

From root Tue Feb 1 10:37:44 1994
X-VM-Summary-Format: "%n %*%a %-17.17F %-3.3m %2d %4l/%-5c %I"%s"\n"
X-VM-Labels: nil
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["312" "Tue" "1" "February" "1994" "15:32:09" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "11" "Re:
VLA proposal" nil nil nil "2" nil nil (number " " mark " Jane Dennett-Thor Feb 1 11/312 " thread-indent "\n"Re: VLA
proposal"\n") nil]
nil)
X-VM-VHeader: ("Resent-" "From:" "Sender:" "To:" "Apparently-To:" "Cc:" "Subject:" "Date:") nil
X-VM-Bookmark: 175
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA41754; Tue, 1 Feb 1994 10:37:37 -0500
Received: from mraosb.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0pRNAb-0002QaC; Tue, 1 Feb 94 15:37 GMT
Received: by mraosb.ra.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0pRNAY-0001HUC; Tue, 1 Feb 94 15:37 GMT
In-Reply-To: <9402010416.AA37539@polaris.cv.nrao.edu>
Message-Id: <Pine.3.87.9402011509.A13124-0100000@mraosb>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: VLA proposal
Date: Tue, 1 Feb 1994 15:32:09 +0000 (GMT)

hello.

This is just a note to thank you for sending me the proposal. (and being
the person responsible for my first run-in with tex!) Sounds great...
what else can i say...?

Hope that everything else went okay (specifically the peter-and-the-plane
bit). I look forward to meeting you at some point.

jane.

From root Wed May 4 07:33:48 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["650" "Wed" "4" "May" "1994" "12:25:07" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.3.87.9405041207.B21730-0100000@mraos>" "15" "on the possibilities of an NRAO visit." nil nil nil "5" nil nil
(number " " mark " R Jane Dennett-Thor May 4 15/650 " thread-indent "\"on the possibilities of an NRAO visit.\\n")
nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA19106; Wed, 4 May 1994 07:33:46 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0pyfEd-0002RtC; Wed, 4 May 94 12:35 BST

Message-Id: <Pine.3.87.9405041207.B21730-0100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: on the possibilities of an NRAO visit.

Date: Wed, 4 May 1994 12:25:07 +0100 (BST)

Hello,

I'm just dropping you a note to say that i am very interested in the possibility of coming to NRAO to work for a while this summer.

Peter said that this might be possible a week or so ago. I have sent Robert an email trying to sort out when he will be where (ie if we can organise a trip to the vla)- but he appears to be presently incommunicado. Not having seen Peter either for a few days I thought it as well to drop you a line to say that yes, i am very interested- in case you didn't know.

Anyway, thanks very much for the offer, and let me know if there is anything i can do to sort it out before i hear back from Robert.

jane.

From abridle Wed May 4 16:49:50 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["4725" "Wed" "4" "May" "1994" "16:49:44" "-0400" "Alan Bridle" "abridle" nil "97" "Re: on the possibilities of an
NRAO visit." nil nil nil "5" nil nil (number " " mark " Alan Bridle May 4 97/4725 " thread-indent "\"Re: on the
possibilities of an NRAO visit.\"") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA23028; Wed, 4 May 1994 16:49:44 -0400
Message-Id: <9405042049.AA23028@polaris.cv.nrao.edu>
References: <Pine.3.87.9405041207.B21730-0100000@mraos>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: on the possibilities of an NRAO visit.
Date: Wed, 4 May 1994 16:49:44 -0400

Hello again Jane

Indeed I had heard nothing from Peter for a while and was beginning to wonder what's up. Thanks for getting in touch.

Robert is in Arizona, I believe, and indeed your next move depends to some extent on his plans. But I've done a bit more leg-work since getting your message.

I've talked again with Bob Brown, who administers our Ph.D. student program. NRAO should be able to contribute to your trip expenses without you having to get a visa that allows you to work here.

What I mentioned to Peter this winter was a miniature of NRAO's "pre-doctoral fellowship" program for Ph.D. students. This funds people by putting them partly on the NRAO payroll while they are here working on their thesis project. We could set that up for you quickly in-house, but for a U.K. student there could be visa and tax complications that are not worth getting into for a modest stay. We can avoid tangling with governments if NRAO just pays you daily expenses and/or provides you with accommodation. Details of how we could do this will depend on just when and where you'd like to visit. So let's work on that first. Bob Brown says we can handle "not less than one month, not more than three" in this mode. I presume that fits? (The only disadvantage to the per diem method over what we usually do for students is that you would not have any medical insurance coverage from the NRAO while here. You might want to ask about the cost of getting a tourist's medical insurance package that would cover emergencies.)

It would be good for you to see the VLA and the rest of the New Mexico end of the NRAO if possible. We do have a rule that first-time student visitors to New Mexico must go there with someone with VLA experience who will "show them the ropes", however. When I mentioned the idea to Peter in January I expected that "someone" would be me. But before I heard back from him I'd made a commitment that keeps me here in Charlottesville in June. So if you want to go to the VLA/AOC for the upcoming run it will depend on whether Robert can also go, at least for the beginning of your visit. I hope that will work out -- it's good to see the telescope you're working with and get to know the people who run it! New Mexico is also an interesting part of the world to visit if you've not seen the U.S. desert before.

If you can rendezvous with Robert in New Mexico for this run, then we should plan for you to come here on the way back. I'll be here for all of June and the first three full weeks of July, then away until mid-August. After that, I'm here until my next trip to the VLA which should be in September or October, but would be a moveable feast if we get some more observing for this project.

The possibilities if you can't rendezvous with Robert for the run itself are for you to come directly to Charlottesville about the time the tapes will get here from New Mexico (a couple of days after the observing), or to organize your visit around a later observing run (TBA) when I could be out there as originally planned.

Any of these will work so far as I'm concerned, and we can do whichever fits in best with the rest of your life.

Other relevant information is that both Charlottesville and New Mexico get very hot in summer, but both are pleasant in the Fall. The observatory has just built its own visitors' apartments in Socorro, quite convenient to the Array Operations Center, and we can arrange for you to stay there during a visit to New Mexico. NRAO also has an apartment in a house near our center here in Charlottesville (short walk or bike) or you would be welcome to stay at our house (Peter can describe our set-up to you, but not the expected weather!).

If you do come to Charlottesville in June, you needn't be constrained to leave when I go to Canada in July, by the way. If it would make sense from your point of view to stay on for a while after I leave, you'd be perfectly welcome to do so. By that time, you'd know your way around and a few of the people here. So you needn't be tied to my travel times so long as we would have a few weeks to familiarize you with things here first.

So the things to sort out as soon as you can are: how long you want to come for, >1 month, <3 months, and whether or not you want to start with a trip to New Mexico. If you do but can't arrange something with Robert for this June, then we should plan around a visit for you later in the year, and I'll not make any more arrangements that would get in the way of that.

Drop me an E-mail any time I can help on this, I read E-mail several times daily (you'd have had this reply a lot sooner if our mail-server hadn't decided to crash its CPU!)

Best wishes,
Alan B.

From root Fri May 6 06:15:21 1994
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1806" "Fri" "6" "May" "1994" "11:04:36" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.3.87.9405061059.B13765-0100000@mraos>" "39" "more on NRAO visitations" nil nil nil "5" nil nil (number " "
mark " R Jane Dennett-Thor May 6 39/1806 " thread-indent "\"more on NRAO visitations\""\n") nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA18193; Fri, 6 May 1994 06:15:04 -0400
Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0pzMx5-0002R7C; Fri, 6 May 94 11:16 BST
Reply-To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
In-Reply-To: <9405042049.AA23028@polaris.cv.nrao.edu>
Message-Id: <Pine.3.87.9405061059.B13765-0100000@mraos>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: more on NRAO visitations
Date: Fri, 6 May 1994 11:04:36 +0100 (BST)

Hello again.

Thanks for your last email, in particular your very kind offer of staying with you whilst I am in Charlottesville.

I have now spoken to Robert, who has returned to RGO now- but has been safely hidden behind a network server that has been playing up. He seems to have a lot of things going on before July, and is loath to commit himself to going to the VLA before then. He will weigh the piles of paper on his desk and let me know for sure early next week.

So it seems likely that I would either come out to VA after the observations anyway, and hopefully get a VLA trip in somewhen else, or the whole thing could be postponed, as you say, until the fall. As for me there are pros and cons for both in terms of the rest of my life (possibly the most obvious being that i may well be in New York around the 26th June anyway, now it appears that i will not be in NM). Talking to Robert it seems however that the most pertinent might actually be my intense dislike of high humidity (as I discovered in Boston last summer). Very hot and dry is fine- gorgeous in fact- moderately hot and very sticky is really *not* my scene. Does that heavily load the die?

I guess that somehow I would like to start with a trip to the telescope- it seems utterly daft as there's no real reason why i want to do it in this order -- but it seemed as well to make my preferred choice of cheesecake known. So given this, if it would be possible to organise a trip in the fall to the vla then this all sounds like the best option. But- no huge favorite on my part anyway.

Oh- and the length of stay you suggest would be great from my perspective.

That's about all at present. Thanks for your efforts at that end. i will contact you again when Robert makes a firm decision.

Cheers,
jane.

From abridle Fri May 6 10:30:21 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["1626" "Fri" "6" "May" "1994" "10:28:30" "-0400" "Alan Bridle" "abridle " nil "40" "Re: more on NRAO visitations"
nil nil nil "5" nil nil (number " " mark " Alan Bridle May 6 40/1626 " thread-indent "\Re: more on NRAO
visitations\"n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA33280; Fri, 6 May 1994 10:28:30 -0400

Message-Id: <9405061428.AA33280@polaris.cv.nrao.edu>

References: <9405042049.AA23028@polaris.cv.nrao.edu>

<Pine.3.87.9405061059.B13765-0100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: more on NRAO visitations

Date: Fri, 6 May 1994 10:28:30 -0400

Well, "moderately hot and very sticky" could be a pretty good description of Charlottesville in June/July. The most questionable part would be the "moderately". Our normal daytime temperatures in June would be in the 80's and 90's (Fahrenheit!) and a "heat wave" would put us over 100. Real catch is that relative humidity often matches the temperature in these units. So "very hot and very sticky" (at least by British standards) is quite in the cards.

If you found summer in Boston tough going you could have a hard time with the great outdoors in Charlottesville's summer. We're way south of Boston and although we're over 100 miles inland we have a couple of mountain ranges between us and the drier mid-continental air. Almost all indoor environments, and cars, here are air-conditioned. This includes the NRAO offices and all of our house. But it would limit your enjoyment of the non-work side of your visit if our typical weather is near your tolerance limit. Evenings can be very pleasant, warm and fragrant -- we usually have dinner and evening conversation outside on our porch. But from mid-morning until near sundown the days can be quite punishing, especially if you attempt such radically un-American activities as a short walk or bicycle ride. You'll appreciate the non-work part of a visit here much more if you come in the Fall.

So, if you come to Virginia in June/July our weather is quite likely to raise your enthusiasm for staying in front of a computer for most of your trip! I'll leave it to you to decide which way, and how much, that loads the decision

Cheers,

Alan

From root Tue May 17 05:59:53 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["530" "Tue" "17" "May" "1994" "10:59:34" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.3.89.9405171033.D29682-0100000@mraosf>" "19" "Re: more on NRAO visitations" nil nil nil "5" nil nil (number
" " mark " R Jane Dennett-Thor May 17 19/530 " thread-indent "\"Re: more on NRAO visitations\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA17420; Tue, 17 May 1994 05:59:43 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp

(Smail3.1.28.1 #2) id m0q3Lw0-0002PxC; Tue, 17 May 94 10:59 BST

In-Reply-To: <9405061428.AA33280@polaris.cv.nrao.edu>

Message-Id: <Pine.3.89.9405171033.D29682-0100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: more on NRAO visitations

Date: Tue, 17 May 1994 10:59:34 +0100 (BST)

Hello again Alan,

sorry for the silence over the last couple of weeks.

Robert has now decided for sure that he will not be able to fit socorro into his heavily booked diary, and i think that given that and the weather in virginia in june i would prefer to organise a trip over in the fall.

My schedule is basically completely free, so its basically a case of whenever suits you and anyone else affected by my visit!

So that's basically it- please let me know if i should do anything at present.

Thanks very much,
jane

From abridle Tue May 17 11:12:37 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["721" "Tue" "17" "May" "1994" "11:11:46" "-0400" "Alan Bridle" "abridle " nil "24" "Re: more on NRAO visitations" nil nil nil "5" nil nil (number " " mark " Alan Bridle May 17 24/721 " thread-indent "\"Re: more on NRAO visitations\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA28234; Tue, 17 May 1994 11:11:46 -0400

Message-Id: <9405171511.AA28234@polaris.cv.nrao.edu>

References: <9405061428.AA33280@polaris.cv.nrao.edu>
<Pine.3.89.9405171033.D29682-0100000@mraosf>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: more on NRAO visitations

Date: Tue, 17 May 1994 11:11:46 -0400

Hello Jane,

Well it's a pity that Robert is too busy to make it to Socorro this June but I certainly sympathize with his problem. He has had to do far more than a fair share of traveling over the years.

Let's hang in for a while and see how the Fall schedule shapes up. A trip to C'ville in Sept/Oct might work out well all-round.

Do we need to put in any proposals for the compact configurations (June 1 deadline)? I seem to recall that some of the 8 GHz images were lacking short-spacing coverage, but I do not have the details in front of me.

Cheers,

Alan

P.S. is there something horribly wrong with Robert's E-mail server still, I have had several messages to him return undelivered after 3 days recently?

From root Tue May 24 13:08:21 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["788" "Tue" "24" "May" "1994" "18:08:24" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "20" "Re: more on NRAO visitations" nil nil nil "5" nil nil (number " " mark " Jane Dennett-Thor May 24 20/788 " thread-indent "\Re: more on NRAO visitations\""\n") nil] nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA40891; Tue, 24 May 1994 13:08:18 -0400

Received: from mraosc.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp (Smail3.1.28.1 #2) id m0q5zxs-0002QTC; Tue, 24 May 94 18:08 BST

Received: by mraosc.ra.phy.cam.ac.uk (Smail3.1.28.1 #2) id m0q5zxp-0000dqC; Tue, 24 May 94 18:08 BST

Reply-To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

In-Reply-To: <9405171511.AA28234@polaris.cv.nrao.edu>

Message-Id: <Pine.3.89.9405241748.A12250-0100000@mraosc>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; CHARSET=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: more on NRAO visitations

Date: Tue, 24 May 1994 18:08:24 +0100 (BST)

hello alan,

have sent robert your message, and will be seeing him tomorrow with a hardcopy, as i've not heard back from him to say he got it.

yes, we do need to put in the c-array application. the month whizzed past- i was horrified to discover that the 1st june is in fact very close indeed. so i'm writing an initial draft proposal tonight- which threatens to look identical to the first... (although still trying to work out what "enough" short spacings are for the 8Ghz maps. worrying about all this because 3c382 spectral index map is a bit of a disaster zone and i can't figure out why. hopefully robert will have some suggestions.)

in general the RGs are not following the trends of the Qs at present (but i've only got 4 done.)

that's all, just keeping you posted.

jane

From root Wed May 25 10:39:16 1994
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1236" "Wed" "25" "May" "94" "15:38:16" "BST" "PAGS@phx.cam.ac.uk" "PAGS@phx.cam.ac.uk"
"<A9543F7DF7755890@UK.AC.CAMBRIDGE.PHOENIX>" "22" "Re: [VLA Observing Logs?]" nil nil nil "5" nil nil
(number " " mark " R PAGS@phx.cam.ac.u May 25 22/1236 " thread-indent "\"Re: [VLA Observing Logs?]"\"n") nil]
nil)
Received: from gray.csi.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA20019; Wed, 25 May 1994 10:39:05 -0400
Received: from phx.cam.ac.uk by ppsw1.cam.ac.uk
with GB-CAM (PP-6.0) as ppsw.cam.ac.uk id <11745-0@ppsw1.cam.ac.uk>;
Wed, 25 May 1994 15:38:27 +0100
Message-Id: <A9543F7DF7755890@UK.AC.CAMBRIDGE.PHOENIX>
In-Reply-To: <9404191613.AA42223@polaris.cv.nrao.edu>
From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [VLA Observing Logs?]
Date: Wed, 25 May 94 15:38:16 BST

Dear Alan,
Jane D-T has been in communication with you, so you will know that the current plan is for her to come to the USA in the fall; I'm not sure how far negotiations regarding precise dates have proceeded between you, her and possibly Robert.

Yesterday Jane & I sifted through the list of radio galaxies to settle on what bits of data we still needed to locate, and realised with horror that the deadline for our threatened C-array observing application is next week. Therefore we had a further session together with Robert this morning, and came up with a list that includes not only 135 and 403 @ 1.4GHz but also 135 @ 8GHz (C array "accidentally omitted" from the original observations, we understand) and a couple more bits of infill. Jane is working on sending the application by email, and we have a request to you:

Could you please (being one of the applicants) glue or staple a copy of the diagram from the Canberra symposium proceedings on to the end of the application (the one that plots jet-c'jet delta-alpha versus lobe-length ratio). Should we email the application to you personally so that you can do that, or can you catch it on its way thro' the system?

many thanks

Peter

From abridle Wed May 25 12:25:20 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["928" "Wed" "25" "May" "1994" "12:25:02" "-0400" "Alan Bridle" "abridle " nil "26" "Re: [VLA Observing Logs?]"
nil nil nil "5" nil nil (number " " mark " Alan Bridle May 25 26/928 " thread-indent ""Re: [VLA Observing
Logs?]"\"n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA21771; Wed, 25 May 1994 12:25:02 -0400

Message-Id: <9405251625.AA21771@polaris.cv.nrao.edu>

References: <9404191613.AA42223@polaris.cv.nrao.edu>

<A9543F7DF7755890@UK.AC.CAMBRIDGE.PHOENIX>

From: abridle (Alan Bridle)

To: PAGES@phx.cam.ac.uk

Subject: Re: [VLA Observing Logs?]

Date: Wed, 25 May 1994 12:25:02 -0400

Hello Peter,

Jane has indeed been in touch with me re plans for visiting us in the Fall. We have not reached precise dates yet, partly because there is another piece of the puzzle to fall into place regarding a Western trip for me.

I thought my "C-array?" prompt to Jane might be timely! Mind you, we did so well at the last moment with the B array proposal that maybe we should never allow >20 hrs for the process! (I joke, of course).

I'll add the Canberra diagram to the proposal. Please send the proposal text directly to my personal E-mail, else I may not be able to intercept it.

I'll plan simply to print it out from the E-version and give a paper copy including the diagram to the secretary who handles proposals. It is technically possible to scan the diagram to PostScript and have it inserted in an electronic copy for the AOC folks but it is probably not worth the effort of doing so.

Cheers, A.

From root Fri May 27 13:57:17 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["319" "Fri" "27" "May" "1994" "18:57:28" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.3.89.9405271840.A27723-0100000@mraose>" "8" "observations" nil nil nil "5" nil nil (number " " mark " R Jane
Dennett-Thor May 27 8/319 " thread-indent "\"observations\\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA43689; Fri, 27 May 1994 13:57:15 -0400

Received: from mraose.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0q769x-0002QhC; Fri, 27 May 94 18:57 BST

Message-Id: <Pine.3.89.9405271840.A27723-0100000@mraose>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: observations

Date: Fri, 27 May 1994 18:57:28 +0100 (BST)

I was wondering if we could put your telephone number on the observe
file, as robert's going away on holiday. (peter's not in and i suspect i
won't be a vast amount of use if something odd happens!) If so could you
either fill them in when i send you the observe file to look over, or
send them to me now-ish.

j.

From abridle Fri May 27 14:04:16 1994
X-VM-v5-Data: ([nil nil nil t nil nil nil nil nil]
["1734" "Fri" "27" "May" "1994" "14:03:54" "-0400" "Alan Bridle" "abridle " nil "41" "Re: the second set" nil nil nil
"5" nil nil (number " " mark " F Alan Bridle May 27 41/1734 " thread-indent "\"Re: the second set\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA29665; Fri, 27 May 1994 14:03:54 -0400
Message-Id: <9405271803.AA29665@polaris.cv.nrao.edu>
References: <Pine.3.89.9405271726.F20785-0100000@mraosc>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: the second set
Date: Fri, 27 May 1994 14:03:54 -0400

Science looks fine except for some minor typos that I will fix.

A couple of things that might confuse the scheduling committee about the time requested.

I think it's best if the time requested column on the back page of the cover sheet adds up to the total time requested on the front, i.e. if the calibration overhead is included on the back page. Could I just make the source times 1.5 hrs, 4 hrs, 1.5 hrs, 6.5 hrs and 1.5 hrs to cover this?

I also had to double-read the sentence about the "first 7 hrs" and the "last 7 hours" to see where the other hour out of the 15 had gone. I don't think we really want to spend a whole hour on 3C286 alone, so it may be best to simply lump all the calibration overhead together in one sentence that again makes it clear we're asking for 15 hours total. I'm also confused by the two-piece LST range, which contains only 11 hours' observing. Is this a "do same thing in shorter total time" option? (Would need to have 3C286 in both pieces at L Band for good calibration).

How about:

"To obtain appropriate (u,v) coverage and parallactic angle throw for polarization calibration, we request a total of 15 hours divided amongst the target sources and calibrators as follows. About six hours will be devoted to the large source 3C390.3 and its calibrator at 5 GHz, and 4 hours to 3C135 and its calibrator at 8 GHz. The balance of the time will be spent on the three shorter 1.4-GHz observations and in setting the flux density and polarization angle scales at all three frequencies using 3C286. We would prefer a continuous LST range from 0500-2000, but if necessary to cut back on the time assignment, it could be done in two pieces, from LST 0400-1000 and LST 1600-2100."

A.

From root Fri May 27 14:43:50 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1178" "Fri" "27" "May" "1994" "19:44:02" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "27" "Re: the second set" nil nil nil "5" nil nil (number " " mark " Jane Dennett-Thor May 27 27/1178 " thread-indent "" "Re: the second set\\"n") nil] nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA21879; Fri, 27 May 1994 14:43:49 -0400

Received: from mraose.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp (Smail3.1.28.1 #2) id m0q76t1-0002QhC; Fri, 27 May 94 19:44 BST

Reply-To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

In-Reply-To: <9405271803.AA29665@polaris.cv.nrao.edu>

Message-Id: <Pine.3.89.9405271906.D27750-0100000@mraose>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; CHARSET=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Sender: jdt@mrao.cam.ac.uk (Jane Dennett-Thorpe)

Sender: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: the second set

Date: Fri, 27 May 1994 19:44:02 +0100 (BST)

thanks -

yes that's great, I was a little concerned about my apparent inability to add up. I also realise that the second period should read 1600-2200. As for why it's there, the idea was that 15hrs is overkill to some extent, but the scheduling is tricky with the sources scattered across the sky. Robert decided he liked the first one better (and i think that was due to 3c286) but the other was a possible. so could you amend that as you suggested, with the replacement of 21 by 22 h.hrs?

the next files will be the two observe files for the runs this month. if ytu could take a look at them that would be great. two things: the mailer was putting in extra lines when i sent it to robert (but that was MIME again so this is prob not a problem) and in my summary report it tells me that _all_ of the sources are calibrators. the observe file is apparently correct on this though. could you also put your phone number on them if you'll be around. if not i'll sort something out w./ peter.

i'm not sure when these things have to be in by. if they need to be done before monday could you let me know, otherwise i'll probabl;y be going soon.

j.

to follow..

From root Fri May 27 14:45:34 1994
X-VM-v5-Data: ([nil nil nil t t nil nil nil nil]
["8040" "Fri" "27" "May" "1994" "19:45:38" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.3.89.9405271911.E27750-0100000@mraose>" "115" "first period" nil nil nil "5" nil nil (number " " mark " FR Jane
Dennett-Thor May 27 115/8040 " thread-indent "\"first period\""\n") nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA21885; Fri, 27 May 1994 14:45:32 -0400
Received: from mraose.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0q76uZ-0002QhC; Fri, 27 May 94 19:45 BST
In-Reply-To: <9405271803.AA29665@polaris.cv.nrao.edu>
Message-Id: <Pine.3.89.9405271911.E27750-0100000@mraose>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: first period
Date: Fri, 27 May 1994 19:45:38 +0100 (BST)

/.AS535 377
/* ***
/* *** NRAO VLA Observe Program, Version U3.1.19, 1993.08.26
/* ***
/* *** Observation day 56,220 at 15 00 00 LST, 1994.06.09 21:57:11 MST.
/* ***
/* *** Observer
/* *** J Dennett-Thorpe Phone
/* *** Cavendish Laboratory Office: ()
/* *** Madingley Road During observation: ()
/* *** Cambridge CB3 0HE
/* *** U.K.
/* ***
/* *** E-Mail address
/* *** jdt@mrao.cam.ac.uk
/* ***
/* *** Observing mode(s): Continuum
/* ***
/* *** Special Instructions
/* ***
/* ***
/* ***
/* ***
/* *** Date Prepared: 1994.05.26 12:03:16 MST.
/* ***
/*
1328+307 15 15 00 13 28 49.6570 +30 45 58.640 LL C 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 15 23 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 16 08 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000

1947+079 16 11 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1328+307 16 21 30 13 28 49.6570 +30 45 58.640 LL C 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 16 29 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 17 14 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 17 18 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 18 03 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 18 06 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 18 51 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 18 55 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 19 40 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 19 43 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 20 28 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 20 32 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 21 17 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 21 20 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30


```
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 22 05 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 22 09 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 22 56 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 23 00 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
```

From root Fri May 27 14:47:35 1994
X-VM-v5-Data: ([nil nil nil t t nil nil nil nil]
["6297" "Fri" "27" "May" "1994" "19:46:16" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.3.89.9405271947.F27750-0100000@mraose>" "90" "second period" nil nil nil "5" nil nil (number " " mark " FR
Jane Dennett-Thor May 27 90/6297 " thread-indent "\"second period\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA38794; Fri, 27 May 1994 14:47:32 -0400

Received: from mraose.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0q76vB-0002QhC; Fri, 27 May 94 19:46 BST

In-Reply-To: <9405271803.AA29665@polaris.cv.nrao.edu>

Message-Id: <Pine.3.89.9405271947.F27750-0100000@mraose>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: second period

Date: Fri, 27 May 1994 19:46:16 +0100 (BST)

/.AS535 377

/* ***

/* *** NRAO VLA Observe Program, Version U3.1.19, 1993.08.26

/* ***

/* *** Observation day 56,229 at 03 00 00 LST, 1994.06.18 09:23:45 MST.

/* ***

/* *** Observer

/* *** J Dennett-Thorpe Phone

/* *** Cavendish Laboratory Office: ()

/* *** Madingley Road During observation: ()

/* *** Cambridge CB3 0HE

/* *** U.K.

/* ***

/* *** E-Mail address

/* *** jdt@mrao.cam.ac.uk

/* ***

/* *** Observing mode(s): Continuum

/* ***

/* *** Special Instructions

/* ***

/* ***

/* ***

/* ***

/* ***

/* *** Date Prepared: 1994.05.27 10:43:09 MST.

/* ***

0134+329 03 15 00 01 34 49.8320 +32 54 20.520 LL C 1111 14.60

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

0518+165 03 22 30 05 18 16.5320 +16 35 26.900 LL C 1111 8.60

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

3C135 03 52 30 05 11 33.7000 +00 53 08.000 LL 1111

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

0457+024 03 56 30 04 57 15.5438 +02 25 05.718 LL A 1111

//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0134+329 04 06 30 01 34 49.8320 +32 54 20.520 LL C 1111 14.60
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 04 36 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 04 40 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 05 10 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 05 14 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 05 44 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 05 48 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 06 18 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 06 22 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0518+165 06 30 00 05 18 16.5320 +16 35 26.900 LL C 1111 8.60
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 06 56 00 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 07 00 00 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000

From root Fri May 27 10:49:24 1994

X-VM-v5-Data: ([nil nil nil t t nil nil nil nil])

["311" "Fri" "27" "May" "1994" "15:49:18" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"]

"<Pine.3.89.9405271518.B16017-0100000@mraos>" "11" "vla proposal" nil nil nil "5" nil nil (number " " mark " FR Jane Dennett-Thor May 27 11/311 " thread-indent "\"vla proposal\"") nil] nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA29775; Fri, 27 May 1994 10:49:16 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0q73Dq-0002QhC; Fri, 27 May 94 15:49 BST

Message-Id: <Pine.3.89.9405271518.B16017-0100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: vla proposal

Date: Fri, 27 May 1994 15:49:18 +0100 (BST)

Hello Alan,

the vla proposal will be following, attached to the next few mailings.

Peter and Robert have looked at it and it seems to be fine with them. If

you have any comments etc let me know.

Peter said he'd spoken to you and you had said you could attach the plot.

that would be great.

cheers, jane

From root Fri May 27 12:02:41 1994
X-VM-v5-Data: ([nil nil nil t nil nil nil nil nil]
["13715" "Fri" "27" "May" "1994" "17:01:37" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "521"
"cover1 MkI" nil nil nil "5" nil nil (number " " mark " F Jane Dennett-Thor May 27 521/13715 " thread-indent ""cover1
MkI\"n") nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA29741; Fri, 27 May 1994 12:01:25 -0400
Received: from mraosc.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0q74Lr-0002QoC; Fri, 27 May 94 17:01 BST
Received: by mraosc.ra.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0q74Lq-0000dqC; Fri, 27 May 94 17:01 BST
Message-Id: <Pine.3.89.9405271657.C20785-0100000@mraosc>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: cover1 MkI
Date: Fri, 27 May 1994 17:01:37 +0100 (BST)

%% Files you will need are:
%% cover1.tex -- front side of VLA proposal cover sheet
%% cover2.tex -- back side of VLA proposal cover sheet
%% nraologo.ps -- PostScript file containing NRAO logo
%% This is the front side of the VLA proposal cover sheet. It is
%% highly recommended that you make a copy of this before editing.
%% Lines beginning with ``%%" give instructions as to what to fill in
%% or replace on immediately following lines.
%%
%% by Dave Mehringer (dmehring@zia.aoc.nrao.edu) 08Oct91 (v 1.0a)
%% updated 02Mar92 (v 1.0b)
%% updated 24Mar92 (v 1.0c)
%% updated 17Aug93 (v 1.0d)
%% format modifications (J. M. Uson 7Dec93; v 2.0)

```
\def\unter#1{\hbox to #1{\hrulefill}}  
\nopagenumbers  
\voffset -.8in  
\hsize 8in  
\vsize 13in
```

%% the next line includes the NRAO logo. This file must be located
%% in the same directory as the front side of the cover sheet.

```
\special{psfile=nraologo.ps hoffset=-65 voffset=10}
```

```
{\settabs 10 \columns  
\offinterlineskip  
\+&&&&&&\vrule height10pt&&\cr  
\+ &&&&&&\vrule height10pt&&\cr  
\+&&{\tenbf VLA OBSERVING APPLICATION}&&&&&\vrule height10pt&&\cr  
\+ &&&&&&\vrule height10pt&&\cr  
\+&&&&&&\vrule height10pt\ A&&\cr  
\+&&&&&&\vrule height10pt&&\cr  
\+ \hskip -.2in DEADLINES: 1st of Feb., June., Oct. for next configuration  
following review &&&&&&\vrule height10pt depth2pt&&\cr  
\+ \hskip -.2in INSTRUCTIONS: Each numbered item must have an entry or
```

N/A&&&&&\vrule height10pt depth2pt\ \rcvd:&&\cr
\+hskip -.2in SEND TO: Director NRAO Edgemont Rd. Charlottesville, VA
22903-2475&&&&&\vrule height10pt\unter {3in}&&\cr
\medskip
\+hskip -.5in {\bf (1)} Date Prepared:

%% enter date prepared on next line
May 27th 1994

\cr\medskip
\+hskip -.5in {\bf (2)} Title of Proposal:

%% enter first line of title on next line
Jet and Spectral-Index Asymmetries in Nearby FRII Radio Galaxies

\cr\vskip .05in
\+hskip 1in

%% enter second line of title on next line (if necessary)

\cr
\medskip
\+&&&&&\unter {1.6in}&&\cr
\+&&&&&\vrule height10pt depth3pt\ For Grad Students&&\vrule height10pt
depth3pt\cr
\+&&&&&\vrule height10pt depth3pt\hskip .5in Only&&\vrule height10pt
depth3pt\cr
\+hskip -.7in\unter{7.9in}\cr
\+hskip -.7in\vrule height10pt depth3pt&&\vrule height10pt depth3pt&&&
\vrule height10pt depth3pt\ Who Will&\vrule height10pt depth3ptObservations&
\vrule height10pt depth3pt&\vrule height10pt depth3pt\cr
\+hskip -.7in\vrule height10pt depth3pt\ \ {\bf (3)}\hskip .3in AUTHORS&&
\vrule height10pt depth3pt&INSTITUTION&&\vrule height10pt depth3pt\ Come
To&\vrule height10pt depth3pt For Ph.D.&\vrule height10pt depth3pt
\ Anticipated&\vrule height10pt depth3pt\cr
\+hskip -.7in\vrule height10pt depth3pt&&\vrule height10pt depth3pt&&&
\vrule height10pt depth3pt\ The VLA?&\vrule height10pt depth3pt Thesis?&
\vrule height10pt depth3pt Ph.D. Year&\vrule height10pt depth3pt\cr
\+hskip -.7in\unter {7.9in}\cr
\+hskip -.7in\vrule height10pt depth3pt\ \

%% enter first author name on next line
P.A.G.Scheuer

&&\vrule height10pt depth3pt \ \

%% enter first author institution on next line
MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if first author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if first author is grad student and observations are for Ph.D. thesis

%% enter "yes", if not enter "no". If first author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if first author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter second author name on next line
R.A.Laing

&&\vrule height10pt depth3pt \ \

%% enter second author institution on next line
RGO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if second author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if second author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If second author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if second author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter third author name on next line
J.Dennett-Thorpe

&&\vrule height10pt depth3pt \ \

%% enter third author institution on next line
MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if third author will come to observe put an "x" on the next line
?

&\vrule height10pt depth3pt \ \

%% if third author is grad student and observations are for Ph.D. thesis

%% enter "yes", if not enter "no". If third author isn't grad student,
%% leave blank
yes

&\vrule height10pt depth3pt \

%% if third author is grad student, enter anticipated Ph.D. year on next line
1996

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fourth author name on next line
A.H.Bridle

&&\vrule height10pt depth3pt \ \

%% enter fourth author institution on next line
NRAO, CV

&&&\vrule height10pt depth3pt\

%% if fourth author will come to observe put an "x" on the next line
?

&\vrule height10pt depth3pt \ \

%% if fourth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fourth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fourth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fifth author name on next line

&&\vrule height10pt depth3pt \ \

%% enter fifth author institution on next line

&&&\vrule height10pt depth3pt\

%% if fifth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if fifth author is grad student and observations are for Ph.D. thesis

%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fifth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter sixth author name on next line

&&\vrule height10pt depth3pt \ \

%% enter sixth author institution on next line

&&&\vrule height10pt depth3pt\

%% if sixth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if sixth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if sixth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr\medskip
\+\hskip -.5in {\bf (4)} Related VLA previous proposal number(s):

%% enter related VLA proposal numbers on next line
AS 535

\cr\medskip
\settabs 7 \columns
\+\hskip -.5in {\bf (5)} \hfill Contact author&&&{\bf (6)} \hfill
Telephone:& \

%% enter contact author's telephone number on next line
(44)223 374720

\cr\vskip .05in
\+\hskip -.4in \hfill for scheduling:& \

%% enter contact author's name on next line
R.A.Laing

&&\hfill Telex:& \

%% enter telex of contact author on next line

\cr\vskip .05in

\+\hskip -.5in \hfill address:& \

%% enter first line of author's address on next line

Royal Greenwich Observatory

&&\hfill Internet:& \

%% enter author's internet address on next line

rl@mail.ast.cam.ac.uk

\cr\vskip .05in

\+& \

%% enter second line of contact author's address on next line

Madingley Road

&&\hfill Other E Mail:& \

%% enter other e-mail of contact author on next line

\cr\vskip .05in

\+& \

%% enter third line of contact author's address on next line

Cambridge CB3 0EZ, U.K.

&&\hfill Telefax:& \

%% enter contact author's telefax number on next line

(44)223 374700

\cr\medskip

\+\hskip -.5in {\bf (7)} Scientific Category: \ \

%% on the next few lines find the category that applies to your

%% project and replace ``bigcirc" with ``bigotimes" on that line

\bigcirc astrometry,geodesy \& techniques,

\bigcirc solar,

\bigcirc propagation,

\bigcirc planetary,

\bigcirc stellar,

\bigcirc pulsar,

\cr\vskip 0.02in

\+\hskip -.5in

%% some more categories (2nd line)

\bigcirc ISM,

\bigcirc galactic centers,

\bigcirc galactic structure & dynamics (HI),
 \bigcirc normal galaxies,
 \bigcirc active galaxies,
 \bigcirc cosmology

```
\cr\medskip
\settabs 8 \columns
\+ \hskip -.7in \unter {7.7in} \cr
\+ \hskip -.7in \vrule height 10pt depth 3pt \ \ {bf (8)} Configurations
(one per column) & \vrule
height 10pt depth 3pt & \vrule height 10pt depth 3pt & \vrule height 10pt
depth 3pt & \vrule height 10pt depth 3pt & \vrule height 10pt depth 3pt &
\vrule height 10pt depth 3pt \cr
\+ \hskip -.7in \vrule height 10pt depth 3pt \ \ \ \ \ \ \ \ \ \ (A, B, C, D,
BnA, CnB, DnC, Any) & \vrule
height 10pt depth 3pt \ \ \
```

%% enter first configuration on next line
C

& \vrule height 10pt depth 3pt \ \ \

%% enter second configuration on next line

& \vrule height 10pt depth 3pt \ \ \

%% enter third configuration on next line

& \vrule height 10pt depth 3pt \ \ \

%% enter fourth configuration on next line

& \vrule height 10pt depth 3pt \ \ \

%% enter fifth configuration on next line

```
& \vrule height 10pt depth 3pt \cr
\+ \hskip -.7in \unter {7.7in} \cr
\+ \hskip -.7in \vrule height 10pt depth 3pt \ \ {bf (9)} Wavelength(s)
& \vrule height 10pt depth 3pt \ \ \
```

%% enter first line of first group of wavelengths on next line
20, 6, 3.5cm

& \vrule height 10pt depth 3pt \ \ \

%% enter first line of second group of wavelengths on next line

& \vrule height 10pt depth 3pt \ \ \

%% enter first line of third group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of fourth group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of fifth group of wavelengths on next line

&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ \ (400, 90,
20, 18, 6, 3.5, 2, 1.3, 0.7 cm)
&&\vrule height10pt depth3pt \ \ \

%% enter second line of first group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of second group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of third group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of fourth group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of fifth group of wavelengths on next line

&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \unter {7.7in} \cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ { \bf (10) } Time requested
&&\vrule height10pt depth3pt&\vrule height10pt depth3pt&\vrule
height10pt depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt
&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ \ \ (hours)
&&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for first array on next line
15

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for second array on next line on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for third array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fourth array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fifth array on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.7in}\cr\medskip
\+\hskip -.6in {\bf (11)} Type of observation:

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_bigotimes\$ mapping,
\$_bigcirc\$ point source,
\$_bigcirc\$ monitor,
\$_bigotimes\$ continuum,
\$_bigotimes\$ lin poln,
\$_bigcirc\$ circ poln,
\$_bigcirc\$ solar,
\$_bigcirc\$ VLBI,

\cr
\medskip
\+\hskip -.6in \ \ \ \ \ \ \ \ \ (check all that apply)

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_bigcirc\$ spectroscopy,
\$_bigcirc\$ multichannel continuum,
\$_bigcirc\$ phased array,
\$_bigcirc\$ pulsar,
\$_bigcirc\$ high-time resolution

\cr\medskip
\+\&\hskip .2in

%% if the proposed observation fits into another type than those
%% listed above, replace the ``bigcirc" on the next line with
%% ``bigotimes"

\$_bigcirc\$ other \ \

%% if you replaced \$_bigcirc\$ on the previous line, give a short
%% description (a couple of words maximum) of the type of observation
%% on the next line

\cr
\+\&\hskip .7in\unter {2in}\cr\medskip

\+hskip -.6in {\bf (12)} ABSTRACT (Do not write outside this space.

Please type.)\cr

\vskip 1.8in

\+hskip -.6in\unter {6in}\cr\smallskip

\+hskip -.6in NRAO use only\cr

\vskip -1.95in}

\hsize 6.5in

%% give a short description (abstract) of 150 words or less of your

%% proposed observation and what you want to accomplish on the

%% following lines

We propose to observe 5 nearby FR II radio galaxies: 3C 135, 3C~403 and 3C~223.1 at 1.4GHz, 3C~135 at 8GHz and 3C~390.3 at 5GHz, as part of a continuing investigation of the correlation between sidedness of jets, lobe spectral index and depolarisation in r

adio galaxies and quasars. As for AS~535, the data are required to fill serious gaps in u-v coverage in earlier observations and archival data. The new data will be combined with existing observations at 3.6 and 20cm to provide maps of spectral index, ro

tation measure and depolarisation.

%% END OF INPUT FOR SIDE 1

\bye

From root Fri May 27 12:03:29 1994

X-VM-v5-Data: ([nil nil nil t nil nil nil nil nil])

["7023" "Fri" "27" "May" "1994" "17:03:13" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "120" "scijust MkII" nil nil nil "5" nil nil (number " " mark " F Jane Dennett-Thor May 27 120/7023 " thread-indent ""scijust MkII\n") nil]

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA29499; Fri, 27 May 1994 12:03:20 -0400

Received: from mraosc.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp (Smail3.1.28.1 #2) id m0q74NP-0002QoC; Fri, 27 May 94 17:03 BST

Received: by mraosc.ra.phy.cam.ac.uk (Smail3.1.28.1 #2) id m0q74NO-0000dqC; Fri, 27 May 94 17:03 BST

Message-Id: <Pine.3.89.9405271722.E20785-0100000@mraosc>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: scijust MkII

Date: Fri, 27 May 1994 17:03:13 +0100 (BST)

\documentstyle{article}

\setlength{\textwidth}{140mm}

\begin{document}

\section{Introduction}

This proposal is part of a project concerned with the origin of one-sided jets in powerful (FRII) radio sources and specifically with the hypothesis that such jets contain bulk relativistic flows on large scales. It complements our previously approved proposal AS535.

A strong prediction of the relativistic flow model is that jet sidedness should not correlate with any orientation-independent parameter. As it is likely that the extended lobes of powerful radio sources are moving too slowly for Doppler boosting to be significant, their spectral indices should be independent of jet sidedness. A correlation between jet sidedness and lobe spectral index is, however, implied if we combine two striking results: \begin{itemize} \item In a sample consisting mostly of quasars, the lobe containing the jet depolarizes less rapidly with increasing wavelength than does its counterpart on the opposite side of the source (Laing 1988; Garrington \{it et al.\} 1988; 1991). \item The lobe with the flatter spectrum depolarizes less rapidly in samples of radio galaxies and quasars (Liu \& Pooley 1991a, b; Garrington \{it et al.\} 1991). \end{itemize} A direct correlation between jet side and lobe spectral index would be of great importance, as it would make nonsense of the widely accepted idea of the relativistic beaming of intrinsically two-sided jets.

We (Bridle \{it et al.\} 1994a) have made 20cm observations of 7 extended 3CR FRII quasars (proposal AL270) and have combined these with existing data at 6cm (Bridle \{it et al.\} 1994b) to study their lobe spectral indices. The rule that emerged clearly, albeit from a small sample, was a little more complicated than a simple correlation. Comparing regions of equal surface brightness on two sides of the same quasar, we find that:

\begin{itemize}

\item the portions with \{sl high\} surface

brightness have a flatter radio spectrum (all cases but one);

the portions with low surface brightness have a flatter spectrum (all cases).

This pattern encourages the notion that an orientation effect causes the Laing-Garrington correlation (especially in quasars, whose axes are at small or moderate angles to the line of sight according to unified theories), while a separate, intrinsic effect causes the Liu-Pooley correlation and also the correlation between lesser depolarization and greater lobe length found by Pedetty (1989). While the pattern appears to be clear, the sample was small and consisted only of quasars. We need to enlarge both the size and diversity of the sample, first to confirm the pattern and then to test possible mechanisms for its origin, of which several have been suggested. We are now investigating radio galaxies with jets (a sub-sample of that described by Black (1992), where one might expect intrinsic effects to dominate and orientation-dependent effects to be weaker. Some of this work has been done using existing archival data, but other sources require additional data to supplement that existing; hence the new B array observations [AS 535, scheduled for June 1994] and the present request for C array data, already mentioned in the AS535 application.

Proposed Observations

From the Black (1992) sample of radio galaxies we have selected 12 that show evidence for a jet and which do not have gross structural peculiarities, with a view to making well-resolved spectral index maps of their lobes. For the majority of these sources good 8GHz data exists [AB534], but for some these archival 1.4GHz data are absent or inadequate. A few others in the sample were not observed at 8GHz as high-resolution maps existed, but these data need to be supplemented in (u,v) coverage to enable us to investigate the spectral index distributions in the large scale structure. We need new 20cm data for two sources: 3C 135 and 403. B array observing time has already been scheduled under AS535, in which we indicated that we would apply for C observations of the same sources. We also wish to map the linear polarisation of these sources to ascertain their depolarisation sidedness. In addition we also need to fill in crucial gaps in the (u,v) coverage of archival data in 3C390.3 (5GHz), 3C135 (8GHz) and 3C223.1 (1.4GHz). The depolarisation sidedness is unknown for these two sources, so we must also map their linear polarization.

In C array we can use 50MHz bandwidth without introducing significant bandwidth smearing in any of the sources. Our time requirement is governed more by the need for aperture-plane coverage to ensure an adequate representation of the large-scale structure, than sensitivity (which is in most cases limited by the observing time of archival data.)

The anticipated surface brightnesses in the extended regions at 20cm are roughly 100 and 20 mJy/beam, respectively for 3C 135 and 403. We require a 5 σ detection of 25% linear polarization, giving 5 and 1 mJy/beam rms.

To obtain appropriate (u,v) coverage, we request 3 hours for 3C 135 at 8GHz and 4.5 hours for 3C 390.3 at 5GHz. We also request 1 hour for each of 3C~403, 3C~135 and 3C~223.1 at 1.4GHz. The preferred LST range is 0500--2000, which will enable us to observe 3C~135, 3C~223.1 and calibrators in the first 7hrs, followed by 3C~286 for flux density and polarisation angle calibration, and 3C~390.3 (at 80 deg decli

nation) and 3C~403, with calibrators, in the last 7hrs. The need for three frequencies will inevitably increase the overheads for calibration somewhat above the usual proportion of observing time. A second possible LST would be 0400-1000 and 1600-2100, allowing us to observe 3C~135, 3C~223.1 and calibrators in the first period and 3C~390.3, 3C~403 and 3C~286 in the later period.

We expect to make one further observing request in this project, for D array observations of 3C~285 at 5GHz, and possibly one--two other sources.

\vspace{0.5 cm}

\noindent{\bf References}\

\medskip

\noindent

Black,A.R.S., Baum,S.A.,Leahy,J.P., Perley,R.A., Riley,J.M. \& Scheuer,P.A.G., 1992, {\sl M.N.R.A.S.}, {\bf 256}, 186.\

Bridle, A.H., Laing, R.A., Scheuer, P.A.G. \& Turner, S., 1994a. {\sl Physics of Active Galaxies}, First Stromlo Symposium, ed. Bicknell, G.V., P.A.S.P.\

Bridle, A.H., Hough, D.H., Lonsdale, C.J., Burns, J.O. and Laing, R.A., 1994b. {\sl A.J.}, in press.\

Garrington, S.T., Conway, R.G. \& Leahy, J.P., 1991. {\sl M.N.R.A.S.}, {\bf 250}, 171.\

Garrington, S.T., Leahy, J.P., Conway, R.G. \& Laing, R.A., 1988. {\sl Nature}, {\bf 331}, 147.\

Laing, R.A., 1988. {\sl Nature}, {\bf 331}, 149.\

Liu, R. \& Pooley, G.G., 1991a. {\sl M.N.R.A.S.}, {\bf 249}, 343.\

Liu, R. \& Pooley, G.G., 1991b. {\sl M.N.R.A.S.}, {\bf 253}, 669.\

Pedelty, J.A., Rudnick, L., McCarthy, P.J. \& Spinrad, H., 1989. {\sl A.J.}, {\bf 97}, 647.\

\end{document}

From root Fri May 27 12:06:33 1994
X-VM-v5-Data: ([nil nil nil t nil nil nil nil nil]
["20938" "Fri" "27" "May" "1994" "17:02:19" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "1095"
"cover2 MkII" nil nil nil "5" nil nil (number " " mark " F Jane Dennett-Thor May 27 1095/20938 " thread-indent "\"cover2
MkII\"n") nil]
nil)
Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA27478; Fri, 27 May 1994 12:06:28 -0400
Received: from ras.phy.cam.ac.uk by cv3.cv.nrao.edu (4.1/DDN-DLB/1.13)
id AA25686; Fri, 27 May 94 12:03:26 EDT
Received: from mraosc.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0q74MX-0002QrC; Fri, 27 May 94 17:02 BST
Received: by mraosc.ra.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0q74MW-0000dqC; Fri, 27 May 94 17:02 BST
Message-Id: <Pine.3.89.9405271742.D20785-0100000@mraosc>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: cover2 MkII
Date: Fri, 27 May 1994 17:02:19 +0100 (BST)

%% This is the back side of the VLA proposal cover sheet. It is
%% highly recommended that you make a copy of this before editing.
%% Lines beginning with ``%%" give instructions as to what to fill in
%% or replace on immediately following lines.
%%
%% by Dave Mehringer (dmehring@zia.aoc.nrao.edu) 08Oct91 (v 1.0a)
%% updated 02Mar92 (v 1.0b)
%% updated 24Mar92 (v 1.0c)
%% updated 17Aug93 (v 1.0d)
%% format modifications (J. M. Uson 7Dec93; v 2.0)

\def\unter#1{\hbox to #1{\hrulefill}}
\def\vr{\vrule height10pt depth3pt}
\def\arcmin{ $^{\prime}$ }
\def\arcsec{ $^{\prime\prime}$ }

%% the next line tells dvips (certain versions at least) to print the
%% page in landscape mode. If this does not work for you, replace the
%% next line using the equivalent command for your system.

\special{landscape}

\nopagenumbers
\voffset -.75in
\vbox{\hsize 8in
\settabs 4 \columns
\+ \hskip -.6in {\bf (13)} Observing File should be prepared by the Observer&

&Calibration done at?&

%% if the calibration will be done at your institution, replace
%% ``bigcirc" with ``bigotimes" on the next line

`\bigcirc Home \hspace .2in`

`%% if the calibration will be done at the AOC or CV, replace
%% ``bigcirc" with ``bigotimes" on the next line`

`\bigotimes AOC or CV (2 weeks notice)\cr\smallskip`

`\+\hspace -.2in Observer present for observations?&`

`%% if observer will be present for observations, replace
%% ``bigcirc" with ``bigotimes" on the next line`

`\bigcirc Yes \hspace .4in`

`%% if observer will not be present for observations, replace
%% ``bigcirc" with ``bigotimes" on the next line`

`\bigotimes No&`

`Mapping done at?&`

`%% if mapping will be done at home, replace ``bigcirc" with
%% ``bigotimes" on the next line`

`\bigotimes Home \hspace .2in`

`%% if mapping will be done at AOC or CV, replace ``bigcirc" with
%% ``bigotimes" on the next line`

`\bigotimes AOC or CV (2 weeks notice) \cr\bigskip`

`\+\hspace -.6in {\bf (14)} Help required: \hspace .2in`

`%% replace ``bigcirc" with ``bigotimes" on the line that describes
%% the amount of help needed`

`\bigotimes None \hspace .2in
\bigcirc Consultation \hspace .2in
\bigcirc Friend (extensive help) \hspace .2in
\bigcirc Staff Collaborator (contact VLA Director's Office)`

`\cr\medskip}
\vbox{\hspace 10in
\offinterlineskip
\settabs 11 \columns
\+\hspace -.6in {\bf (15)} Spectroscopy Only:&&line 1&line 2&line
3&&&line 1&line 2&line 3\cr\smallskip
\+\hspace -.2in Transition (HI, OH, etc.)&&`

`%% enter first transition on next line (spectroscopy only)`

&

%% enter second transition on next line (spectroscopy only)

&

%% enter third transition on next line (spectroscopy only)

&IF bandwidth(s) (MHz)&&&

%% enter first IF bandwidth(s) in MHz on next line (spectroscopy only)

&

%% enter second IF bandwidth(s) in MHz on next line (spectroscopy only)

&

%% enter third IF bandwidth(s) in MHz on next line (spectroscopy only)

\cr

\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip

\+\hskip -.2in Rest Frequency (MHz)&&

%% enter rest frequency (MHz) of first transition on next line

%% (spectroscopy only)

&

%% enter rest frequency (MHz) of second transition on next line

%% (spectroscopy only)

&

%% enter rest frequency (MHz) of third transition on next line

%% (spectroscopy only)

&Hanning smoothing (y/n)&&&

%% enter whether you want hanning smoothing for first transition (y/n)

%% on next line (spectroscopy only)

&

%% enter whether you want hanning smoothing for second transition (y/n)

%% on next line (spectroscopy only)

&

%% enter whether you want hanning smoothing for third transition (y/n)
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+\hskip -.2in Velocity (km/s)&&

%% enter velocity (km/s) of first transition on next line
%% (spectroscopy only)

&

%% enter velocity (km/s) of second transition on next line
%% (spectroscopy only)

&

%% enter velocity (km/s) of third transition on next line
%% (spectroscopy only)

&Number of channels per IF&&&

%% enter number of channels per IF for first transition
%% on next line (spectroscopy only)

&

%% enter number of channels per IF for second transition
%% on next line (spectroscopy only)

&

%% enter number of channels per IF for third transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+\hskip -.2in Observing frequency (MHz)&&

%% enter observing frequency (MHz) of first transition on next line
%% (spectroscopy only)

&

%% enter observing frequency (MHz) of second transition on next line
%% (spectroscopy only)

&

%% enter observing frequency (MHz) of third transition on next line
%% (spectroscopy only)

&Frequency Resolution (kHz/channel)&&&

%% enter frequency resolution (kHz/channel) for first transition
%% on next line (spectroscopy only)

&

%% enter frequency resolution (kHz/channel) for second transition
%% on next line (spectroscopy only)

&

%% enter frequency resolution (kHz/channel) for third transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+\hskip -.2in Correlator mode&&

%% enter correlator mode for first transition on next line
%% (spectroscopy only)

&

%% enter correlator mode for second transition on next line
%% (spectroscopy only)

&

%% enter correlator mode for third transition on next line
%% (spectroscopy only)

&Rms noise (natural weighting)&&&

%% enter rms noise after 1 hour for first transition
%% on next line (spectroscopy only)

&

%% enter rms noise after 1 hour for second transition
%% on next line (spectroscopy only)

&

%% enter rms noise after 1 hour for third transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+&&&&\hskip .2in after 1 hour (mJy)\cr\medskip}
{\offinterlineskip
\settabs 2 \columns
\+&\hskip -.6in {\bf (16)} Number of sources \$\underline{\hbox{ \

%% enter number of sources on next line
5

\ } }\$ (If more than 10 sources please attach list. If more than
30 give only selection criteria and LST range(s.))\cr\bigskip}
\vbox{\hsize 10in
\offinterlineskip
\settabs 41 \columns
\+&\hskip -.7in \unter {10.462in}\cr
\+&\hskip -.7in\vr&&&&&\vr \ Epoch 1950

%% if the epoch is 1950, replace the ``bigcirc" with ``bigotimes" on
%% the next line

\$\bigotimes\$

\ 2000

%% if the epoch is 2000, replace the ``bigcirc" with ``bigotimes" on
%% the next line

\$\bigcirc\$

&&&&&\vr&&\vr&&\vr \ Band-&\vr \ Total Flux&
&&\vr \ Largest&&\vr \ Weakest&&\vr \ Required&&\vr \ Possible&&\vr
\ Time&&\vr\cr
\+&\hskip -.7in\vr&&&&&\vr
&RA&&&Dec&&\vr \ Config.&&\vr \ Band&&\vr \ width&&\vr \unter
{.338in}\vrule height0pt depth3pt\unter {.376in}&
&&\vr \ ang.&&\vr \ signal&&&\vr \ dynamic&&\vr \ LST range&&\vr
\ requested&&\vr\cr
\+&\hskip -.7in\vr\hskip .1in {\bf (17)}&&NAME&&&\vr
\ hh&&mm&& \$\pm\$ xx.x\$^{\circ}\$&&\vr&&\vr \ (cm)&&\vr \ (MHz)&&
\vr \ line&\hskip .1in\vr
\ cont.&&\vr \ size&&\vr \ (mJy/beam)&&&\vr \ range&&&
\vr \ hh - hh&&\vr&&\vr\cr
\+&\hskip -.7in\vr&&&&&\vr
&&&&&\vr&&\vr&&\vr \ (Jy)&\hskip .1in\vr
\ (Jy)&&\vr&&\vr&&\vr&&\vr&&\vr&&\vr&&\vr\cr
\+&\hskip -.7in\unter {10.462in}\cr
\+&\hskip -.7in\vr \

%% enter name of first source/field on next line
3C 135

&&&&&\vr\hfil

%% enter hours of right ascension for first source/field on next line
05

&&\hfil

%% enter minutes of right ascension for first source/field on next line
11

&&&\hfil

%% enter declination in degrees for first source/field on next line
00.8

&&\vr\ \

%% enter configuration for first source/field on next line
C

&&&\vr\ \

%% enter band in cm for first source/field on next line
20

&&\vr\ \

%% enter bandwidth in MHz for first source/field on next line
50

&&\vr\ \

%% enter total line flux in Jy of first source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of first source/field on next line
3.3

&&\vr\ \

%% enter largest detectable angular size for first source/field on next line
130

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for first source/field on
%% next line
5.0

&&&&\vr\ \

%% enter required dynamic range for first source/field on next line
2000

&&&\vr\ \

%% enter possible LST range in hh - hh format for first source/field on
%% next line
05-12

&&&\vr \

%% enter time requested for first field/source on next line, include units
1 hour

&&&\vr\cr
\+\hskip -.7in\unter {10.462in}\cr
\+\hskip -.7in\vr\ \

%% enter name of second source/field on next line
3C 135

&&&&&\vr\hfil

%% enter hours of right ascension for second source/field on next line
05

&&\hfil

%% enter minutes of right ascension for second source/field on next line
11

&&&\hfil

%% enter declination in degrees for second source/field on next line
00.8

&&\vr\ \

%% enter configuration for second source/field on next line
C

&&&\vr\ \

%% enter band in cm for second source/field on next line
3.6

&&\vr\ \

%% enter bandwidth in MHz for second source/field on next line
50

&&\vr \

%% enter total line flux in Jy of second source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of second source/field on next line
0.7

&&\vr\ \

%% enter largest detectable angular size for second source/field on next line
130

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for second source/field on
%% next line
0.03

&&&&\vr \ \

%% enter required dynamic range for second source/field on next line
2000

&&&\vr \ \

%% enter possible LST range in hh - hh format for second source/field on
%% next line
05-12

&&&\vr \

%% enter time requested for second field/source on next line, include units
3 hours

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of third source/field on next line
3C 223.1

&&&&&\vr\hfil

%% enter hours of right ascension for third source/field on next line
09

&&\hfil

%% enter minutes of right ascension for third source/field on next line
38

&&&\hfil

%% enter declination in degrees for third source/field on next line
40.0

&&\vr\ \

%% enter configuration for third source/field on next line
C

&&&\vr\ \

%% enter band in cm for third source/field on next line
20

&&\vr \

%% enter bandwidth in MHz for third source/field on next line
50

&&\vr \

%% enter total line flux in Jy of third source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of third source/field on next line
3.4

&&\vr \ \

%% enter largest detectable angular size for third source/field on next line
120

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for third source/field on
%% next line
1.6

&&&&\vr \ \

%% enter required dynamic range for third source/field on next line
1000

&&&\vr \ \

%% enter possible LST range in hh - hh format for third source/field on
%% next line
05-12

&&&\vr \

%% enter time requested for third field/source on next line, include units
1 hour

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of fourth source/field on next line
3C 390.3

&&&&&\vr\hfil

%% enter hours of right ascension for fourth source/field on next line
18

&&\hfil

%% enter minutes of right ascension for fourth source/field on next line
45

&&&\hfil

%% enter declination in degrees for fourth source/field on next line
79.7

&&\vr\ \

%% enter configuration for fourth source/field on next line
C

&&&\vr\ \

%% enter band in cm for fourth source/field on next line
6

&&\vr\ \

%% enter bandwidth in MHz for fourth source/field on next line
50

&&\vr\ \

%% enter total line flux in Jy of fourth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of fourth source/field on next line
4.3

&&\vr\ \

%% enter largest detectable angular size for fourth source/field on next line
240

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for fourth source/field on
%% next line
0.06

&&&&\vr\ \

%% enter required dynamic range for fourth source/field on next line
2500

&&&\vr\ \

%% enter possible LST range in hh - hh format for fourth source/field on
%% next line
12-20

&&&\vr\ \

%% enter time requested for fourth field/source on next line, include units
4.5 hours

```
&&&\vr\cr
\+hskip -.7in\unter {10.462in}\cr
\+hskip -.7in\vr\ \

%% enter name of fifth source/field on next line
3C 403

&&&&&&\vr\hfil

%% enter hours of right ascension for fifth source/field on next line
19

&&\hfil

%% enter minutes of right ascension for fifth source/field on next line
49

&&&\hfil

%% enter declination in degrees for fifth source/field on next line
02.3

&&\vr\ \

%% enter configuration for fifth source/field on next line
C

&&&\vr\ \

%% enter band in cm for fifth source/field on next line
20

&&\vr\ \

%% enter bandwidth in MHz for fifth source/field on next line
50

&&\vr\ \

%% enter total line flux in Jy of fifth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of fifth source/field on next line
5.9

&&\vr\ \

%% enter largest detectable angular size for fifth source/field on next line
230

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for fifth source/field on
%% next line
1.0
```

&&&\vr \ \

%% enter required dynamic range for fifth source/field on next line
1000

&&&\vr \ \

%% enter possible LST range in hh - hh format for fifth source/field on
%% next line
12-20

&&&\vr \

%% enter time requested for fifth field/source on next line, include units
1 hour

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of sixth source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for sixth source/field on next line

&&\hfil

%% enter minutes of right ascension for sixth source/field on next line

&&&\hfil

%% enter declination in degrees for sixth source/field on next line

&&\vr\ \

%% enter configuration for sixth source/field on next line

&&&\vr\ \

%% enter band in cm for sixth source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for sixth source/field on next line

&&\vr \

%% enter total line flux in Jy of sixth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of sixth source/field on next line

&&\vr \ \

%% enter largest detectable angular size for sixth source/field on next line

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for sixth source/field on
%% next line

&&&&\vr \ \

%% enter required dynamic range for sixth source/field on next line

&&&\vr \ \

%% enter possible LST range in hh - hh format for sixth source/field on
%% next line

&&&\vr \

%% enter time requested for sixth field/source on next line, include
%% units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr \ \

%% enter name of seventh source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for seventh source/field on next line

&&\hfil

%% enter minutes of right ascension for seventh source/field on next line

&&&\hfil

%% enter declination in degrees for seventh source/field on next line

&&\vr \ \

%% enter configuration for seventh source/field on next line

&&&\vr\ \

%% enter band in cm for seventh source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for seventh source/field on next line

&&\vr\ \

%% enter total line flux in Jy of seventh source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of seventh source/field on next line

&&\vr\ \

%% enter largest detectable angular size for seventh source/field on next line

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for seventh source/field on
%% next line

&&&&\vr\ \

%% enter required dynamic range for seventh source/field on next line

&&&\vr\ \

%% enter possible LST range in hh - hh format for seventh source/field on
%% next line

&&&\vr\ \

%% enter time requested for seventh field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of eighth source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for eighth source/field on next line

&&\hfil

%% enter minutes of right ascension for eighth source/field on next line

&&&\hfil

%% enter declination in degrees for eighth source/field on next line

&&\vr\ \

%% enter configuration for eighth source/field on next line

&&&\vr\ \

%% enter band in cm for eighth source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for eighth source/field on next line

&&\vr\ \

%% enter total line flux in Jy of eighth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of eighth source/field on next line

&&\vr\ \

%% enter largest detectable angular size for eighth source/field on next line

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for eighth source/field on
%% next line

&&&&\vr\ \

%% enter required dynamic range for eighth source/field on next line

&&&\vr\ \

%% enter possible LST range in hh - hh format for eighth source/field on
%% next line

&&&\vr \

%% enter time requested for eighth field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

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%% enter name of ninth source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for ninth source/field on next line

&&\hfil

%% enter minutes of right ascension for ninth source/field on next line

&&&\hfil

%% enter declination in degrees for ninth source/field on next line

&&\vr\ \

%% enter configuration for ninth source/field on next line

&&&\vr\ \

%% enter band in cm for ninth source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for ninth source/field on next line

&&\vr \

%% enter total line flux in Jy of ninth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of ninth source/field on next line

&&\vr\ \

%% enter largest detectable angular size for ninth source/field on next line

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for ninth source/field on
%% next line

&&&&\vr \ \

%% enter required dynamic range for ninth source/field on next line

&&&\vr \ \

%% enter possible LST range in hh - hh format for ninth source/field on
%% next line

&&&\vr \

%% enter time requested for ninth field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr \ \

%% enter name of tenth source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for tenth source/field on next line

&&\hfil

%% enter minutes of right ascension for tenth source/field on next line

&&&\hfil

%% enter declination in degrees for tenth source/field on next line

&&\vr \ \

%% enter configuration for tenth source/field on next line

&&&\vr \ \

%% enter band in cm for tenth source/field on next line

&&\vr \ \

%% enter bandwidth in MHz for tenth source/field on next line

&&\vr \

%% enter total line flux in Jy of tenth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of tenth source/field on next line

&&\vr \ \

%% enter largest detectable angular size for tenth source/field on next line

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for tenth source/field on
%% next line

&&&&\vr \ \

%% enter required dynamic range for tenth source/field on next line

&&&\vr \ \

%% enter possible LST range in hh - hh format for tenth source/field on
%% next line

&&&\vr \

%% enter time requested for tenth field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr\bigskip
\+\hskip -.6in {\bf (18)} Special hardware, software, or operating
requirements: \

%% if you have special hardware, software, or operating requirements,
%% enter them on next couple of lines, if not enter N/A on next line
N/A

\cr\bigskip
\+\hskip -.6in {\bf (19)} Preferred range of dates for scheduling (give
reason): \

%% enter preferred range of dates for scheduling on next line
none

\cr\bigskip
\+\hskip -.6in {\bf (20)} Dates which are not acceptable: \

%% enter any unacceptable scheduling dates on next line
none

%% END OF INPUTS FOR SIDE 2

\cr\bigskip

\+\hskip -.6in {\bf (21)} Please attach a self-contained

\hbox{Scientific Justification} not in excess of 1000 words.

(Preprints and reprints will be IGNORED!) \cr\smallskip

\hskip -.48in When your proposal is scheduled, the contents of this cover
sheet become public information (Any supporting pages are for refereeing
only). \hfil v2.0 12/93}

\bye

From abridle Fri May 27 15:09:03 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["87" "Fri" "27" "May" "1994" "15:09:00" "-0400" "Alan Bridle" "abridle " nil "4" "Re: observations" nil nil nil "5" nil
nil (number " " mark " Alan Bridle May 27 4/87 " thread-indent "\"Re: observations\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA19164; Fri, 27 May 1994 15:09:00 -0400

Message-Id: <9405271909.AA19164@polaris.cv.nrao.edu>

References: <Pine.3.89.9405271840.A27723-0100000@mraose>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: observations

Date: Fri, 27 May 1994 15:09:00 -0400

Yes, we'd better put my home phone number on the
OBSERVE file, it's 804-971-7752.

A.

From root Fri May 27 15:41:02 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["80" "Fri" "27" "May" "1994" "20:41:11" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.3.89.9405272029.A27850-0100000@mraose>" "4" "hoping all is under control" nil nil nil "5" nil nil (number " " mark " R Jane Dennett-Thor May 27 4/80 " thread-indent "\"hoping all is under control\"\\n") nil]

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA30593; Fri, 27 May 1994 15:41:01 -0400

Received: from mraose.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0q77mL-0002QhC; Fri, 27 May 94 20:41 BST

Message-Id: <Pine.3.89.9405272029.A27850-0100000@mraose>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: hoping all is under control

Date: Fri, 27 May 1994 20:41:11 +0100 (BST)

i'm off home now.

please let me know the state of things on monday.

thanks.

j.

From abridle Fri May 27 16:59:30 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["804" "Fri" "27" "May" "1994" "16:59:25" "-0400" "Alan Bridle" "abridle " nil "26" "Re: hoping all is under control"
nil nil nil "5" nil nil (number " " mark " Alan Bridle May 27 26/804 " thread-indent "\"Re: hoping all is under
control\"") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA40661; Fri, 27 May 1994 16:59:25 -0400

Message-Id: <9405272059.AA40661@polaris.cv.nrao.edu>

References: <Pine.3.89.9405272029.A27850-0100000@mraose>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: hoping all is under control

Date: Fri, 27 May 1994 16:59:25 -0400

Hi Jane,

I think it is. I will not be in the office on Monday, but will give Joanne the proposal copy first thing on Tuesday. Next three messages will contain the modified .tex files so you can take a final look at them.

I added a little bit to the proposal abstract to say what the overall sample is.

I couldn't find any mention of the Figure so I slipped it into the last para. of sec.1.

I changed the LST range as per your last message, and the back page of the cover as per mine.

Other tweaks were tiny typos/wording changes, the ref. for the Stromlo paper, and a little reformatting to cut it to two printed pages.

The OBSERVE files aren't needed in final form until a few days before the observing, I'll look them over this weekend and get back to you if I have any questions.

Cheers, A.

From abridle Fri May 27 17:03:23 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["13844" "Fri" "27" "May" "1994" "17:02:55" "-0400" "Alan Bridle" "abridle" "nil" "528" "Cover1.tex" nil nil nil "5"
nil nil (number " " mark " Alan Bridle May 27 528/13844 " thread-indent "\"Cover1.tex\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA40676; Fri, 27 May 1994 17:02:55 -0400
Message-Id: <9405272102.AA40676@polaris.cv.nrao.edu>
References: <Pine.3.89.9405272029.A27850-0100000@mraose>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Cover1.tex
Date: Fri, 27 May 1994 17:02:55 -0400

%% Files you will need are:
%% cover1.tex -- front side of VLA proposal cover sheet
%% cover2.tex -- back side of VLA proposal cover sheet
%% nraologo.ps -- PostScript file containing NRAO logo
%% This is the front side of the VLA proposal cover sheet. It is
%% highly recommended that you make a copy of this before editing.
%% Lines beginning with ``%%'' give instructions as to what to fill in
%% or replace on immediately following lines.
%%
%% by Dave Mehringer (dmehring@zia.aoc.nrao.edu) 08Oct91 (v 1.0a)
%% updated 02Mar92 (v 1.0b)
%% updated 24Mar92 (v 1.0c)
%% updated 17Aug93 (v 1.0d)
%% format modifications (J. M. Uson 7Dec93; v 2.0)

\def\unter#1 {\hbox to #1 {\hrulefill}}
\nopagenumbers
\voffset -.8in
\hsize 8in
\vsize 13in

%% the next line includes the NRAO logo. This file must be located
%% in the same directory as the front side of the cover sheet.

\special{psfile=nraologo.ps hoffset=-65 voffset=10}

{\settabs 10 \columns
\offinterlineskip
\+&&&&&\vrule height10pt&&\cr
\+ &&&&&\vrule height10pt&&\cr
\+&& {\tenbf VLA OBSERVING APPLICATION}&&&&\vrule height10pt&&\cr
\+ &&&&&\vrule height10pt&&\cr
\+&&&&&\vrule height10pt\ A&&\cr
\+&&&&&\vrule height10pt&& \cr
\+ \hskip -.2in DEADLINES: 1st of Feb., June., Oct. for next configuration
following review &&&&&\vrule height10pt depth2pt&&\cr
\+ \hskip -.2in INSTRUCTIONS: Each numbered item must have an entry or
N/A&&&&&\vrule height10pt depth2pt\ \ rcvd:&&\cr
\+ \hskip -.2in SEND TO: Director NRAO Edgemont Rd. Charlottesville, VA
22903-2475&&&&&\vrule height10pt\unter {3in}&&\cr
\medskip
\+ \hskip -.5in {\bf (1)} Date Prepared:

%% enter date prepared on next line
May 27th 1994

\cr\medskip
\+ \hskip -.5in {\bf (2)} Title of Proposal:

%% enter first line of title on next line
Jet and Spectral-Index Asymmetries in Nearby FR II Radio Galaxies

\cr\vskip .05in
\+ \hskip 1in

%% enter second line of title on next line (if necessary)

\cr
\medskip
\+ &&&&&&\under {1.6in} &&\cr
\+ &&&&&&\vrule height10pt depth3pt\ For Grad Students&&\vrule height10pt
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\+ \hskip -.7in\vrule height10pt depth3pt\ \ {\bf (3)} \hskip .3in AUTHORS&&
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\ Anticipated&\vrule height10pt depth3pt\cr
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\vrule height10pt depth3pt\ The VLA?&\vrule height10pt depth3pt Thesis?&
\vrule height10pt depth3pt Ph.D. Year&\vrule height10pt depth3pt\cr
\+ \hskip -.7in\unter {7.9in}\cr
\+ \hskip -.7in\vrule height10pt depth3pt\ \

%% enter first author name on next line
P.A.G.Scheuer

&&\vrule height10pt depth3pt \ \

%% enter first author institution on next line
MRAO, Cambridge, UK

&&&&\vrule height10pt depth3pt\

%% if first author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if first author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If first author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if first author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
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\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter second author name on next line

R.A.Laing

&&\vrule height10pt depth3pt \ \

%% enter second author institution on next line

RGO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if second author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if second author is grad student and observations are for Ph.D. thesis

%% enter "yes", if not enter "no". If second author isn't grad student,

%% leave blank

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%% if second author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
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\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter third author name on next line

J.Dennett-Thorpe

&&\vrule height10pt depth3pt \ \

%% enter third author institution on next line

MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if third author will come to observe put an "x" on the next line

?

&\vrule height10pt depth3pt \ \

%% if third author is grad student and observations are for Ph.D. thesis

%% enter "yes", if not enter "no". If third author isn't grad student,

%% leave blank

yes

&\vrule height10pt depth3pt \

%% if third author is grad student, enter anticipated Ph.D. year on next line
1996

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fourth author name on next line
A.H.Bridle

&&\vrule height10pt depth3pt \ \

%% enter fourth author institution on next line
NRAO, CV

&&&\vrule height10pt depth3pt\

%% if fourth author will come to observe put an "x" on the next line
?

&\vrule height10pt depth3pt \ \

%% if fourth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fourth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fourth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fifth author name on next line

&&\vrule height10pt depth3pt \ \

%% enter fifth author institution on next line

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%% if fifth author will come to observe put an "x" on the next line

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%% if fifth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fifth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
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\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter sixth author name on next line

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%% enter sixth author institution on next line

&&&\vrule height10pt depth3pt\

%% if sixth author will come to observe put an "x" on the next line

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%% if sixth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

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%% if sixth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr\medskip
\+\hskip -.5in {\bf (4)} Related VLA previous proposal number(s):

%% enter related VLA proposal numbers on next line
AS 535

\cr\medskip
\settabs 7 \columns
\+\hskip -.5in {\bf (5)} \hfill Contact author&&&{\bf (6)} \hfill
Telephone:& \

%% enter contact author's telephone number on next line
(44)223 374720

\cr\vskip .05in
\+\hskip -.4in \hfill for scheduling:& \

%% enter contact author's name on next line
R.A.Laing

&&\hfill Telex:& \

%% enter telex of contact author on next line

\cr\vskip .05in
\+\hskip -.5in \hfill address:& \

%% enter first line of author's address on next line
Royal Greenwich Observatory

&&\hfill Internet:& \

%% enter author's internet address on next line
rl@mail.ast.cam.ac.uk

\cr\vskip .05in
\+& \

%% enter second line of contact author's address on next line
Madingley Road

&&\hfill Other E Mail:& \

%% enter other e-mail of contact author on next line

\cr\vskip .05in
\+& \

%% enter third line of contact author's address on next line
Cambridge CB3 0EZ, U.K.

&&\hfill Telefax:& \

%% enter contact author's telefax number on next line
(44)223 374700

\cr\medskip
\+\hskip -.5in {\bf (7)} Scientific Category: \ \

%% on the next few lines find the category that applies to your
%% project and replace ``bigcirc" with ``bigotimes" on that line

\$_bigcirc\$ astrometry,geodesy \& techniques,
\$_bigcirc\$ solar,
\$_bigcirc\$ propagation,
\$_bigcirc\$ planetary,
\$_bigcirc\$ stellar,
\$_bigcirc\$ pulsar,

\cr\vskip 0.02in
\+\hskip -.5in

%% some more categories (2nd line)

\$_bigcirc\$ ISM,
\$_bigcirc\$ galactic centers,
\$_bigcirc\$ galactic structure \& dynamics (HI),
\$_bigcirc\$ normal galaxies,
\$_bigotimes\$ active galaxies,
\$_bigcirc\$ cosmology

```
\cr\medskip
\settabs 8 \columns
\+hskip -.7in\unter {7.7in}\cr
\+hskip -.7in \vrule height10pt depth3pt \ \ {\bf (8)} Configurations
(one per column)&&\vrule
height10pt depth3pt&\vrule height10pt depth3pt&\vrule height10pt
depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt&
\vrule height10pt depth3pt\cr
\+hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ (A, B, C, D,
BnA, CnB, DnC, Any)&&\vrule
height10pt depth3pt \ \ \
```

```
%% enter first configuration on next line
C
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter second configuration on next line
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter third configuration on next line
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter fourth configuration on next line
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter fifth configuration on next line
```

```
&\vrule height10pt depth3pt\cr
\+hskip -.7in\unter {7.7in}\cr
\+hskip -.7in \vrule height10pt depth3pt \ \ {\bf (9)} Wavelength(s)
&&\vrule height10pt depth3pt \ \ \
```

```
%% enter first line of first group of wavelengths on next line
20, 6, 3.5cm
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter first line of second group of wavelengths on next line
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter first line of third group of wavelengths on next line
```

```
&\vrule height10pt depth3pt \ \ \
```

```
%% enter first line of fourth group of wavelengths on next line
```

```
&\vrule height10pt depth3pt \ \ \
```

%% enter first line of fifth group of wavelengths on next line

```
&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ (400, 90,
20, 18, 6, 3.5, 2, 1.3, 0.7 cm)
&&\vrule height10pt depth3pt \ \ \
```

%% enter second line of first group of wavelengths on next line

```
&\vrule height10pt depth3pt \ \ \
```

%% enter second line of second group of wavelengths on next line

```
&\vrule height10pt depth3pt \ \ \
```

%% enter second line of third group of wavelengths on next line

```
&\vrule height10pt depth3pt \ \ \
```

%% enter second line of fourth group of wavelengths on next line

```
&\vrule height10pt depth3pt \ \ \
```

%% enter second line of fifth group of wavelengths on next line

```
&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \under {7.7in} \cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ {bf (10)} Time requested
&&\vrule height10pt depth3pt&\vrule height10pt depth3pt&\vrule
height10pt depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt
&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ \ \ (hours)
&&\vrule height10pt depth3pt \ \ \
```

%% enter time requested in hours for first array on next line

15

```
&\vrule height10pt depth3pt \ \ \
```

%% enter time requested in hours for second array on next line on next line

```
&\vrule height10pt depth3pt \ \ \
```

%% enter time requested in hours for third array on next line

```
&\vrule height10pt depth3pt \ \ \
```

%% enter time requested in hours for fourth array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fifth array on next line

&\vrule height10pt depth3pt\cr

\+\hskip -.7in\unter {7.7in}\cr\medskip

\+\hskip -.6in {\bf (11)} Type of observation:

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_bigotimes\$ mapping,
\$_bigcirc\$ point source,
\$_bigcirc\$ monitor,
\$_bigotimes\$ continuum,
\$_bigotimes\$ lin poln,
\$_bigcirc\$ circ poln,
\$_bigcirc\$ solar,
\$_bigcirc\$ VLBI,

\cr

\medskip

\+\hskip -.6in \ \ \ \ \ \ \ \ \ (check all that apply)

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_bigcirc\$ spectroscopy,
\$_bigcirc\$ multichannel continuum,
\$_bigcirc\$ phased array,
\$_bigcirc\$ pulsar,
\$_bigcirc\$ high-time resolution

\cr\medskip

\+\&\hskip .2in

%% if the proposed observation fits into another type than those
%% listed above, replace the ``bigcirc" on the next line with
%% ``bigotimes"

\$_bigcirc\$ other \ \

%% if you replaced \$_bigcirc\$ on the previous line, give a short
%% description (a couple of words maximum) of the type of observation
%% on the next line

\cr

\+\&\hskip .7in\unter {2in}\cr\medskip

\+\hskip -.6in {\bf (12)} ABSTRACT (Do not write outside this space.

Please type.)\cr

\vskip 1.8in

\+\hskip -.6in\unter {6in}\cr\smallskip

\+\hskip -.6in NRAO use only\cr

\vskip -1.95in}

```
\hsize 6.5in
%% give a short description (abstract) of 150 words or less of your
%% proposed observation and what you want to accomplish on the
%% following lines
We propose to observe 5 nearby FRII radio galaxies: 3C135, 3C403 and
3C223.1 at 1.4 GHz, 3C135 at 8 GHz and 3C390.3 at 5 GHz, as part of a
continuing investigation of the correlation between sidedness of jets,
lobe spectral index and depolarization in radio galaxies and quasars.
As for AS535, the data are needed to fill serious gaps in {\sl (u,v)}
coverage in data originally obtained for other purposes, and in
archival data. The new data will be combined with existing
observations at 3.6 and 20cm to map spectral index, rotation measure
and depolarization in a sample of 12 FRII radio galaxies that show
evidence for a jet and do not have gross structural peculiarities.

%% END OF INPUT FOR SIDE 1
\bye
```

```
From abridle Fri May 27 17:03:59 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]
["20944" "Fri" "27" "May" "1994" "17:03:43" "-0400" "Alan Bridle" "abridle" "nil" "1097" "Cover2.tex" nil nil nil "5"
nil nil (number " " mark " Alan Bridle May 27 1097/20944 " thread-indent "\"Cover2.tex\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA40458; Fri, 27 May 1994 17:03:43 -0400
Message-Id: <9405272103.AA40458@polaris.cv.nrao.edu>
References: <Pine.3.89.9405272029.A27850-0100000@mraose>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Cover2.tex
Date: Fri, 27 May 1994 17:03:43 -0400
```

```
%% This is the back side of the VLA proposal cover sheet. It is
%% highly recommended that you make a copy of this before editing.
%% Lines beginning with ``%%" give instructions as to what to fill in
%% or replace on immediately following lines.
%%
%% by Dave Mehringer (dmehring@zia.aoc.nrao.edu) 08Oct91 (v 1.0a)
%% updated 02Mar92 (v 1.0b)
%% updated 24Mar92 (v 1.0c)
%% updated 17Aug93 (v 1.0d)
%% format modifications (J. M. Uson 7Dec93; v 2.0)
```

```
\def\unter#1{\hbox to #1{\hrulefill}}
\def\vr{\vrule height10pt depth3pt}
\def\arcmin{${}^{\prime}$}
\def\arcsec{${}^{\prime\prime}$}
```

```
%% the next line tells dvips (certain versions at least) to print the
%% page in landscape mode. If this does not work for you, replace the
%% next line using the equivalent command for your system.
```

```
\special{landscape}
```

\nopagenumbers
\voffset -.75in
\vbox {\hspace 8in
\settabs 4 \columns
\+ \hspace -.6in {\bf (13)} Observing File should be prepared by the Observer&

&Calibration done at?&

%% if the calibration will be done at your institution, replace
%% ``bigcirc" with ``bigotimes" on the next line

\$\bigcirc\$ Home \hspace .2in

%% if the calibration will be done at the AOC or CV, replace
%% ``bigcirc" with ``bigotimes" on the next line

\$\bigotimes\$ AOC or CV (2 weeks notice)\cr\smallskip

\+ \hspace -.2in Observer present for observations?&

%% if observer will be present for observations, replace
%% ``bigcirc" with ``bigotimes" on the next line

\$\bigcirc\$ Yes \hspace .4in

%% if observer will not be present for observations, replace
%% ``bigcirc" with ``bigotimes" on the next line

\$\bigotimes\$ No&

Mapping done at?&

%% if mapping will be done at home, replace ``bigcirc" with
%% ``bigotimes" on the next line

\$\bigotimes\$ Home \hspace .2in

%% if mapping will be done at AOC or CV, replace ``bigcirc" with
%% ``bigotimes" on the next line

\$\bigotimes\$ AOC or CV (2 weeks notice) \cr\bigskip

\+ \hspace -.6in {\bf (14)} Help required: \hspace .2in

%% replace ``bigcirc" with ``bigotimes" on the line that describes
%% the amount of help needed

\$\bigotimes\$ None \hspace .2in
\$\bigcirc\$ Consultation \hspace .2in
\$\bigcirc\$ Friend (extensive help) \hspace .2in

\$\bigcirc\$ Staff Collaborator (contact VLA Director's Office)

```
\cr\medskip}
\ vbox {\hspace 10in
\offinterlineskip
\settabs 11 \columns
\+\hspace -.6in {\bf (15)} Spectroscopy Only:&&line 1&line 2&line
3&&&line 1&line 2&line 3\cr\smallskip
\+\hspace -.2in Transition (HI, OH, etc.)&&
```

%% enter first transition on next line (spectroscopy only)

&

%% enter second transition on next line (spectroscopy only)

&

%% enter third transition on next line (spectroscopy only)

&IF bandwidth(s) (MHz)&&&

%% enter first IF bandwidth(s) in MHz on next line (spectroscopy only)

&

%% enter second IF bandwidth(s) in MHz on next line (spectroscopy only)

&

%% enter third IF bandwidth(s) in MHz on next line (spectroscopy only)

```
\cr
\+\&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+\hspace -.2in Rest Frequency (MHz)&&
```

%% enter rest frequency (MHz) of first transition on next line
%% (spectroscopy only)

&

%% enter rest frequency (MHz) of second transition on next line
%% (spectroscopy only)

&

%% enter rest frequency (MHz) of third transition on next line
%% (spectroscopy only)

&Hanning smoothing (y/n)&&&

%% enter whether you want hanning smoothing for first transition (y/n)
%% on next line (spectroscopy only)

&

%% enter whether you want hanning smoothing for second transition (y/n)
%% on next line (spectroscopy only)

&

%% enter whether you want hanning smoothing for third transition (y/n)
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+\hskip -.2in Velocity (km/s)&&

%% enter velocity (km/s) of first transition on next line
%% (spectroscopy only)

&

%% enter velocity (km/s) of second transition on next line
%% (spectroscopy only)

&

%% enter velocity (km/s) of third transition on next line
%% (spectroscopy only)

&Number of channels per IF&&&

%% enter number of channels per IF for first transition
%% on next line (spectroscopy only)

&

%% enter number of channels per IF for second transition
%% on next line (spectroscopy only)

&

%% enter number of channels per IF for third transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter

{.6in}&\unter {.6in}\cr\smallskip
\+\hskip -.2in Observing frequency (MHz)&&

%% enter observing frequency (MHz) of first transition on next line
%% (spectroscopy only)

&

%% enter observing frequency (MHz) of second transition on next line
%% (spectroscopy only)

&

%% enter observing frequency (MHz) of third transition on next line
%% (spectroscopy only)

&Frequency Resolution (kHz/channel)&&&

%% enter frequency resolution (kHz/channel) for first transition
%% on next line (spectroscopy only)

&

%% enter frequency resolution (kHz/channel) for second transition
%% on next line (spectroscopy only)

&

%% enter frequency resolution (kHz/channel) for third transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+\hskip -.2in Correlator mode&&

%% enter correlator mode for first transition on next line
%% (spectroscopy only)

&

%% enter correlator mode for second transition on next line
%% (spectroscopy only)

&

%% enter correlator mode for third transition on next line
%% (spectroscopy only)

&Rms noise (natural weighting)&&&

%% enter rms noise after 1 hour for first transition
%% on next line (spectroscopy only)

&

%% enter rms noise after 1 hour for second transition
%% on next line (spectroscopy only)

&

%% enter rms noise after 1 hour for third transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&&&\unter {.6in}&\unter
{.6in}&\unter {.6in}\cr\smallskip
\+&&&&\hskip .2in after 1 hour (mJy)\cr\medskip}
\offinterlineskip
\settabs 2 \columns
\+&\hskip -.6in {\bf (16)} Number of sources \$\underline{\hbox{ \

%% enter number of sources on next line
5

\ } }\$ (If more than 10 sources please attach list. If more than
30 give only selection criteria and LST range(s.))\cr\bigskip}
\vbox{\hspace 10in
\offinterlineskip
\settabs 41 \columns
\+&\hskip -.7in \unter {10.462in}\cr
\+&\hskip -.7in\vr&&&&&\vr \ Epoch 1950

%% if the epoch is 1950, replace the ``bigcirc" with ``bigotimes" on
%% the next line

\$\bigotimes\$

\ 2000

%% if the epoch is 2000, replace the ``bigcirc" with ``bigotimes" on
%% the next line

\$\bigcirc\$

&&&&&\vr&&\vr&&\vr \ Band-&\vr \ Total Flux&
&&\vr \ Largest&&\vr \ Weakest&&&\vr \ Required&&\vr \ Possible&&&\vr
\ Time&&\vr\cr
\+&\hskip -.7in\vr&&&&&\vr
&RA&&&Dec&&\vr \ Config.&&&\vr \ Band&&\vr \ width&&\vr \unter
{.338in}\vrule height0pt depth3pt\unter {.376in}&
&&\vr \ ang.&&&\vr \ signal&&&\vr \ dynamic&&\vr \ LST range&&\vr
\ requested&&&\vr\cr

```
\+hskip -.7in\vr\hskip .1in {\bf (17)}&&NAME&&&&\vr
\ hh&&mm&&&$\pm$ xx.x$^{\circ}$&&\vr&&&\vr \ (cm)&&\vr \ (MHz)&&
\vr \ line&\hskip .1in\vr
\ cont.&&\vr \ size&&&\vr \ (mJy/beam)&&&&\vr \ range&&&
\vr \ hh - hh&&&\vr&&&\vr\cr
\+hskip -.7in\vr&&&&&&\vr
&&&&&&\vr&&&\vr&&\vr&&\vr \ (Jy)&\hskip .1in\vr
\ (Jy)&&\vr&&&\vr&&&\vr&&&\vr&&&\vr&&&\vr\cr
\+hskip -.7in\unter {10.462in}\cr
\+hskip -.7in\vr \
```

```
%% enter name of first source/field on next line
3C 135
```

```
&&&&&&\vr\hfil
```

```
%% enter hours of right ascension for first source/field on next line
05
```

```
&&\hfil
```

```
%% enter minutes of right ascension for first source/field on next line
11
```

```
&&&\hfil
```

```
%% enter declination in degrees for first source/field on next line
00.8
```

```
&&\vr \
```

```
%% enter configuration for first source/field on next line
C
```

```
&&&\vr \
```

```
%% enter band in cm for first source/field on next line
20
```

```
&&\vr \
```

```
%% enter bandwidth in MHz for first source/field on next line
50
```

```
&&\vr \
```

```
%% enter total line flux in Jy of first source/field on next line
```

```
&\hskip .1in\vr \
```

```
%% enter total continuum flux in Jy of first source/field on next line
3.3
```

```
&&\vr \
```

```
%% enter largest detectable angular size for first source/field on next line
130
```


&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for first source/field on
%% next line

5.0

&&&&\vr \ \

%% enter required dynamic range for first source/field on next line
2000

&&&\vr \ \

%% enter possible LST range in hh - hh format for first source/field on
%% next line

05-12

&&&\vr \

%% enter time requested for first field/source on next line, include units
1.5 hour

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of second source/field on next line

3C 135

&&&&&\vr\hfil

%% enter hours of right ascension for second source/field on next line

05

&&\hfil

%% enter minutes of right ascension for second source/field on next line

11

&&&\hfil

%% enter declination in degrees for second source/field on next line

00.8

&&\vr\ \

%% enter configuration for second source/field on next line

C

&&&\vr\ \

%% enter band in cm for second source/field on next line

3.6

&&\vr\ \

%% enter bandwidth in MHz for second source/field on next line

50

&&\vr \

%% enter total line flux in Jy of second source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of second source/field on next line

0.7

&&\vr \ \

%% enter largest detectable angular size for second source/field on next line

130

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for second source/field on

%% next line

0.03

&&&&\vr \ \

%% enter required dynamic range for second source/field on next line

2000

&&&\vr \ \

%% enter possible LST range in hh - hh format for second source/field on

%% next line

05-12

&&&\vr \

%% enter time requested for second field/source on next line, include units

4 hours

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of third source/field on next line

3C 223.1

&&&&&\vr\hfil

%% enter hours of right ascension for third source/field on next line

09

&&\hfil

%% enter minutes of right ascension for third source/field on next line

38

&&&\hfil

%% enter declination in degrees for third source/field on next line
40.0

&&\vr\ \

%% enter configuration for third source/field on next line
C

&&&\vr\ \

%% enter band in cm for third source/field on next line
20

&&\vr\ \

%% enter bandwidth in MHz for third source/field on next line
50

&&\vr\ \

%% enter total line flux in Jy of third source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of third source/field on next line
3.4

&&\vr\ \

%% enter largest detectable angular size for third source/field on next line
120

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for third source/field on
%% next line
1.6

&&&&\vr\ \

%% enter required dynamic range for third source/field on next line
1000

&&&\vr\ \

%% enter possible LST range in hh - hh format for third source/field on
%% next line
05-12

&&&\vr\ \

%% enter time requested for third field/source on next line, include units
1.5 hour

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of fourth source/field on next line

3C 390.3

&&&&&\vr\hfil

%% enter hours of right ascension for fourth source/field on next line

18

&&\hfil

%% enter minutes of right ascension for fourth source/field on next line

45

&&&\hfil

%% enter declination in degrees for fourth source/field on next line

79.7

&&\vr\ \

%% enter configuration for fourth source/field on next line

C

&&&\vr\ \

%% enter band in cm for fourth source/field on next line

6

&&\vr\ \

%% enter bandwidth in MHz for fourth source/field on next line

50

&&\vr\ \

%% enter total line flux in Jy of fourth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of fourth source/field on next line

4.3

&&\vr\ \

%% enter largest detectable angular size for fourth source/field on next line

240

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for fourth source/field on
%% next line

0.06

&&&&\vr\ \

%% enter required dynamic range for fourth source/field on next line

2500

&&&\vr \ \

%% enter possible LST range in hh - hh format for fourth source/field on

%% next line

12-20

&&&\vr \

%% enter time requested for fourth field/source on next line, include units

6 hours

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr \ \

%% enter name of fifth source/field on next line

3C 403

&&&&&&\vr\hfil

%% enter hours of right ascension for fifth source/field on next line

19

&&\hfil

%% enter minutes of right ascension for fifth source/field on next line

49

&&&\hfil

%% enter declination in degrees for fifth source/field on next line

02.3

&&\vr \ \

%% enter configuration for fifth source/field on next line

C

&&&\vr \ \

%% enter band in cm for fifth source/field on next line

20

&&\vr \ \

%% enter bandwidth in MHz for fifth source/field on next line

50

&&\vr \

%% enter total line flux in Jy of fifth source/field on next line

&\hskip .1in\vr \

%% enter total continuum flux in Jy of fifth source/field on next line

5.9

&&\vr \ \

%% enter largest detectable angular size for fifth source/field on next line

230

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for fifth source/field on

%% next line

1.0

&&&&\vr \ \

%% enter required dynamic range for fifth source/field on next line

1000

&&&\vr \ \

%% enter possible LST range in hh - hh format for fifth source/field on

%% next line

12-20

&&&\vr \

%% enter time requested for fifth field/source on next line, include units

1.5 hour

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of sixth source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for sixth source/field on next line

&&\hfil

%% enter minutes of right ascension for sixth source/field on next line

&&&\hfil

%% enter declination in degrees for sixth source/field on next line

&&\vr\ \

%% enter configuration for sixth source/field on next line

&&&\vr\ \

%% enter band in cm for sixth source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for sixth source/field on next line

&&\vr\ \

%% enter total line flux in Jy of sixth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of sixth source/field on next line

&&\vr\ \

%% enter largest detectable angular size for sixth source/field on next line

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for sixth source/field on
%% next line

&&&&\vr\ \

%% enter required dynamic range for sixth source/field on next line

&&&\vr\ \

%% enter possible LST range in hh - hh format for sixth source/field on
%% next line

&&&\vr\ \

%% enter time requested for sixth field/source on next line, include
%% units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr\ \

%% enter name of seventh source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for seventh source/field on next line

&&\hfil

%% enter minutes of right ascension for seventh source/field on next line

&&&\hfil

%% enter declination in degrees for seventh source/field on next line

&&\vr \

%% enter configuration for seventh source/field on next line

&&&\vr \

%% enter band in cm for seventh source/field on next line

&&\vr \

%% enter bandwidth in MHz for seventh source/field on next line

&&\vr \

%% enter total line flux in Jy of seventh source/field on next line

&\hskip .1in\vr \

%% enter total continuum flux in Jy of seventh source/field on next line

&&\vr \ \

%% enter largest detectable angular size for seventh source/field on next line

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for seventh source/field on
%% next line

&&&&\vr \ \

%% enter required dynamic range for seventh source/field on next line

&&&\vr \ \

%% enter possible LST range in hh - hh format for seventh source/field on
%% next line

&&&\vr \

%% enter time requested for seventh field/source on next line, include units

&&&\vr\cr
\+\hskip -.7in\unter {10.462in}\cr
\+\hskip -.7in\vr\ \

%% enter name of eighth source/field on next line

&&&&&&\vr\hfil

%% enter hours of right ascension for eighth source/field on next line

&&\hfil

%% enter minutes of right ascension for eighth source/field on next line

&&&\hfil

%% enter declination in degrees for eighth source/field on next line

&&\vr\ \

%% enter configuration for eighth source/field on next line

&&&\vr\ \

%% enter band in cm for eighth source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for eighth source/field on next line

&&\vr\ \

%% enter total line flux in Jy of eighth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of eighth source/field on next line

&&\vr\ \

%% enter largest detectable angular size for eighth source/field on next line

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for eighth source/field on
%% next line

&&&&\vr \ \

%% enter required dynamic range for eighth source/field on next line

&&&\vr \ \

%% enter possible LST range in hh - hh format for eighth source/field on
%% next line

&&&\vr \

%% enter time requested for eighth field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr \ \

%% enter name of ninth source/field on next line

&&&&&&\vr\hfil

%% enter hours of right ascension for ninth source/field on next line

&&\hfil

%% enter minutes of right ascension for ninth source/field on next line

&&&\hfil

%% enter declination in degrees for ninth source/field on next line

&&\vr \ \

%% enter configuration for ninth source/field on next line

&&&\vr \ \

%% enter band in cm for ninth source/field on next line

&&\vr \ \

%% enter bandwidth in MHz for ninth source/field on next line

&&\vr \

%% enter total line flux in Jy of ninth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of ninth source/field on next line

&&\vr \ \

%% enter largest detectable angular size for ninth source/field on next line

&&&\vr \ \

%% enter weakest signal detectable in mJy/beam for ninth source/field on
%% next line

&&&&\vr \ \

%% enter required dynamic range for ninth source/field on next line

&&&\vr \ \

%% enter possible LST range in hh - hh format for ninth source/field on
%% next line

&&&\vr \

%% enter time requested for ninth field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr

\+\hskip -.7in\vr \ \

%% enter name of tenth source/field on next line

&&&&&\vr\hfil

%% enter hours of right ascension for tenth source/field on next line

&&\hfil

%% enter minutes of right ascension for tenth source/field on next line

&&&\hfil

%% enter declination in degrees for tenth source/field on next line

&&\vr\ \

%% enter configuration for tenth source/field on next line

&&&\vr\ \

%% enter band in cm for tenth source/field on next line

&&\vr\ \

%% enter bandwidth in MHz for tenth source/field on next line

&&\vr\ \

%% enter total line flux in Jy of tenth source/field on next line

&\hskip .1in\vr\

%% enter total continuum flux in Jy of tenth source/field on next line

&&\vr\ \

%% enter largest detectable angular size for tenth source/field on next line

&&&\vr\ \

%% enter weakest signal detectable in mJy/beam for tenth source/field on
%% next line

&&&&\vr\ \

%% enter required dynamic range for tenth source/field on next line

&&&\vr\ \

%% enter possible LST range in hh - hh format for tenth source/field on
%% next line

&&&\vr\ \

%% enter time requested for tenth field/source on next line, include units

&&&\vr\cr

\+\hskip -.7in\unter {10.462in}\cr\bigskip
\+\hskip -.6in {\bf (18)} Special hardware, software, or operating
requirements: \

%% if you have special hardware, software, or operating requirements,

%% enter them on next couple of lines, if not enter N/A on next line
N/A

\cr\bigskip
\+\hskip -.6in {\bf (19)} Preferred range of dates for scheduling (give
reason): \

%% enter preferred range of dates for scheduling on next line
none

\cr\bigskip
\+\hskip -.6in {\bf (20)} Dates which are not acceptable: \

%% enter any unacceptable scheduling dates on next line
none

%% END OF INPUTS FOR SIDE 2

\cr\bigskip
\+\hskip -.6in {\bf (21)} Please attach a self-contained
\$\underline{\hbox{Scientific Justification}}\$ not in excess of 1000 words.
(Preprints and reprints will be IGNORED!) \cr\smallskip
\hskip -.48in When your proposal is scheduled, the contents of this cover
sheet become public information (Any supporting pages are for refereeing
only). \hfil v2.0 12/93}

\bye

From abridle Fri May 27 17:04:47 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["6958" "Fri" "27" "May" "1994" "17:04:38" "-0400" "Alan Bridle" "abridle " nil "140" "Scientific Justification" nil nil nil "5" nil nil (number " " mark " Alan Bridle May 27 140/6958 " thread-indent "\"Scientific Justification\""\n") nil]

nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA29715; Fri, 27 May 1994 17:04:38 -0400

Message-Id: <9405272104.AA29715@polaris.cv.nrao.edu>

References: <Pine.3.89.9405272029.A27850-0100000@mraose>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Scientific Justification

Date: Fri, 27 May 1994 17:04:38 -0400

```
\documentstyle{article}
\setlength{\textwidth}{160mm}
\hoffset -2cm
\begin{document}
```

```
\section{Introduction}
```

This proposal is part of a project concerned with the origin of one-sided jets in powerful (FR II) radio sources and specifically with the hypothesis that such jets contain bulk relativistic flows on large scales. It complements our previously approved proposal AS535.

A strong prediction of the relativistic flow model is that jet sidedness should not correlate with any orientation-independent parameter. As it is likely that the extended lobes of powerful radio sources are moving too slowly for Doppler boosting to be significant, their spectral indices should be independent of jet sidedness. A correlation between jet sidedness and lobe spectral index is, however, implied if we combine two striking results: \begin{itemize} \item In a sample consisting mostly of quasars, the lobe containing the jet depolarizes less rapidly with increasing wavelength than does its counterpart on the opposite side of the source (Laing 1988; Garrington \& Pooley 1991a, b; Garrington \& Pooley 1991). \end{itemize} A direct correlation between jet side and lobe spectral index would be of great importance, as it would make nonsense of the widely accepted idea of the relativistic beaming of intrinsically two-sided jets.

We (Bridle \& Pooley 1994a) have combined 20cm observations of 7 extended 3CR FR II quasars (proposal AL270) with existing data at 6cm (Bridle \& Pooley 1994b) to study their lobe spectral indices. The rule that emerged clearly, albeit from a small sample, was a little more complicated than a simple correlation. Comparing regions of equal surface brightness on two sides of the same quasar, we find that:

```
\begin{itemize}
\item the portions with \sl high surface
brightness have a flatter radio spectrum \sl in the jetted lobe} (all
cases but one);
\item the portions with \sl low surface brightness
have a flatter spectrum \sl in the longer lobe} (all cases).
```

\end{itemize}

This pattern (see Figure 1) encourages the notion that an orientation effect causes the Laing-Garrington correlation (especially in quasars, whose axes are at small or moderate angles to the line of sight according to unified theories), while a separate, intrinsic effect causes the Liu-Pooley correlation and also the correlation between lesser depolarization and greater lobe length found by Pedelty *et al.* (1989). While the pattern appears to be clear, the sample was small and consisted only of quasars. We need to enlarge both the size and diversity of the sample, first to confirm the pattern and then to test possible mechanisms for its origin, of which several have been suggested. We are now investigating radio galaxies with jets (a sub-sample of that described by Black *et al.* 1992), where one might expect intrinsic effects to dominate and orientation-dependent effects to be weaker. Some of this work has been done using existing archival data, but other sources require additional data to supplement that existing; hence the new B array observations [AS 535, scheduled for June 1994] and this request for C array data (already mentioned in the AS535 application).

\section{Proposed Observations}

>From the Black *et al.* sample of radio galaxies we have selected 12 that show evidence for a jet and which do not have gross structural peculiarities, with a view to making well-resolved spectral index maps of their lobes. There are good 8 GHz data for most of these sources [AB534], but for some the archival 1.4 GHz data are absent or inadequate. A few others in the sample were not observed at 8 GHz as high-resolution maps existed, but these data need to be supplemented in $\{u,v\}$ coverage to let us study the spectral index distributions in the large scale structure. We need new 20cm data for two sources: 3C135 and 3C403. B array observing time has already been scheduled under AS535, in which we indicated that we would apply for C array observations of the same sources. We also wish to map the linear polarization of these sources to ascertain their depolarization sidedness. In addition we also need to fill in crucial gaps in the $\{u,v\}$ coverage of archival data in 3C390.3 (5 GHz), 3C135 (8 GHz) and 3C223.1 (1.4 GHz). The depolarization sidedness is unknown for these two sources, so we must also map their linear polarization.

In C array we can use 50MHz bandwidth without introducing significant bandwidth smearing in any source. Our time requirement is governed more by the need for aperture-plane coverage to ensure an adequate representation of the large-scale structure, than by sensitivity (which is in most cases limited by the observing time of archival data.) The anticipated surface brightnesses in the extended regions at 20cm are roughly 100 and 20 mJy/beam, respectively for 3C 135 and 403. We require a 5σ detection of 25% linear polarization, giving 5 and 1 mJy/beam rms.

To obtain appropriate $\{u,v\}$ coverage and parallactic angle throw for polarization calibration, we request a total of 15 hours divided amongst the target sources and calibrators as follows. About six hours will be devoted to the large source 3C390.3 and its calibrator at 5 GHz, and 4 hours to 3C135 and its calibrator at 8 GHz. The balance of the time will be spent on the three shorter 1.4-GHz observations and in setting the flux density and polarization angle

scales at all three frequencies using 3C286. We prefer a continuous LST range from 0500-2000, but if necessary to cut back on the time assignment, it might be done in two pieces, from LST 0400-1000 and LST 1600-2200.

We expect to make one further observing request in this project, for D array observations of 3C285 at 5 GHz, and possibly one or two other sources.

\vspace{0.5 cm}

\noindent{\bf References}\

\medskip

\noindent

Black,A.R.S., Baum,S.A.,Leahy,J.P., Perley,R.A., Riley,J.M. \& Scheuer,P.A.G., 1992, {\sl M.N.R.A.S.}, {\bf 256}, 186.\

Bridle, A.H., Laing, R.A., Scheuer, P.A.G. \& Turner, S., 1994a. {\sl Physics of Active Galaxies}, First Stromlo Symposium, ed. Bicknell, G.V., Dopita, M.A. and Quinn,P., A.S.P. Conference Series {\bf 54}, 187.\

Bridle, A.H., Hough, D.H., Lonsdale, C.J., Burns, J.O. and Laing, R.A., 1994b. {\sl A.J.}, in press (Sept).\

Garrington, S.T., Conway, R.G. \& Leahy, J.P., 1991. {\sl M.N.R.A.S.}, {\bf 250}, 171.\

Garrington, S.T., Leahy, J.P., Conway, R.G. \& Laing, R.A., 1988. {\sl Nature}, {\bf 331}, 147.\

Laing, R.A., 1988. {\sl Nature}, {\bf 331}, 149.\

Liu, R. \& Pooley, G.G., 1991a. {\sl M.N.R.A.S.}, {\bf 249}, 343.\

Liu, R. \& Pooley, G.G., 1991b. {\sl M.N.R.A.S.}, {\bf 253}, 669.\

Pedelty, J.A., Rudnick, L., McCarthy, P.J. \& Spinrad, H., 1989. {\sl A.J.}, {\bf 97}, 647.\

\end{document}

From abridle Wed Jun 1 11:32:49 1994

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Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA19685; Wed, 1 Jun 1994 11:31:13 -0400

Message-Id: <9406011531.AA19685@polaris.cv.nrao.edu>

References: <9405271803.AA29665@polaris.cv.nrao.edu>
<Pine.3.89.9405271947.F27750-0100000@mraose>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: second period

Date: Wed, 1 Jun 1994 11:31:13 -0400

/.AS535 377

/* ***/

/* ***/ NRAO VLA Observe Program, Version U3.1.19, 1993.08.26

/* ***/

/* ***/ Observation day 56,229 at 03 00 00 LST, 1994.06.18 09:23:45 MST.

/* ***/

/* ***/ Observer

/* ***/ J Dennett-Thorpe Phone

/* ***/ Cavendish Laboratory | Office: ()

/* ***/ Madingley Road | During observation: (804)-971-7752

/* ***/ Cambridge CB3 0HE | Alan Bridle, NRAO/CV

/* ***/ U.K.

/* ***/

/* ***/ E-Mail address

/* ***/ jdt@mrao.cam.ac.uk

/* ***/

/* ***/ Observing mode(s): Continuum

/* ***/

/* ***/ Special Instructions

/* ***/

/* ***/ Extend observations of 0134+329 and 0518+165 if necessary to

/* ***/ ensure 2 min of on-source integration in case of any on-line

/* ***/ problems

/* ***/

/* ***/ Date Prepared: 1994.05.27 10:43:09 MST.

/* ***/

0134+329 03 15 00 01 34 49.8320 +32 54 20.520 LL C 1111 14.60

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

0518+165 03 22 30 05 18 16.5320 +16 35 26.900 LL C 1111 8.60

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

3C135 03 52 30 05 11 33.7000 +00 53 08.000 LL 1111

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

0457+024 03 56 30 04 57 15.5438 +02 25 05.718 LL A 1111

//DS 30

//LO -3.2 -3.2 3690 3610

//FISF 113.500000 212.500000

0134+329 04 06 30 01 34 49.8320 +32 54 20.520 LL C 1111 14.60
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 04 36 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 04 40 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 05 10 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 05 14 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
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3C135 05 44 30 05 11 33.7000 +00 53 08.000 LL 1111
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0457+024 05 48 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
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//FISF 113.500000 212.500000
3C135 06 18 30 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 06 22 30 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0518+165 06 30 00 05 18 16.5320 +16 35 26.900 LL C 1111 8.60
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C135 06 56 00 05 11 33.7000 +00 53 08.000 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
0457+024 07 00 00 04 57 15.5438 +02 25 05.718 LL A 1111
//DS 30
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//FISF 113.500000 212.500000

From abridle Wed Jun 1 11:32:56 1994
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"6" nil nil (number " " mark " Alan Bridle Jun 1 150/9854 " thread-indent "\"Re: first period\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA20194; Wed, 1 Jun 1994 11:30:47 -0400
Message-Id: <9406011530.AA20194@polaris.cv.nrao.edu>
References: <9405271803.AA29665@polaris.cv.nrao.edu>
<Pine.3.89.9405271911.E27750-0100000@mraose>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: first period
Date: Wed, 1 Jun 1994 11:30:47 -0400

I've taken a quick look at this and just edited the header as follows.
I haven't checked the details of dwell times, as I presume you've done
that with OBSERVE already. I suggest the one "special instruction" to
make sure we do get flux and polarization calibration as expected (the
operators can easily extend a scan manually).

The final file can just be E-mailed to observe@nrao.edu. I'll send it
if you like but let's make sure we don't both do it as that could cause
confusion.

If you want the AOC staff to ship you the archive tape copies directly
you'll have to arrange that with analysts@nrao.edu and arrange for
MRAO to pony up a shipping charge (probably \$10). Someone from MRAO
who's done that before can tell you how this has worked in the past.
You may have to be explicit about waiting until both runs have
happened and putting them both on the same tape, otherwise they may
ship and bill for two. An alternative would be for me to request the
archive tape copy to be sent here, which they'll do for free. Then I
could run it through FILLM to make sure it's o.k. and send you the raw
multi-source database in FITS format. That would (a) avoid any tedium
over \$10 amounts -- the NRAO won't care about _me_ shipping you a tape,
(b) make sure the data on the first tape you see are intact and (c)
leave a copy of the raw data both here and in Cambridge for extra
backup. It would take a little longer to get to you however (air mail
to Charlottesville and Cambridge probably about the same time from
Socorro!).

Whichever suits you best

Second file follows separately

A.

```
/.AS535 377
/* ***
/* *** NRAO VLA Observe Program, Version U3.1.19, 1993.08.26
/* ***
/* *** Observation day 56,220 at 15 00 00 LST, 1994.06.09 21:57:11 MST.
/* ***
/* *** Observer
/* *** J Dennett-Thorpe Phone
/* *** Cavendish Laboratory Office: ( )
```

/* ** Madingley Road | During observation: (804)971-7752
/* ** Cambridge CB3 0HE | Alan Bridle, NRAO/CV
/* ** U.K.
/* **
/* ** E-Mail address
/* ** jdt@mrao.cam.ac.uk
/* **
/* ** Observing mode(s): Continuum
/* **
/* ** Special Instructions
/* **
/* ** Extend observations of 1328+307 if necessary to ensure 2 min
/* ** on-source integration in case of any on-line problems
/* **
/* **
/* ** Date Prepared: 1994.05.26 12:03:16 MST.
/* **
/*

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1947+079 15 23 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 16 08 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 16 11 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1328+307 16 21 30 13 28 49.6570 +30 45 58.640 LL C 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 16 29 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 17 14 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 17 18 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 18 03 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
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//FISF 113.500000 212.500000
1947+079 18 06 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
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//FISF 113.500000 212.500000

3C403 18 51 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 18 55 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 19 40 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 19 43 30 19 47 40.1626 +07 59 35.579 LL A 1111
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3C403 20 28 30 19 49 44.5680 +02 22 37.100 LL 1111
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1947+079 20 32 00 19 47 40.1626 +07 59 35.579 LL A 1111
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3C403 21 17 00 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
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//FISF 113.500000 212.500000
1947+079 21 20 30 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
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//FISF 113.500000 212.500000
3C403 22 05 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 22 09 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
3C403 22 56 30 19 49 44.5680 +02 22 37.100 LL 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000
1947+079 23 00 00 19 47 40.1626 +07 59 35.579 LL A 1111
//DS 30
//LO -3.2 -3.2 3690 3610
//FISF 113.500000 212.500000

From root Thu Jun 9 05:58:05 1994

X-VM-v5-Data: ([nil nil nil nil t nil t nil nil]

["397" "Thu" "9" "June" "1994" "10:58:24" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.3.89.9406091045.C4600-0100000@mraosb>" "12" "observations" nil nil nil "6" nil nil (number " " mark " R Jane
Dennett-Thor Jun 9 12/397 " thread-indent "\"observations\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA46334; Thu, 9 Jun 1994 05:58:04 -0400

Received: from mraosb.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0qBgsX-0002PqC; Thu, 9 Jun 94 10:58 BST

Received: by mraosb.ra.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qBgsT-0001HuC; Thu, 9 Jun 94 10:58 BST

Message-Id: <Pine.3.89.9406091045.C4600-0100000@mraosb>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: observations

Date: Thu, 9 Jun 1994 10:58:24 +0100 (BST)

hi there,

peter got an email from the analysts saying "if we were planning to do
our observe file remotely, on site etc etc". i hope this is all routine
and doesn't mean that they didn't get the files. if *not* can you let me
know/ sort it out?

also, it said something about calling them, is this
necessary/advisable, and if so, are you on top of that??
sorry to bother you with this.

j.

From abridle Thu Jun 9 10:27:46 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

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nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31963; Thu, 9 Jun 1994 10:27:28 -0400

Message-Id: <9406091427.AA31963@polaris.cv.nrao.edu>

References: <Pine.3.89.9406091045.C4600-0100000@mraosb>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: observations

Date: Thu, 9 Jun 1994 10:27:28 -0400

The analysts will routinely contact the designated contact person with a form E-mail but I didn't think they were supposed to send that out if the files had already been received. I've sent them an E-mail to check on the situation.

A.

I thought that you had sent the files several days ago. If so, this probably just the analysts not checking with the observing staff before sending their form letter.

From root Thu Jun 9 10:28:02 1994

X-VM-v5-Data: ([nil nil nil nil t nil t nil nil]

["184" "Thu" "9" "June" "1994" "08:28:37" "-0600" "Data Analysts" "analysts@aoc.nrao.edu"

"<199406091428.AA07363@agave.aoc.nrao.edu>" "8" "Re: forwarded message re AS535" nil nil nil "6" nil nil (number "
" mark " R Data Analysts Jun 9 8/184 " thread-indent "\"Re: forwarded message re AS535\""\n") nil]
nil)

Received: from agave.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31715; Thu, 9 Jun 1994 10:28:01 -0400

Received: by agave.aoc.nrao.edu (5.65c/1.3pmsg)

id AA07363; Thu, 9 Jun 1994 08:28:37 -0600

Message-Id: <199406091428.AA07363@agave.aoc.nrao.edu>

From: Data Analysts <analysts@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: forwarded message re AS535

Date: Thu, 9 Jun 1994 08:28:37 -0600

Dear Alan,

Yes, the operators have your files. We did not receive copies of them - and that's fine - but we didn't realize the operators had them. Sorry about the confusion.

Meri

From abridle Thu Jun 9 10:29:48 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["701" "Thu" "9" "June" "1994" "10:29:24" "-0400" "Alan Bridle" "abridle " nil "20" "forwarded message from Data Analysts" nil nil nil "6" nil nil (number " " mark " Alan Bridle Jun 9 20/701 " thread-indent ""forwarded message from Data Analysts\`\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31728; Thu, 9 Jun 1994 10:29:24 -0400

Message-Id: <9406091429.AA31728@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: jdt@mrao.cam.ac.uk

Subject: forwarded message from Data Analysts

Date: Thu, 9 Jun 1994 10:29:24 -0400

----- Start of forwarded message -----

Received: from agave.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31715; Thu, 9 Jun 1994 10:28:01 -0400

Received: by agave.aoc.nrao.edu (5.65c/1.3pmsg)

id AA07363; Thu, 9 Jun 1994 08:28:37 -0600

Message-Id: <199406091428.AA07363@agave.aoc.nrao.edu>

From: Data Analysts <analysts@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: forwarded message re AS535

Date: Thu, 9 Jun 1994 08:28:37 -0600

Dear Alan,

Yes, the operators have your files. We did not receive copies of them - and that's fine - but we didn't realize the operators had them. Sorry about the confusion.

Meri

----- End of forwarded message -----

From root Thu Jun 9 10:32:53 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["27" "Thu" "9" "June" "1994" "15:33:13" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "4" "Re:
forwarded message from Data Analysts" nil nil nil "6" nil nil (number " " mark " Jane Dennett-Thor Jun 9 4/27 "
thread-indent "\"Re: forwarded message from Data Analysts\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA35602; Thu, 9 Jun 1994 10:32:50 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qBIAQ-0002QvC; Thu, 9 Jun 94 15:33 BST

In-Reply-To: <9406091429.AA31728@polaris.cv.nrao.edu>

Message-Id: <Pine.3.89.9406091530.A22604-0100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: forwarded message from Data Analysts

Date: Thu, 9 Jun 1994 15:33:13 +0100 (BST)

ahhh...

relief.

thanks!

j.

From abridle Thu Jun 9 10:36:48 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["709" "Thu" "9" "June" "1994" "10:36:37" "-0400" "Alan Bridle" "abridle " nil "20" "Re: observations" nil nil nil "6"
nil nil (number " " mark " Alan Bridle Jun 9 20/709 " thread-indent "\"Re: observations\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA35627; Thu, 9 Jun 1994 10:36:37 -0400

Message-Id: <9406091436.AA35627@polaris.cv.nrao.edu>

References: <Pine.3.89.9406091045.C4600-0100000@mraosb>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: observations

Date: Thu, 9 Jun 1994 10:36:37 -0400

Just to confirm, they had the files all the time, and
we don't have to do anything!

The operators are on the Plains and the analysts are in Socorro
so there is scope for missed communications here. A lot of
people have the analysts prepare the observing files for them,
so the analysts have a form letter they send out before the
observing runs. But they are supposed to check that the
letter is needed before they send it.

I don't normally send copies of my observe files to the analysts
as well but it would evidently help to head off such confusions
in the future if I/we did!

So a simultaneous email to observe@nrao.edu, analysts@nrao.edu
"next time" might be simpler!

Resume breathing

A.

From abridle Thu Jun 23 09:31:13 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["432" "Thu" "23" "June" "1994" "09:30:46" "-0400" "Alan Bridle" "abridle" nil "14" "Re: observations" nil nil nil
"6" nil nil (number " " mark " Alan Bridle Jun 23 14/432 " thread-indent "\"Re: observations\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA49108; Thu, 23 Jun 1994 09:30:46 -0400

Message-Id: <9406231330.AA49108@polaris.cv.nrao.edu>

References: <Pine.3.89.9406091045.C4600-0100000@mraosb>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: observations

Date: Thu, 23 Jun 1994 09:30:46 -0400

Hello Jane,

Just to let you know I have received the Exabyte from the AOC this morning (they waited an extra couple of days so they could also send me another project on the same tape).

I'll make the tape with the FILL'd data as soon as possible and let you know when it's in the mail.

We have been having an enormous heat-wave for the last couple of weeks -- you made the right choice about whether or not to come over now!

A.

From abridle Thu Jun 23 11:35:13 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["446" "Thu" "23" "June" "1994" "11:34:00" "-0400" "Alan Bridle" "abridle" nil "17" "Re: observations" nil nil nil
"6" nil nil (number " " mark " Alan Bridle Jun 23 17/446 " thread-indent "\"Re: observations\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31733; Thu, 23 Jun 1994 11:34:00 -0400

Message-Id: <9406231534.AA31733@polaris.cv.nrao.edu>

References: <Pine.3.89.9406091045.C4600-0100000@mraosb>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: observations

Date: Thu, 23 Jun 1994 11:34:00 -0400

Hello again Jane,

The FITS tape and copies of the operators' logs are in the mail to you. Each run has its own MULTI source FITS file, and I wrote the table extensions in the old AIPS binary format in case you do not have the latest AIPS (which can also read the new FITS binary table standard format).

I have kept copies of the archive tape and the FITS tape here. Let me know if you have any problems once your tape arrives.

Cheers, A.

From root Mon Sep 5 13:18:53 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["507" "Mon" "5" "September" "1994" "18:20:35" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940905181247.13403A-100000@mraosf>" "16" "fall visit?" nil nil nil "9" nil nil (number " " mark " R

Jane Dennett-Thor Sep 5 16/507 " thread-indent "\"fall visit?\"n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA67344; Mon, 5 Sep 1994 13:18:48 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp

(Smail3.1.28.1 #2) id m0qhhie-0002QIC; Mon, 5 Sep 94 18:20 BST

X-Sender: jdt@mraosf

In-Reply-To: <9406231534.AA31733@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940905181247.13403A-100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: fall visit?

Date: Mon, 5 Sep 1994 18:20:35 +0100 (BST)

Hello Alan,

After a spell of silence from me, I thought it was time i started filling your mailbox up again.

I thought it was probably about time i got on the case of organising my trip out to NRAO. Assuming that this is still convenient of course...

Please let me know when the best/worst times for you would be. From my perspective it doesn't really make much odds as long as it's not the next three weeks ;)

Anyway I hope things are well and your summer was temperately bearable.

cheers, jane.

From root Tue Sep 13 10:04:48 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["899" "Tue" "13" "September" "1994" "15:05:55" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940913145531.776A-100000@mraosf>" "24" "Re: fall visit?" nil nil nil "9" nil nil (number " " mark " R
Jane Dennett-Thor Sep 13 24/899 " thread-indent "\"Re: fall visit?\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA24114; Tue, 13 Sep 1994 10:04:21 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0qkYSI-0002Q2C; Tue, 13 Sep 94 15:03 BST

X-Sender: jdt@mraosf

In-Reply-To: <9409121323.AA30369@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940913145531.776A-100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: fall visit?

Date: Tue, 13 Sep 1994 15:05:55 +0100 (BST)

Hello Alan,

Thanks for the email & the included news.

I think what may be a good plan- although I don't know how it works at
your end- is if we provisionally plan for me to come out in early october.
I have not done anything to the data from the last observing run (which,
yes i got, sorry- i thought i haad sent an email to that effect.
apparently not.), and there's also the question of doing depolarisation
work- so that should keep me busy. the provisional would then be in case
the the run is scdeduled in the latter part of the session, in which case
it may be better if i wait a bit.

As for the NM trip- robert also has to go out at soem point, so that may
all wotk out well. (but then again...)

So: i'll make the necessary enquiries here abt money. Do i need a visa?
(I think we discussed this before, but i can't remember the outcome.)
What other hoops are there?

Cheers,
jane

From abridle Tue Sep 13 10:36:21 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["661" "Tue" "13" "September" "1994" "10:36:05" "-0400" "Alan Bridle" "abridle " nil "17" "Re: fall visit?" nil nil nil
"9" nil nil (number " " mark " Alan Bridle Sep 13 17/661 " thread-indent "\"Re: fall visit?\"\\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA26920; Tue, 13 Sep 1994 10:36:05 -0400

Message-Id: <9409131436.AA26920@polaris.cv.nrao.edu>

References: <9409121323.AA30369@polaris.cv.nrao.edu>
<Pine.SUN.3.90.940913145531.776A-100000@mraosf>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: fall visit?

Date: Tue, 13 Sep 1994 10:36:05 -0400

I think you would only need a visitor (tourist) visa. If you had one on your last visit to the U.S. that was valid for multiple entries then you may only need to renew it to cover the period of the visit. I'll talk to our visa expert.

You will not need a work permit if the NRAO simply reimburses your air fare and pays you a per diem to cover living expenses, i.e. no stipend/salary is involved. It would however be a good idea to buy travelers' medical insurance to cover the time that you would be here. No medical treatment in the U.S. is free and you would need some insurance coverage that is valid here even in case of an accident.

Cheers, Alan

From abridle Tue Sep 13 10:41:58 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["450" "Tue" "13" "September" "1994" "10:41:58" "-0400" "Alan Bridle" "abridle " nil "15" "Visiting student from U.K." nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 13 15/450 " thread-indent "\"Visiting student from U.K.\"") nil]

nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA24283; Tue, 13 Sep 1994 10:41:58 -0400

Message-Id: <9409131441.AA24283@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: mpetty

Subject: Visiting student from U.K.

Date: Tue, 13 Sep 1994 10:41:58 -0400

Monroe,

Bob Brown has agreed to pay air fare and per diem expenses for a U.K. student who will come over for a couple of months to do some VLA observing and to work with me here in C'ville. She will not be in the official NRAO pre-doc program and will only receive expense reimbursement, not any salary from NRAO.

What sort of visa should she get? Can she come in on a visitor (tourist) visa or is another category more appropriate?

Alan B.

From mpetty Tue Sep 13 11:25:50 1994
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["613" "Tue" "13" "September" "94" "11:25:49" "EDT" "Monroe Petty" "mpetty "
"<9409131525.AA24453@polaris.cv.nrao.edu>" "21" "Re: Visiting student from U.K." nil nil nil "9" nil nil (number " "
mark " R Monroe Petty Sep 13 21/613 " thread-indent "\"Re: Visiting student from U.K.\"\\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA24453; Tue, 13 Sep 1994 11:25:49 -0400
Message-Id: <9409131525.AA24453@polaris.cv.nrao.edu>
In-Reply-To: <9409131441.AA24283@polaris.cv.nrao.edu>; from "Alan Bridle" at Sep 13, 94 10:41 am
X-Mailer: ELM [version 2.3 PL11]
From: mpetty (Monroe Petty)
To: abridle@polaris.cv.nrao.edu (Alan Bridle)
Subject: Re: Visiting student from U.K.
Date: Tue, 13 Sep 94 11:25:49 EDT

Alan, I think a J-1 visa would be the best. We can take care of everything if you'll give us the contact information.

Monroe>
>
> Monroe,
>
> Bob Brown has agreed to pay air fare and per diem expenses for
> a U.K. student who will come over for a couple of months
> to do some VLA observing and to work with me here in C'ville.
> She will not be in the official NRAO pre-doc program and will
> only receive expense reimbursement, not any salary from NRAO.
>
> What sort of visa should she get? Can she come in on a visitor
> (tourist) visa or is another category more appropriate?
>
> Alan B.
>
>
>

From root Tue Sep 13 11:28:37 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["283" "Tue" "13" "September" "1994" "16:28:30" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940913162618.883C-100000@mraosf>" "9" "Re: fall visit?" nil nil nil "9" nil nil (number " " mark " R
Jane Dennett-Thor Sep 13 9/283 " thread-indent "\"Re: fall visit?\""\n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA33480; Tue, 13 Sep 1994 11:28:36 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp

(Smail3.1.28.1 #2) id m0qkZma-0002Q2C; Tue, 13 Sep 94 16:28 BST

X-Sender: jdt@mraosf

In-Reply-To: <9409131436.AA26920@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940913162618.883C-100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: fall visit?

Date: Tue, 13 Sep 1994 16:28:30 +0100 (BST)

If you are talking to your visa expert things you may need to know: my
last visa was not a tourist visa as it related to a year's study. it is
also in a passport that has now expired.

I shall get insurance from our groups policy, so that shouldn't be a problem.

Thanks,
jane.

From mpetty Wed Sep 14 08:56:35 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["294" "Wed" "14" "September" "94" "8:56:34" "EDT" "Monroe Petty" "mpetty" nil "11" "Re: Visiting student from U.K." nil nil nil "9" nil nil (number " " mark " Monroe Petty Sep 14 11/294 " thread-indent "\"Re: Visiting student from U.K.\"") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA25942; Wed, 14 Sep 1994 08:56:35 -0400

Message-Id: <9409141256.AA25942@polaris.cv.nrao.edu>

In-Reply-To: <9409131610.AA24230@polaris.cv.nrao.edu>; from "Alan Bridle" at Sep 13, 94 12:10 pm

X-Mailer: ELM [version 2.3 PL11]

From: mpetty (Monroe Petty)

To: abridle@polaris.cv.nrao.edu (Alan Bridle)

Subject: Re: Visiting student from U.K.

Date: Wed, 14 Sep 94 8:56:34 EDT

We can fedex the forms the day after we receive the necessary info from the student. He/she can then pick up the visa as soon as they can get to the nearest US Consulate office.>

>

> How long would J-1 processing usually take?

>

> We are (of course) looking to do this a.s.a.p.!

>

> A.

>

From abridle Wed Sep 14 09:12:46 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["415" "Wed" "14" "September" "1994" "09:12:44" "-0400" "Alan Bridle" "abridle" "nil" "10" "Re: fall visit?" nil nil nil
"9" nil nil (number " " mark " Alan Bridle Sep 14 10/415 " thread-indent "\"Re: fall visit?\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA25988; Wed, 14 Sep 1994 09:12:44 -0400

Message-Id: <9409141312.AA25988@polaris.cv.nrao.edu>

References: <9409131436.AA26920@polaris.cv.nrao.edu>
<Pine.SUN.3.90.940913162618.883C-100000@mraosf>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: fall visit?

Date: Wed, 14 Sep 1994 09:12:44 -0400

Hi Jane,

The story at this end is that we need to get you a J-1 student visa. I gather this can be done pretty quickly. If you can send me a FAX number I will have our personnel department FAX you the forms so you can give them the info that will be needed. Then they will courier what is needed to the INS and you would have to go to the nearest US consular office (London?) to pick up a visa.

Cheers, A,

From root Wed Sep 14 13:15:37 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["282" "Wed" "14" "September" "1994" "18:15:18" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "10"
"Re: fall visit?" nil nil nil "9" nil nil (number " " mark " Jane Dennett-Thor Sep 14 10/282 " thread-indent "\Re: fall
visit?"\n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA34110; Wed, 14 Sep 1994 13:15:27 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qkxvT-0002QaC; Wed, 14 Sep 94 18:15 BST

X-Sender: jdt@mraos

In-Reply-To: <9409141312.AA25988@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940914180327.4405A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: fall visit?

Date: Wed, 14 Sep 1994 18:15:18 +0100 (BST)

Our fax number is +(44) 1223 354599

Although perhaps you may as well throw it in the post -- my passport is
in for renewal & i'm not expecting to see it for another two weeks. I may
just have to go and stand on the steps of the consul on my way to the
airport!

Thanks,
jane.

From abridle Wed Sep 14 15:38:54 1994

X-VM-v5-Data: ([nil nil nil nil nil nil t nil nil]

["560" "Wed" "14" "September" "1994" "15:38:54" "-0400" "Alan Bridle" "abridle" "nil" "20" "U.K. student" nil nil nil
"9" nil nil (number " " mark " Z Alan Bridle Sep 14 20/560 " thread-indent "\"U.K. student\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA39185; Wed, 14 Sep 1994 15:38:54 -0400

Message-Id: <9409141938.AA39185@polaris.cv.nrao.edu>

References: <9409141835.AA23452@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: brodrigu (Billie Rodriguez)

Subject: U.K. student

Date: Wed, 14 Sep 1994 15:38:54 -0400

Billie,

Jane Dennett-Thorpe is a Ph.D. student in the Mullard Radio Astronomy Observatory, Cavendish Laboratory, Cambridge, U.K. She will be coming to the NRAO for some VLA observing and to work with me for a couple of months. Bob Brown has planned for NRAO to pay her travel and living expenses, but she will not be on our payroll (i.e. not part of the formal pre-doctoral program).

Monroe says that she will need a J-1 visa for this.

Could you send her the J-1 application forms as soon as possible by FAX to +(44) 1223 354599 ?

Thanks,

Alan Bridle

From abridle Wed Sep 14 15:42:51 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1140" "Wed" "14" "September" "1994" "15:42:39" "-0400" "Alan Bridle" "abridle " nil "39" "forwarded message
from Alan Bridle" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 14 39/1140 " thread-indent "\n"forwarded
message from Alan Bridle"\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA32025; Wed, 14 Sep 1994 15:42:39 -0400
Message-Id: <9409141942.AA32025@polaris.cv.nrao.edu>
From: abridle (Alan Bridle)
To: jdt@mrao.cam.ac.uk
Subject: forwarded message from Alan Bridle
Date: Wed, 14 Sep 1994 15:42:39 -0400

Jane, we might as well get the ball rolling as fast as possible
whatever the state of your passport, so here FYI is a copy of the
request I've made of Billie Rodriguez in our personnel office.
("Monroe" is Monroe Petty, the NRAO Personnel Director).

E-mail me or Billie (brodrigu@nrao.edu) directly if what emerges from
this at your end isn't comprehensible!

Cheers, A.

----- Start of forwarded message -----

From: abridle (Alan Bridle)
To: brodrigu (Billie Rodriguez)
Subject: U.K. student
Date: Wed, 14 Sep 1994 15:38:54 -0400

Billie,

Jane Dennett-Thorpe is a Ph.D. student in the Mullard Radio
Astronomy Observatory, Cavendish Laboratory, Cambridge, U.K.
She will be coming to the NRAO for some VLA observing and
to work with me for a couple of months. Bob Brown has
planned for NRAO to pay her travel and living expenses, but
she will not be on our payroll (i.e. not part of the formal
pre-doctoral program).

Monroe says that she will need a J-1 visa for this.

Could you send her the J-1 application forms as soon as
possible by FAX to +(44) 1223 354599 ?

Thanks,

Alan Bridle

----- End of forwarded message -----

From brodrigu Wed Sep 14 15:47:12 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["149" "Wed" "14" "September" "94" "15:47:11" "EDT" "Billie Rodriguez" "brodrigu "

"<9409141947.AA19035@polaris.cv.nrao.edu>" "8" "Re: U.K. student" nil nil nil "9" nil nil (number " " mark " R Billie Rodriguez Sep 14 8/149 " thread-indent "\"Re: U.K. student\""\n") nil]

nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA19035; Wed, 14 Sep 1994 15:47:12 -0400

Message-Id: <9409141947.AA19035@polaris.cv.nrao.edu>

In-Reply-To: <9409141938.AA39185@polaris.cv.nrao.edu>; from "Alan Bridle" at Sep 14, 94 3:38 pm

X-Mailer: ELM [version 2.3 PL11]

From: brodrigu (Billie Rodriguez)

To: abridle@polaris.cv.nrao.edu (Alan Bridle)

Subject: Re: U.K. student

Date: Wed, 14 Sep 94 15:47:11 EDT

I will send her the questions I need answered for the IAP-66
but will then send the original form to her.

Thanks for the information.

Billie

From abridle Wed Sep 14 16:13:59 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["170" "Wed" "14" "September" "1994" "16:13:59" "-0400" "Alan Bridle" "abridle " nil "11" "Re: U.K. student" nil nil
nil "9" nil nil (number " " mark " Alan Bridle Sep 14 11/170 " thread-indent "\"Re: U.K. student\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA32246; Wed, 14 Sep 1994 16:13:59 -0400

Message-Id: <9409142013.AA32246@polaris.cv.nrao.edu>

References: <9409141938.AA39185@polaris.cv.nrao.edu>

<9409141947.AA19035@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: brodrigu (Billie Rodriguez)

Subject: Re: U.K. student

Date: Wed, 14 Sep 1994 16:13:59 -0400

Thanks,

the full postal address at MRAO is

Mullard Radio Astronomy Observatory
Cavendish Laboratory
Madingley Road
Cambridge CB3 0HE
U.K.

A.

From root Thu Sep 15 09:32:24 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["402" "Thu" "15" "September" "1994" "14:32:16" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940915142524.11051A-100000@mraos>" "14" "Re: forwarded message from Alan Bridle" nil nil nil "9"
nil nil (number " " mark " R Jane Dennett-Thor Sep 15 14/402 " thread-indent "\"Re: forwarded message from Alan
Bridle\""\n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA17409; Thu, 15 Sep 1994 09:32:20 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qlGvB-0002QIC; Thu, 15 Sep 94 14:32 BST

X-Sender: jdt@mraos

In-Reply-To: <9409141942.AA32025@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940915142524.11051A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: forwarded message from Alan Bridle

Date: Thu, 15 Sep 1994 14:32:16 +0100 (BST)

Hi Alan,

Thanks for the fwded.

I noticed something in there that i had not expected--it included 'travel expenses'. I was planning to see what I could get out of PPARC (the successor to SERC) in this line. They certainly pay 100% of observing trips, and may pay 50% of my flight to wherever I fly to to reach you.

I will continue with this, unless I hear to the contrary from you.

cheers,

jane

From abridle Thu Sep 15 11:15:17 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1330" "Thu" "15" "September" "1994" "11:14:53" "-0400" "Alan Bridle" "abridle" "nil" "28" "Re: forwarded message from Alan Bridle" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 15 28/1330 " thread-indent "\"Re: forwarded message from Alan Bridle\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31865; Thu, 15 Sep 1994 11:14:53 -0400

Message-Id: <9409151514.AA31865@polaris.cv.nrao.edu>

References: <9409141942.AA32025@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940915142524.11051A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: forwarded message from Alan Bridle

Date: Thu, 15 Sep 1994 11:14:53 -0400

Hi Jane,

Well, I'm sure the NRAO will be even more happy to share the costs of your ticket than to pay all of them, so by all means try to raise a contribution from PPARC as well!

Normally the NRAO does not pay any travel or living expenses for non-US visitors on observing trips. But Bob Brown appeared to be in a generous frame of mind here and the decision is up to him. The NRAO is interested in bringing students in for more than just quick observe-and-leave visits, in part to counteract the trend for VLA users never to come at all! So the usual rulebook seems to have been left shut in this case. At least some parts of it ...

I just talked with Billie again re the visa, and to clarify what's going to happen: she needs information to answer some particular questions and will FAX that then she will mail you completed forms that you will need to sign and take to a U.S. consulate in order to be issued the J-1 visa. If dealing with the consulates is anything like dealing with the immigration authorities once you're in the country, you'll need to ask your consulate exactly how they handle the visa-issuing process, i.e. is it a walk-in "quickie" or do they need to review the forms for a while? These things seem to vary from one office to another, as does the degree of inconvenience they inflict!

Alan

From root Wed Sep 21 07:39:03 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["106" "Wed" "21" "September" "1994" "12:38:51" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "8" "J-1" nil nil nil "9" nil nil (number " " mark " Jane Dennett-Thor Sep 21 8/106 " thread-indent "\"J-1\""\n") nil] nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA32636; Wed, 21 Sep 1994 07:39:02 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qnQ0i-0002QUC; Wed, 21 Sep 94 12:38 BST

X-Sender: jdt@mraos

In-Reply-To: <9409201507.AA36592@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940921123541.23453A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: J-1

Date: Wed, 21 Sep 1994 12:38:51 +0100 (BST)

hi,

Grant info: yes, i get a grant from PPARC (4720pounds pa)

telephone: as was, 337200.

thanks,
jane.

From root Fri Sep 23 12:00:08 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["272" "Fri" "23" "September" "1994" "17:00:10" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.940923165655.7486A-100000@mraosf>" "9" "Re: forwarded message from Alan Bridle" nil nil nil "9"
nil nil (number " " mark " R Jane Dennett-Thor Sep 23 9/272 " thread-indent "\"Re: forwarded message from Alan
Bridle\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA27932; Fri, 23 Sep 1994 12:00:05 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0qoD2h-0002QpC; Fri, 23 Sep 94 17:00 BST

X-Sender: jdt@mraosf

In-Reply-To: <9409201507.AA36592@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940923165655.7486A-100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: forwarded message from Alan Bridle

Date: Fri, 23 Sep 1994 17:00:10 +0100 (BST)

as you may know by now, our obs dates are 25-27 november. so now that is organised, and you and robert may have chatted abt when who is going to be where, i wondered if you had some more ideas as to more exactly when would be best for me to come over.

cheers,
jane.

From abridle Fri Sep 23 12:07:14 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["146" "Fri" "23" "September" "1994" "12:06:43" "-0400" "Alan Bridle" "abridle " nil "5" "Re: forwarded message from Alan Bridle" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 23 5/146 " thread-indent ""Re: forwarded message from Alan Bridle\\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA22585; Fri, 23 Sep 1994 12:06:43 -0400

Message-Id: <9409231606.AA22585@polaris.cv.nrao.edu>

References: <9409201507.AA36592@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940923165655.7486A-100000@mraosf>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: forwarded message from Alan Bridle

Date: Fri, 23 Sep 1994 12:06:43 -0400

oops no I had not heard yet (only the contact person hears from Barry) and I haven't heard from Robert yet. I'll try to raise him today

A.

From abridle Fri Sep 23 12:09:57 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["300" "Fri" "23" "September" "1994" "12:09:46" "-0400" "Alan Bridle" "abridle " nil "14" "Observing" nil nil nil "9"
nil nil (number " " mark " Alan Bridle Sep 23 14/300 " thread-indent "\"Observing\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA30681; Fri, 23 Sep 1994 12:09:46 -0400

Message-Id: <9409231609.AA30681@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: rl@mail.ast.cam.ac.uk

Subject: Observing

Date: Fri, 23 Sep 1994 12:09:46 -0400

Hi Robert,

jane tells me the RG run has been scheduled for 25-27 November.

Is that a time when you are likely to be in the West, or should we try to arrange it so I go out there (by car or by rail) to "supervise" her?

Can make it work either way, probably, just need to know the options ...

A.

From root Fri Sep 23 12:11:11 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["338" "Fri" "23" "September" "1994" "17:10:27" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.940923170823.8275A-100000@mraosf>" "16" "AS 542 = Nearby FR IIs (fwd)" nil nil nil "9" nil nil
(number " " mark " R Jane Dennett-Thor Sep 23 16/338 " thread-indent "\"AS 542 = Nearby FR IIs (fwd)\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA26855; Fri, 23 Sep 1994 12:10:28 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0qoDCd-0002PLC; Fri, 23 Sep 94 17:10 BST

X-Sender: jdt@mraosf

Message-Id: <Pine.SUN.3.90.940923170823.8275A-100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: AS 542 = Nearby FR IIs (fwd)

Date: Fri, 23 Sep 1994 17:10:27 +0100 (BST)

ah, ok, FYI i've sent you the schedule.

----- Forwarded message -----

Date: Wed, 21 Sep 1994 15:09:40 -0600

From: Barry Clark <bclark@aoc.nrao.edu>

To: rl@mail.ast.cam.ac.uk

Cc: bclark@bclark.aoc.nrao.edu

Subject: AS 542 = Nearby FR IIs

I propose to schedule this

November 25/26, 0300-1000 LST

November 27, 1500-2300.

From abridle Fri Sep 23 15:11:42 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil])

["1394" "Fri" "23" "September" "1994" "15:11:40" "-0400" "Alan Bridle" "abridle" nil "34" "Re: AS 542 = Nearby FR IIs (fwd)" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 23 34/1394 " thread-indent "\"Re: AS 542 = Nearby FR IIs (fwd)\"") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA29387; Fri, 23 Sep 1994 15:11:40 -0400

Message-Id: <9409231911.AA29387@polaris.cv.nrao.edu>

References: <Pine.SUN.3.90.940923170823.8275A-100000@mraosf>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: AS 542 = Nearby FR IIs (fwd)

Date: Fri, 23 Sep 1994 15:11:40 -0400

Jane,

I guess with this timing (and I presume you want to be home for Christmas) then we should plan on you coming to C'ville first, to do what you can with data already in hand, then go out to Socorro for the observing run, either with me or to meet Robert. If I go out West with you, I will need to be back in C'ville by Dec. 12th but that would leave time to do the calibration and some imaging with the new data out there. You might want to look into heading home directly from Albuquerque in that case.

You would not need to leave Socorro exactly when Robert or I do, so long as one of us is there with you for most of your stay it would be o.k. for you to stay there a little longer if that worked out better.

I have to be in Socorro again by mid-January and will almost certainly have to take the train out for that, so I may look at driving out there from C'ville (3 days). If you would be interested in seeing the intervening country by road we might save some \$\$ on an air fare by driving out together. But sometimes round-trip tickets are no more than one-way, so if you wanted to fly out I would just leave C'ville a couple of days earlier than you and meet up with you again in Albuquerque.

I haven't heard back from Robert yet. Let me know if you do!

How's the passport/visa end of things coming along? I have shuffled the paper I know about at this end ...

A.

From root Mon Sep 26 13:01:06 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["699" "Mon" "26" "September" "1994" "18:01:11" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940926174227.14546B-100000@mraosf>" "20" "Re: AS 542 = Nearby FR IIs (fwd)" nil nil nil "9" nil nil
(number " " mark " R Jane Dennett-Thor Sep 26 20/699 " thread-indent "\"Re: AS 542 = Nearby FR IIs (fwd)\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA41987; Mon, 26 Sep 1994 13:01:05 -0400

Received: from mraosf.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0qpJQO-0002PwC; Mon, 26 Sep 94 18:01 BST

X-Sender: jdt@mraosf

In-Reply-To: <9409231911.AA29387@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940926174227.14546B-100000@mraosf>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: AS 542 = Nearby FR IIs (fwd)

Date: Mon, 26 Sep 1994 18:01:11 +0100 (BST)

hi Alan,

yes that sounds fine: c'ville then socorro, then 'home' (which will
actually almost certainly be boston).

as for the papers: i received the form for the visa just now from nrao. i
still have to receive my passport, though...

road/air: we can probably sort this out nearer the time (at least after i
arrive i should imagine), but crosscountry appeals (even though i've done
it twice- if hardly that exact route). and this also depends on roberts
whereabouts (i assume you got the message from him.)

i'll keep you posted on developments here, but it seems as though i'll
probably be able to be out there by mid-oct. does that sound like a
reasonable time to you?

cheers,
jane.

From abridle Mon Sep 26 13:59:40 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["399" "Mon" "26" "September" "1994" "13:59:20" "-0400" "Alan Bridle" "abridle " nil "14" "Re: AS 542 = Nearby FR IIs (fwd)" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 26 14/399 " thread-indent "\"Re: AS 542 = Nearby FR IIs (fwd)\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31543; Mon, 26 Sep 1994 13:59:20 -0400

Message-Id: <9409261759.AA31543@polaris.cv.nrao.edu>

References: <9409231911.AA29387@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940926174227.14546B-100000@mraosf>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: AS 542 = Nearby FR IIs (fwd)

Date: Mon, 26 Sep 1994 13:59:20 -0400

Hello Jane,

Mid-Oct sounds just fine, and as you say we can sort out some details later (though air fares do depend significantly on lead time).

I did hear from Robert and I guess it's a few more days before he'll come to any decision. He sounded quite positive and it would probably be very useful for the three of us to get together in fact, so I'll think "road trip" for now.

Cheers, A.

From root Wed Sep 28 06:46:28 1994

X-VM-v5-Data: ([nil nil nil t t nil nil nil nil])

["1058" "Wed" "28" "September" "1994" "11:46:22" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.940928112330.15590A-100000@mraos>" "23" "vla proposal." nil nil nil "9" nil nil (number " " mark "
FR Jane Dennett-Thor Sep 28 23/1058 " thread-indent "\"vla proposal.\"") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA41929; Wed, 28 Sep 1994 06:46:17 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qpWk-0002RKC; Wed, 28 Sep 94 11:46 BST

X-Sender: jdt@mraos

In-Reply-To: <9409261759.AA31543@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940928112330.15590A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: vla proposal.

Date: Wed, 28 Sep 1994 11:46:22 +0100 (BST)

hi Alan,

there will follow 4 sheets of the proposal for D array.

Peter knew of the idea, but hasn't seen the proposal. (not around now). I haven't sent it to Robert yet in an attempt to do this vaguely linearly so i don't end up under a morass of crossing communications.

I decided to include 5GHz as well as 8GHz as it turns out that for the sources in question there are 5GHz data lurking without d array. This would mean we could have a better stab at doing spectral break maps - which would seem easier to interpret than spectral index maps. two of them are sources with large wings, which would be good to get some spectral data on. 3c390.3 doesn't actually have any 8GHz data, but this is the nicest looking source showing the greatest length asymmetry, and we could also slip in 8GHz when i write the observe file for C array. I decided to include the third frequency because to get the coverage in and to get a decent observing schedule we have 'time to spare' so to speak.

Please take a look and let me know what you think.

thanks, jane.

From root Wed Sep 28 07:34:01 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["251" "Wed" "28" "September" "1994" "12:33:39" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "9"
"CORRECTION" nil nil nil "9" nil nil (number " " mark " Jane Dennett-Thor Sep 28 9/251 " thread-indent
"\"CORRECTION\"\\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA25823; Wed, 28 Sep 1994 07:34:00 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qpxGW-0002R4C; Wed, 28 Sep 94 12:33 BST

X-Sender: jdt@mraos

Message-Id: <Pine.SUN.3.90.940928122854.16285A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: CORRECTION

Date: Wed, 28 Sep 1994 12:33:39 +0100 (BST)

This applies to the coversheet, and the proposed obs part of the sci
just. i won't send you a revised edition until you've commented on the
whole thing.

3C403 needs 2 ptc at 8GHz, and we don't need 5GHz data for 3C452. (it
already has it)

jane.

From abridle Wed Sep 28 12:29:16 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil

["458" "Wed" "28" "September" "1994" "12:26:43" "-0400" "Alan Bridle" "abridle" nil "18" "Re: vla proposal" nil nil
nil "9" nil nil (number " " mark " Alan Bridle Sep 28 18/458 " thread-indent "\"Re: vla proposal\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA21003; Wed, 28 Sep 1994 12:26:43 -0400

Message-Id: <9409281626.AA21003@polaris.cv.nrao.edu>

References: <9409281429.AA44515@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940928155243.16285B-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: vla proposal

Date: Wed, 28 Sep 1994 12:26:43 -0400

Jane,

What's your criterion for needing 2 pointings @ 8 GHz.
Specifically, why go for 2 pointings on 3C403 but not
390.3?

In the "proposed observations" section, para.2, I
don't find the bit about "a third frequency" to be
very clear. I presume this means 4.9 GHz, can we
just say so?

Is there a .ps file for the Figure these days or do we
just paste it in again?

Still doing some small hackings, will get it back
to you a.s.a.p. in the new format.

A.

From root Wed Sep 28 12:47:37 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil])

["1275" "Wed" "28" "September" "1994" "17:47:34" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.940928173225.22354A-100000@mraos>" "31" "Re: vla proposal" nil nil nil "9" nil nil (number " " mark
" R Jane Dennett-Thor Sep 28 31/1275 " thread-indent "\"Re: vla proposal\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA50001; Wed, 28 Sep 1994 12:47:25 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qq2AI-0002RRC; Wed, 28 Sep 94 17:47 BST

X-Sender: jdt@mraos

In-Reply-To: <9409281626.AA21003@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940928173225.22354A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: vla proposal

Date: Wed, 28 Sep 1994 17:47:34 +0100 (BST)

> What's your criterion for needing 2 pointings @ 8 GHz.

> Specifically, why go for 2 pointings on 3C403 but not
> 390.3?

hmm, yes i realised that may be a question. the reason why we have it on
452 & 403 is because it has to be combined with the other data
already taken (403 all arrays, 452 ABC arrays) i hoped however
that maybe we could get away with only one on 390.3. perhaps this is too
optimistic.

> In the "proposed observations" section, para.2, I

> don't find the bit about "a third frequency" to be

> very clear. I presume this means 4.9 GHz, can we

> just say so?

the reason i didn't say 5GHz is because the 'extra' (ie one not
originally planned) is 8GHz for 390.3 and 192. (i mentioned 390.3 in the
first note this morning. this may be a little hopeful trying to get a
third frq for it, but i thought as we were looking at it anyway a third
freq would be nice. and ditto when we do the C array observing. if you
think this is not worth the effort let me know.)

but maybe we could just say it is 5GHz just for the sake of clarity.

>

> Is there a .ps file for the Figure these days or do we

> just paste it in again?

>

cut 'n paste i'm afraid. (when i get 3c432 completely finished there will
be my version as a .ps file, but not yet ...)

j.

From abridle Wed Sep 28 13:21:26 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["45066" "Wed" "28" "September" "1994" "13:20:50" "-0400" "Alan Bridle" "abridle " nil "1845" "Re: vla proposal"
nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 28 1845/45066 " thread-indent "\"Re: vla proposal\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA32517; Wed, 28 Sep 1994 13:20:50 -0400
Message-Id: <9409281720.AA32517@polaris.cv.nrao.edu>
References: <9409281626.AA21003@polaris.cv.nrao.edu>
<Pine.SUN.3.90.940928173225.22354A-100000@mraos>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: vla proposal
Date: Wed, 28 Sep 1994 13:20:50 -0400

OK, here's a version that addresses everything but the 2-pointing
issue and is in the new format. I haven't proofread it carefully
yet but is should do for your next iteration on Peter or Robert.

I'll do some sums about the tw0-pointing thing. We should spell out
whatever we decide, as 3C390.3 is larger than 3C403 and we don't
want to puzzle the poor referees!

Cheers, A.

=====

% Files you will need are:
% vlcovr.tex -- both sides of VLA proposal cover sheet
% nraologo.ps -- PostScript file containing NRAO logo
%
% by Dave Mehringer (dmehring@zia.aoc.nrao.edu) 08Oct91 (v 1.0a)
% updated 02Mar92 (v 1.0b)
% updated 24Mar92 (v 1.0c)
% updated 17Aug93 (v 1.0d)
% format modifications (J. M. Uson 7Dec93; v 2.0)
% new format, both sides in portrait mode (J. M. Uson 12Jun94; v 3.0)
%
%
% This template begins with the front side of the VLA proposal cover sheet.
% It is highly recommended that you make a copy of this before editing.
% Lines beginning with ``%%%" give instructions as to what to fill in
% or replace on immediately following lines.
% You can use standard TeX Mathmode if you wish to use scientific notation for
% some numbers, for example 10^{-6} will work in the tables.

```
\def\unter#1{\hbox to #1{\hrulefill}}  
\nopagenumbers  
\voffset -.8in  
\hsize 8in  
\vsize 13in
```

% the next line includes the NRAO logo. This file must be located
% in the same directory as the front side of the cover sheet.

```
\special{psfile=nraologo.ps hoffset=-65 voffset=10}
```

```
{\settabs 10 \columns
\offinterlineskip
\+&&&&&&\vrule height10pt&&\cr
\+ &&&&&&\vrule height10pt&&\cr
\+&& {\tenbf VLA OBSERVING APPLICATION}&&&&\vrule height10pt&&\cr
\+ &&&&&&\vrule height10pt&&\cr
\+&&&&&&\vrule height10pt\ \ A&&\cr
\+&&&&&&\vrule height10pt&& \cr
\+\hskip -.2in DEADLINES: 1st of Feb., June., Oct. for next configuration
following review &&&&&&\vrule height10pt depth2pt&&\cr
\+\hskip -.2in INSTRUCTIONS: Each numbered item must have an entry or
N/A&&&&&&\vrule height10pt depth2pt\ \ rcvd:&&\cr
\+\hskip -.2in SEND TO: Director NRAO, 520 Edgemont Rd., Charlottesville, VA
22903-2475&&&&&&\vrule height10pt\unter {3in}&&\cr
\medskip
\+\hskip -.5in {\bf (1)} Date Prepared:
```

```
%% enter date prepared on next line
Sep 28th 1994
```

```
\cr\medskip
\+\hskip -.5in {\bf (2)} Title of Proposal:
```

```
%% enter first line of title on next line
Jet and Spectral-Index Asymmetries in Nearby FR II Radio Galaxies
```

```
\cr\vskip .05in
\+\hskip 1in
```

```
%% enter second line of title on next line (if necessary)
```

```
\cr
\medskip
\+&&&&&&\unter {1.6in}&&\cr
\+&&&&&&\vrule height10pt depth3pt\ For Grad Students&&\vrule height10pt
depth3pt\cr
\+&&&&&&\vrule height10pt depth3pt\hskip .5in Only&&\vrule height10pt
depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt&&\vrule height10pt depth3pt&&&
\vrule height10pt depth3pt\ Who Will&\vrule height10pt depth3ptObservations&
\vrule height10pt depth3pt\vrule height10pt depth3pt\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \ {\bf (3)}\hskip .3in AUTHORS&&
\vrule height10pt depth3pt&INSTITUTION&&\vrule height10pt depth3pt\ Come
To&\vrule height10pt depth3pt For Ph.D.&\vrule height10pt depth3pt
\ Anticipated&\vrule height10pt depth3pt\cr
\+\hskip -.7in\vrule height10pt depth3pt&&\vrule height10pt depth3pt&&&
\vrule height10pt depth3pt\ The VLA?&\vrule height10pt depth3pt Thesis?&
\vrule height10pt depth3pt Ph.D. Year&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \
```

```
%% enter first author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
P.A.G.Scheuer
```

&&\vrule height10pt depth3pt \ \

%% enter first author institution on next line
MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt \

%% if first author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if first author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If first author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if first author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt \cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt \ \

%% enter second author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
R.A.Laing

&&\vrule height10pt depth3pt \ \

%% enter second author institution on next line
RGO, Cambridge, UK

&&&\vrule height10pt depth3pt \

%% if second author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if second author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If second author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if second author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt \cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt \ \

%% enter third author name on next line (if not contact author and first-time

%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
J.Dennett-Thorpe

&&\vrule height10pt depth3pt \ \

%% enter third author institution on next line
MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt \

%% if third author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if third author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If third author isn't grad student,
%% leave blank
yes

&\vrule height10pt depth3pt \

%% if third author is grad student, enter anticipated Ph.D. year on next line
1996

&\vrule height10pt depth3pt \cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt \ \

%% enter fourth author name on next line
A.H.Bridle

&&\vrule height10pt depth3pt \ \

%% enter fourth author address on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
NRAO, Charlottesville

&&&\vrule height10pt depth3pt \

%% if fourth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if fourth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fourth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fourth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt \cr

\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fifth author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification

&&\vrule height10pt depth3pt \ \

%% enter fifth author institution on next line

&&&\vrule height10pt depth3pt\

%% if fifth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if fifth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fifth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter sixth author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification

&&\vrule height10pt depth3pt \ \

%% enter sixth author institution on next line

&&&\vrule height10pt depth3pt\

%% if sixth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if sixth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if sixth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+hskip -.7in\unter {7.9in}\cr\medskip
\+hskip -.5in {\bf (4)} Related VLA previous proposal number(s):

%% enter related VLA proposal numbers on next line
AS535, AS542

\cr\medskip
\settabs 7 \columns
\+hskip -.5in {\bf (5)} Contact author&&\hskip 0.2truein{\bf (6)} \hfill
Telephone:& \

%% enter contact author's telephone number on next line
(44)223 374720

\cr\vskip .05in
\+hskip -.2in for scheduling: \

%% enter contact author's name on next line
J. Dennett-Thorpe

&&\hfill Telex:& \

%% enter telex of contact author on next line

\cr\vskip .05in
\+hskip .2in address: \

%% enter first line of contact author's address on next line
Mullard Radio Astronomy Observatory

&&\hfill Internet:& \

%% enter contact author's internet address on next line
jdt@mrao.cam.ac.uk

\cr\vskip .05in
\+hskip 0.74truein \

%% enter second line of contact author's address on next line
Madingley Road

&&\hfill Other E Mail:& \

%% enter other e-mail of contact author on next line

\cr\vskip .05in
\+hskip 0.74truein \

%% enter third line of contact author's address on next line
Cambridge CB3 0HE, U.K.

&&\hfill Telefax:& \

%% enter contact author's telefax number on next line

(44)223 337294

\cr\medskip

\+\hskip -.5in {\bf (7)} Scientific Category: \ \

%% on the next few lines find the category that applies to your

%% project and replace ``bigcirc" with ``bigotimes" on that line

\bigcirc astrometry, geodesy & techniques,

\bigcirc solar,

\bigcirc propagation,

\bigcirc planetary,

\bigcirc stellar,

\bigcirc pulsar,

\cr\vskip 0.02in

\+\hskip -.5in

%% some more categories (2nd line)

\bigcirc ISM,

\bigcirc galactic center,

\bigcirc galactic structure & dynamics (HI),

\bigcirc normal galaxies,

\bigotimes active galaxies,

\bigcirc cosmology

\cr\medskip

\settabs 8 \columns

\+\hskip -.7in\unter {7.7in}\cr

\+\hskip -.7in \vrule height10pt depth3pt \ \ {\bf (8)} Configurations

(one per column)&&\vrule

height10pt depth3pt&\vrule height10pt depth3pt&\vrule height10pt

depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt&

\vrule height10pt depth3pt\cr

\+\hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ (A, B, C, D,

BnA, CnB, DnC, Any)&&\vrule

height10pt depth3pt \ \ \

%% enter first configuration on next line

D

&\vrule height10pt depth3pt \ \ \

%% enter second configuration on next line

&\vrule height10pt depth3pt \ \ \

%% enter third configuration on next line

&\vrule height10pt depth3pt \ \ \

%% enter fourth configuration on next line

&\vrule height10pt depth3pt \ \ \

%% enter fifth configuration on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.7in}\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ {\bf (9)} Wavelength(s)
&&\vrule height10pt depth3pt \ \ \

%% enter first line of first group of wavelengths on next line
6, 3.5cm

&\vrule height10pt depth3pt \ \ \

%% enter first line of second group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of third group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of fourth group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of fifth group of wavelengths on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ (400, 90,
20, 18, 6, 3.5, 2, 1.3, 0.7 cm)
&&\vrule height10pt depth3pt \ \ \

%% enter second line of first group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of second group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of third group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of fourth group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of fifth group of wavelengths on next line

&\vrule height10pt depth3pt\cr
+\hskip -.7in\unter {7.7in}\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ {\bf (10)} Time requested
&&\vrule height10pt depth3pt&\vrule height10pt depth3pt&\vrule
height10pt depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt
&\vrule height10pt depth3pt\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ \ \ (hours)
&&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for first array on next line
10

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for second array on next line on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for third array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fourth array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fifth array on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.7in}\cr\medskip
\+\hskip -.6in {\bf (11)} Type of observation:

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_{bigotimes}\$ mapping,
\$_{bigcirc}\$ point source,
\$_{bigcirc}\$ monitor,
\$_{bigotimes}\$ continuum,
\$_{bigotimes}\$ lin poln,
\$_{bigcirc}\$ circ poln,
\$_{bigcirc}\$ solar,
\$_{bigcirc}\$ VLBI,

\cr
\medskip
\+\hskip -.6in \ \ \ \ \ \ \ \ \ \ (check all that apply)

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\bigcirc spectroscopy,
 \bigcirc multichannel continuum,
 \bigcirc phased array,
 \bigcirc pulsar,
 \bigcirc high-time resolution

\medskip
 $\hspace{.2in}$

%% if the proposed observation fits into another type than those
%% listed above, replace the \bigcirc on the next line with
%% \bigotimes

\bigcirc other $\backslash\backslash$

%% if you replaced \bigcirc on the previous line, give a short
%% description (a couple of words maximum) of the type of observation
%% on the next line

\cr
 $\hspace{.7in}\underbrace{\hspace{2in}}\medskip$
 $\hspace{-0.6in}\{\bf (12)\}$ ABSTRACT (Do not write outside this space.
Please type.) \cr

$\vskip 1.8in$
 $\hspace{-0.6in}\underbrace{\hspace{6in}}\cr\smallskip$
 $\hspace{-0.6in}$ NRAO use only \cr
 $\vskip -1.95in\}$
 $\hspace{6.5in}$

%% give a short description (abstract) of 150 words or less of your
%% proposed observation and what you want to accomplish on the
%% following lines

We propose to observe 6 nearby FR II radio galaxies: 3C192, 3C223.1, 3C390.3, 3C403 at both 5 and 8 GHz, 3C452 at 8 GHz only and 3C285 at 5 GHz only, as part of a continuing investigation of the correlation between sidedness of jets, lobe spectral index and depolarization in radio galaxies and quasars. As in proposals AS535 and AS542, the new data are needed to fill serious gaps in $\{u,v\}$ coverage in data originally taken for other purposes, and in archival data. The new data will be combined with existing observations at 3.6, 5 and 20cm to map spectral index, rotation measure and depolarization in a sample of 12 FR II radio galaxies that show evidence for a jet and do not have gross structural peculiarities.

% END OF INPUT FOR SIDE 1

\vfill
 \eject

% BEGINNING OF SIDE 2

$\def\unter#1{\hbox to #1{\hrulefill}}$
 $\def\vr{\vrule height10pt depth3pt}$
 $\def\arcmin{\prime}$
 $\def\arcsec{\prime\prime}$

\nopagenumbers
\voffset -.25truein
\hoffset -.65truein
\vbox {\hspace 7.5truein
\settabsh+1313Observer present for the observations&ss&yesyes&sss&nonono&sssss&Data
reduction done&ss&homehome&ss&NRAONRAONRAONRAONRAONRAO& \cr

\+ {\bf (13)} Observer present for observations? &&

%% if observer will be present for observations, replace
%% "bigcirc" with "bigotimes" on the next line

\$bigcirc\$ Yes &&

%% if observer will not be present for observations, replace
%% "bigcirc" with "bigotimes" on the next line

\$bigotimes\$ No &&

Data reduction at? &&

%% if mapping will be done at home, replace "bigcirc" with
%% "bigotimes" on the next line

\$bigotimes\$ Home &&

%% if mapping will be done at AOC or CV, replace "bigcirc" with
%% "bigotimes" on the next line

\$bigotimes\$ AOC or CV (2 weeks notice) \cr }

\bigskip

\vbox {\hspace 7truein
\settabsh+1414Help required&sssss&noneno&sss&some&ss&friendfriendfriendfriend&ss
&collaboratorcollaboratorcollaborator& \cr

\+ {\bf (14)} Help required: &&

%% replace "bigcirc" with "bigotimes" on the line that describes
%% the amount of help needed

\$bigotimes\$ None &&

\$bigcirc\$ Consultation &&

\$bigcirc\$ Friend (extensive help) &&

% If you need a Staff Collaborator, please contact the VLA Director's Office
% well in advance to submitting your proposal

\cr}

\bigskip

\vbox {\hspace 7in
\offinterlineskip

```

\settabs 5 \columns
\+ {\bf (15)} Spectroscopy Only:&&line 1&line 2&line 3&line 4\cr
\medskip
\+ \hskip 0.32truein Transition (HI, OH, etc.)&& \

%% enter first transition on next line (spectroscopy only)

& \

%% enter second transition on next line (spectroscopy only)

& \

%% enter third transition on next line (spectroscopy only)

& \

%% enter fourth transition on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Rest Frequency (MHz)&& \

%% enter rest frequency (MHz) of first transition on next line
%% (spectroscopy only)

& \

%% enter rest frequency (MHz) of second transition on next line
%% (spectroscopy only)

& \

%% enter rest frequency (MHz) of third transition on next line
%% (spectroscopy only)

& \

%% enter rest frequency (MHz) of fourth transition on next line
%% (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Velocity (km/s)&& \

%% enter velocity (km/s) of first transition on next line
%% (spectroscopy only)

& \

```

%% enter velocity (km/s) of second transition on next line
%% (spectroscopy only)

& \ \

%% enter velocity (km/s) of third transition on next line
%% (spectroscopy only)

& \ \

%% enter velocity (km/s) of fourth transition on next line
%% (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Observing frequency (MHz)&& \ \

%% enter observing frequency (MHz) of first transition on next line
%% (spectroscopy only)

& \ \

%% enter observing frequency (MHz) of second transition on next line
%% (spectroscopy only)

& \ \

%% enter observing frequency (MHz) of third transition on next line
%% (spectroscopy only)

& \ \

%% enter observing frequency (MHz) of fourth transition on next line
%% (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Correlator mode&& \ \

%% enter correlator mode for first transition on next line
%% (spectroscopy only)

& \ \

%% enter correlator mode for second transition on next line
%% (spectroscopy only)

& \ \

%% enter correlator mode for third transition on next line
%% (spectroscopy only)

& \ \

%% enter correlator mode for fourth transition on next line
%% (spectroscopy only)

\cr
\vskip 0.03truein
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein IF bandwidth(s) (MHz)&& \ \

%% enter first IF bandwidth(s) in MHz on next line (spectroscopy only)

& \ \

%% enter second IF bandwidth(s) in MHz on next line (spectroscopy only)

& \ \

%% enter third IF bandwidth(s) in MHz on next line (spectroscopy only)

& \ \

%% enter fourth IF bandwidth(s) in MHz on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Hanning smoothing (y/n)&& \ \

%% enter whether you want hanning smoothing for first transition (y/n)
%% on next line (spectroscopy only)

& \ \

%% enter whether you want hanning smoothing for second transition (y/n)
%% on next line (spectroscopy only)

& \ \

%% enter whether you want hanning smoothing for third transition (y/n)
%% on next line (spectroscopy only)

& \ \

%% enter whether you want hanning smoothing for fourth transition (y/n)
%% on next line (spectroscopy only)

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\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Number of channels per IF&& \ \
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%% enter number of channels per IF for first transition
%% on next line (spectroscopy only)
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%% enter number of channels per IF for second transition
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%% enter number of channels per IF for third transition
%% on next line (spectroscopy only)
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%% enter number of channels per IF for fourth transition
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\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Frequency Resolution (kHz/channel)&& \ \
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%% enter frequency resolution (kHz/channel) for first transition
%% on next line (spectroscopy only)
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%% enter frequency resolution (kHz/channel) for second transition
%% on next line (spectroscopy only)
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%% enter frequency resolution (kHz/channel) for third transition
%% on next line (spectroscopy only)
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& \ \
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```
%% enter frequency resolution (kHz/channel) for fourth transition
%% on next line (spectroscopy only)
```

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\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Rms noise (mJy/bm, nat. weight., 1~hr)&& \ \
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%% enter rms noise after 1 hour for first transition
%% on next line (spectroscopy only)

& \ \

%% enter rms noise after 1 hour for second transition
%% on next line (spectroscopy only)

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%% enter rms noise after 1 hour for third transition
%% on next line (spectroscopy only)

& \ \

%% enter rms noise after 1 hour for fourth transition
%% on next line (spectroscopy only)

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\+&&\under {.6in}&\under {.6in}&\under {.6in}&\under {.6in}\cr\medskip
\+ \hskip 0.32truein Rms noise (K, nat. weight., 1~hr)&& \ \

%% enter rms brightness temperature after 1 hour for first transition
%% on next line (spectroscopy only)

& \ \

%% enter rms brightness temperature after 1 hour for second transition
%% on next line (spectroscopy only)

& \ \

%% enter rms brightness temperature after 1 hour for third transition
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%% enter rms brightness temperature after 1 hour for fourth transition
%% on next line (spectroscopy only)

\cr
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\offinterlineskip
\settabs 2 \columns
\+ {\bf (16)} Number of sources \$\underline{\hbox{ \

%% enter number of sources on next line
6

\ } }\$ (If more than 10 please attach list. If more than

30 give only selection criteria and LST range(s.)\cr\bigskip}

\vbox {\hsize 7.5truein

\offinterlineskip

\settabs 40 \columns

\+ \unter {7.5truein}\cr

\+ \vr&&&&\vr \ Epoch: \ 1950

%% if the epoch is 1950, replace the ``bigcirc" with ``bigotimes" on

%% the next line

\bigotimes

\ 2000

%% if the epoch is 2000, replace the ``bigcirc" with ``bigotimes" on

%% the next line

\bigcirc

&&&&&\vr&&\vr&&\vr \ Band-&&&\vr &\ Total Flux&&&&\vr \ Largest&&&\vr

\hskip 0.1truein Required&&&\vr &\ Time&&&\vr\cr

\+ \vr&&&&\vr

&&RA&&&Dec&&\vr \ Config.&&\vr \ Band&&\vr \ width&&\vr \unter

{.565in}\vrule height0pt depth3pt\unter {.553in}&

&&&&\vr \ angular&&\vr &\ rms &&\vr

\hskip 0.15truein requested&&&\vr\cr

\+ \vr \ {\bf (17)}&&NAME&&&\vr

\hskip 0.25truein hh&&\ mm&&&\pm\$ xx.x^{\circ}\$&&&\vr&&\vr \ (cm)&&\vr \ (MHz)&&&

\vr&\ line&\hskip .195truein\vr

&&\ cont.&&\vr \hskip 0.2truein size&&\vr \hskip 0.05truein (mJy/bm)&&&

\vr & (hours) &&&\vr\cr

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&&\ (Jy)&&\vr&&\vr&&&\vr&&&\vr&&&\vr\cr

\+ \unter {7.5truein}\cr

\+ \vr \ \

%% enter name of first source/field on next line

3C 192

&&&&&\vr&\ \

%% enter hours of right ascension for first source/field on next line

08

&\ \

%% enter minutes of right ascension for first source/field on next line

02

&&&\hfil

%% enter declination in degrees (to a tenth) for first source/field on next

%% line

24.3

&&&&\vr\ \ \

%% enter configuration for first source/field on next line

D

&&&\vr\ \

%% enter band in cm for first source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for first source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of first source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of first source/field on next line

1.4

&&&&\vr\ \ \ \

%% enter largest detectable angular size for first source/field on next line

%% use \arcsec or \arcmin for units

210\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for first source/field on

%% next line

0.05

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%% enter time requested for first field/source on next line, include units if

%% not hours

0.75

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\+\vr\ \ \

%% enter name of second source/field on next line

3C 192

&&&&&\vr& \ \

%% enter hours of right ascension for second source/field on next line

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%% enter declination in degrees (to a tenth) for second source/field on next
%% line

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%% enter configuration for second source/field on next line
D

&&&\vr\ \

%% enter band in cm for second source/field on next line
6

&&\vr\ \ \

%% enter bandwidth in MHz for second source/field on next line
50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of second source/field
%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of second source/field on next line
2.2

&&&&\vr\ \ \ \

%% enter largest detectable angular size for second source/field on next line
%% use \arcsec or \arcmin for units
210\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for second source/field on
%% next line
0.07

&&&\vr & \ \

%% enter time requested for second field/source on next line, include units
0.75

&&&\vr\cr

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\+\vr\ \

%% enter name of third source/field on next line

3C 223.1

&&&&&\vr&\

%% enter hours of right ascension for third source/field on next line

09

&\

%% enter minutes of right ascension for third source/field on next line

38

&&\hfil

%% enter declination in degrees (to a tenth) for third source/field on next

%%line

40.0

&&&&\vr\ \

%% enter configuration for third source/field on next line

D

&&&\vr\ \

%% enter band in cm for third source/field on next line

3.6

&&\vr\ \

%% enter bandwidth in MHz for third source/field on next line

50

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%% enter total flux at the peak of the line in Jy of third source/field

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&&\hskip .195truein\vr\ \

%% enter total continuum flux in Jy of third source/field on next line

0.6

&&&&\vr\ \ \

%% enter largest detectable angular size for third source/field on next line

%% use \arcsec or \arcmin for units

120\arcsec

&&&\vr &\ \

%% enter required rms in mJy/beam for third source/field on

%% next line

0.04

&&&\vr &\ \

%% enter time requested for third field/source on next line, include units
1.25

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%% enter name of fourth source/field on next line
3C 223.1

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%% enter hours of right ascension for fourth source/field on next line

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%% enter configuration for fourth source/field on next line
D

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%% enter band in cm for fourth source/field on next line
6

&&\vr\ \ \

%% enter bandwidth in MHz for fourth source/field on next line
50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of fourth source/field
%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of fourth source/field on next line
1.0

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%% enter largest detectable angular size for fourth source/field on next line
%% use \arcsec or \arcmin for units
120\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for fourth source/field on
%% next line
0.06

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%% enter time requested for fourth field/source on next line, include units
1.25

&&&\vr\cr
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%% enter name of fifth source/field on next line
3C 285

&&&&&\vr& \ \

%% enter hours of right ascension for fifth source/field on next line
13

& \ \

%% enter minutes of right ascension for fifth source/field on next line
19

&&&\hfil

%% enter declination in degrees (to a tenth) for fifth source/field on next
%% line
42.8

&&&&\vr\ \ \

%% enter configuration for fifth source/field on next line
D

&&&\vr\ \

%% enter band in cm for fifth source/field on next line
6

&&\vr\ \ \

%% enter bandwidth in MHz for fifth source/field on next line
50

&&&\vr \ \ \

%% enter total flux at the peak of the line in Jy of fifth source/field
%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of fifth source/field on next line

1.1

&&&&\vr \ \ \

%% enter largest detectable angular size for fifth source/field on next line

%% use \arcsec or \arcmin for units

180\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for fifth source/field on

%% next line

0.06

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%% enter time requested for fifth field/source on next line, include units

1

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%% enter name of sixth source/field on next line

3C 390.3

&&&&&\vr&\ \

%% enter hours of right ascension for sixth source/field on next line

18

&\ \

%% enter minutes of right ascension for sixth source/field on next line

45

&&&\hfil

%% enter declination in degrees (to a tenth) for sixth source/field on next

%% line

79.7

&&&&\vr\ \ \

%% enter configuration for sixth source/field on next line

D

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%% enter band in cm for sixth source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for sixth source/field on next line

50

&&\vr \ \ \

%% enter total flux at the peak of the line in Jy of sixth source/field
%% on next line

&&\hskip .195truein\vr \ \ \

%% enter total continuum flux in Jy of sixth source/field on next line
2.5

&&&\vr \ \ \

%% enter largest detectable angular size for sixth source/field on next line
%% use \arcsec or \arcmin for units
240\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for sixth source/field on
%% next line
0.06

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%% enter time requested for sixth field/source on next line, include
%% units
0.5

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%% enter name of seventh source/field on next line
3C 390.3

&&&&&\vr& \ \

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%% enter declination in degrees (to a tenth) for seventh source/field on next
%% line

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D

&&&\vr \ \

%% enter band in cm for seventh source/field on next line

6

&&\vr\ \ \

%% enter bandwidth in MHz for seventh source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of seventh source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of seventh source/field on next line

4.3

&&&&\vr\ \ \ \

%% enter largest detectable angular size for seventh source/field on next line

%% use \arcsec or \arcmin for units

240\arcsec

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%% enter required rms in mJy/beam for seventh source/field on

%% next line

0.09

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%% enter time requested for seventh field/source on next line, include units

0.5

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%% enter name of eighth source/field on next line

3C 403 (2 ptgs)

&&&&&\vr& \ \ \

%% enter hours of right ascension for eighth source/field on next line

19

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%% enter minutes of right ascension for eighth source/field on next line

49

&&&\hfil

%% enter declination in degrees (to a tenth) for eighth source/field on next

%% line

02.3

&&&&\vr\ \ \

%% enter configuration for eighth source/field on next line

D

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%% enter band in cm for eighth source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for eighth source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of eighth source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of eighth source/field on next line

1.3

&&&&\vr\ \ \ \

%% enter largest detectable angular size for eighth source/field on next line

%% use \arcsec or \arcmin for units

230\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for eighth source/field on

%% next line

0.05

&&&\vr & \ \

%% enter time requested for eighth field/source on next line, include units

1.5

&&&\vr\cr

\+\unter {7.5truein}\cr

\+\vr\ \

%% enter name of ninth source/field on next line

3C 403

&&&&&\vr& \ \

%% enter hours of right ascension for ninth source/field on next line

&\ \

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%% enter declination in degrees (to a tenth) for ninth source/field on next
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&&&&\vr\ \ \

%% enter configuration for ninth source/field on next line
D

&&&\vr\ \

%% enter band in cm for ninth source/field on next line
6

&&\vr\ \ \

%% enter bandwidth in MHz for ninth source/field on next line
50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of ninth source/field
%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of ninth source/field on next line
2.3

&&&&\vr\ \ \ \

%% enter largest detectable angular size for ninth source/field on next line
%% use \arcsec or \arcmin for units
230\arcsec

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%% enter required rms in mJy/beam for ninth source/field on
%% next line
0.06

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%% enter time requested for ninth field/source on next line, include units
1

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%% enter name of tenth source/field on next line

3C 452 (2 ptgs)

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%% enter hours of right ascension for tenth source/field on next line

22

&\ \

%% enter minutes of right ascension for tenth source/field on next line

43

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%% enter declination in degrees (to a tenth) for tenth source/field on next

%% line

39.4

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%% enter configuration for tenth source/field on next line

D

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%% enter band in cm for tenth source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for tenth source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of tenth source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of tenth source/field on next line

2.1

&&&&\vr\ \ \ \

%% enter largest detectable angular size for tenth source/field on next line

%% use \arcsec or \arcmin for units

280\arcsec

&&&\vr &\ \ \

%% enter required rms in mJy/beam for tenth source/field on

%% next line

0.05

&&&\vr &\ \ \

%% enter time requested for tenth field/source on next line, include units

1.5

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\+ \$^*\$ \$this should be the total flux at the peak of the line \cr}

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Notes to the table (if any): \

%% If you want to add any footnote to the table or other clarification, do so

%% here.

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{\bf (18)} Restrictions to elevation (other than hardware limits)

or HA range (give reason): \

%% enter any restrictions to elevation or HA, if not default, on next line,

%% (give reason)

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{\bf (19)} Preferred range of dates for scheduling (give reason): \

%% enter preferred range of dates for scheduling on next line (give reason)

none

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{\bf (20)} Dates which are not acceptable: \

%% enter any unacceptable scheduling dates on next line (give reason)

none

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{\bf (21)} Special hardware, software, or operating

requirements: \

%% if you have special hardware, software, or operating requirements,

%% enter them on next couple of lines, if not enter N/A on next line

N/A

% END OF INPUTS FOR SIDE 2

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{\bf (22)} Please attach a self-contained

$\underline{\hbox{Scientific Justification}}$ \$ not in excess of 1000 words.

(Preprints or reprints will be IGNORED!)

\medskip

Please include the full addresses (postal and e-mail) for first-time

users or for those that have moved (if not contact author). \medskip

When your proposal is scheduled, the contents of the cover sheets become public

information (Any supporting pages are for

\medskip refereeing only). \hfill v3.0 6/94

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%% TYPE YOUR SCIENTIFIC JUSTIFICATION BEGINNING ON THE NEXT LINE (do not

%% exceed 1000 words).

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\centerline{\bf Introduction}
\medskip

This proposal is part of a project concerned with the origin of one-sided jets in powerful (FRII) radio sources and specifically with the hypothesis that such jets contain bulk relativistic flows on large scales. It complements our previously approved proposals AS535 and AS542.

\medskip

A strong prediction of the relativistic flow model is that jet sidedness should not correlate with any orientation-independent parameter. As it is likely that the extended lobes of powerful radio sources are moving too slowly for Doppler boosting to be significant, their spectral indices should be independent of jet sidedness. A correlation between jet sidedness and lobe spectral index is, however, implied if we combine two striking results:

\item{1.}

In a sample consisting mostly of quasars, the lobe containing the jet depolarizes less rapidly with increasing wavelength than does its counterpart on the opposite side of the source (Laing 1988; Garrington & Pooley 1991).

\item{2.}

The lobe with the flatter spectrum depolarizes less rapidly in samples of radio galaxies and quasars (Liu & Pooley 1991a, b; Garrington & Pooley 1991).

\medskip

A direct correlation between jet side and lobe spectral index would be of great importance, as it would make nonsense of the widely accepted idea of the relativistic beaming of intrinsically two-sided jets.

\medskip

We (Bridle & Pooley 1994a) have combined 20cm observations of 9 extended 3CR FRII quasars (proposal AL270) with existing data at 6cm (Bridle & Pooley 1994b) to study their lobe spectral indices. The rule that emerged clearly, albeit from a small sample, was a little more complicated than a simple correlation. Comparing regions of equal surface brightness on two sides of the same quasar, we find that:

\item{(a)}

the portions with {sl high} surface brightness have a flatter radio spectrum {sl in the jetted lobe} (all cases but one);

\item{(b)}

the portions with {sl low} surface brightness have a flatter spectrum {sl in the longer lobe} (all cases).

\medskip

This pattern (see Figure 1) encourages the notion that an orientation effect causes the Laing-Garrington correlation (especially in quasars, whose axes are at small or moderate angles to the line of sight according to unified theories), while a separate, intrinsic effect causes the Liu-Pooley correlation and also the correlation between lesser depolarization and greater lobe length found by Pedelty *et al.* (1989). While the pattern appears to be clear, the sample was small and consisted only of quasars. We need to enlarge both the size and diversity of the sample, first to confirm the pattern and then to test possible mechanisms for its origin, of which several have been suggested. We are now investigating radio galaxies with jets (a sub-sample of that described by Black *et al.* 1992), where one might expect intrinsic effects to dominate and orientation-dependent effects to be weaker. Some of this work has been done using existing archival data, but other sources require additional data to supplement that existing; hence the new B and C array observations [AS 535, observed June 1994 and AS542 scheduled November 1994] and this request for D array data (already mentioned in the AS542 application).

\medskip
\centerline{\bf Proposed Observations}
\medskip

>From the Black *et al.* sample of radio galaxies we have selected 12 that show evidence for a jet and which do not have gross structural peculiarities, with a view to making well-resolved spectral index maps of their lobes. There are good 8 GHz data from AB534, and suitable 1.4 GHz, for most of these sources. We wish to supplement these data in $\{sl(u,v)\}$ coverage for a few sources to let us study the spectral index distribution in the large scale structure. These sources are ones which presently have no D array data, or in which the discovery of large low-surface-brightness "wings" makes it desirable to obtain more. The required C array observing time has already been scheduled under proposal AS542; this proposal is for the D array observations already mentioned there.

\medskip

3C285 was not observed at 8 GHz as high-resolution maps existed, but the data must be supplemented in $\{sl(u,v)\}$ coverage to obtain information on the large scale structure. Further, there are enough archival data, which would also be suitable for the analysis of spectral variations if we add D array data, to allow us to image all but one of these sources at 1.4, 4.9 GHz and 8.3 GHz. By including a third frequency for most sources we will be able to analyse spectral gradients in terms of the break frequency (or a two-colour diagram) rather than just by the cruder measure of spectral index alone. This is particularly interesting as two of the sources contain large "wings", the nature of whose formation is poorly understood. We also wish to map the linear polarization of the sources to ascertain their depolarization sidedness.

\medskip

In D array we can use 50 MHz bandwidth without introducing significant bandwidth smearing in any source. Our time requirement is governed more by the need for aperture-plane coverage to ensure an adequate representation of the large-scale structure, than by sensitivity

(which is in most cases limited by the observing time of archival data.) The anticipated surface brightnesses in the extended regions at 5 GHz for 3C390.3 is roughly 14 mJy/beam, and 0.6 mJy/beam for 3C223.1 at 8 GHz. We require a 5σ detection of 25% linear polarization, (i.e.) rms noise of 0.7 and 0.03 mJy/beam rms respectively. (The latter can be obtained in the time proposed by combining both 50 MHz bandwidths.)

\medskip

To obtain appropriate $\{l(u,v)\}$ coverage and parallactic angle throw for polarization calibration, we request a total of 10 hours divided amongst the target sources and calibrators as follows. About two and a half hours will be spent observing each of the two sources (3C403 and 3C223.1) with low surface brightness wings and their calibrators at 5 and 8 GHz. One hour will be spent observing both 3C390.3 and 3C285, and on setting the flux density and polarization angle scales at both frequencies using 3C286. The balance of the time will be used to observe 3C192 at 5 and 8 GHz and 3C452 at 8 GHz. (The latter, like 3C403, requires two pointings at 8 GHz due to its large angular size.) The preferred LST ranges are from 0800 -- 1300 for 3C192, 3C223.1 and 3C285, and 1800-- 2300 for 3C390.1, 3C403 and 3C452.

\medskip

\centerline{\it References}

\medskip

\noindent Black, A.R.S., Baum, S.A., Leahy, J.P., Perley, R.A., Riley, J.M. & Scheuer, P.A.G., 1992, *{\it M.N.R.A.S.}*, **256**, 186.

\noindent Bridle, A.H., Laing, R.A., Scheuer, P.A.G. & Turner, S., 1994a. *{\it Physics of Active Galaxies}*, First Stromlo Symposium, ed. Bicknell, G.V., Dopita, M.A. and Quinn, P., A.S.P. Conference Series **54**, 187.

\noindent Bridle, A.H., Hough, D.H., Lonsdale, C.J., Burns, J.O. and Laing, R.A., 1994b. *{\it A.J.}*, **108**, 766.

\noindent Garrington, S.T., Conway, R.G. & Leahy, J.P., 1991. *{\it M.N.R.A.S.}*, **250**, 171.

\noindent Garrington, S.T., Leahy, J.P., Conway, R.G. & Laing, R.A., 1988. *{\it Nature}*, **331**, 147.

\noindent Laing, R.A., 1988. *{\it Nature}*, **331**, 149.

\noindent Liu, R. & Pooley, G.G., 1991a. *{\it M.N.R.A.S.}*, **249**, 343.

\noindent Liu, R. & Pooley, G.G., 1991b. *{\it M.N.R.A.S.}*, **253**, 669.

\noindent Pedelty, J.A., Rudnick, L., McCarthy, P.J. & Spinrad, H., 1989. *{\it A.J.}*, **97**, 647.

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From root Wed Sep 28 13:40:03 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["576" "Wed" "28" "September" "1994" "18:40:06" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940928183131.22738A-100000@mraos>" "13" "Re: vla proposal" nil nil nil "9" nil nil (number " " mark
" R Jane Dennett-Thor Sep 28 13/576 " thread-indent "\"Re: vla proposal\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA43040; Wed, 28 Sep 1994 13:39:54 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qq2z8-0002SVC; Wed, 28 Sep 94 18:40 BST

X-Sender: jdt@mraos

In-Reply-To: <9409281720.AA32517@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940928183131.22738A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: vla proposal

Date: Wed, 28 Sep 1994 18:40:06 +0100 (BST)

ok, thanks, it seems fine, except as you said we need to do something abt
the 2 pting thing. Peter has already approved this in its original form,
so i suspect this one'll be fine too! I will send it to Robert.

Two other things: (i) where did your rms numbers come from?? they don't
seem to have any bearing on the 'weakest signal' figures i had...just
curious!

(ii) please make sure that you think the *times* are ok. (you probably
did, but just in case i did something stupid >paranoia<, and everyone else
thinks someone else will notice if anything is wrong.)

j.

From abridle Wed Sep 28 14:27:20 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1434" "Wed" "28" "September" "1994" "14:27:11" "-0400" "Alan Bridle" "abridle " nil "33" "Re: vla proposal" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 28 33/1434 " thread-indent "\"Re: vla proposal\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA49073; Wed, 28 Sep 1994 14:27:11 -0400

Message-Id: <9409281827.AA49073@polaris.cv.nrao.edu>

References: <9409281720.AA32517@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940928183131.22738A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: vla proposal

Date: Wed, 28 Sep 1994 14:27:11 -0400

As the new form is asking for rms numbers I simply worked out what we should get (in one 50 MHz bandwidth) for the observing times you had asked for. These are therefore the purely thermal numbers, doesn't mean we will have the dynamic range to get to them.

I think the key with these D array observations is not so much the total time, but how it's distributed in HA. It's important to get down to +/- 4h of HA to get foreshortened baselines and not just do a track near the meridian. We'll probably be limited by the lumpiness in the large-scale background rather than by the actual rms calculated from thermal noise.

Unfortunately the only known cure for that is to do 4-hour tracks on each source in the D array, even though this takes the thermal noise down way too low. Dividing the D array coverage up among about three sources at a time as you're doing here is the best compromise short of that.

In that spirit we might as well adjust to 1 hour on each of 3C192 and 3C223.1 in fact, and fiddle the rms numbers accordingly, as the bigger source will really have more need for u,v coverage.

I think my only real concern about times is that 3C390.3 may be too short an integration if we want to do two pointings on it as well.

Possible we should bring it up to 1.5 hrs and ask for 12 altogether. It's probably no harder to get 12 than 10, in fact, as the proposal as had pretty good referee's comments so far.

A.

From root Thu Sep 29 10:46:41 1994
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["46854" "Thu" "29" "September" "1994" "15:45:20" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.940929150826.29947A-100000@mraos>" "1887" "VLA proposal (fwd)" nil nil nil "9" nil nil (number " "
mark " R Jane Dennett-Thor Sep 29 1887/46854 " thread-indent "\"VLA proposal (fwd)\""\n") nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA20790; Thu, 29 Sep 1994 10:45:11 -0400
Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qqMjY-0002SJC; Thu, 29 Sep 94 15:45 BST
X-Sender: jdt@mraos
Message-Id: <Pine.SUN.3.90.940929150826.29947A-100000@mraos>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: VLA proposal (fwd)
Date: Thu, 29 Sep 1994 15:45:20 +0100 (BST)

thanks for your response.

what i meant by 'time', was more accurately 'timing' i guess. specifically
192 and 285 do not actually pass through the meridian. i thought perhaps
this might be not a good idea because of parallatic angle changes, but
thought that it was actually fine, so left it there.

as for 192, actually this is winging it a little. i have the maps,
robert has the notes and the uv data, and, yes, is halfway up a
mountain. (what we have is:

5GHz 114mins C array, maybe some D already but don't know.

1.4GHz something in B for sure, maybe some in C. If there is none in
C we'll have to squeeze it in our observations in november.)

I suppose that it was given this state of play i was perhaps a little
skimpy on it. psychological, purely psychological!

i have ammended the proposal to 1hr for ech of the 3c192 and 3c223.1 obs
and the expected rms (an odd discrepancy of 4 or 2rt2 between your results
and mine. i stuck to yours!)

i have also done a few other tweaks suggested by robert. the one below
i have left out however. i don't think any clarity
would be gained by his suggestion, as we will not have 3 frq for all
sources bar one in the sample, only all sources bar one of those that
are being applied for now. if you think otherwise pls amend.

thanks,
jane.

Robert says:

Basically fine. One reason for avoiding 2 pointings for 3C390.3 is
that there is a bright central source, which might be difficult to remove
from off-centre datasets.

In "Proposed Observations" section:

- I'd suggest separating out the point about 2-colour diagrams from the

utilitarian one about missing D-array data. Be specific about which sources potentially have 3-frequency data. How about something like:

>From the Black et al. sample of radio galaxies, we have selected 12 that show evidence for a jet, but which have no gross structural peculiarities. The aims of this proposal are to fill in the short-spacing uv coverage for all of the sources at 5 or 8 GHz, allowing 2-frequency spectral-index maps to be made for the extended structure in all cases, and 3-frequency (2-colour) maps for all but one of the sample.

% Files you will need are:

% vllacover.tex -- both sides of VLA proposal cover sheet

% nraologo.ps -- PostScript file containing NRAO logo

%

% by Dave Mehringer (dmehring@zia.aoc.nrao.edu) 08Oct91 (v 1.0a)

% updated 02Mar92 (v 1.0b)

% updated 24Mar92 (v 1.0c)

% updated 17Aug93 (v 1.0d)

% format modifications (J. M. Uson 7Dec93; v 2.0)

% new format, both sides in portrait mode (J. M. Uson 12Jun94; v 3.0)

%

%

% This template begins with the front side of the VLA proposal cover sheet.

% It is highly recommended that you make a copy of this before editing.

% Lines beginning with ``%'' give instructions as to what to fill in

% or replace on immediately following lines.

% You can use standard TeX Mathmode if you wish to use scientific notation for

% some numbers, for example 10^{-6} will work in the tables.

\def\unter#1{\hbox to #1{\hrulefill}}

\nopagenumbers

\voffset -.8in

\hspace 8in

\vsize 13in

% the next line includes the NRAO logo. This file must be located

% in the same directory as the front side of the cover sheet.

\special{psfile=nraologo.ps hoffset=-65 voffset=10}

{\settabs 10 \columns

\offinterlineskip

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\+&&{\tenbf VLA OBSERVING APPLICATION}&&&&\vrule height10pt&&\cr

\+ &&&&&\vrule height10pt&&\cr

\+&&&&&\vrule height10pt\ A&&\cr

\+&&&&&\vrule height10pt&& \cr

\+hskip -.2in DEADLINES: 1st of Feb., June., Oct. for next configuration

following review &&&&&\vrule height10pt depth2pt&&\cr

\+hskip -.2in INSTRUCTIONS: Each numbered item must have an entry or

N/A&&&&&\vrule height10pt depth2pt\ \rcvd:&&\cr

\+hskip -.2in SEND TO: Director NRAO, 520 Edgemont Rd., Charlottesville, VA

22903-2475&&&&&\vrule height10pt\unter {3in}&&\cr

\medskip

\+hskip -.5in {\bf (1)} Date Prepared:

%% enter date prepared on next line
Sep 28th 1994

\cr\medskip
\+\hskip -.5in {\bf (2)} Title of Proposal:

%% enter first line of title on next line
Jet and Spectral-Index Asymmetries in Nearby FR II Radio Galaxies

\cr\vskip .05in
\+\hskip 1in

%% enter second line of title on next line (if necessary)

\cr
\medskip
\+\&&&&&\unter {1.6in}&&\cr
\+\&&&&&\vrule height10pt depth3pt\ For Grad Students&&\vrule height10pt
depth3pt\cr
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depth3pt\cr
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\vrule height10pt depth3pt&\vrule height10pt depth3pt\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \ {\bf (3)}\hskip .3in AUTHORS&&
\vrule height10pt depth3pt&INSTITUTION&&\vrule height10pt depth3pt\ Come
To&\vrule height10pt depth3pt For Ph.D.&\vrule height10pt depth3pt
\ Anticipated&\vrule height10pt depth3pt\cr
\+\hskip -.7in\vrule height10pt depth3pt&&\vrule height10pt depth3pt&&&
\vrule height10pt depth3pt\ The VLA?&\vrule height10pt depth3pt Thesis?&
\vrule height10pt depth3pt Ph.D. Year&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter first author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
P.A.G.Scheuer

&&\vrule height10pt depth3pt \ \

%% enter first author institution on next line
MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if first author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if first author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If first author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if first author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter second author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
R.A.Laing

&&\vrule height10pt depth3pt \ \

%% enter second author institution on next line
RGO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if second author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if second author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If second author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if second author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter third author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
J.Dennett-Thorpe

&&\vrule height10pt depth3pt \ \

%% enter third author institution on next line
MRAO, Cambridge, UK

&&&\vrule height10pt depth3pt\

%% if third author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if third author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If third author isn't grad student,
%% leave blank
yes

&\vrule height10pt depth3pt \

%% if third author is grad student, enter anticipated Ph.D. year on next line
1996

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fourth author name on next line
A.H.Bridle

&&\vrule height10pt depth3pt \ \

%% enter fourth author address on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification
NRAO, Charlottesville

&&&\vrule height10pt depth3pt\

%% if fourth author will come to observe put an "x" on the next line

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%% if fourth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fourth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fourth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter fifth author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification

&&\vrule height10pt depth3pt \ \

%% enter fifth author institution on next line

&&&\vrule height10pt depth3pt\

%% if fifth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if fifth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if fifth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr
\+\hskip -.7in\vrule height10pt depth3pt\ \

%% enter sixth author name on next line (if not contact author and first-time
%%user or your address has changed from last proposal, please attach your
%%complete address, including e-mail, at the end of the scientific justification

&&\vrule height10pt depth3pt \ \

%% enter sixth author institution on next line

&&&\vrule height10pt depth3pt\

%% if sixth author will come to observe put an "x" on the next line

&\vrule height10pt depth3pt \ \

%% if sixth author is grad student and observations are for Ph.D. thesis
%% enter "yes", if not enter "no". If fifth author isn't grad student,
%% leave blank

&\vrule height10pt depth3pt \

%% if sixth author is grad student, enter anticipated Ph.D. year on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.9in}\cr\medskip
\+\hskip -.5in {\bf (4)} Related VLA previous proposal number(s):

%% enter related VLA proposal numbers on next line
AS535, AS542

\cr\medskip
\settabs 7 \columns
\+\hskip -.5in {\bf (5)} Contact author&&\hskip 0.2truein{\bf (6)} \hfill
Telephone:& \

%% enter contact author's telephone number on next line

(44)223 374720

\cr\vskip .05in
\+\hskip -.2in for scheduling: \

%% enter contact author's name on next line
J. Dennett-Thorpe

&&&\hfill Telex:& \

%% enter telex of contact author on next line

\cr\vskip .05in
\+\hskip .2in address: \

%% enter first line of contact author's address on next line
Mullard Radio Astronomy Observatory

&&&\hfill Internet:& \

%% enter contact author's internet address on next line
jdt@mrao.cam.ac.uk

\cr\vskip .05in
\+\hskip 0.74truein \

%% enter second line of contact author's address on next line
Madingley Road

&&&\hfill Other E Mail:& \

%% enter other e-mail of contact author on next line

\cr\vskip .05in
\+\hskip 0.74truein \

%% enter third line of contact author's address on next line
Cambridge CB3 0HE, U.K.

&&&\hfill Telefax:& \

%% enter contact author's telefax number on next line
(44)223 337294

\cr\medskip
\+\hskip -.5in {\bf (7)} Scientific Category: \ \

%% on the next few lines find the category that applies to your
%% project and replace ``bigcirc" with ``bigotimes" on that line

\bigcirc astrometry, geodesy & techniques,
 \bigcirc solar,
 \bigcirc propagation,
 \bigcirc planetary,
 \bigcirc stellar,
 \bigcirc pulsar,

\cr\vskip 0.02in
\+\hskip -.5in

%% some more categories (2nd line)

\bigcirc ISM,
 \bigcirc galactic center,
 \bigcirc galactic structure & dynamics (HI),
 \bigcirc normal galaxies,
 \otimes active galaxies,
 \bigcirc cosmology

\cr\medskip
\settabs 8 \columns
\+\hskip -.7in\unter {7.7in}\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ {\bf (8)} Configurations
(one per column)&&\vrule
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depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt&
\vrule height10pt depth3pt\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ (A, B, C, D,
BnA, CnB, DnC, Any)&&\vrule
height10pt depth3pt \ \ \

%% enter first configuration on next line
D

&\vrule height10pt depth3pt \ \ \

%% enter second configuration on next line

&\vrule height10pt depth3pt \ \ \

%% enter third configuration on next line

&\vrule height10pt depth3pt \ \ \

%% enter fourth configuration on next line

&\vrule height10pt depth3pt \ \ \

%% enter fifth configuration on next line

&\vrule height10pt depth3pt\cr
\+\hskip -.7in\unter {7.7in}\cr
\+\hskip -.7in \vrule height10pt depth3pt \ \ {\bf (9)} Wavelength(s)
&&\vrule height10pt depth3pt \ \ \

%% enter first line of first group of wavelengths on next line
6, 3.5cm

&\vrule height10pt depth3pt \ \ \

%% enter first line of second group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of third group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of fourth group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter first line of fifth group of wavelengths on next line

&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ (400, 90,
20, 18, 6, 3.5, 2, 1.3, 0.7 cm)
&&\vrule height10pt depth3pt \ \ \

%% enter second line of first group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of second group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of third group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of fourth group of wavelengths on next line

&\vrule height10pt depth3pt \ \ \

%% enter second line of fifth group of wavelengths on next line

&\vrule height10pt depth3pt\cr
\+ \hskip -.7in\unter {7.7in}\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ {\bf (10)} Time requested
&&\vrule height10pt depth3pt&\vrule height10pt depth3pt&\vrule
height10pt depth3pt&\vrule height10pt depth3pt&\vrule height10pt depth3pt
&\vrule height10pt depth3pt\cr
\+ \hskip -.7in \vrule height10pt depth3pt \ \ \ \ \ \ \ \ \ (hours)
&&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for first array on next line

10

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for second array on next line on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for third array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fourth array on next line

&\vrule height10pt depth3pt \ \ \

%% enter time requested in hours for fifth array on next line

&\vrule height10pt depth3pt\cr

\+\hskip -.7in\unter {7.7in}\cr\medskip

\+\hskip -.6in {\bf (11)} Type of observation:

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_bigotimes\$ mapping,
\$_bigcirc\$ point source,
\$_bigcirc\$ monitor,
\$_bigotimes\$ continuum,
\$_bigotimes\$ lin poln,
\$_bigcirc\$ circ poln,
\$_bigcirc\$ solar,
\$_bigcirc\$ VLBI,

\cr

\medskip

\+\hskip -.6in \ \ \ \ \ \ \ \ \ (check all that apply)

%% for the type of observation below (up to the ``\cr") that apply to
%% this project, replace ``bigcirc" with ``bigotimes"

\$_bigcirc\$ spectroscopy,
\$_bigcirc\$ multichannel continuum,
\$_bigcirc\$ phased array,
\$_bigcirc\$ pulsar,
\$_bigcirc\$ high-time resolution

\cr\medskip

\+\&\hskip .2in

%% if the proposed observation fits into another type than those
%% listed above, replace the ``bigcirc" on the next line with
%% ``bigotimes"

\$_bigcirc\$ other \ \

%% if you replaced \bigcirc on the previous line, give a short
%% description (a couple of words maximum) of the type of observation
%% on the next line

\cr
\+&\hskip .7in\unter {2in}\cr\medskip
\+\hskip -.6in {\bf (12)} ABSTRACT (Do not write outside this space.
Please type.)\cr
\vskip 1.8in
\+\hskip -.6in\unter {6in}\cr\smallskip
\+\hskip -.6in NRAO use only\cr
\vskip -1.95in}
\hsize 6.5in

%% give a short description (abstract) of 150 words or less of your
%% proposed observation and what you want to accomplish on the
%% following lines

We propose to observe 6 nearby FR II radio galaxies: 3C192, 3C223.1,
3C390.3, 3C403 at both 5 and 8 GHz, 3C452 at 8 GHz only and 3C285 at 5
GHz only, as part of a continuing investigation of the correlation
between sidedness of jets, lobe spectral index and depolarization in
radio galaxies and quasars. As in proposals AS535 and AS542, the new
data are needed to fill serious gaps in $\{u,v\}$ coverage in data
originally taken for other purposes, and in archival data. The new
data will be combined with existing observations at 3.6, 5 and 20cm to
map spectral index, rotation measure and depolarization in a sample of
12 FR II radio galaxies that show evidence for a jet and do not have
gross structural peculiarities.

% END OF INPUT FOR SIDE 1

\vfill
\eject

% BEGINNING OF SIDE 2

\def\unter#1{\hbox to #1{\hrulefill}}
\def\vr{\vrule height10pt depth3pt}
\def\arcmin{\textsupscript'}
\def\arcsec{\textsupscript''}

\nopagenumbers
\voffset -.25truein
\hoffset -.65truein
\vbox{\hsize 7.5truein
\settabs\+1313Observer present for the observations&s&yesyes&sss&nonono&sssss&Data
reduction done&ss&homehome&s&NRAONRAONRAONRAONRAONRAO& \cr

\+ {\bf (13)} Observer present for observations? &&

%% if observer will be present for observations, replace
%% " \bigcirc " with " \bigotimes " on the next line

\bigcirc Yes &&

%% if observer will not be present for observations, replace

%% ``bigcirc" with ``bigotimes" on the next line

$\$bigotimes\$$ No &&

Data reduction at? &&

%% if mapping will be done at home, replace ``bigcirc" with
%% ``bigotimes" on the next line

$\$bigotimes\$$ Home &&

%% if mapping will be done at AOC or CV, replace ``bigcirc" with
%% ``bigotimes" on the next line

$\$bigotimes\$$ AOC or CV (2 weeks notice) \cr }

\bigskip

\vbox{\hspace 7truein
\settabs+1414Help required&ssss&noneno&sss&somesomesome&sss&friendfriendfriendfriend&s
sss&collaboratorcollaboratorcollaborator& \cr
\+ {\bf (14)} Help required: &&

%% replace ``bigcirc" with ``bigotimes" on the line that describes
%% the amount of help needed

$\$bigotimes\$$ None &&
 $\$bigcirc\$$ Consultation &&
 $\$bigcirc\$$ Friend (extensive help) &&

% If you need a Staff Collaborator, please contact the VLA Director's Office
% well in advance to submitting your proposal

\cr}

\bigskip

\vbox{\hspace 7in
\offinterlineskip
\settabs 5 \columns
\+ {\bf (15)} Spectroscopy Only:&&line 1&line 2&line 3&line 4\cr
\medskip
\+ \hspace 0.32truein Transition (HI, OH, etc.)&& \}

%% enter first transition on next line (spectroscopy only)

& \}

%% enter second transition on next line (spectroscopy only)

& \}

%% enter third transition on next line (spectroscopy only)

& \ \

%% enter fourth transition on next line (spectroscopy only)

\cr

\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip

\+ \hskip 0.32truein Rest Frequency (MHz)&& \ \

%% enter rest frequency (MHz) of first transition on next line

%% (spectroscopy only)

& \ \

%% enter rest frequency (MHz) of second transition on next line

%% (spectroscopy only)

& \ \

%% enter rest frequency (MHz) of third transition on next line

%% (spectroscopy only)

& \ \

%% enter rest frequency (MHz) of fourth transition on next line

%% (spectroscopy only)

\cr

\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip

\+ \hskip 0.32truein Velocity (km/s)&& \ \

%% enter velocity (km/s) of first transition on next line

%% (spectroscopy only)

& \ \

%% enter velocity (km/s) of second transition on next line

%% (spectroscopy only)

& \ \

%% enter velocity (km/s) of third transition on next line

%% (spectroscopy only)

& \ \

%% enter velocity (km/s) of fourth transition on next line

%% (spectroscopy only)


```
\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Observing frequency (MHz)&& \ \
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%% enter observing frequency (MHz) of first transition on next line
%% (spectroscopy only)
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%% enter observing frequency (MHz) of second transition on next line
%% (spectroscopy only)
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%% enter observing frequency (MHz) of third transition on next line
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%% enter observing frequency (MHz) of fourth transition on next line
%% (spectroscopy only)
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\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Correlator mode&& \ \
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%% enter correlator mode for first transition on next line
%% (spectroscopy only)
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%% enter correlator mode for second transition on next line
%% (spectroscopy only)
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%% enter correlator mode for third transition on next line
%% (spectroscopy only)
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%% enter correlator mode for fourth transition on next line
%% (spectroscopy only)
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\cr
\vskip 0.03truein
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein IF bandwidth(s) (MHz)&& \ \
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%% enter first IF bandwidth(s) in MHz on next line (spectroscopy only)

& \ \

%% enter second IF bandwidth(s) in MHz on next line (spectroscopy only)

& \ \

%% enter third IF bandwidth(s) in MHz on next line (spectroscopy only)

& \ \

%% enter fourth IF bandwidth(s) in MHz on next line (spectroscopy only)

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\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip

\+ \hskip 0.32truein Hanning smoothing (y/n)&& \ \

%% enter whether you want hanning smoothing for first transition (y/n)

%% on next line (spectroscopy only)

& \ \

%% enter whether you want hanning smoothing for second transition (y/n)

%% on next line (spectroscopy only)

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%% enter whether you want hanning smoothing for third transition (y/n)

%% on next line (spectroscopy only)

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%% enter whether you want hanning smoothing for fourth transition (y/n)

%% on next line (spectroscopy only)

\cr

\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip

\+ \hskip 0.32truein Number of channels per IF&& \ \

%% enter number of channels per IF for first transition

%% on next line (spectroscopy only)

& \ \

%% enter number of channels per IF for second transition

%% on next line (spectroscopy only)

& \ \

%% enter number of channels per IF for third transition
%% on next line (spectroscopy only)

& \ \

%% enter number of channels per IF for fourth transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Frequency Resolution (kHz/channel)&& \ \

%% enter frequency resolution (kHz/channel) for first transition
%% on next line (spectroscopy only)

& \ \

%% enter frequency resolution (kHz/channel) for second transition
%% on next line (spectroscopy only)

& \ \

%% enter frequency resolution (kHz/channel) for third transition
%% on next line (spectroscopy only)

& \ \

%% enter frequency resolution (kHz/channel) for fourth transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Rms noise (mJy/bm, nat. weight., 1~hr)&& \ \

%% enter rms noise after 1 hour for first transition
%% on next line (spectroscopy only)

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%% enter rms noise after 1 hour for second transition
%% on next line (spectroscopy only)

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%% enter rms noise after 1 hour for third transition
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%% enter rms noise after 1 hour for fourth transition
%% on next line (spectroscopy only)

\cr
\+&&\unter {.6in}&\unter {.6in}&\unter {.6in}&\unter {.6in}\cr\medskip
\+ \hskip 0.32truein Rms noise (K, nat. weight., 1~hr)&& \ \

%% enter rms brightness temperature after 1 hour for first transition
%% on next line (spectroscopy only)

& \ \

%% enter rms brightness temperature after 1 hour for second transition
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%% enter rms brightness temperature after 1 hour for third transition
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%% enter rms brightness temperature after 1 hour for fourth transition
%% on next line (spectroscopy only)

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\offinterlineskip
\settabs 2 \columns
\+ {\bf (16)} Number of sources \$\underline{\hbox{ \

%% enter number of sources on next line
6

\ } }\$ (If more than 10 please attach list. If more than
30 give only selection criteria and LST range(s.))\cr\bigskip}
\vbox {\hsize 7.5truein
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\settabs 40 \columns
\+ \unter {7.5truein}\cr
\+ \vr&&&&&\vr \ Epoch: \ 1950

%% if the epoch is 1950, replace the ``bigcirc" with ``bigotimes" on
%% the next line

\$\bigotimes\$

\ 2000

%% if the epoch is 2000, replace the ``bigcirc" with ``bigotimes" on

%% the next line

\bigcirc

Band- Total Flux Largest
\hskip 0.1truein Required Time

Config. Band width
{.565in}\vrule height0pt depth3pt\unter {.553in}&
angular rms
\hskip 0.15truein requested

{\bf(17)}NAME
\hskip 0.25truein hh\ mm\pm\$ xx.x \circ (cm) (MHz)
line\hskip .195truein
cont.\hskip 0.2truein size\hskip 0.05truein (mJy/bm)
vr & (hours)

(Jy) \circ \hskip .195truein
(Jy)
\+unter {7.5truein}\cr
\+vr\ \

%% enter name of first source/field on next line
3C 192

%% enter hours of right ascension for first source/field on next line
08

&\ \

%% enter minutes of right ascension for first source/field on next line
02

&&\hfil

%% enter declination in degrees (to a tenth) for first source/field on next
%% line
24.3

&&&\vr\ \ \

%% enter configuration for first source/field on next line
D

&&&\vr\ \

%% enter band in cm for first source/field on next line
3.6

&&\vr\ \ \

%% enter bandwidth in MHz for first source/field on next line
50

&&&\vr \ \ \

%% enter total flux at the peak of the line in Jy of first source/field
%% on next line

&&\hskip .195truein\vr \ \ \

%% enter total continuum flux in Jy of first source/field on next line
1.4

&&&&\vr \ \ \

%% enter largest detectable angular size for first source/field on next line
%% use \arcsec or \arcmin for units
210\arcsec

&&&\vr & \ \ \

%% enter required rms in mJy/beam for first source/field on
%% next line
0.04

&&&\vr & \ \ \

%% enter time requested for first field/source on next line, include units if
%% not hours
1

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%% enter name of second source/field on next line
3C 192

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%% enter hours of right ascension for second source/field on next line

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D

&&&\vr\ \

%% enter band in cm for second source/field on next line

6

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%% enter bandwidth in MHz for second source/field on next line

50

&&&\vr \ \ \

%% enter total flux at the peak of the line in Jy of second source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of second source/field on next line

2.2

&&&&\vr \ \ \

%% enter largest detectable angular size for second source/field on next line

%% use \arcsec or \arcmin for units

210\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for second source/field on

%% next line

0.06

&&&\vr & \ \

%% enter time requested for second field/source on next line, include units

1

&&&\vr\cr

\+\unter {7.5truein}\cr

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%% enter name of third source/field on next line

3C 223.1

&&&&&\vr& \ \

%% enter hours of right ascension for third source/field on next line

09

&\ \

%% enter minutes of right ascension for third source/field on next line

38

&&&\hfil

%% enter declination in degrees (to a tenth) for third source/field on next

%%line

40.0

&&&&\vr\ \ \

%% enter configuration for third source/field on next line

D

&&&\vr\ \

%% enter band in cm for third source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for third source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of third source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of third source/field on next line

0.6

&&&&\vr\ \ \ \

%% enter largest detectable angular size for third source/field on next line

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120\arcsec

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0.04

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%% enter time requested for third field/source on next line, include units

1

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%% enter name of fourth source/field on next line

3C 223.1

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%% enter declination in degrees (to a tenth) for fourth source/field on next
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%% enter configuration for fourth source/field on next line
D

&&&\vr\ \

%% enter band in cm for fourth source/field on next line
6

&&\vr\ \ \

%% enter bandwidth in MHz for fourth source/field on next line
50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of fourth source/field
%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of fourth source/field on next line
1.0

&&&&\vr\ \ \ \ \

%% enter largest detectable angular size for fourth source/field on next line
%% use \arcsec or \arcmin for units
120\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for fourth source/field on
%% next line
0.06

&&&\vr & \ \

%% enter time requested for fourth field/source on next line, include units
1

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\+\unter {7.5truein}\cr

\+\vr\ \

%% enter name of fifth source/field on next line

3C 285

&&&&&\vr&\ \

%% enter hours of right ascension for fifth source/field on next line

13

&\ \

%% enter minutes of right ascension for fifth source/field on next line

19

&&&\hfil

%% enter declination in degrees (to a tenth) for fifth source/field on next

%% line

42.8

&&&&\vr\ \ \

%% enter configuration for fifth source/field on next line

D

&&&\vr\ \

%% enter band in cm for fifth source/field on next line

6

&&\vr\ \ \

%% enter bandwidth in MHz for fifth source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of fifth source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of fifth source/field on next line

1.1

&&&&\vr\ \ \ \

%% enter largest detectable angular size for fifth source/field on next line

%% use \arcsec or \arcmin for units

180\arcsec

&&&\vr &\ \ \

%% enter required rms in mJy/beam for fifth source/field on

%% next line

0.06

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%% enter time requested for fifth field/source on next line, include units

1

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\+\vr\ \

%% enter name of sixth source/field on next line

3C 390.3

&&&&&\vr&\ \

%% enter hours of right ascension for sixth source/field on next line

18

&\ \

%% enter minutes of right ascension for sixth source/field on next line

45

&&&\hfil

%% enter declination in degrees (to a tenth) for sixth source/field on next

%% line

79.7

&&&&\vr\ \ \

%% enter configuration for sixth source/field on next line

D

&&&\vr\ \

%% enter band in cm for sixth source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for sixth source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of sixth source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of sixth source/field on next line

2.5

&&&&\vr\ \ \ \

%% enter largest detectable angular size for sixth source/field on next line

%% use \arcsec or \arcmin for units

240\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for sixth source/field on
%% next line
0.06

&&&\vr & \ \

%% enter time requested for sixth field/source on next line, include
%% units
0.5

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\+\vr\ \

%% enter name of seventh source/field on next line
3C 390.3

&&&&&\vr& \ \

%% enter hours of right ascension for seventh source/field on next line

& \ \

%% enter minutes of right ascension for seventh source/field on next line

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%% enter declination in degrees (to a tenth) for seventh source/field on next
%% line

&&&&\vr\ \ \

%% enter configuration for seventh source/field on next line
D

&&&\vr\ \

%% enter band in cm for seventh source/field on next line
6

&&\vr\ \ \

%% enter bandwidth in MHz for seventh source/field on next line
50

&&&\vr \ \ \

%% enter total flux at the peak of the line in Jy of seventh source/field
%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of seventh source/field on next line
4.3

&&&&\vr \ \ \

%% enter largest detectable angular size for seventh source/field on next line
%% use \arcsec or \arcmin for units
240\arcsec

&&&\vr & \ \

%% enter required rms in mJy/beam for seventh source/field on
%% next line
0.09

&&&\vr & \ \

%% enter time requested for seventh field/source on next line, include units
0.5

&&&\vr\cr
\+\unter {7.5truein}\cr
\+\vr\ \

%% enter name of eighth source/field on next line
3C 403 (2 ptgs)

&&&&&\vr&\ \

%% enter hours of right ascension for eighth source/field on next line
19

&\ \

%% enter minutes of right ascension for eighth source/field on next line
49

&&&\hfil

%% enter declination in degrees (to a tenth) for eighth source/field on next
%% line
02.3

&&&&\vr\ \ \

%% enter configuration for eighth source/field on next line
D

&&&\vr\ \

%% enter band in cm for eighth source/field on next line
3.6

&&\vr\ \ \

%% enter bandwidth in MHz for eighth source/field on next line
50

&&&\vr \ \ \

%% enter total flux at the peak of the line in Jy of eighth source/field
%% on next line

&&\hskip .195truein\vr \ \ \

%% enter total continuum flux in Jy of eighth source/field on next line
1.3

&&&&\vr \ \ \

%% enter largest detectable angular size for eighth source/field on next line
%% use \arcsec or \arcmin for units
230\arcsec

&&&\vr & \ \ \

%% enter required rms in mJy/beam for eighth source/field on
%% next line
0.05

&&&\vr & \ \ \

%% enter time requested for eighth field/source on next line, include units
1.5

&&&\vr\cr
\+\unter {7.5truein}\cr
\+\vr \ \ \

%% enter name of ninth source/field on next line
3C 403

&&&&&\vr& \ \ \

%% enter hours of right ascension for ninth source/field on next line

& \ \

%% enter minutes of right ascension for ninth source/field on next line

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%% enter declination in degrees (to a tenth) for ninth source/field on next
%% line

&&&&\vr \ \ \

%% enter configuration for ninth source/field on next line
D

&&&\vr \ \ \

%% enter band in cm for ninth source/field on next line

6

&&\vr\ \ \

%% enter bandwidth in MHz for ninth source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of ninth source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of ninth source/field on next line

2.3

&&&&\vr\ \ \ \

%% enter largest detectable angular size for ninth source/field on next line

%% use \arcsec or \arcmin for units

230\arcsec

&&&\vr & \ \ \

%% enter required rms in mJy/beam for ninth source/field on

%% next line

0.06

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%% enter time requested for ninth field/source on next line, include units

1

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\+\vr\ \ \

%% enter name of tenth source/field on next line

3C 452 (2 ptgs)

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%% enter hours of right ascension for tenth source/field on next line

22

& \ \

%% enter minutes of right ascension for tenth source/field on next line

43

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%% enter declination in degrees (to a tenth) for tenth source/field on next

%% line

39.4

&&&&\vr\ \ \

%% enter configuration for tenth source/field on next line

D

&&&\vr\ \

%% enter band in cm for tenth source/field on next line

3.6

&&\vr\ \ \

%% enter bandwidth in MHz for tenth source/field on next line

50

&&&\vr\ \ \ \

%% enter total flux at the peak of the line in Jy of tenth source/field

%% on next line

&&\hskip .195truein\vr\ \ \

%% enter total continuum flux in Jy of tenth source/field on next line

2.1

&&&&\vr\ \ \ \

%% enter largest detectable angular size for tenth source/field on next line

%% use \arcsec or \arcmin for units

280\arcsec

&&&\vr & \ \ \

%% enter required rms in mJy/beam for tenth source/field on

%% next line

0.05

&&&\vr & \ \ \

%% enter time requested for tenth field/source on next line, include units

1.5

&&&\vr\cr

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\+ \$^*\$this should be the total flux at the peak of the line \cr}

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Notes to the table (if any): \

%% If you want to add any footnote to the table or other clarification, do so

%% here.

\bigskip

{\bf (18)} Restrictions to elevation (other than hardware limits)

or HA range (give reason): \

%% enter any restrictions to elevation or HA, if not default, on next line,
%% (give reason)

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{\bf (19)} Preferred range of dates for scheduling (give reason): \
%% enter preferred range of dates for scheduling on next line (give reason)
none

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{\bf (20)} Dates which are not acceptable: \
%% enter any unacceptable scheduling dates on next line (give reason)
none

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{\bf (21)} Special hardware, software, or operating
requirements: \
%% if you have special hardware, software, or operating requirements,
%% enter them on next couple of lines, if not enter N/A on next line
N/A

% END OF INPUTS FOR SIDE 2

\bigskip
{\bf (22)} Please attach a self-contained
\$\underline{\hbox{Scientific Justification}}\$ not in excess of 1000 words.
(Preprints or reprints will be IGNORED!)
\medskip
Please include the full addresses (postal and e-mail) for first-time
users or for those that have moved (if not contact author). \medskip

When your proposal is scheduled, the contents of the cover sheets become public
information (Any supporting pages are for
\medskip refereeing only). \hfill v3.0 6/94

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\centerline{\bf Introduction}
\medskip

This proposal is part of a project concerned with the origin of
one-sided jets in powerful (FR II) radio sources and specifically with
the hypothesis that such jets contain bulk relativistic flows on large
scales. It complements our previously approved proposals AS535 and AS542.

\medskip

A strong prediction of the relativistic flow model is that jet
sidedness should not correlate with any orientation-independent
parameter. As it is likely that the extended lobes of powerful radio
sources are moving too slowly for Doppler boosting to be significant,

their spectral indices should be independent of jet sidedness. A correlation between jet sidedness and lobe spectral index is, however, implied if we combine two striking results:

\item{1.}

In a sample consisting mostly of quasars, the lobe containing the jet depolarizes less rapidly with increasing wavelength than does its counterpart on the opposite side of the source (Laing 1988; Garrington {it et al.} 1988; 1991).

\item{2.}

The lobe with the flatter spectrum depolarizes less rapidly in samples of radio galaxies and quasars (Liu & Pooley 1991a, b; Garrington {it et al.} 1991).

\medskip

A direct correlation between jet side and lobe spectral index would be of great importance, as it would make nonsense of the widely accepted idea of the relativistic beaming of intrinsically two-sided jets.

\medskip

We (Bridle {it et al.} 1994a) have combined 20cm observations of 9 extended 3CR FR II quasars (proposal AL270) with existing data at 6cm (Bridle {it et al.} 1994b) to study their lobe spectral indices. The rule that emerged clearly, albeit from a small sample, was a little more complicated than a simple correlation. Comparing regions of equal surface brightness on two sides of the same quasar, we find that:

\item{(a)}

the portions with {sl high} surface brightness have a flatter radio spectrum {sl in the jetted lobe} (all cases but one);

\item{(b)}

the portions with {sl low} surface brightness have a flatter spectrum {sl in the longer lobe} (all cases).

\medskip

This pattern (see Figure 1) encourages the notion that an orientation effect causes the Laing-Garrington correlation (especially in quasars, whose axes are at small or moderate angles to the line of sight according to unified theories), while a separate, intrinsic effect causes the Liu-Pooley correlation and also the correlation between lesser depolarization and greater lobe length found by Pedelty {it et al.} (1989). While the pattern appears to be clear, the sample was small and consisted only of quasars. We need to enlarge both the size and diversity of the sample, first to confirm the pattern and then to test possible mechanisms for its origin, of which several have been suggested. We are now investigating radio galaxies with jets (a sub-sample of that described by Black {it et al.} 1992), where one might expect intrinsic effects to dominate and orientation-dependent effects to be weaker. Some of this work has been done using existing archival data, but other sources require additional data to supplement that existing; hence the new B and C array observations [AS 535,

observed June 1994 and AS542 scheduled November 1994] and this request for D array data (already mentioned in the AS542 application).

\medskip
\centerline{\bf Proposed Observations}
\medskip

\noindent From the Black {\it et al.} sample of radio galaxies we have selected 12 that show evidence for a jet and which do not have gross structural peculiarities, with a view to making well-resolved spectral index maps of their lobes. There are good 8 GHz data from AB534, and suitable 1.4 GHz data, for most of these sources. We wish to supplement these data in $\{sl(u,v)\}$ coverage for a few sources to let us study the spectral index distribution in the large scale structure. These sources are ones which presently have no D array data, or in which the discovery of large low-surface-brightness ``wings" makes it desirable to obtain more. The required C array observing time has already been scheduled under proposal AS542; this proposal is for the D array observations already mentioned there.

\medskip

3C285 was not observed at 8 GHz as high-resolution 5 GHz maps existed, but this data must be supplemented in $\{sl(u,v)\}$ coverage to obtain information on the large scale structure. Further, there are enough archival data, which would also be suitable for the analysis of spectral variations if we add D array data, to allow us to image all but one of these sources at 1.4, 4.9 GHz and 8.3 GHz. By including a third frequency for most sources we will be able to analyse spectral gradients in terms of the break frequency (or a two-colour diagram) rather than by the cruder measure of spectral index alone. This is particularly interesting as two of the sources contain large ``wings", the nature of whose formation is poorly understood. We also wish to map the linear polarization of the sources to ascertain their depolarization sidedness.

\medskip

In D array we can use 50 MHz bandwidth without introducing significant bandwidth smearing in any source. Our time requirement is governed more by the need for aperture-plane coverage to ensure an adequate representation of the large-scale structure, than by sensitivity (which is in most cases limited by the observing time of archival data.) The anticipated surface brightnesses in the extended regions at 5 GHz for 3C390.3 is roughly 14 mJy/beam, and 0.6 mJy/beam for 3C223.1 at 8 GHz. We require a 5σ detection of 25% linear polarization, {\it i.e.} rms noise of 0.7 and 0.03 mJy/beam rms respectively. (The latter can be obtained in the time proposed by combining both 50 MHz bandwidths.)

\medskip

To obtain appropriate $\{sl(u,v)\}$ coverage and parallactic angle throw for polarization calibration, we request a total of 10 hours divided amongst the target sources and calibrators as follows. About two and a half hours will be spent observing the each of the two sources (3C403 and 3C223.1) with low surface brightness wings and their calibrators at 5 and 8 GHz. One hour will be spent observing both

3C390.3 and 3C285, and on setting the flux density and polarization angle scales at both frequencies using 3C286. The balance of the time will be used to observe 3C192 at 5 and 8 GHz and 3C452 at 8 GHz. (The latter, like 3C403, requires two pointings at 8 GHz due to its large angular size.) The preferred LST ranges are from 0800 -- 1300 for 3C192, 3C223.1 and 3C285, and 1800-- 2300 for 3C390.1, 3C403 and 3C452.

\medskip

\centerline{\it References}

\medskip

\noindent Black, A.R.S., Baum, S.A., Leahy, J.P., Perley, R.A., Riley, J.M. & Scheuer, P.A.G., 1992, *{\it M.N.R.A.S.}*, **{\bf 256}**, 186.

\noindent Bridle, A.H., Laing, R.A., Scheuer, P.A.G. & Turner, S., 1994a. *{\it Physics of Active Galaxies}*, First Stromlo Symposium, ed. Bicknell, G.V., Dopita, M.A. and Quinn, P., A.S.P. Conference Series **{\bf 54}**, 187.

\noindent Bridle, A.H., Hough, D.H., Lonsdale, C.J., Burns, J.O. and Laing, R.A., 1994b. *{\it A.J.}*, **{\bf 108}**, 766.

\noindent Garrington, S.T., Conway, R.G. & Leahy, J.P., 1991. *{\it M.N.R.A.S.}*, **{\bf 250}**, 171.

\noindent Garrington, S.T., Leahy, J.P., Conway, R.G. & Laing, R.A., 1988. *{\it Nature}*, **{\bf 331}**, 147.

\noindent Laing, R.A., 1988. *{\it Nature}*, **{\bf 331}**, 149.

\noindent Liu, R. & Pooley, G.G., 1991a. *{\it M.N.R.A.S.}*, **{\bf 249}**, 343.

\noindent Liu, R. & Pooley, G.G., 1991b. *{\it M.N.R.A.S.}*, **{\bf 253}**, 669.

\noindent Pedelty, J.A., Rudnick, L., McCarthy, P.J. & Spinrad, H., 1989. *{\it A.J.}*, **{\bf 97}**, 647.

\vfill

\eject

\bye

From abridle Thu Sep 29 12:27:17 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["2831" "Thu" "29" "September" "1994" "12:27:12" "-0400" "Alan Bridle" "abridle" nil "77" "Re: VLA proposal (fwd)" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 29 77/2831 " thread-indent "\"Re: VLA proposal (fwd)\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA50313; Thu, 29 Sep 1994 12:27:12 -0400

Message-Id: <9409291627.AA50313@polaris.cv.nrao.edu>

References: <Pine.SUN.3.90.940929150826.29947A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: VLA proposal (fwd)

Date: Thu, 29 Sep 1994 12:27:12 -0400

Hi, I'll make this a quickie as getting later over there ...

Off-meridian is actually an advantage for the short spacings, so that's all o.k. (If we were doing single snapshots we'd go for about 4hr off-meridian, but we should do on the bigger sources is probably closer to 4h, 2h and 0h HA settings).

Re rms -- were you by any chance calculating for "natural" weighting. I was making the correction for uniform weighting. Other than that and the $\sqrt{2}$ from adding both 50 MHz BW's we oughta be closer!

Robert's point re the bright core in 3C390.3 is something to factor in all right, here are the choices as I see them for 8 GHz:

1. Point right at the core. Minimizes its effect on limiting dynamic range, especially if it's a windy day when we observe.

Problem: Np hotspot then has a 52% primary beam correction
Sf hotspot has a 22% primary beam correction

The asymmetry in these corrections bothers me as well as their size. I'm not sure I trust the corrections above about 20-30% and it is spectral asymmetry between the regions right near the hot spots that contains our most interesting science.

I'm very leery of this option.

2. Point midway between the hot spots, NW of the core by 18"

Core is still within 1% of primary beam peak if the pointing hangs in, Np and Sf hotspots have equal 36% corrections for primary beam.

Problem: still a sizeable correction, not sure how well we really will know it.

This is better than #1 and should be our strategy if we do only one pointing.

3. Point at the 1/3 and 2/3 positions along the axis of 390.3

This keeps both hot spot corrections the same if we use only the closer pointing for the spectral comparison, and reduces the corrections to 12%. I like that.

Problem: the Sf pointing has the same offset of the core in #2 (just opposite sign), but the Np pointing has the core at the 6% correction point on the primary beam. This fires up Robert's concern re dynamic range, especially if the weather is poor.

As you can see, it's on the hairy-edge between #2 and #3. If we go for one pointing, we should use strategy #2 and probably mention in the proposal that we're treating 390.3 differently from 403 and 452 primarily because of the strength of its core. (How strong is the core in 403 by the way, don't have that to hand right now).

Think it over, we don't have to decide finally until we make the C config observing file, and the main issue right now is just the length of time on 390.3 and maybe an explanatory sentence about it for the proposal. The fact that we're thinking about it at all is probably enough to convince the "casual referee" that we're serious

Cheers, A.

From root Thu Sep 29 13:02:25 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["621" "Thu" "29" "September" "1994" "18:00:56" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "19"
"Re: VLA proposal (fwd)" nil nil nil "9" nil nil (number " " mark " Jane Dennett-Thor Sep 29 19/621 " thread-indent
"\Re: VLA proposal (fwd)"\n") nil]
nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA50066; Thu, 29 Sep 1994 13:02:24 -0400

Received: from ras.phy.cam.ac.uk by cv3.cv.nrao.edu (4.1/DDN-DLB/1.13)
id AA02051; Thu, 29 Sep 94 13:02:10 EDT

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qqOqm-0002PKC; Thu, 29 Sep 94 18:00 BST

X-Sender: jdt@mraos

In-Reply-To: <9409291627.AA50313@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940929173840.1904E-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: VLA proposal (fwd)

Date: Thu, 29 Sep 1994 18:00:56 +0100 (BST)

okay, why don't we put in for two pointings, apply for the extra time reqd, put in sentences to that effect and think a bit more (the other factor i was thinking of is if we go for 2ptc in D we'll need to do that in C- remember we didn't actually schedule this, its a matter of squeezing it in. we then have to re-work how much time we have going spare there...)

as for the rms, no i was simply using the wrong system constants there.
a problem of alignment ...

can i leave the final patting in your hands please?

i take it we are not trying to put in a PATT or MERLIN application tomorrow ;>

thanks,
jane.

From root Thu Sep 29 13:09:35 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["301" "Thu" "29" "September" "1994" "18:08:56" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940929180355.1904F-100000@mraos>" "9" "Re: VLA proposal (fwd)" nil nil nil "9" nil nil (number " " mark " R Jane Dennett-Thor Sep 29 9/301 " thread-indent "\"Re: VLA proposal (fwd)\""\n") nil] nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA16494; Thu, 29 Sep 1994 13:09:34 -0400

Received: from ras.phy.cam.ac.uk by cv3.cv.nrao.edu (4.1/DDN-DLB/1.13)

id AA02116; Thu, 29 Sep 94 13:09:03 EDT

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qqOyW-0002Q7C; Thu, 29 Sep 94 18:08 BST

X-Sender: jdt@mraos

In-Reply-To: <9409291627.AA50313@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940929180355.1904F-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: VLA proposal (fwd)

Date: Thu, 29 Sep 1994 18:08:56 +0100 (BST)

ps the core in 403 is a measly 6.4mJy, whilst that in 390.3 is 186 mJy.
(so says Adam's table) 452 has 124mJy.

the core in 3c111, however (now you've got me worried) is a stonking 1055 mJy. this has two pointings. this is the data unprocessed by rick that i'm meant to be doing in CV.....

jane

From abridle Thu Sep 29 14:35:10 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1219" "Thu" "29" "September" "1994" "14:34:47" "-0400" "Alan Bridle" "abridle " nil "29" "Re: VLA proposal (fwd)" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 29 29/1219 " thread-indent "\"Re: VLA proposal (fwd)\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA42053; Thu, 29 Sep 1994 14:34:47 -0400

Message-Id: <9409291834.AA42053@polaris.cv.nrao.edu>

References: <9409291627.AA50313@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940929180355.1904F-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: VLA proposal (fwd)

Date: Thu, 29 Sep 1994 14:34:47 -0400

Jane Dennett-Thorpe writes:

>

> the core in 3c111, however (now you've got me
> worried) is a stonking 1055 mJy. this has two pointings. this is the data
^^^^^^

> unprocessed by rick that i'm meant to be doing in CV.....

>

Did I just learn a new word? 1 Jy off-center will indeed be a problem if unlucky, (maybe whether it stonks or not). Was this why Rick didn't want to process it?

Indeed I will put the proposal in Joanne's hands by tomorrow a.m. I think we should bring it up to 11 hours by giving 390.3 1 hr at each band for simplicity (whether or not this is exactly how we divide the time in the end). The final para needs a small but trivial overhaul in the light of this. Also, as 3C390.3 is circumpolar, we don't have to be quite so restrictive about preferred LST range, the critical object is 3C403 which can be seen above 10 degree elevation from 1500 to 0100 but (because of its low dec) gets its shortest baselines about 1 hr before transit, near 1900 LST). So I'm inclined to say "any 6-hour block of LST between 1600 and 2400" for the second group.

I'll go ahead with just these changes unless I hear something more from you during your a.m. Friday.

Cheers, A.

From abridle Fri Sep 30 09:57:34 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["201" "Fri" "30" "September" "1994" "09:57:13" "-0400" "Alan Bridle" "abridle " nil "8" "Re: VLA proposal (fwd)"
nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 30 8/201 " thread-indent "\"Re: VLA proposal (fwd)\""\n")
nil]

nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA49717; Fri, 30 Sep 1994 09:57:13 -0400

Message-Id: <9409301357.AA49717@polaris.cv.nrao.edu>

References: <9409291627.AA50313@polaris.cv.nrao.edu>

<Pine.SUN.3.90.940929180355.1904F-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: VLA proposal (fwd)

Date: Fri, 30 Sep 1994 09:57:13 -0400

Jane,

Just to confirm, D array proposal now in Director's office, 3 copies
of final version (for you, PAGS and RAL) are in snail-mail to you.

Any progress on passport, travel arrangements, etc.?

A.

From root Fri Sep 30 11:35:26 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["704" "Fri" "30" "September" "1994" "16:35:21" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.940930162356.14012A-100000@mraos>" "16" "Re: VLA proposal (fwd)" nil nil nil "9" nil nil (number "
" mark " R Jane Dennett-Thor Sep 30 16/704 " thread-indent "\"Re: VLA proposal (fwd)\"") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA45755; Fri, 30 Sep 1994 11:35:18 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qqjzV-0002QWC; Fri, 30 Sep 94 16:35 BST

X-Sender: jdt@mraos

In-Reply-To: <9409301357.AA49717@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.940930162356.14012A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: VLA proposal (fwd)

Date: Fri, 30 Sep 1994 16:35:21 +0100 (BST)

thanks for putting the proposal in.

re passport- no sign, but i've made an appt with the consul for next
friday as i should have it by then.

its a little awkward trying to get tickets yet- if i don't get my
passport i'll have to book another appt with the consul ,and its usually
abt 10 days before their next one.

but i'm trying to get a booking without having to hand over any cash til
next fri. when exactly would suit you best? i'll get it sorted as much as
possible on monday.

jane,

for whom 'stonking' is a great word. perhaps a hybrid of 'stomping' and
'stinking', both in the sense of 'big'. implies a degree of 'bigger than
would be polite', in-your-face and waving its hands around.

From abridle Fri Sep 30 12:12:12 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]
["1988" "Fri" "30" "September" "1994" "12:12:09" "-0400" "Alan Bridle" "abridle " nil "40" "Re: VLA proposal
(fwd)" nil nil nil "9" nil nil (number " " mark " Alan Bridle Sep 30 40/1988 " thread-indent "\"Re: VLA proposal
(fwd)\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA30760; Fri, 30 Sep 1994 12:12:09 -0400
Message-Id: <9409301612.AA30760@polaris.cv.nrao.edu>
References: <9409301357.AA49717@polaris.cv.nrao.edu>
<Pine.SUN.3.90.940930162356.14012A-100000@mraos>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: VLA proposal (fwd)
Date: Fri, 30 Sep 1994 12:12:09 -0400

Ah, I shall add "stonking" to the Bridle verbarium now I have its pedigree. Vision of large and possible smelly object shaped like a Jansky and gesticulating in not altogether friendly fashion

It occurs to me that we should probably avoid large primary beam corrections (i.e. favor 2 pointings on large sources) also for the reason that the VLA's off-axis feeds produce larger spurious polarizations as you image further from the pointing center. As we are concerned about polarimetry for the depolarization asymmetry, this is another reason so stay as near the axis as we can.

I think you have more constraints on exactly when you fly than I do as to when you arrive. I was just wondering how that end of things was progressing ...

It is physically possible to fly right to Charlottesville, taking a connecting flight from whichever major airport your transatlantic flight comes into (would be either Washington-Dulles or Baltimore-Washington International). Peter can give you two very disparate read-outs on whether it is advisable to do this (he arrived in the middle of the worst cold snap and ice storm in memory, and took approximately a day and half to get from Dulles to C'ville, but returned in the predicted 30 min). That sort of weather should not be a problem in October however, and you might want to look at timeliness of a connection to Charlottesville as part of your flight selection.

If you can't find a sensible connection the alternatives are for me to come to get you at Dulles (it's about a 2-hour drive under best conditions, maybe 3 at rush hour), for you to rent a car one-way to C'ville, or if you'd like to stop over in Washington to look around to do that and then take a train to C'ville the next day. (There are buses but as you probably know American buses are not a lot of fun, especially not at the end of a long air trip). On any of those options, it's probably better to land at Dulles than at Baltimore-Washington.

Cheers, A.

From root Thu Oct 6 10:09:47 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["1001" "Thu" "6" "October" "1994" "15:08:54" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.941006145149.7196B-100000@mraos>" "22" "movement." nil nil nil "10" nil nil (number " " mark " R
Jane Dennett-Thor Oct 6 22/1001 " thread-indent "\"movement.\"\\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA23182; Thu, 6 Oct 1994 10:09:44 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qstV8-0002QDC; Thu, 6 Oct 94 15:08 BST

X-Sender: jdt@mraos

In-Reply-To: <9409301612.AA30760@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.941006145149.7196B-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: movement.

Date: Thu, 6 Oct 1994 15:08:54 +0100 (BST)

well i have my passport now in my sweaty paws, and an appt for a visa tomorrow. so i've booked a flight for the 17th (monday after next) . For reasons to do with the return flight i'm flying to new york (oh god, please, please please don't say i've just booked a flight to JFK...) and will travel to charlottesville by amtrak. i will probably stay a night in NY so i will arrive on your doorstep (or some approximation to it) on tuesday.

if this is not convenient you have about another 4hrs to let me know (sorry about that, but as i'm away visa-ing etc the next 2 working days i have to leave strict instructions to pay this thing by tonight.)

further: what is the weather like between now and then, there and out west? (yes, yes, i know, but weather is one of the Important Things in my life)

what else do i/ you need to know?

perhaps i should write a checklist of the data etc that i'm meant to bring. this will happen next week, and you can point out what i've missed.

cheers, jane.

From abridle Thu Oct 6 10:44:36 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1774" "Thu" "6" "October" "1994" "10:44:22" "-0400" "Alan Bridle" "abridle " nil "43" "Re: movement." nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 6 43/1774 " thread-indent "\"Re: movement.\\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA35603; Thu, 6 Oct 1994 10:44:22 -0400
Message-Id: <9410061444.AA35603@polaris.cv.nrao.edu>
References: <9409301612.AA30760@polaris.cv.nrao.edu>
<Pine.SUN.3.90.941006145149.7196B-100000@mraos>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: movement.
Date: Thu, 6 Oct 1994 10:44:22 -0400

Glad to hear you've got the document chain started!

Yup, you probably got JFK. :(

Tuesday evening (17th) arrival in C'ville will be just fine - I presume that means you're on the Crescent (Train 19) due in around 9 pm (only alternative is the Cardinal - train 51 - which gets in at 4.30 pm but last time I checked it doesn't run on Tuesdays).

Weather here now is cool overnight (40's on our old non-metric German scale) and pleasant by day (mid-60's or low 70's). By December you can expect below freezing overnight and 40-60 by day here, about 10 degrees colder in Boston at enmd of your trip. Both here and Boston have a good chance at being wet only there in late December it's likely to be solid, here more likely rain.

New Mexico in November should be well below freezing by night, warm (60-70) by afternoon (high desert). And basically dry.

So you need some winter clothes by Brit standards, some for warm-ish, some for wet. Pretty much covers the spectrum, in fact!

What else? Don't expect to cash Sterling in small U.S. towns, credit card or US \$ traveler's cheques would be best way to bring over money, or plan to change any Sterling at major cities like NY, Boston rather than C'ville or (probably impossible) Socorro.

Yup we should make a data checklist as I only have pieces of the project here and I have been assuming that you and Robert between you are staying on top of exactly which datasets we have already from the archive and from the new runs.

I do have the 3C390.3 data from Ken Kellerman at C Band (long phased-array synthesis during VLBI run) plus my copy of the Steven Turner tapes and the AS535 run. But best if you think about what I have here as emergency backup only.

Hope all goes smoothly with the consul,

Cheers, A.

From root Thu Oct 6 11:05:49 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil])

["1131" "Thu" "6" "October" "1994" "16:06:04" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"]

"<Pine.SUN.3.90.941006155021.12278A-100000@mraos>" "28" "Re: movement." nil nil nil "10" nil nil (number " " mark
" R Jane Dennett-Thor Oct 6 28/1131 " thread-indent "\"Re: movement.\""\n") nil]

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA35804; Thu, 6 Oct 1994 11:05:45 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0qsuOS-0002QEC; Thu, 6 Oct 94 16:06 BST

X-Sender: jdt@mraos

In-Reply-To: <9410061444.AA35603@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.941006155021.12278A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: movement.

Date: Thu, 6 Oct 1994 16:06:04 +0100 (BST)

>

- > Tuesday evening (17th) arrival in C'ville will be just fine - I
- > presume that means you're on the Crescent (Train 19) due in around 9
- > pm (only alternative is the Cardinal - train 51 - which gets
- > in at 4.30 pm but last time I checked it doesn't run on Tuesdays).

er, hmm. no i'm not on any particular train. i'm was just sort of planning
on turning up and getting a ticket. What are these trains? NY-CV , NY-DC,
DC-CV ?? if they are either of the latter it looks like i ought to be
careful of connections.

trains don't run on _tuesdays_? your 'public transport' never ceases to
amaze.

on that topic: things you may need to know- i don't drive (any chance of
begging/hiring a bicycle in CV?)

weather: great. better than i expected :)

>

- > Yup we should make a data checklist as I only have pieces of
- > the project here and I have been assuming that you and
- > Robert between you are staying on top of exactly which datasets
- > we have already from the archive and from the new runs.

ok, i'll sort this out with Robert, but send you the checklist just in case.

i'll let yu know if the consul don't like me...
jane.

From abridle Thu Oct 6 11:29:37 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1278" "Thu" "6" "October" "1994" "11:29:04" "-0400" "Alan Bridle" "abridle " nil "29" "Re: movement." nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 6 29/1278 " thread-indent "\"Re: movement.\\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA35852; Thu, 6 Oct 1994 11:29:04 -0400

Message-Id: <9410061529.AA35852@polaris.cv.nrao.edu>

References: <9410061444.AA35603@polaris.cv.nrao.edu>

<Pine.SUN.3.90.941006155021.12278A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: movement.

Date: Thu, 6 Oct 1994 11:29:04 -0400

Hi Jane,

Trains here aren't like trains in the U.K. once you're out of the commuter-train range. The long-distance trains need reservations even for coach, and the only one running from New York to C'ville on a Tuesday is the Crescent (New York to New Orleans). I don't have the current schedule but last winter it was leaving New York Penn Station at 2 pm. It goes via Philly, and has a half-hour stopover in D.C. around 6.30 p.m. It's then about 2 hours to C'ville.

Your travel agent in Cambridge should be able to make the Amtrak reservation for you. At this time of year you would probably be able to get a reservation after you got to New York, but if it just happened to be busy for some reason you'd be out of luck until the two Wednesday trains (Cardinal at 9.45 am and Crescent again at 2pm).

Better safe than waiting around in NY?

I'll see what we can do re bicycles. The NRAO does have one and Mary and I have very ancient and decrepit ones that might be capable of resuscitation.

If you will want to do a lot of late-nights and/or be independent of coming in and out with me the NRAO has a guest house within walking distance of the observatory that we can put you up in. That might be more convenient as our house is about 6 miles from town.

A.

From abridle Thu Oct 6 11:50:01 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1243" "Thu" "6" "October" "1994" "11:49:13" "-0400" "Alan Bridle" "abridle " nil "30" "Re: movement." nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 6 30/1243 " thread-indent "\"Re: movement.\\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA39031; Thu, 6 Oct 1994 11:49:13 -0400

Message-Id: <9410061549.AA39031@polaris.cv.nrao.edu>

References: <9410061444.AA35603@polaris.cv.nrao.edu>

<Pine.SUN.3.90.941006155021.12278A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: movement.

Date: Thu, 6 Oct 1994 11:49:13 -0400

Jane,

minor update re bicycle and guest house -- bicycle is sort of "attached" to the guest house and people there have first dibs on it. Guest house has four bedrooms and there are between two and three people signed up there already for the rest of October. So we should probably "wing it" once you're here and you have some feel for the lie of the land and how you might want to work. You can have a bit more space to yourself etc. staying with us as we have a study/bedroom/bathroom downstairs that we don't use ourselves. You could be more independent coming/going to NRAO by staying in the guest house. A couple of the sets there have their own bathrooms, a couple share bathroom and all share the sitting room and kitchen. You'd still need some sort of transport for going to shops etc. as the guest house is up a hill behind the NRAO and in a quiet setting but not close to any particular facilities like grocery stores etc.

There's a Mexican computer programmer here who's using the NRAO bike a lot but he's leaving round about the time you will arrive. I'll take a look at my own antique and see if it's rideable. It's not actually the same one I had in cambridge as an undergraduate but it might as well be

A.

From root Thu Oct 6 12:14:05 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["602" "Thu" "6" "October" "1994" "17:14:17" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.941006165557.13620A-100000@mraos>" "15" "Re: movement." nil nil nil "10" nil nil (number " " mark
" R Jane Dennett-Thor Oct 6 15/602 " thread-indent "\"Re: movement.\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA28615; Thu, 6 Oct 1994 12:13:59 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qsvSU-0002Q5C; Thu, 6 Oct 94 17:14 BST

X-Sender: jdt@mraos

In-Reply-To: <9410061549.AA39031@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.941006165557.13620A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: movement.

Date: Thu, 6 Oct 1994 17:14:17 +0100 (BST)

thanks very much for the offer of staying in your house (which you had also made some time back, but then dialogue ceased as i postponed til fall). i suspect however, that given the distance it would probably be best for me to be stationed in the guesthouse. (i tend to be, erm, not at my best early in the morning. however if i play jet-lag correctly - who knows- maybe i'll have a 9-5 day going!)

as to where i am to stay immediately on arrival- i'll leave that to your skill and judgement.

my travel agent would not make a booking for the train, but i'll try another. thanks for the tip.

j.

From abridle Thu Oct 6 14:25:01 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["663" "Thu" "6" "October" "1994" "14:24:47" "-0400" "Alan Bridle" "abridle " nil "15" "Re: movement." nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 6 15/663 " thread-indent "\"Re: movement.\"") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA29835; Thu, 6 Oct 1994 14:24:47 -0400

Message-Id: <9410061824.AA29835@polaris.cv.nrao.edu>

References: <9410061549.AA39031@polaris.cv.nrao.edu>

<Pine.SUN.3.90.941006165557.13620A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: movement.

Date: Thu, 6 Oct 1994 14:24:47 -0400

Jane,

I've booked you in to the NRAO guest house from Oct 24 (Monday) to Nov.24th as that's the latest you might still be here. That way you can start out with us while you get the lie of the land but be as independent as you'd like later on. And although Mary is a morning person I only do a grumpy impersonation of one when she and I go in to work together. So can start slowly each a.m. and still keep you synchronized with me for the first few days, while we may have a fair number of things worth synchronizing for. Then we can move into a more independent mode the first full week you're here and once you know your way around the place. Howzat?

A.

From root Thu Oct 6 14:27:45 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["29" "Thu" "6" "October" "1994" "19:27:57" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "3" "Re: movement." nil nil nil "10" nil nil (number " " mark " Jane Dennett-Thor Oct 6 3/29 " thread-indent "\"Re: movement.\""\n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA38586; Thu, 6 Oct 1994 14:27:41 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qsxXq-0002PxC; Thu, 6 Oct 94 19:27 BST

X-Sender: jdt@mraos

In-Reply-To: <9410061824.AA29835@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.941006192735.13620B-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: movement.

Date: Thu, 6 Oct 1994 19:27:57 +0100 (BST)

sounds great, thanks.

jane.

From abridle Tue Oct 11 11:28:21 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["297" "Tue" "11" "October" "1994" "11:28:20" "-0400" "Alan Bridle" "abridle " nil "8" "Jane Dennett-Thorpe" nil nil
nil "10" nil nil (number " " mark " Alan Bridle Oct 11 8/297 " thread-indent "\"Jane Dennett-Thorpe\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA32873; Tue, 11 Oct 1994 11:28:20 -0400

Message-Id: <9410111528.AA32873@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: jcondon

Subject: Jane Dennett-Thorpe

Date: Tue, 11 Oct 1994 11:28:20 -0400

is a student of Peter Scheuer's who will be here for just over a month starting next Wednesday (Oct 19th). She will need to have access to one of the IBMs with a fair amount of disk while here. Mark suggested that rhesus would do best as it has the most disk. Can we arrange that?

Thanks, A.

From abridle Fri Oct 14 10:45:25 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["277" "Fri" "14" "October" "1994" "10:45:17" "-0400" "Alan Bridle" "abridle " nil "15" "Re: movement." nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 14 15/277 " thread-indent "\"Re: movement.\\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA32881; Fri, 14 Oct 1994 10:45:17 -0400

Message-Id: <9410141445.AA32881@polaris.cv.nrao.edu>

References: <9409301612.AA30760@polaris.cv.nrao.edu>
<Pine.SUN.3.90.941006145149.7196B-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: movement.

Date: Fri, 14 Oct 1994 10:45:17 -0400

Hi Jane,

Just checking that your plans are still to
arrive CV Tuesday evening via Amtrak.

Pack a swimsuit if you might enjoy using
the hot tub (jacuzzi) while at our house ...

I'll be checking my E-mail over the weekend if
you have any last-minute matters.

Cheers, A.

From root Fri Oct 14 11:53:53 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["525" "Fri" "14" "October" "1994" "16:01:17" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SUN.3.90.941014154846.6553A-100000@mraos>" "14" "Re: movement." nil nil nil "10" nil nil (number " " mark "

R Jane Dennett-Thor Oct 14 14/525 " thread-indent "\"Re: movement.\"") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA45576; Fri, 14 Oct 1994 11:53:51 -0400

Received: by ras.phy.cam.ac.uk (Smail3.1.28.1 #2)

id m0qvo8D-0002RIC; Fri, 14 Oct 94 16:01 BST

X-Sender: jdt@mraos

In-Reply-To: <9410141445.AA32881@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.941014154846.6553A-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: movement.

Date: Fri, 14 Oct 1994 16:01:17 +0100 (BST)

oooo- a jacuzzi! definitely sounds like the trip will be worthwhile (i've
always wanted to try one). sounds particularly appealing when still
frantically getting data onto exabyte... a surprisingly frantic activity.

will be arriving in CV tues eve - seat is apparently booked.

yes, there was something i was going to ask you: any particular english
delights/poisons you pine for? (marmite & ribena seem the standards.)

will be logging on sunday- but hopefully not to send messages of distress.

see you soon,

jane

From abridle Fri Oct 14 12:55:48 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil])

["681" "Fri" "14" "October" "1994" "12:55:31" "-0400" "Alan Bridle" "abridle" "nil" "22" "Re: movement." nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 14 22/681 " thread-indent "\"Re: movement.\\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA46581; Fri, 14 Oct 1994 12:55:31 -0400

Message-Id: <9410141655.AA46581@polaris.cv.nrao.edu>

References: <9410141445.AA32881@polaris.cv.nrao.edu>

<Pine.SUN.3.90.941014154846.6553A-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: movement.

Date: Fri, 14 Oct 1994 12:55:31 -0400

Good luck with the tape-writing (everyone's unfavorite task these days)!

Can't think of any goodies we pine for seriously -- in our third decade over here we're either converted to US fare or we've found the necessary underground goodie suppliers, but thanks for the thought.

Glad to hear you got the train reserved. When you get off, look for a tall grey-bearded bloke wearing a radio telescope on his T-shirt/sweater. Odds are high that he'll be me.

In case you need to get in touch while in transit,

our home phone is 804-971-7752,

my office phone is 804-296-0375,

and both have answering machines.

Have a good trip,

Cheers, A.

From abridle Wed Oct 19 12:05:39 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["296" "Wed" "19" "October" "1994" "12:05:35" "-0400" "Alan Bridle" "abridle" " nil "10" "VLA user number" nil nil
nil "10" nil nil (number " " mark " Alan Bridle Oct 19 10/296 " thread-indent "\"VLA user number\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA26758; Wed, 19 Oct 1994 12:05:35 -0400

Message-Id: <9410191605.AA26758@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: tmcbride

Subject: VLA user number

Date: Wed, 19 Oct 1994 12:05:35 -0400

Hi, I have a student here at the moment who will be observing
at the VLA in November and will need a VLA user number.

So I can start her working here with the number she will
eventually be assigned, could you give her a number and
E-mail it to me?

Thanks. Her name is Jane Dennett-Thorpe.

A.

From root Wed Oct 19 12:15:01 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["42" "Wed" "19" "October" "1994" "10:14:48" "-0600" "Theresa McBride" "tmcbride@aoc.nrao.edu" nil "4" "Re:
VLA user number" nil nil nil "10" nil nil (number " " mark " Theresa McBride Oct 19 4/42 " thread-indent "\"Re:
VLA user number\""\n") nil]

nil)

Received: from zia.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31349; Wed, 19 Oct 1994 12:14:57 -0400

Received: by zia.aoc.nrao.edu (5.65c/1.3pmsg)

id AA06568; Wed, 19 Oct 1994 10:14:48 -0600

Message-Id: <199410191614.AA06568@zia.aoc.nrao.edu>

From: Theresa McBride <tmcbride@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: VLA user number

Date: Wed, 19 Oct 1994 10:14:48 -0600

Hi, Jane's user number is 2004.

Theresa

From abridle Wed Oct 19 12:00:54 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["450" "Wed" "19" "October" "1994" "12:00:47" "-0400" "Alan Bridle" "abridle " nil "19" "3C111" nil nil nil "10" nil
nil (number " " mark " Alan Bridle Oct 19 19/450 " thread-indent "\"3C111\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA37430; Wed, 19 Oct 1994 12:00:47 -0400

Message-Id: <9410191600.AA37430@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: rperley

Subject: 3C111

Date: Wed, 19 Oct 1994 12:00:47 -0400

Hi Rick,

Jane Dennett-Thorpe (Peter Scheuer's student) is here and was led to believe (by Peter) that he had asked you to send me your 3C111 8-GHz data (2 pointings, all configurations) so she could reduce it while she's here in C'ville.

Does this ring a bell?

If so, how soon could we get it here? I'm willing to ftp it if you could just load it out there, or is it conveniently on a set of tapes you could Fed-ex to me?

Thanks a bunch,

A.

From root Wed Oct 19 12:40:37 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["692" "Wed" "19" "October" "1994" "10:40:33" "-0600" "Rick Perley" "rperley@aoc.nrao.edu" nil "16" "Re: 3C111"
nil nil nil "10" nil nil (number " " mark " Rick Perley Oct 19 16/692 " thread-indent "\"Re: 3C111\""\n") nil]
nil)

Received: from sechelt.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA30878; Wed, 19 Oct 1994 12:40:35 -0400

Received: by sechelt.aoc.nrao.edu (5.65c/1.3pmg)
id AA03688; Wed, 19 Oct 1994 10:40:33 -0600

Message-Id: <199410191640.AA03688@sechelt.aoc.nrao.edu>

From: Rick Perley <rperley@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: 3C111

Date: Wed, 19 Oct 1994 10:40:33 -0600

Sigh.

Yes, I recall getting this request. The data are spread over 24 tapes, currently stacked up on my office floor. Some of these are in FITS format, (without PRITPs), some are in EXPORT format. It's a heterogeneous mix.

I haven't the time to sort out the details. What I'm willing to do is to copy all of these tapes on Exabyte, and ship that to you (FedEx, if you want). You'll get LOTS of data on many many objects.

For most of these original tapes, Adam Black (the student who did this work) has written fairly detailed labels. I'll photocopy these and send them along, in the proper order, to help in unravelling the data.

I hope this will be sufficient.,

Rick

From abridle Wed Oct 19 12:00:54 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["450" "Wed" "19" "October" "1994" "12:00:47" "-0400" "Alan Bridle" "abridle " nil "19" "3C111" nil nil nil "10" nil
nil (number " " mark " Alan Bridle Oct 19 19/450 " thread-indent "\"3C111\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA37430; Wed, 19 Oct 1994 12:00:47 -0400

Message-Id: <9410191600.AA37430@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: rperley

Subject: 3C111

Date: Wed, 19 Oct 1994 12:00:47 -0400

Hi Rick,

Jane Dennett-Thorpe (Peter Scheuer's student) is here and was led to believe (by peter) that he had asked you to send me your 3C111 8-GHz data (2 pointings, all configurations) so she could reduce it while she's here in C'ville.

Does this ring a bell?

If so, how soon could we get it here? I'm willing to ftp it if you could just load it out there, or is it conveniently on a set of tapes you could Fed-ex to me?

Thanks a bunch,

A.

From abridle Wed Oct 19 12:05:39 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["296" "Wed" "19" "October" "1994" "12:05:35" "-0400" "Alan Bridle" "abridle" " nil "10" "VLA user number" nil nil nil "10" nil nil (number " " mark " Alan Bridle Oct 19 10/296 " thread-indent "\"VLA user number\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA26758; Wed, 19 Oct 1994 12:05:35 -0400

Message-Id: <9410191605.AA26758@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: tmcbride

Subject: VLA user number

Date: Wed, 19 Oct 1994 12:05:35 -0400

Hi, I have a student here at the moment who will be observing at the VLA in November and will need a VLA user number.

So I can start her working here with the number she will eventually be assigned, could you give her a number and E-mail it to me?

Thanks. Her name is Jane Dennett-Thorpe.

A.

From root Wed Oct 19 12:15:01 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["42" "Wed" "19" "October" "1994" "10:14:48" "-0600" "Theresa McBride" "tmcbride@aoc.nrao.edu"

"<199410191614.AA06568@zia.aoc.nrao.edu>" "4" "Re: VLA user number" nil nil nil "10" nil nil (number " " mark " R
Theresa McBride Oct 19 4/42 " thread-indent "\"Re: VLA user number\""\n") nil]

nil)

Received: from zia.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA31349; Wed, 19 Oct 1994 12:14:57 -0400

Received: by zia.aoc.nrao.edu (5.65c/1.3pmg)

id AA06568; Wed, 19 Oct 1994 10:14:48 -0600

Message-Id: <199410191614.AA06568@zia.aoc.nrao.edu>

From: Theresa McBride <tmcbride@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: VLA user number

Date: Wed, 19 Oct 1994 10:14:48 -0600

Hi, Jane's user number is 2004.

Theresa

From root Wed Oct 19 12:40:37 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["692" "Wed" "19" "October" "1994" "10:40:33" "-0600" "Rick Perley" "rperley@aoc.nrao.edu"

"<199410191640.AA03688@sechelt.aoc.nrao.edu>" "16" "Re: 3C111" nil nil nil "10" nil nil (number " " mark " R Rick Perley Oct 19 16/692 " thread-indent "\Re: 3C111\n") nil]

nil)

Received: from sechelt.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA30878; Wed, 19 Oct 1994 12:40:35 -0400

Received: by sechelt.aoc.nrao.edu (5.65c/1.3pmg)

id AA03688; Wed, 19 Oct 1994 10:40:33 -0600

Message-Id: <199410191640.AA03688@sechelt.aoc.nrao.edu>

From: Rick Perley <rperley@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: 3C111

Date: Wed, 19 Oct 1994 10:40:33 -0600

Sigh.

Yes, I recall getting this request. The data are spread over 24 tapes, currently stacked up on my office floor. Some of these are in FITS format, (without PRITPs), some are in EXPORT format. It's a heterogeneous mix.

I haven't the time to sort out the details. What I'm willing to do is to copy all of these tapes on Exabyte, and ship that to you (FedEx, if you want). You'll get LOTS of data on many many objects.

For most of these original tapes, Adam Black (the student who did this work) has written fairly detailed labels. I'll photocopy these and send them along, in the proper order, to help in unravelling the data.

I hope this will be sufficient.,

Rick

From abridle Wed Oct 19 17:51:41 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1197" "Wed" "19" "October" "1994" "17:51:35" "-0400" "Alan Bridle" "abridle " nil "30" "Re: 3C111" nil nil nil
"10" nil nil (number " " mark " Alan Bridle Oct 19 30/1197 " thread-indent "\"Re: 3C111\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA21176; Wed, 19 Oct 1994 17:51:35 -0400

Message-Id: <9410192151.AA21176@polaris.cv.nrao.edu>

References: <199410191737.AA03690@sechelt.aoc.nrao.edu>

From: abridle (Alan Bridle)

To: Rick Perley <rperley@aoc.nrao.edu>

Subject: Re: 3C111

Date: Wed, 19 Oct 1994 17:51:35 -0400

Hi Rick,

I guess there are two issues re answer to "will the export tapes do"?

1. Was any significant processing done on the data that might be stashed on the FITS tapes? If for example they had been self-cal'd and cross-calibrated it might be worth a few week's work to salvage the later stages from them. But if not much has been done then it's obviously not worth it and the Export tapes alone would be fine. Jane seems to think that if anyone worked on that data at all it would have been you, i.e. Adam Black didn't? Maybe you can judge the "added-value" of the FITS stuff from that?

2. There's another field that has gone missing from Adam Black's data in Cambridge. They have all his 8 GHz stuff for 3C403P (preceding pointing) but none of it for 3C403F (following pointing). If his annotations on any of the FITS tapes you have there suggest that they contain 3C403F then these would also be very much welcomed, though not with the urgency of 3C111 and Jane could probably get that data from you when she arrives in NM. She needs to resurrect the uv datasets to match coverages and resolutions for the spectral-index imaging.

Thanks a bunch for whatever you can do,

A.

From root Wed Oct 19 19:02:44 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["344" "Wed" "19" "October" "1994" "17:02:39" "-0600" "Rick Perley" "rperley@aoc.nrao.edu"

"<199410192302.AA03716@sechelt.aoc.nrao.edu>" "11" "Re: 3C111" nil nil nil "10" nil nil (number " " mark " R Rick Perley Oct 19 11/344 " thread-indent "\Re: 3C111\n") nil]

nil)

Received: from sechelt.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA21435; Wed, 19 Oct 1994 19:02:42 -0400

Received: by sechelt.aoc.nrao.edu (5.65c/1.3pmg)

id AA03716; Wed, 19 Oct 1994 17:02:39 -0600

Message-Id: <199410192302.AA03716@sechelt.aoc.nrao.edu>

From: Rick Perley <rperley@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: 3C111

Date: Wed, 19 Oct 1994 17:02:39 -0600

Alan:

I didn't personally do anything with the 3C111 data. So since it appears Adam left this one off his list of sources to work on, it would appear that the only useful data will be the Export format stuff.

My first attempt to copy data failed. Program bombed for some reason.

I'll try come in tonight and do some of this.

Rick

From root Thu Oct 20 13:44:09 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1578" "Thu" "20" "October" "1994" "11:44:07" "-0600" "Rick Perley" "rperley@aoc.nrao.edu" nil "35" "Re: 3C111"
nil nil nil "10" nil nil (number " " mark " Rick Perley Oct 20 35/1578 " thread-indent "\"Re: 3C111\""\n") nil]
nil)
Received: from sechelt.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA24983; Thu, 20 Oct 1994 13:44:08 -0400
Received: by sechelt.aoc.nrao.edu (5.65c/1.3pmg)
id AA03999; Thu, 20 Oct 1994 11:44:07 -0600
Message-Id: <199410201744.AA03999@sechelt.aoc.nrao.edu>
From: Rick Perley <rperley@aoc.nrao.edu>
To: abridle@polaris.cv.nrao.edu
Subject: Re: 3C111
Date: Thu, 20 Oct 1994 11:44:07 -0600

Alan:

The copying is done. I hope you can read it. There are hundreds of files on the tape, and in the interest of time, it seems prudent not to run PRTTP on it!

Here's what I think is on the tape:

Block A: 73 files of D-configuration, X-band Black data. These include the original MULTI tape, and all its SPLITted derivatives.

Block B: 40 files of C-configuration data, Export format. I left off half the data (40 more files -- the 2nd IF). I'll send these later.

Block C: 29 files of B-config, Export format. IF#1.

Block D: 29 files of B-config., Export format. IF#2

Block E: 1 files of A-config., multi format. 25 MHz BW.

Block F: 1 file of A-config., multi format. 12.5MHz BW.

Block g: 1 file of A-config., multi format. 50 MHz BW.

Block H: 27 files, FITS format, various data and maps from D-config. data.

Block I: 22 files, FITS format. Data and maps from B-config. data.

** All the above are from Adam's project **

Block J: 6 files of A-config data at 20, 6, 3.6 cm observations of 3C111 and 3C300. I don't know whose data these are! Export.

Block K: 5 files, ARCOPY (i.e., Modcomp data), of AP534 and AB534. I don't know what these data are! There's on here because the tape was in the pile labeled 'Black project/3C111'.

Block L: 8 files of various 3C111 data, maps and uv, A-config. I don't know the origin -- I *think* these originate from a Robert Laing proposal. These are old data -- 1987 or earlier.

Well, good luck. This is everything I have.

I'll fedex these out right away.

Rick

From abridle Thu Oct 20 15:03:04 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["185" "Thu" "20" "October" "1994" "15:03:00" "-0400" "Alan Bridle" "abridle " nil "8" "Re: 3C111" nil nil nil "10"
nil nil (number " " mark " Alan Bridle Oct 20 8/185 " thread-indent "\"Re: 3C111\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA39380; Thu, 20 Oct 1994 15:03:00 -0400

Message-Id: <9410201903.AA39380@polaris.cv.nrao.edu>

References: <199410192302.AA03716@sechelt.aoc.nrao.edu>

From: abridle (Alan Bridle)

To: Rick Perley <rperley@aoc.nrao.edu>

Subject: Re: 3C111

Date: Thu, 20 Oct 1994 15:03:00 -0400

Thanks a bunch, Rick.

We can search for the missing dataset when we get to NM, I think Jane will have her hands quite full with what is presently here plus 3C111 once it arrives!

A.

From root Thu Oct 20 16:09:53 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["543" "Thu" "20" "October" "1994" "14:06:24" "-0600" "Rick Perley" "rperley@aoc.nrao.edu"

"<199410202006.AA04005@sechelt.aoc.nrao.edu>" "14" "Re: 3C111" nil nil nil "10" nil nil (number " " mark " R Rick Perley Oct 20 14/543 " thread-indent "\"Re: 3C111\""\n") nil]

nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA04667; Thu, 20 Oct 1994 16:09:52 -0400

Received: from sechelt.aoc.nrao.edu by cv3.cv.nrao.edu (4.1/DDN-DLB/1.13)
id AA10650; Thu, 20 Oct 94 16:07:40 EDT

Received: by sechelt.aoc.nrao.edu (5.65c/1.3pmg)
id AA04005; Thu, 20 Oct 1994 14:06:24 -0600

Message-Id: <199410202006.AA04005@sechelt.aoc.nrao.edu>

From: Rick Perley <rperley@aoc.nrao.edu>

To: abridle@polaris.cv.nrao.edu

Subject: Re: 3C111

Date: Thu, 20 Oct 1994 14:06:24 -0600

... no need to search. I have the 'missing' 40 files right here,
at my feet. THE problem was I didn't notice there were 2x40 files on the tape,
and only typed in 40.

Rick

There is a chance that between the 'blocks' I described in the last
mail message there will be 2 EOF, rather than one. I'm not sure how the VLAR
program handles those double EOFs. Stephane Beland (who's the author) isn't
here today, and the MAN file didn't say anything about this point. I hope
this possibility doesn't prevent your reading the tape.

Rick

From abridle Mon Oct 24 18:40:44 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["166" "Mon" "24" "October" "1994" "18:40:44" "-0400" "Alan Bridle" "abridle " nil "7" "Jane's billing at Alden House" nil nil nil "10" nil nil (number " " mark " Alan Bridle Oct 24 7/166 " thread-indent "\"Jane's billing at Alden House\""\n") nil]

nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA11422; Mon, 24 Oct 1994 18:40:44 -0400

Message-Id: <9410242240.AA11422@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: bmattox

Subject: Jane's billing at Alden House

Date: Mon, 24 Oct 1994 18:40:44 -0400

is to be charged to NRAO. I don't know what account number but it will be whichever account Bob Brown uses to fund the Ph.D. student (predoctoral) program.

A.

From abridle Tue Oct 25 13:35:51 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["921" "Tue" "25" "October" "1994" "13:30:33" "-0400" "Alan Bridle" "abridle" nil "21" "Re: A complication in our plans" nil nil nil "10" nil nil (number " " mark " Alan Bridle Oct 25 21/921 " thread-indent "\"Re: A complication in our plans\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA20566; Tue, 25 Oct 1994 13:30:33 -0400

Message-Id: <9410251730.AA20566@polaris.cv.nrao.edu>

References: <9410210329.AA42207@polaris.cv.nrao.edu>

<Pine.3.05.9410211236.A4868-a100000@rgosc.ast.cam.ac.uk>

From: abridle (Alan Bridle)

To: Robert Laing <rl@mail.ast.cam.ac.uk>

Subject: Re: A complication in our plans

Date: Tue, 25 Oct 1994 13:30:33 -0400

Robert Laing writes:

>

> My current position is that I have Gemini meetings in Cambridge on Nov
> 10-11, which I can't avoid, and a potential meeting on Nov 21 which I
> wouldn't mind skipping, but which might be quite important (it's our
> review of ground-based optical, ir and mm astronomy), although the date is
> only pencilled in at the moment. The next meeting of the review is on
> Monday and Tuesday, so we will presumably decide then. I will make a
> final decision on Tuesday, I think.

>

> It's therefore not out of the question for me to go to Socorro.

>

As the run is very close to Thanksgiving Jane will need as much advance notice as possible re getting her ticket if you do decide that you can go. Fare sales, and even space available on the planes, will disappear very shortly. So please do let one of us (her/me) know your decision as soon as you have arrived at it.

Thanks, Alan

From root Wed Oct 26 08:10:14 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["269" "Wed" "26" "October" "1994" "11:42:05" "+0000" "Robert Laing" "rl@mail.ast.cam.ac.uk"

"<Pine.3.05.9410261105.A11369-9100000@rgosc.ast.cam.ac.uk>" "14" "Thanksgiving" nil nil nil "10" nil nil (number " " mark " R Robert Laing Oct 26 14/269 " thread-indent "\"Thanksgiving\""\n") nil]

Received: from cast0.ast.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA19221; Wed, 26 Oct 1994 08:10:10 -0400

Received: from rgosc.ast.cam.ac.uk [131.111.69.16]

by cast0.ast.cam.ac.uk with smtp

(Smail-3.1.28.1) id m0r07B7-0001RnC; Wed, 26 Oct 94 12:10 GMT

Received: by rgosc.ast.cam.ac.uk

(Smail-3.1.28.1) id m0r07B7-0001vhC; Wed, 26 Oct 94 12:10 GMT

Message-Id: <Pine.3.05.9410261105.A11369-9100000@rgosc.ast.cam.ac.uk>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Robert Laing <rl@mail.ast.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Cc: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Thanksgiving

Date: Wed, 26 Oct 1994 11:42:05 +0000 (GMT)

Dear Alan,

Thanks for reminding me. What would you suggest as a reasonable time to spend in Socorro? I was thinking of something like:

UK -> ABQ 23/11

ABQ -> Socorro 24/11

Socorro -> CV 3/12

CV -> UK 18/12

Would this work, do you think?

Cheers, Robert

From abridle Wed Oct 26 08:18:30 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["666" "Wed" "26" "October" "1994" "08:18:09" "-0400" "Alan Bridle" "abridle " nil "19" "Re: Thanksgiving" nil nil nil "10" nil nil (number " " mark " Alan Bridle Oct 26 19/666 " thread-indent "\"Re: Thanksgiving\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA43089; Wed, 26 Oct 1994 08:18:09 -0400

Message-Id: <9410261218.AA43089@polaris.cv.nrao.edu>

References: <Pine.3.05.9410261105.A11369-9100000@rgosc.ast.cam.ac.uk>

From: abridle (Alan Bridle)

To: Robert Laing <rl@mail.ast.cam.ac.uk>

Subject: Re: Thanksgiving

Date: Wed, 26 Oct 1994 08:18:09 -0400

Hi Robert,

That's probably a good schedule, I'll just talk it over with Jane when she comes in (she's not an early riser but will probably here in about another hour).

We don't have a schedule for Mary's surgery yet as we have been advised of a better surgeon than the one first suggested by Mary's doctor and will not get to see the new guy until next Tuesday. But I think so long as Mary is not actually going to be in the hospital from 3-18 Dec it should work out o.k..

We'd better book the outbound leg a.s.a.p. whatever, does your question mean you'll definitely be making the trip?

I'll get back to you again as soon as I've seen Jane ...

Cheers, A.

From root Wed Oct 26 11:21:48 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["383" "Wed" "26" "October" "1994" "15:17:46" "+0000" "Robert Laing" "rl@mail.ast.cam.ac.uk" nil "11" "Re: Thanksgiving" nil nil nil "10" nil nil (number " " mark " Robert Laing Oct 26 11/383 " thread-indent "" "Re: Thanksgiving"\n") nil] nil)

Received: from cast0.ast.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA19145; Wed, 26 Oct 1994 11:21:44 -0400

Received: from rgosc.ast.cam.ac.uk [131.111.69.16]

by cast0.ast.cam.ac.uk with smtp

(Smail-3.1.28.1) id m0r0AAY-0001RnC; Wed, 26 Oct 94 15:21 GMT

Received: by rgosc.ast.cam.ac.uk

(Smail-3.1.28.1) id m0r0AAY-0001vgC; Wed, 26 Oct 94 15:21 GMT

In-Reply-To: <9410261513.AA40574@polaris.cv.nrao.edu>

Message-Id: <Pine.3.05.9410261510.A11665-9100000@rgosc.ast.cam.ac.uk>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Robert Laing <rl@mail.ast.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: Thanksgiving

Date: Wed, 26 Oct 1994 15:17:46 +0000 (GMT)

I should be able to get something for you by the end of our working day. Any info about good deals would be welcome (our travel agents are not always clued up about internal US flights).

Cheers, Robert

P.S. I'd quite like to visit the Starfire Optical Range in Albuquerque, and might have to fit in with their schedule too (besides which, it may take too long to get clearance).

From root Wed Oct 26 14:45:52 1994

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["900" "Wed" "26" "October" "1994" "18:38:25" "+0000" "Robert Laing" "rl@mail.ast.cam.ac.uk"

"<Pine.3.05.9410261825.A11978-a100000@rgosc.ast.cam.ac.uk>" "25" "Trip" nil nil nil "10" nil nil (number " " mark " R
Robert Laing Oct 26 25/900 " thread-indent "\"Trip\""\n") nil]
nil)

Received: from cast0.ast.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA41290; Wed, 26 Oct 1994 14:45:48 -0400

Received: from rgosc.ast.cam.ac.uk [131.111.69.16]

by cast0.ast.cam.ac.uk with smtp

(Smail-3.1.28.1) id m0r0DLs-0001S5C; Wed, 26 Oct 94 18:45 GMT

Received: by rgosc.ast.cam.ac.uk

(Smail-3.1.28.1) id m0r0DLr-0001vhC; Wed, 26 Oct 94 18:45 GMT

Message-Id: <Pine.3.05.9410261825.A11978-a100000@rgosc.ast.cam.ac.uk>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Robert Laing <rl@mail.ast.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Trip

Date: Wed, 26 Oct 1994 18:38:25 +0000 (GMT)

Dear Alan,

The trip now looks OK from my end. I have sorted out the finances and made some provisional reservations, to be tweaked later. At the moment, I plan to arrive in Albuquerque on 23rd (late) and stay overnight, although the connection in Dallas is tight, so I may reconsider.

The flight I have from Albuquerque to CV is on Dec 3rd. I don't have the flight numbers, but you should be able to identify things from the following info:

Albuquerque 0715 Pittsburgh 1237 (USAir, Oh Well)

Pittsburgh 1355 CV 1440 (American)

If you have a better (later?) alternative, please could you let me know?

I'd be leaving CV on Dec 18th at 1706, via Rayleigh-Durham of all places.

I'll hold off confirming the reservations as late as possible consistent with maintaining the fare, and will have another iteration with our travel people tomorrow.

Best Wishes,

Robert

From abridle Wed Oct 26 15:38:35 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["776" "Wed" "26" "October" "1994" "15:38:05" "-0400" "Alan Bridle" "abridle " nil "28" "Re: Trip" nil nil nil "10"
nil nil (number " " mark " Alan Bridle Oct 26 28/776 " thread-indent "\"Re: Trip\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA33451; Wed, 26 Oct 1994 15:38:05 -0400

Message-Id: <9410261938.AA33451@polaris.cv.nrao.edu>

References: <Pine.3.05.9410261825.A11978-a100000@rgosc.ast.cam.ac.uk>

From: abridle (Alan Bridle)

To: Robert Laing <rl@mail.ast.cam.ac.uk>

Subject: Re: Trip

Date: Wed, 26 Oct 1994 15:38:05 -0400

Hi Robert,

Our only choice left for getting Jane out of CV is on the 24th:

CVille 1015 Pittsburgh 1120

Pittb 1215 Albq 1409

This also lets her return on the same flights as you on 3rd Dec.
i.e.

Albuq 0715 Pittsb 1237

Pittsb 1335 C'ville 1440 must be same flight but note not
same quoted departure time as yours!

This would let you link up with her in ABQ on 24th if you like,
even if you end up missing a tight connection in Dallas and staying
overnight there instead :)

It's all USAir by the way! But they are being extra careful
these days!

We had to book by Oct 27th and have confirmed them this p.m.
to make sure. So we'll assume that you might only fiddle
your outbound section tomorrow a.m.

Cheers,

A.

From abridle Fri Oct 28 11:05:01 1994
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1441" "Fri" "28" "October" "1994" "11:04:31" "-0400" "Alan Bridle" "abridle " nil "39" "Visit to AOC by Jane
Dennett-Thorpe" nil nil nil "10" nil nil (number " " mark " Alan Bridle Oct 28 39/1441 " thread-indent "\Visit to
AOC by Jane Dennett-Thorpe\"n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA41577; Fri, 28 Oct 1994 11:04:31 -0400
Message-Id: <9410281504.AA41577@polaris.cv.nrao.edu>
From: abridle (Alan Bridle)
To: elatasa
Subject: Visit to AOC by Jane Dennett-Thorpe
Date: Fri, 28 Oct 1994 11:04:31 -0400

Hi Eileen,

Jane Dennett-Thorpe is a Ph.D. student from the MRAO, Cambridge, UK who is currently working with me in Charlottesville and will be joining Robert Laing in NM for work on the observing run AS542 on Nov 25/27.

They will both be arriving in Albuquerque on November 24th (Thanksgiving Day). Jane will be on USAir Flight 94 arriving 1409, Robert is arriving in Albuquerque earlier that day and I do not have his details. But they will meet in Albuquerque and travel down together. They will depart together from Albuquerque on December 3rd on USAir Flight 406 at 0715.

They will probably spend some time at the VLA site as well as at the AOC. Robert will set the details of this and their of their travel to and from Albuquerque, as he drives and Jane doesn't!

So this is to ask that when Robert Laing contacts you with his details re room reservations at the site and Socorro, and of ground transport in NM, could you please make matching arrangements for Jane?

They will be calibrating and reducing the AS542 run and merging it with some other data while at the AOC. They will need to reserve at least a SPARC-IPX for this. If one of the IBM workstations was available this would of course be preferred to an IPX for speed.

Please contact me if you need any more details right away, though it is Robert who is really deciding where they will be and when and he will be on holiday until November 7th!

Cheers,

Alan

From root Fri Nov 4 23:29:17 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1294" "Fri" "4" "November" "1994" "23:29:15" "+0500" "Patrick P. Murphy" "pmurphy@NRAO.EDU" " nil "27"
"Conversion for Dennett-Thorpe, J." nil nil nil "11" nil nil (number " " mark " Patrick P. Murphy Nov 4 27/1294 "
thread-indent "\"Conversion for Dennett-Thorpe, J.\"") nil]
nil)

Received: from orangutan.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA33387; Fri, 4 Nov 1994 23:29:17 -0500

Received: by orangutan.cv.nrao.edu (5.0/S2.3/NRAO-CV/2.0)
id AA02262; Fri, 4 Nov 1994 23:29:15 +0500

Message-Id: <9411050429.AA02262@orangutan.cv.nrao.edu>

Content-Length: 1294

From: pmurphy@NRAO.EDU (Patrick P. Murphy)

To: abridle@orangutan, egreisen@orangutan

Subject: Conversion for Dennett-Thorpe, J.

Date: Fri, 4 Nov 1994 23:29:15 +0500

I have updated the AIPS data on all RHESUS disks (only) for user 2004.
There was a pre-existing message file and a couple of save/get files in
the "D" format that I blew away first; otherwise the conversion was
fairly smooth. I believe the warnings about missing catalog slots are not
serious, and if I remember what Eric told me, the UPDAT program correctly
handles them. Let me know if you have any problems.

- Pat

Transcript of session:

User number range : 2004 2004

Disk range : 1 9

Oldest data : 15JUL93

Enter : 1=I made a mistake, reenter; 2=continue :

2

UPDAT1: For user 2004 renamed 1 message, 13 save/get, 1 tget files

UPDAT1: Updated user 2004 disk 3 with 60 files, 291 exts, 0 errors

UPDAT1: FILE FOR CATALOG SLOT 32 USER 2004 IS MISSING OR EMPTY

UPDAT1: FILE FOR CATALOG SLOT 33 USER 2004 IS MISSING OR EMPTY

UPDAT1: FILE FOR CATALOG SLOT 34 USER 2004 IS MISSING OR EMPTY

UPDAT1: Updated user 2004 disk 5 with 46 files, 70 exts, 3 errors

UPDAT1: Updated user 2004 disk 6 with 32 files, 48 exts, 0 errors

UPDAT1: Updated user 2004 disk 7 with 28 files, 113 exts, 0 errors

UPDAT1: Updated user 2004 disk 8 with 19 files, 92 exts, 0 errors

UPDAT1: Updated user 2004 disk 9 with 32 files, 326 exts, 0 errors

STOP

From jdennett Mon Nov 28 14:40:18 1994
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["744" "Mon" "28" "November" "94" "14:40:17" "EST" "Jane Dennett-Thorpe" "jdennett "
"<9411281940.AA11499@polaris.cv.nrao.edu>" "18" "Re: How" nil nil nil "11" nil nil (number " " mark " R Jane
Dennett-Thor Nov 28 18/744 " thread-indent "\"Re: How\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA11499; Mon, 28 Nov 1994 14:40:17 -0500
Message-Id: <9411281940.AA11499@polaris.cv.nrao.edu>
In-Reply-To: <9411281930.AA51622@polaris.cv.nrao.edu>; from "Alan Bridle" at Nov 28, 94 2:30 pm
X-Mailer: ELM [version 2.3 PL11]
From: jdennett (Jane Dennett-Thorpe)
To: abridle@polaris.cv.nrao.edu (Alan Bridle)
Subject: Re: How
Date: Mon, 28 Nov 94 14:40:17 EST

oh. telepathy. just logged on to tell you that.

excellently so far.

the data from the first run has been good. self cal has been done on that and i'm in the process of drwing a line underneath it (exabytes, hardcopies etc) before starting the second set.. (the thging appeared to look at things similar to those it was meant to, but beyond that no news yet.)

the wings on 223.1 look simply gorgeous

which is good asthe other half of the observing team is cold-ridden and this half is threatening to follow suit.

il drop another line when i've looked more thoroughly at yesterday's data.

hope things are well with yourself and Mary,

later,
jane

(disclaimer: typos due to slow trans-continental connection and inability to touch type.

From jdennett Fri Dec 2 00:36:45 1994
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1047" "Fri" "2" "December" "94" "0:36:43" "EST" "Jane Dennett-Thorpe" "jdennett "
"<9412020536.AA58185@polaris.cv.nrao.edu>" "28" "all but ..." nil nil nil "12" nil nil (number " " mark " R Jane
Dennett-Thor Dec 2 28/1047 " thread-indent "\"all but ...\""\n") nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA58185; Fri, 2 Dec 1994 00:36:44 -0500
Message-Id: <9412020536.AA58185@polaris.cv.nrao.edu>
X-Mailer: ELM [version 2.3 PL11]
From: jdennett (Jane Dennett-Thorpe)
To: abridle (7752)
Subject: all but ...
Date: Fri, 2 Dec 94 0:36:43 EST

hi,

well just to let you know that the second set is also well behaved. we should get something good from 3c390.3 when it has D array with it. the wings at 8GHz on 3c403 are more iffy, but they still have to be combined with Adam's data and i'll think they'll do the necessary for us.

but you'll get to see the fruits soon enough!

went out to the site on tuesday, but didn't make pie town as the choice seemed to be kelly or pie town. i have to admit the mine won out. it was great to see the machine after so long in front of its 'prose'. (robert seemed less than enthused abt going out so i hijacked tim roberts for the purpose.)

i will be here til 9 tomorrow evening when i'll be leaving on the shuttle to alb. and staying the nigt there for my am flight. just to remind you i'll be arriving in cv supposedly at 2.40pm flight usair 4003b from pitts. and would love t see you at the airport somethim after that. if you can't make it drop me a line here before i leave or leave a message for the airport msg board.

soon,
jane

From abridle Fri Dec 2 12:45:10 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["185" "Fri" "2" "December" "1994" "12:45:10" "-0500" "Alan Bridle" "abridle " nil "8" "Re: all but ..." nil nil nil "12" nil nil (number " " mark " Alan Bridle Dec 2 8/185 " thread-indent "\"Re: all but ...\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA53520; Fri, 2 Dec 1994 12:45:10 -0500

Message-Id: <9412021745.AA53520@polaris.cv.nrao.edu>

References: <9412020536.AA58185@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: jdennett (Jane Dennett-Thorpe)

Subject: Re: all but ...

Date: Fri, 2 Dec 1994 12:45:10 -0500

Glad to hear it's going so well and that you saw the VLA and Kelly -- probably the right choice for variety!

I'll see you at the airport at 2.40 tomorrow.

Have a great trip back!

A.

From root Fri Dec 9 11:39:33 1994

X-VM-v5-Data: ([nil nil nil nil t nil t nil nil]

["189" "Fri" "9" "December" "1994" "09:39:30" "-0700" "Eileen Latasa" "elatasa@aoc.nrao.edu"
"<199412091639.AA22387@zia.aoc.nrao.edu>" "8" "Expenses for Jane Denett-Thorpe" nil nil nil "12" nil nil (number " "
mark " R Eileen Latasa Dec 9 8/189 " thread-indent "\"Expenses for Jane Denett-Thorpe\""\n") nil]
nil)

Received: from zia.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA33203; Fri, 9 Dec 1994 11:39:32 -0500

Received: by zia.aoc.nrao.edu (5.65c/1.3pmsg)

id AA22387; Fri, 9 Dec 1994 09:39:30 -0700

Message-Id: <199412091639.AA22387@zia.aoc.nrao.edu>

From: Eileen Latasa <elatasa@aoc.nrao.edu>

To: abridle

Cc: elatasa

Subject: Expenses for Jane Denett-Thorpe

Date: Fri, 9 Dec 1994 09:39:30 -0700

Hi All!

Jane said that NRAO was supposed to pay for her lodging, shuttle
and data tapes. Do you have an account # that we should charge
the invoice to? The total is \$165.00.

Eileen

From root Fri Dec 9 16:55:57 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["99" "Fri" "9" "December" "94" "16:55:56" "EST" "Robert Brown" "rbrown@pantagruel.CV.NRAO.EDU " nil "5"
"Jane's charges" nil nil nil "12" nil nil (number " " mark " Robert Brown Dec 9 5/99 " thread-indent "\"Jane's
charges\"") nil]

nil)

Received: from pantagruel.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA15905; Fri, 9 Dec 1994 16:55:57 -0500

Received: by pantagruel.cv.nrao.edu (4.1/DDN-DLB/1.5)

id AA21137; Fri, 9 Dec 94 16:55:56 EST

Message-Id: <9412092155.AA21137@pantagruel.cv.nrao.edu>

From: rbrown@pantagruel.CV.NRAO.EDU (Robert Brown)

To: elatasa, abridle

Subject: Jane's charges

Date: Fri, 9 Dec 94 16:55:56 EST

Eileen,

Please charge Jane's lodging, shuttle charges and tapes to account

#41222. Thanks,

Bob

From abridle Tue Dec 20 15:47:33 1994

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["238" "Tue" "20" "December" "1994" "15:47:25" "-0500" "Alan Bridle" "abridle " nil "12" "Alden House keys" nil
nil nil "12" nil nil (number " " mark " Alan Bridle Dec 20 12/238 " thread-indent "\"Alden House keys\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA44710; Tue, 20 Dec 1994 15:47:25 -0500

Message-Id: <9412202047.AA44710@polaris.cv.nrao.edu>

References: <9409301612.AA30760@polaris.cv.nrao.edu>
<Pine.SUN.3.90.941006145149.7196B-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Alden House keys

Date: Tue, 20 Dec 1994 15:47:25 -0500

Hi Jane,

Seems you did not leave the keys where Billy Jo was expecting them (maybe took them with you by mistake?).

If you still have them can you mail them to Billy Jo (Mattox) and if not can you tell us where you left them?

Ta,

A.

From root Thu Jan 5 11:39:43 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil])

["917" "Thu" "5" "January" "1995" "16:40:26" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.950105162752.3162A-100000@mraosc>" "23" "Re: Alden House keys, and best wishes for the new
year" nil nil nil "1" nil nil (number " " mark " R Jane Dennett-Thor Jan 5 23/917 " thread-indent ""Re: Alden House
keys, and best wishes for the new year\\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA51128; Thu, 5 Jan 1995 11:39:40 -0500

Received: from mraosc.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0rPvEo-0002QSC; Thu, 5 Jan 95 16:40 GMT

Received: by mraosc.ra.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0rPvEk-0000duC; Thu, 5 Jan 95 16:40 GMT

X-Sender: jdt@mraosc

In-Reply-To: <9412202047.AA44710@polaris.cv.nrao.edu>

Message-Id: <Pine.SUN.3.90.950105162752.3162A-100000@mraosc>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: Alden House keys, and best wishes for the new year

Date: Thu, 5 Jan 1995 16:40:26 +0000 (GMT)

hi Alan,

as you see i'm back in mrao, after a great time in boston. it was so good
to see people again. oddly felt at times as if i'd never left.
double-edged joy in being with people i live so far away from.
then i wen t to see my folks for a few days before returning to
cambridge. my mother is doing pretty well now - and is planning a last
minute booking somewhere, anywhere, in the sun.

as for the keys, yes i did accidently walk off with them. but i hope they
have returned by now, as i put them in the post in boston to billie jo
(mattox or maddox, i wasn't sure...)
thanks for forwarding my mail- it got here quicker than some of it got
there (two months from germany to c'ville??? okay, so i thought she
hadn't written...)

haven't seen peter yet, but i expect i will soon.

send my love to mary, and i hope the next year smiles more sweetly upon
you both than the latter half of the last.

jane.

From root Wed Jan 18 07:23:31 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1164" "Wed" "18" "January" "1995" "12:24:38" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SUN.3.90.950118120837.28508A-100000@mraosb>" "25" "3c390.3" nil nil nil "1" nil nil (number " " mark " R
Jane Dennett-Thor Jan 18 25/1164 " thread-indent "\3c390.3\n") nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA35503; Wed, 18 Jan 1995 07:23:30 -0500
Received: from mraosb.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0rUZRJ-0002PqC; Wed, 18 Jan 95 12:24 GMT
Received: by mraosb.ra.phy.cam.ac.uk (Smail3.1.28.1 #2)
id m0rUZRH-0001I5C; Wed, 18 Jan 95 12:24 GMT
X-Sender: jdt@mraosb
In-Reply-To: <9501061334.AA64569@polaris.cv.nrao.edu>
Message-Id: <Pine.SUN.3.90.950118120837.28508A-100000@mraosb>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: 3c390.3
Date: Wed, 18 Jan 1995 12:24:38 +0000 (GMT)

hi Alan,

i hope that things have given you no more shocks of late.

This is actually just a pesky little note to ask if ken kellerman is around. i sent him a note on monday but have had no reply. due to the tightness of disk space i can't do anything else without offloading everything on disk & i can't do 3c390.3 until i sort this out, so i'd like to know whether to start fitting.....

the problem is that when i use uvcop to seperate IFs !&2 in his data the freq in ther header is the same. (the FQ table indicates a difference between them, but i can't work out head nor tail of it). I wondered if somehow this was eroneous because when i attempted an amplitude self cal on the data (i was trying to get rid of the ringing artifacts as they cleraly limit the B+C data) it put a +3% correction in one IF and -3% on the other. At present this strikes me as so dodgy i am reluctant to push it further. I asked ken if he had any independent info on what the frequencies were. Or do you have any other suggestions? (VBCAL - the routine I used to correct the flux scale- doesn't apparently have any IF switches, so that should be okay).

cheers
jane

From root Wed Jan 18 15:44:26 1995

X-VM-v5-Data: ([nil nil nil nil nil t nil nil]

["822" "Wed" "18" "January" "1995" "13:44:18" "-0700" "Joan Wrobel" "jwrobel@aoc.nrao.edu" nil "22" "Re: VL mode observations" nil nil nil "1" nil nil (number " " mark " Z Joan Wrobel Jan 18 22/822 " thread-indent "" "Re: VL mode observations\\"n") nil] nil)

Received: from pinon.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA25198; Wed, 18 Jan 1995 15:44:25 -0500

Received: by pinon.aoc.nrao.edu (5.65c/1.3pmg)
id AA22836; Wed, 18 Jan 1995 13:44:18 -0700

Message-Id: <199501182044.AA22836@pinon.aoc.nrao.edu>

From: Joan Wrobel <jwrobel@aoc.nrao.edu>

To: jdt@mrao.cam.ac.uk

Cc: abridle, jwrobel@aoc.nrao.edu

Subject: Re: VL mode observations

Date: Wed, 18 Jan 1995 13:44:18 -0700

Hi, Jane.

I assume you meant vla band VL, and vla mode VA or VX.

If this is a standard phased VLA project, the AC and BD IF pairs are tuned identically. This is done to permit dual circular polarization VLBI since the VLA wants to phase its A (rcp) and D (lcp) IFs. However, adventuresome VLBIers needing just one polarization for VLBI sometimes tune the unneeded IF pair to a separate frequency. This is rarely done but can be checked by examining the VLA observe file. If you give me a project code, month, and year, I might be able to hunt up the observe file.

There is a guide that describes all this special vlbi stuff, and it might be worth your time pursuing it since you're using somewhat odd data. Use Mosaic or whatever to get the VLA document "VLBI at the VLA" from URL <http://info.aoc.nrao.edu/>

Cheers,
Joan

From root Wed Jan 18 16:47:24 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1316" "Wed" "18" "January" "95" "16:47:21" "EST" "Ken Kellermann" "kkellerm@sarah.CV.NRAO.EDU " nil
"40" "Returned mail: User unknown (fwd)" nil nil nil "1" nil nil (number " " mark " Ken Kellermann Jan 18 40/1316 "
thread-indent "\"Returned mail: User unknown (fwd)\""\n") nil]
nil)
Received: from sarah.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA53509; Wed, 18 Jan 1995 16:47:24 -0500
Received: by sarah.cv.nrao.edu (4.1/DDN-DLB/1.5)
id AA03533; Wed, 18 Jan 95 16:47:23 EST
Message-Id: <9501182147.AA03533@sarah.cv.nrao.edu>
X-Mailer: ELM [version 2.3 PL11]
From: kkellerm@sarah.CV.NRAO.EDU (Ken Kellermann)
To: abridle (Alan Bridle)
Subject: Returned mail: User unknown (fwd)
Date: Wed, 18 Jan 95 16:47:21 EST

Forwarded message:

>From daemon Wed Jan 18 16:44:21 1995
Date: Wed, 18 Jan 95 16:43:58 EST
From: MAILER-DAEMON (Mail Delivery Subsystem)
Subject: Returned mail: User unknown
Message-Id: <9501182143.AB03520@sarah.cv.nrao.edu>
To: kkellerm

----- Transcript of session follows -----
550 abridel... User unknown

----- Unsent message follows -----
Return-Path: <kkellerm>
Received: by sarah.cv.nrao.edu (4.1/DDN-DLB/1.5)
id AA03518; Wed, 18 Jan 95 16:43:58 EST
From: kkellerm (Ken Kellermann)
Message-Id: <9501182143.AA03518@sarah.cv.nrao.edu>
Subject: 3C 390.3
To: jdt@mrao.cam.ac.uk
Date: Wed, 18 Jan 95 16:43:56 EST
Cc: jwrobel, abridel
X-Mailer: ELM [version 2.3 PL11]

Jane,

Sorry not to have replied to you earlier. You are right as Joan confirms that both IF's are apparently set to the same frequency which I independently confirmed from looing at the various listings of the data.

Joan, The program that Jane is questioning is VP 88 which you set up for me. It ran on 16 April 1989. The file name was VP88G1. Of course we took the VLA data becasue we thought it was free, never appreciating how much work would be involved in getting an image out.

Let me know if either of you need any more information although I can't promise that my files are adequate to answer your quesries I'll try.

Ken

From root Wed Jan 18 18:27:53 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["723" "Wed" "18" "January" "1995" "16:26:59" "-0700" "Joan Wrobel" "jwrobel@aoc.nrao.edu" nil "25" "3c390.3"
nil nil nil "1" nil nil (number " " mark " Joan Wrobel Jan 18 25/723 " thread-indent "\"3c390.3\""\n") nil]
nil)

Received: from pinon.aoc.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA56040; Wed, 18 Jan 1995 18:27:51 -0500

Received: by pinon.aoc.nrao.edu (5.65c/1.3pmg)
id AA23009; Wed, 18 Jan 1995 16:26:59 -0700

Message-Id: <199501182326.AA23009@pinon.aoc.nrao.edu>

From: Joan Wrobel <jwrobel@aoc.nrao.edu>

To: jdt@mrao.cam.ac.uk

Cc: abridle, jwrobel@aoc.nrao.edu, kkellerm

Subject: 3c390.3

Date: Wed, 18 Jan 1995 16:26:59 -0700

Hi, Jane.

Ken's observe file shows identical setups for
the vla's AC and BD IF pairs.

The data are so old, though, that something
else special was done: the Tsys corrections were
turned off to allow the VLA data to be used for
calibration of the vla as a vlbi station (we
stopped doing this later in 1989). For a source
as strong as 3c390.3, you could probably
self-calibrate these corrections back in.

Wrobel & Lind (1990, ApJ, 348, 135) describe
how one phased VLA data set was analyzed,
including polarization calibration. The phased
VLA data sets can be particularly good, both
because they offer higher dynamic ranges and
long integration times.

Please feel free to bug me if you need further
advice.

Cheers,
Joan

From abridle Thu Feb 2 10:35:29 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["326" "Thu" "2" "February" "1995" "10:35:07" "-0500" "Alan Bridle" "abridle "

"<9502021535.AA13229@polaris.cv.nrao.edu>" "10" "Re: 3c390.3" nil nil nil "2" nil nil (number " " mark " R Alan
Bridle Feb 2 10/326 " thread-indent "\"Re: 3c390.3\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA13229; Thu, 2 Feb 1995 10:35:07 -0500

Message-Id: <9502021535.AA13229@polaris.cv.nrao.edu>

References: <9502011931.AA35138@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950202094341.17220A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: 3c390.3

Date: Thu, 2 Feb 1995 10:35:07 -0500

Jane Dennett-Thorpe writes:

> (if that is slow try 131.111.48.8 which *may* be faster, or may be the
> only one allowing anon ftp access) [our machines are clustered and i
> actually don't know where the things 'physcially' are]

Went so slowly on the first file that it timed out. I'll try at a less
busy time. A.

From abridle Mon Feb 13 11:43:24 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["128" "Mon" "13" "February" "1995" "11:42:35" "-0500" "Alan Bridle" "abridle " nil "8" "Re: 3c390.3" nil nil nil "2"
nil nil (number " " mark " Alan Bridle Feb 13 8/128 " thread-indent "\"Re: 3c390.3\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA25597; Mon, 13 Feb 1995 11:42:35 -0500

Message-Id: <9502131642.AA25597@polaris.cv.nrao.edu>

References: <9502072054.AA31850@polaris.cv.nrao.edu>

<Pine.SUN.3.90.950208102258.8321D-100000@mraos>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: 3c390.3

Date: Mon, 13 Feb 1995 11:42:35 -0500

Jane,

I have the files on my w/station now, has been a long and
twisty path, interrupted by meetings and aips++
nonsense.

A.

From root Mon Jan 23 06:12:13 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["270" "Mon" "23" "January" "1995" "11:12:15" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "11" "AS 549 = FR II asymmetries (fwd)" nil nil nil "1" nil nil (number " " mark " Jane Dennett-Thor Jan 23 11/270 " thread-indent "\"AS 549 = FR II asymmetries (fwd)\""\n") nil] nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA59280; Mon, 23 Jan 1995 06:12:08 -0500

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp (Smail3.1.28.1 #2) id m0rWmi7-0002PIC; Mon, 23 Jan 95 11:13 GMT

Message-Id: <Pine.SOL.3.91.950123110941.23428A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Content-Length: 270

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Cc: Robert Laing <rl@mail.ast.cam.ac.uk>

Subject: AS 549 = FR II asymmetries (fwd)

Date: Mon, 23 Jan 1995 11:12:15 +0000 (GMT)

----- Forwarded message -----

Date: Fri, 20 Jan 1995 09:30:38 -0700

From: Barry Clark <bclark@aoc.nrao.edu>

To: jdt@mrao.cam.ac.uk

Cc: bclark@bclark.aoc.nrao.edu

Subject: AS 549 = FR II asymmetries

I propose to schedule this on April 10/11, 0900-2000 LST.

From root Fri Jan 27 07:57:52 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["1049" "Fri" "27" "January" "1995" "12:57:53" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SOL.3.91.950127124556.23791A@mraosa>" "25" "Re: 3c390.3" nil nil nil "1" nil nil (number " " mark " R Jane Dennett-Thor Jan 27 25/1049 " thread-indent "\"Re: 3c390.3\""\n") nil] nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA35475; Fri, 27 Jan 1995 07:57:50 -0500

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp (Smail3.1.28.1 #2) id m0rXqGb-0002PKC; Fri, 27 Jan 95 12:59 GMT

In-Reply-To: <9501181823.AA52528@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950127124556.23791A@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Content-Length: 1049

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: 3c390.3

Date: Fri, 27 Jan 1995 12:57:53 +0000 (GMT)

Hello Alan,

Hope things are well at your end and that Mary is making good progress and is chipper.

Okay so we've sorted out what I'm meant to be doing to correct for the unrecorded Tsys. REsult is that the image is a little better, but the rings are still prominent. Now i've just done something that puzzles me:

(i) MX the dataset

(ii) MX (NITER =0) the residual uv dataset

(iii) RSTOR clean cpts from (i) onto (ii).

Now I'd have thought that numbers (i) and (iii) should have resulted in maps with only minor differences. Far from it- (iii) lacks both the nasty rings and the slightly extended emission.

Am I missing something?

(This whole roceedure resulted from me wondering if the rings were simply there due to insufficient cleaning, so I mapped the residuals. No problem with those, so was i picking up anything nasty in the CC? nothing there either. So, if there is something about mapping a UVWORK file that I'm overlooking is there any other way of telling if the rings are due to insufficient cleaning?)

baffled again

jane.

From abridle Fri Jan 27 10:36:23 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1899" "Fri" "27" "January" "1995" "10:35:53" "-0500" "Alan Bridle" "abridle " nil "43" "Re: 3c390.3" nil nil nil "1" nil nil (number " " mark " Alan Bridle Jan 27 43/1899 " thread-indent "\"Re: 3c390.3\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA58817; Fri, 27 Jan 1995 10:35:53 -0500

Message-Id: <9501271535.AA58817@polaris.cv.nrao.edu>

References: <9501181823.AA52528@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950127124556.23791A@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: 3c390.3

Date: Fri, 27 Jan 1995 10:35:53 -0500

Hi Jane,

Right now I'm home with the 'flu, nothing major just feeling awful and not up to going in to work. Mary is recovering well from second surgery, restarted her chemotherapy on Wed and is doing o.k. with that too. At least this year the weather is gorgeous.

Re 390.3, I'm as baffled as you re restarting the MX with the UVWORK file. That ought to have given you the residual map as before, and restoring the CC's onto that should indeed be the same as restoring them as part of the original MX. If no other parameters were changed in the meanwhile, it's a big puzzle, especially the part about the slightly extended emission evaporating.

The only way to test whether something is insufficiently CLEANed is to look at the total flux density in the CLEAN components and in the residual image versus the visibility function. It's done once the flux in the vis function is all in the CC's with no net flux density remaining in the residuals. In practice it may not change much for some time before that because the residuals over a wide area get down to a level whose first sidelobes are buried in the noise. So it's not always worth the CPU cycles to pursue all the way to completion. You often just reduce the rms a little off-source without changing the on-source appearance significantly.

Rings are rarely due to incomplete deconvolution with the VLA, though this might be the case for a northern source. They are more often a calibration problem involving one antenna or a correlator error involving one baseline.

I'm totally baffled why you have such different results from reimaging the UVWORK file but it is also not something I have done. Probably the best person to ask is Bill Cotton. I can do that when I get back in (am writing this from home) but would also be nice to see the images first.

Or you might try him yourself via E-mail (wcotton@nrao).

Cheers, A.

From root Mon Jan 30 05:23:26 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil])

["1789" "Mon" "30" "January" "1995" "10:23:19" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950127182220.3279A-100000@mraosa>" "36" "Re: 3c390.3" nil nil nil "1" nil nil (number " " mark " R
Jane Dennett-Thor Jan 30 36/1789 " thread-indent "\Re: 3c390.3\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA54333; Mon, 30 Jan 1995 05:23:16 -0500

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0rYtHj-0002QTC; Mon, 30 Jan 95 10:24 GMT

In-Reply-To: <9501271535.AA58817@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950127182220.3279A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Content-Length: 1789

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: 3c390.3

Date: Mon, 30 Jan 1995 10:23:19 +0000 (GMT)

sorry to hear abt the flu, glad mary is doing well, and glad too that
something is better over there with you than here: the weather.

I thought i carefully left all parameters as was, and have checked
history files carefully. also the 'CC image' looks very
suspicious, well maybe not- 6000 CC and essentially just the brightest
'head regions' of the source? i dunno- maybe. it just seems that
somewhere something has gone missing.

further: found that if i restored the CC onto a blank map i get bits and
pieces were there are no clean epts. Martin Hardastle has also run this
on amother source and gets "emission" outside clean boxes he had.
Semms then there is a problem with RSTOR at least.

> Rings are rarely due to incomplete deconvolution with the
> VLA, though this might be the case for a northern source.
> They are more often a calibration problem involving one
> antenna or a correlator error involving one baseline.

The reason i was looking into this is that the beam is unusual in the
sense that it does have rings. Two things i was working with:

i) this all takes an unbelievable age here so i was cleaning down only
to first neg so long as my choices of whether things are getting better
seem straightforward. thus there is flux not yet cleaned off, but
ii) the ringing still looks like that in Ken's final images, which as far
as i could see do have all flux removed.

i was just trying to go for the quickest first order solution to the problem
- if the CC conatined elements of the ringing then further cleaning
wasn't going to help.

now something is obviously awry anyhow but there is a deep clean running
(which has been going all weekend) which will give some answers here, but
doesn't resolve MX/RSTOR issues. Should I contact Bill Cotton?

jane

From abridle Mon Jan 30 09:00:16 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["252" "Mon" "30" "January" "1995" "08:59:47" "-0500" "Alan Bridle" "abridle" "nil" "11" "Re: 3c390.3" nil nil nil "1" nil nil (number " " mark " Alan Bridle Jan 30 11/252 " thread-indent "\"Re: 3c390.3\""\n") nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA55529; Mon, 30 Jan 1995 08:59:47 -0500

Message-Id: <9501301359.AA55529@polaris.cv.nrao.edu>

References: <9501271535.AA58817@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950127182220.3279A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: 3c390.3

Date: Mon, 30 Jan 1995 08:59:47 -0500

Hi Jane,

I'm back at work over worst of flu tho it is now snowing with considerable enthusiasm

It might help a little if I could look at the images.

Any chance they could be put where I can ftp them? Maybe as subims to minimize 'net time?

A.

From root Mon Jan 30 10:01:40 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["932" "Mon" "30" "January" "1995" "15:01:23" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "21" "Re: 3c390.3" nil nil nil "1" nil nil (number " " mark " Jane Dennett-Thor Jan 30 21/932 " thread-indent "\"Re: 3c390.3\""\n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA26342; Mon, 30 Jan 1995 10:01:16 -0500

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0rYxco-0002R2C; Mon, 30 Jan 95 15:02 GMT

In-Reply-To: <9501301359.AA55529@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950130145223.26891A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Content-Length: 932

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: 3c390.3

Date: Mon, 30 Jan 1995 15:01:23 +0000 (GMT)

hi,

yes, i can put some images in our ~pub directory now. they will be in directory jdt there, and hopefully named in an obvious fashion.

further info that Martin and I have elucidated:

(i) RSTOR acts wierdly went RSTORing to a blank map, but apparently doesn't have these problems on any other sort of map.

(ii) the images made by subtracting the CC from the data by UVSUB give a map that we expect (ie the one we expected the map of UVWORK to give us)

(iii) the uvplots of the residuals in UVWORK and UVSUBed datasets look pretty identical. Nonetheless from the problems we started with it would seem that the mapping (the results are the same apparently regardless of task - MX & HORUS both give same nonsense) of UVWORK files ignores short baselines, or something like that. problem with headers? problem with UVWORK files not being what we thought?

anyway that's the scoop so far. images will be there in a bit.

jane.

From root Mon Jan 30 10:23:59 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["68" "Mon" "30" "January" "1995" "15:21:42" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SOL.3.91.950130152003.28007A@mraosa>" "4" "Re: 3c390.3" nil nil nil "1" nil nil (number " " mark " R Jane
Dennett-Thor Jan 30 4/68 " thread-indent "\"Re: 3c390.3\""\n") nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA25587; Mon, 30 Jan 1995 10:21:36 -0500

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.28.1 #2) id m0rYxwT-0002R2C; Mon, 30 Jan 95 15:23 GMT

In-Reply-To: <9501301359.AA55529@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950130152003.28007A@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Content-Length: 68

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: 3c390.3

Date: Mon, 30 Jan 1995 15:21:42 +0000 (GMT)

okay, four FITS files await your loving gaze in pub/jdt.

cheers,j

From abridle Wed Feb 1 14:31:56 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["248" "Wed" "1" "February" "1995" "14:31:40" "-0500" "Alan Bridle" "abridle " nil "12" "Re: 3c390.3" nil nil nil "2"
nil nil (number " " mark " Alan Bridle Feb 1 12/248 " thread-indent "\"Re: 3c390.3\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA35138; Wed, 1 Feb 1995 14:31:40 -0500

Message-Id: <9502011931.AA35138@polaris.cv.nrao.edu>

References: <9501301359.AA55529@polaris.cv.nrao.edu>
<Pine.SOL.3.91.950130152003.28007A@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: 3c390.3

Date: Wed, 1 Feb 1995 14:31:40 -0500

Jane Dennett-Thorpe writes:

>
> okay, four FITS files await your loving gaze in pub/jdt.
>
> cheers,j

Hi Jane,

Thanks to a foot of snow and the VLA proposal deadline I'm only just getting to these. What is the machine_name they're on?

A.

From root Thu Feb 2 04:50:12 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["261" "Thu" "2" "February" "1995" "09:49:58" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"

"<Pine.SOL.3.91.950202094341.17220A-100000@mraosa>" "9" "Re: 3c390.3" nil nil nil "2" nil nil (number " " mark " R
Jane Dennett-Thor Feb 2 9/261 " thread-indent "\"Re: 3c390.3\""\n") nil]

nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA37209; Thu, 2 Feb 1995 04:49:50 -0500

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp

(Smail3.1.28.1 #2) id m0rZyC7-0002QZC; Thu, 2 Feb 95 09:51 GMT

In-Reply-To: <9502011931.AA35138@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950202094341.17220A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Content-Length: 261

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: 3c390.3

Date: Thu, 2 Feb 1995 09:49:58 +0000 (GMT)

i'm glad i missed the snow...

machine is 131.111.48.10

(if that is slow try 131.111.48.8 which *may* be faster, or may be the
only one allowing anon ftp access) [our machines are clustered and i
actually don't know where the things 'physcially' are]

jane

From abridle Mon Feb 13 12:02:07 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["549" "Mon" "13" "February" "1995" "12:02:06" "-0500" "Alan Bridle" "abridle " nil "16" "Re: 3c390.3" nil nil nil
"2" nil nil (number " " mark " Alan Bridle Feb 13 16/549 " thread-indent "\"Re: 3c390.3\""\n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA51189; Mon, 13 Feb 1995 12:02:06 -0500

Message-Id: <9502131702.AA51189@polaris.cv.nrao.edu>

References: <9502011931.AA35138@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950202094341.17220A-100000@mraosa>

<9502021535.AA13229@polaris.cv.nrao.edu>

From: abridle (Alan Bridle)

To: abridle (Alan Bridle)

Subject: Re: 3c390.3

Date: Mon, 13 Feb 1995 12:02:06 -0500

Hi Jane,

This is really wierd. it looks as if the RSTORR images put the CLEAN components back into an image that did not contain the real residuals, and was significantly noisier, than the straight MX. It looks like an over-noisy (by about 50%) representation just of the brightest stuff.

When the RSTORR was made, the MX did have an IN2N set, to UVWORK.4, as well as the inn to UVWORK.3

I wonder if that has interacted in some strange way with the re-imaging. It shouldn't, of course, but who knows what lurks in the dark recesses ...

A.

From root Fri Apr 7 08:17:48 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["230" "Fri" " 7" "April" "1995" "13:17:31" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950407131444.11535F-100000@mraosa>" "10" "Re: 3c390.3" "^From:" nil nil "4" nil nil nil nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA86023; Fri, 7 Apr 1995 08:17:45 -0400
Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0rxCyl-0005enC; Fri, 7 Apr 95 13:17 BST
X-Sender: jdt@mraosa
In-Reply-To: <9502072054.AA31850@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.950407131444.11535F-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: 3c390.3
Date: Fri, 7 Apr 1995 13:17:31 +0100 (BST)

hi Alan,

would you like to peruse the observe file for the D array run?
i will communicate a little more fully about other things when this is
out of the way.

hope everything is alright in your neck of the woods,
best,
jane.

From abridle Fri Apr 7 09:01:19 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["253" "Fri" "7" "April" "1995" "09:01:12" "-0400" "Alan Bridle" "abridle" nil "9" "Re: 3c390.3" "^From:" nil nil "4"
nil nil nil nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA98357; Fri, 7 Apr 1995 09:01:12 -0400

Message-Id: <9504071301.AA98357@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950407131444.11535F-100000@mraosa>

References: <9502072054.AA31850@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950407131444.11535F-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: 3c390.3

Date: Fri, 7 Apr 1995 09:01:12 -0400

Sure, send me a copy when you have the file. Things are a bit busy here but I'll have a chance to look at it later today.

Mary is doing quite well, back at work half-time. Spring is blooming delightfully at the moment, a good time of the year.

A.

From root Fri Apr 7 10:05:59 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["38209" "Fri" " 7" "April" "1995" "15:05:36" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "484"
"observe file" "^From:" nil nil "4" nil nil nil nil
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA74271; Fri, 7 Apr 1995 10:05:49 -0400
Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0rxEfL-0005eTC; Fri, 7 Apr 95 15:05 BST
X-Sender: jdt@mraosa
In-Reply-To: <9504071301.AA98357@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.950407150442.12762A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: observe file
Date: Fri, 7 Apr 1995 15:05:36 +0100 (BST)

/.AS549 2004
/* ***
/* *** NRAO VLA Observe Program, Version U3.2.6, 1994.10.24
/* ***
/* *** Observation day 56,526 at 09 00 00 LST, 1995.04.10 19:55:01 MST.
/* ***
/* *** Observer
/* *** J Dennett-Thorpe Phone
/* *** MRAO Office: ()
/* *** Madingley Rd During observation: ()
/* *** Cambridge
/* *** CB1 0HE,UK
/* ***
/* *** E-Mail address
/* *** jdt@mrao.cam.ac.uk
/* ***
/* *** Observing mode(s): Continuum
/* ***
/* *** Special Instructions
/* *** Please extend observation of 1331+305 & 1328+307 to 3minutes in case
/* *** of instrument failure etc.
/* ***
/* ***
/* *** Date Prepared: 1995.04.07 07:03:45 MST.
/* ***
/* This source was not located in the Calibrator List
0827+243 09 05 10 08 27 54.3986 +24 21 07.664 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
0830+241 09 08 03 08 30 52.0862 +24 10 59.821C XX A 0000 0.44
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C192 09 15 48 08 05 35.0150 +24 09 49.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000

3C192 09 23 15 08 02 35.5000 +24 18 26.399 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
0827+243 09 26 24 08 27 54.3986 +24 21 07.664 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
0830+241 09 29 17 08 30 52.0862 +24 10 59.821C XX A 0000 0.44
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
0923+392 09 35 04 09 23 55.3192 +39 15 23.565 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
0920+446 09 38 15 09 20 58.4587 +44 41 53.984C XX A 0000 1.18
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C223.1 09 49 11 09 41 24.5650 +39 44 41.620C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C223.1 09 59 40 09 38 18.3500 +39 58 22.000 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
0923+392 10 03 00 09 23 55.3192 +39 15 23.565 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
0920+446 10 06 21 09 20 58.4587 +44 41 53.984C XX A 0000 1.18
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
0830+241 10 11 02 08 30 52.0862 +24 10 59.821C XX A 0000 0.44
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
0827+243 10 13 54 08 27 54.3986 +24 21 07.664 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C192 10 24 30 08 02 35.5000 +24 18 26.399 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C192 10 31 56 08 05 35.0150 +24 09 49.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000

```

/* This source was not located in the Calibrator List
1331+305  10 41 47 13 31 08.2873 +30 30 32.959C  XX  C  0000  5.20
//DS      10
//LO 13.0 13.0  3740  3510
//FISF      100.000000      200.000000
/* This source was not located in the Calibrator List
1328+307  10 47 09 13 28 49.6570 +30 45 58.640  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
/* This source was not located in the Calibrator List
1242+410  10 50 31 12 42 26.3960 +41 04 30.000  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
3C285    11 01 21 13 19 04.5000 +42 50 44.999  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
/* This source was not located in the Calibrator List
1242+410  11 04 33 12 42 26.3960 +41 04 30.000  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
3C192    11 20 09 08 02 35.5000 +24 18 26.399  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
3C192    11 27 35 08 05 35.0150 +24 09 49.940C  XX  0000
//DS      10
//LO 13.0 13.0  3740  3510
//FISF      100.000000      200.000000
0830+241 11 30 42 08 30 52.0862 +24 10 59.821C  XX  A  0000  0.44
//DS      10
//LO 13.0 13.0  3740  3510
//FISF      100.000000      200.000000
/* This source was not located in the Calibrator List
0827+243  11 33 37 08 27 54.3986 +24 21 07.664  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
/* This source was not located in the Calibrator List
0923+392  11 37 12 09 23 55.3192 +39 15 23.565  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810
//FISF      100.000000      200.000000
/* This source was not located in the Calibrator List
0920+446  11 40 26 09 20 58.4587 +44 41 53.984C  XX  A  0000  1.18
//DS      10
//LO 13.0 13.0  3740  3510
//FISF      100.000000      200.000000
3C223.1  11 48 03 09 41 24.5650 +39 44 41.620C  XX  0000
//DS      10
//LO 13.0 13.0  3740  3510
//FISF      100.000000      200.000000
3C223.1  11 58 30 09 38 18.3500 +39 58 22.000  CC  0000
//DS      10
//LO  0.0  0.0  3960  3810

```

```

//FISF      100.000000    200.000000
3C285      12 11 58 13 19 04.5000 +42 50 44.999  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1242+410   12 15 14 12 42 26.3960 +41 04 30.000  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
0923+392   12 20 46 09 23 55.3192 +39 15 23.565  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
0920+446   12 24 00 09 20 58.4587 +44 41 53.984C  XX  A  0000  1.18
//DS        10
//LO 13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C223.1    12 34 39 09 41 24.5650 +39 44 41.620C  XX   0000
//DS        10
//LO 13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C223.1    12 45 07 09 38 18.3500 +39 58 22.000  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
3C223.1    12 55 29 09 41 24.5650 +39 44 41.620C  XX   0000
//DS        10
//LO 13.0 13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
0920+446   12 58 33 09 20 58.4587 +44 41 53.984C  XX  A  0000  1.18
//DS        10
//LO 13.0 13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
0923+392   13 01 44 09 23 55.3192 +39 15 23.565  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
3C223.1    13 12 20 09 38 18.3500 +39 58 22.000  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
3C223.1    13 22 44 09 41 24.5650 +39 44 41.620C  XX   0000
//DS        10
//LO 13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C223.1    13 33 05 09 38 18.3500 +39 58 22.000  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
0923+392   13 36 06 09 23 55.3192 +39 15 23.565  CC   0000
//DS        10
//LO 0.0  0.0   3960   3810

```

```

//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
0920+446   13 39 09 09 20 58.4587 +44 41 53.984C  XX  A  0000  1.18
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C223.1   13 49 49 09 41 24.5650 +39 44 41.620C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1800+784   13 54 36 18 00 45.6829 +78 28 04.017C  XX  A  0000  2.85
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1803+784   13 57 30 18 03 39.1924 +78 27 54.297   CC   0000
//DS      10
//LO   0.0   0.0   3960   3810
//FISF      100.000000    200.000000
3C390.3   14 07 58 18 45 37.8020 +79 43 06.340   CC   0000
//DS      10
//LO   0.0   0.0   3960   3810
//FISF      100.000000    200.000000
3C390.3   14 18 23 18 42 04.4000 +79 46 30.940C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1800+784   14 21 21 18 00 45.6829 +78 28 04.017C  XX  A  0000  2.85
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1803+784   14 24 15 18 03 39.1924 +78 27 54.297   CC   0000
//DS      10
//LO   0.0   0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1242+410   14 28 59 12 42 26.3960 +41 04 30.000   CC   0000
//DS      10
//LO   0.0   0.0   3960   3810
//FISF      100.000000    200.000000
3C285     14 39 44 13 19 04.5000 +42 50 44.999   CC   0000
//DS      10
//LO   0.0   0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1242+410   14 42 56 12 42 26.3960 +41 04 30.000   CC   0000
//DS      10
//LO   0.0   0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1800+784   14 47 44 18 00 45.6829 +78 28 04.017C  XX  A  0000  2.85
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List

```

1803+784 14 50 39 18 03 39.1924 +78 27 54.297 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 14 58 07 18 45 37.8020 +79 43 06.340 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 15 06 51 18 42 04.4000 +79 46 30.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C390.3 15 17 12 18 45 37.8020 +79 43 06.340 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 15 27 34 18 42 04.4000 +79 46 30.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
1800+784 15 30 33 18 00 45.6829 +78 28 04.017C XX A 0000 2.85
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
1803+784 15 33 26 18 03 39.1924 +78 27 54.297 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 15 40 54 18 45 37.8020 +79 43 06.340 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 15 48 18 18 42 04.4000 +79 46 30.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C390.3 15 55 39 18 45 37.8020 +79 43 06.340 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 16 03 00 18 42 04.4000 +79 46 30.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C390.3 16 10 22 18 45 37.8020 +79 43 06.340 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C390.3 16 17 43 18 42 04.4000 +79 46 30.940C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
/* This source was not located in the Calibrator List
1800+784 16 20 40 18 00 45.6829 +78 28 04.017C XX A 0000 2.85
//DS 10
//LO 13.0 13.0 3740 3510

```

//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1803+784   16 23 34 18 03 39.1924 +78 27 54.297  CC   0000
//DS      10
//LO  0.0  0.0   3960   3810
//FISF      100.000000    200.000000
3C285     16 35 39 13 19 04.5000 +42 50 44.999  CC   0000
//DS      10
//LO  0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1242+410   16 38 58 12 42 26.3960 +41 04 30.000  CC   0000
//DS      10
//LO  0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1328+307   16 44 55 13 28 49.6570 +30 45 58.640  CC   0000
//DS      10
//LO  0.0  0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1331+305   16 50 18 13 31 08.2873 +30 30 32.959C  XX  C  0000  5.20
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1950+081   16 57 21 19 50 05.5403 +08 07 13.981C  XX  A  0000  0.63
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C403P     17 05 03 19 52 12.8650 +02 30 21.450C  XX   0000
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C403F     17 12 32 19 52 18.2610 +02 30 41.800C  XX   0000
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C403P     17 19 53 19 52 12.8650 +02 30 21.450C  XX   0000
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C403F     17 30 14 19 52 18.2610 +02 30 41.800C  XX   0000
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1950+081   17 40 49 19 50 05.5403 +08 07 13.981C  XX  A  0000  0.63
//DS      10
//LO  13.0 13.0   3740   3510
//FISF      100.000000    200.000000
3C390.3    17 54 18 18 45 37.8020 +79 43 06.340  CC   0000
//DS      10
//LO  0.0  0.0   3960   3810
//FISF      100.000000    200.000000
3C390.3    18 04 40 18 42 04.4000 +79 46 30.940C  XX   0000
//DS      10
//LO  13.0 13.0   3740   3510

```

```

//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1800+784   18 07 36 18 00 45.6829 +78 28 04.017C  XX  A  0000  2.85
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1803+784   18 10 32 18 03 39.1924 +78 27 54.297  CC   0000
//DS      10
//LO  0.0   0.0   3960   3810
//FISF      100.000000    200.000000
3C452F    18 17 27 22 45 59.0040 +39 41 38.570C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C452P    18 22 54 22 45 38.4340 +39 40 53.090C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C452     18 28 15 22 43 32.8100 +39 25 27.598  CC   0000
//DS      10
//LO  0.0   0.0   3960   3810
//FISF      100.000000    200.000000
3C452F    18 33 35 22 45 59.0040 +39 41 38.570C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C452P    18 38 56 22 45 38.4340 +39 40 53.090C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C452     18 44 17 22 43 32.8100 +39 25 27.598  CC   0000
//DS      10
//LO  0.0   0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
2253+417   18 47 13 22 53 19.8436 +41 46 51.269  CC   0000
//DS      10
//LO  0.0   0.0   3960   3810
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
2255+420   18 50 08 22 55 36.7077 +42 02 52.535C  XX  A  0000  0.90
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
/* This source was not located in the Calibrator List
1950+081   18 55 10 19 50 05.5403 +08 07 13.981C  XX  A  0000  0.63
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C403P    19 05 56 19 52 12.8650 +02 30 21.450C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000
3C403F    19 16 22 19 52 18.2610 +02 30 41.800C  XX   0000
//DS      10
//LO  13.0  13.0   3740   3510
//FISF      100.000000    200.000000

```

```

/** This source was not located in the Calibrator List
1950+081 19 19 30 19 50 05.5403 +08 07 13.981C XX A 0000 0.63
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C452F 19 27 19 22 45 59.0040 +39 41 38.570C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C452P 19 32 45 22 45 38.4340 +39 40 53.090C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C452 19 38 06 22 43 32.8100 +39 25 27.598 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
3C452F 19 43 27 22 45 59.0040 +39 41 38.570C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C452P 19 48 48 22 45 38.4340 +39 40 53.090C XX 0000
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000
3C452 19 54 09 22 43 32.8100 +39 25 27.598 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
/** This source was not located in the Calibrator List
2253+417 19 57 06 22 53 19.8436 +41 46 51.269 CC 0000
//DS 10
//LO 0.0 0.0 3960 3810
//FISF 100.000000 200.000000
/** This source was not located in the Calibrator List
2255+420 20 00 00 22 55 36.7077 +42 02 52.535C XX A 0000 0.90
//DS 10
//LO 13.0 13.0 3740 3510
//FISF 100.000000 200.000000

```


From root Fri Apr 7 10:12:30 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["527" "Fri" " 7" "April" "1995" "15:12:07" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "17" "observe
file: notes" "^From:" nil nil "4" nil nil nil nil]
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA99818; Fri, 7 Apr 1995 10:12:29 -0400

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0rxEle-0005eOC; Fri, 7 Apr 95 15:12 BST

X-Sender: jdt@mraosa

In-Reply-To: <9504071301.AA98357@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950407150541.12762B-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: observe file: notes

Date: Fri, 7 Apr 1995 15:12:07 +0100 (BST)

Alan-

things of note

- (i) all the 'source not found in calibrator list' messages are to be ignored- this is the problem with using two epochs in the observe programme. this will be fixed before the final one is done, but requires hand-editing which is undone every time it is loaded into the observe programme.
- (ii) one pointing for 3c390.3 to match what we ended up doing in C-array.

and, of course, "comments welcome"!

i'm glad mary is recovering so well - i expect she is delighted to be back at work.

cheers,

j.

From abridle Fri Apr 7 17:33:45 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["404" "Fri" "7" "April" "1995" "17:33:37" "-0400" "Alan Bridle" "abridle" nil "14" "Re: observe" "^From:" nil nil "4"
nil nil nil nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA66362; Fri, 7 Apr 1995 17:33:37 -0400

Message-Id: <9504072133.AA66362@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950407214214.14917A-100000@mraosa>

References: <9504071301.AA98357@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950407214214.14917A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: observe

Date: Fri, 7 Apr 1995 17:33:37 -0400

Hi Jane,

It looked o.k. to me though I did not check every last detail of the X-2000 versus C-1950 business. I hope there is no room for confusion within the file in that respect.

You might just put my phone number in as a special instruction rather than create any operator-confusion about whether you are here. 804-296-0375

Did you get to the bottom of the resolution/ring dilemma in 3C390.3?

A.

From root Fri Apr 14 08:05:23 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["449" "Fri" "14" "April" "1995" "13:05:12" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950414130039.12323A-100000@mraosa>" "14" "Re: observe" "^From:" nil nil "4" nil nil nil nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA22871; Fri, 14 Apr 1995 08:05:19 -0400
Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0rzk7f-0005eFC; Fri, 14 Apr 95 13:05 BST
X-Sender: jdt@mraosa
In-Reply-To: <9504072133.AA66362@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.950414130039.12323A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: observe
Date: Fri, 14 Apr 1995 13:05:12 +0100 (BST)

hi Alan,
well the observations seemed to go off okay (with apparently 9% downtime
though). Can you get the data and send it to me as you did the B array
data? That would be great, as hassles with \$10 are thus avoided.

further: we may be getting 15GHz RT observations of 3C223.1 which would
match a trimmed 8GHz C+D VLA data set. It sort of depends on scheduling
though. i'll keep you posted.

a happy easter to you both. (and the cats!)
j.

From abridle Fri May 5 17:10:00 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["193" "Fri" "5" "May" "1995" "17:09:56" "-0400" "Alan Bridle" "abridle" nil "8" "FITS tape" "^From:" nil nil "5" nil
nil (number " " mark " Alan Bridle May 5 8/193 " thread-indent "\"FITS tape\\\"n") nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA23678; Fri, 5 May 1995 17:09:56 -0400

Message-Id: <9505052109.AA23678@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950414130039.12323A-100000@mraosa>

References: <9504072133.AA66362@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950414130039.12323A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: FITS tape

Date: Fri, 5 May 1995 17:09:56 -0400

is on its way to you, sorry I didn't get it written before
the Cyg A meeting but keep yer eyes on the mailbox later
in the week ...

Log file etc. in with it, looks a bit busy ...

Cheers, A.

From root Mon May 8 05:50:11 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["237" "Mon" "8" "May" "1995" "10:50:10" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "8" "Re: FITS
tape" "^From:" nil nil "5" nil nil nil nil
nil)

Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA31167; Mon, 8 May 1995 05:50:03 -0400

Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0s8PS8-0005eWC; Mon, 8 May 95 10:50 BST

X-Sender: jdt@mraosa

In-Reply-To: <9505052109.AA23678@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950508104704.4011B-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: FITS tape

Date: Mon, 8 May 1995 10:50:10 +0100 (BST)

excellent, i had thought you were probably busy cygnusing. i had also noticed
the observing report looked a little rough. we'll see...

i hope the conference was good. i look forward to hearing from my
office partner all about it!

j.

From root Tue Jun 6 06:25:52 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1156" "Tue" "6" "June" "1995" "11:25:25" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950606110951.20450A-100000@mraos>" "27" "3c223.1 & 3C98" "^From:" nil nil "6" nil nil nil nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA19856; Tue, 6 Jun 1995 06:25:04 -0400
Received: by ras.phy.cam.ac.uk (Smail3.1.29.0 #2)
id m0sIvp8-0005eyC; Tue, 6 Jun 95 11:25 BST
X-Sender: jdt@mraos
Message-Id: <Pine.SOL.3.91.950606110951.20450A-100000@mraos>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: 3c223.1 & 3C98
Date: Tue, 6 Jun 1995 11:25:25 +0100 (BST)

Hello Alan,

I hope your summer is more summer-like than ours at present (hard to credit it's june.)

The D-array data has now been reduced (3C403 isn't that grand but everything else turned out pretty well despite the 'busy' observing log.)

Now I've hit a problem: those damn exabytes again (or my poor relationship with them at least.) i have * no idea* what can have happened, but the exabyte on which the Carray data for 3C223.1 was now starts with a non-FITS file. after that its okay, but doesn't contain all the data i want. I have a listing from the 16th dec showing the C array stuff, but the data on the tape says 17 dec and has none of the C array (its all the spangler archive things). If it wasn't for the grunk at the start i'd think it was simply just another tape or i'd overwritten from the start.

i wondered if you could look at the tape i left you to see if we still have a copy of it?

secondly, something i meant to say when you sent the D array data over, was that after copying the 3C98 stuff i don't seem to have that data- did i give it "back" to you?

yours trying not to feel a completely incompetent loon.
jane

From root Wed Jun 14 12:07:43 1995
X-VM-v5-Data: ([nil nil nil t t nil nil nil nil]
["1964" "Wed" "14" "June" "1995" "17:02:05" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950614162834.933A-100000@mraosa>" "44" "archives..." "^From:" nil nil "6" nil nil nil nil]
nil)
Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA54385; Wed, 14 Jun 1995 12:07:42 -0400
Received: from ras.phy.cam.ac.uk by cv3.cv.nrao.edu (4.1/DDN-DLB/1.13)
id AA24702; Wed, 14 Jun 95 12:07:24 EDT
Received: from mraosa.ra.phy.cam.ac.uk by ras.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0sLutL-0005elC; Wed, 14 Jun 95 17:02 BST
X-Sender: jdt@mraosa
Message-Id: <Pine.SOL.3.91.950614162834.933A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: archives...
Date: Wed, 14 Jun 1995 17:02:05 +0100 (BST)

Hi alan.

Its been a bit of a "grrr" week so far i'm afraid.
After numerous attempts at dealing with the data on 3c285 which has been
sent to me by Wil van Breugel the spectral index map is still nonsense.
his data has had the history files lopped, and i simply cannot get it to
self-cal nicely on itself. don't know what is going on, so i think it's
back to the archives...

Can I send a request to the analysts/archive using your name for the bill
hassle please?? also if you are still at the aoc could you perhaps slip
in the request (at the end)?

Paper stuff: getting more hassle from Peter (reasonably) re writing this
paper, i guess i will be on the case soon, although feeling hassled abt
getting this reduction done (partly because P is in utter disbelief that it
will take until october to have vaguely trustworthy results from the RG
sample). Anyway other reason I'm not on the case is that i don't think i feel
comfortable about first authorship as i will have done little more than write
it up! he suggested i spoke to you and suggested you as first author, so
what do you think??

AIPS question: is it possible to take a multi-array dataset and turn it into
several "normal" single sub-array data sets (so far i use - MULTI, then
SPLIT, then delete AN no 1, then USUBA, then TACOP the AN file to space no 1,
and delete all other antenna files.) reason for this is so i don't end up
with files with N*36 antenna files attached.
Also this process does not put the right freq in the header, although it
is in the antenna file. I assume it's safe for me to alter the header
with PUTH?

Thanks a lot,
j.

ARCHIVES:

3c285 4873.0 4823.0 27 55 AV127 C 12/02/86

1319+42 1385.0 1638.0 26 160 AV127 86 01/01/01 (possibly 07/05/86 ??)
3c285 1385.0 1638.0 27 58 AV127 C 12/02/86
1319+42 1385.0 1638.0 27 69 AV127 B 08/29/86
1319+42 4866.0 4816.0 26 160 AV127 86 01/01/01 ("")
1319+42 4873.0 4823.0 27 109 AV127 B 08/29/86

From abridle Wed Jun 14 23:40:09 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["1634" "Wed" "14" "June" "1995" "23:40:06" "-0400" "Alan Bridle" "abridle" nil "33" "Re: archives..." "^From:" nil nil "6" nil nil nil nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA61025; Wed, 14 Jun 1995 23:40:06 -0400

Message-Id: <9506150340.AA61025@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950614162834.933A-100000@mraosa>

References: <Pine.SOL.3.91.950614162834.933A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: archives...

Date: Wed, 14 Jun 1995 23:40:06 -0400

Hi Jane,

I'm still in Socorro and thanks to that have been able to get Barry Clark to do some detective work on the actual dates of the van Breugel observations using the database that only he knows about (the one from which the printed listings are generated, occasionally with formatting problems as you saw). I will attempt to get the analysts on the case tomorrow a.m.

Re the paper on the quasars spectral asymmetries, if being the first author means making the first draft then that will put it on hold until the end of July at least which is probably not what Peter had in mind when he suggested me. I would not be able to get at it between returning to C'ville (end of next week) and going up to Canada in mid-July. And probably not right away when I get back in August, because of pressure from the VLA upgrade project and aips++. So if Peter wants a first author in action before then he may have to look closer to home.

Re multiple AN files, I have usually born it, (not necessarily grinning the while) as my maximum per data base has usually been 4. The frequency in the AN files is not often used. That in the header is used for operations like COMB and may if needed be adjusted to average reality with PUTH. I have not often gone to splitting datasets back out of DBCON'd ones, preferring to retain the originals as much as possible. So some of the operations you mentioned are not ones I have considered in any detail.....

What has become of Robert, by the way? He was an unexpected no-show at the Cyg A meeting and I have heard rumors of dire events at the RGO. Have you seen/heard from him recently?

A.

From root Thu Jun 15 07:13:35 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1005" "Thu" "15" "June" "1995" "12:13:15" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950615115530.4367A-100000@mraosa>" "25" "Re: archives..." "^From:" nil nil "6" nil nil nil nil]
nil)
Received: from ras.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA18636; Thu, 15 Jun 1995 07:13:32 -0400
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0sMCrO-0005etC; Thu, 15 Jun 95 12:13 BST
X-Sender: jdt@mraosa
In-Reply-To: <9506150340.AA61025@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.950615115530.4367A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: archives...
Date: Thu, 15 Jun 1995 12:13:15 +0100 (BST)

hi Alan,

Thanks for the work on the archive stuff.

The news with the most impact first: re Robert - i have *no idea*, all i know is that he is more unobtainable than usual- haven't got hold of him for a couple of months - despite increasingly urgent messages asking for the uv data for a couple of sources. i hope things aren't *that* bad - i haven't heard the RGO grapevine as you obviously have.

re the paper - no i think the idea was that i write the first draft whatever order the names.

re multiple AN files. - oh shucks. just what i thought really. the reason i ask this is because WvB's data was in the form of subarrays- one IF after the other, array after array. Adam's is ditto, and if i need to do anything more to it - adding in the new obs, i will have to weigh the case: to start from scratch or not to start from scratch? seems particularly awful when Adam took so much care with his reduction.

Is Mary out there too? if so send her my love. i hope she is doing well.

best,
j.

From abridle Thu Jun 15 11:14:22 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["2864" "Thu" "15" "June" "1995" "11:14:08" "-0400" "Alan Bridle" "abridle" nil "55" "Re: archives..." "^From:" nil nil "6" nil nil nil nil])

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA52906; Thu, 15 Jun 1995 11:14:08 -0400

Message-Id: <9506151514.AA52906@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950615115530.4367A-100000@mraosa>

References: <9506150340.AA61025@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950615115530.4367A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: archives...

Date: Thu, 15 Jun 1995 11:14:08 -0400

> The news with the most impact first: re Robert - i have *no idea*, all i
> know is that he is more unobtainable than usual- haven't got hold of him
> for a couple of months - despite increasingly urgent messages asking for
> the uv data for a couple of sources. i hope things aren't *that* bad - i
> haven't heard the RGO grapevine as you obviously have.
>

Well I had a visit from Jasper Wall who told me that there was yet another attack on the entire existence of RGO being mounted, this time by Ken Pounds and some politically potent committee set up by the government. Apparently they are trying to return ROE to the University of Edinburgh (whence it came originally, I had not remembered that until reading Hoyle's autobio) and then RGO (or rather a tiny rump thereof) with it. Basically shutting off the operation in Cambridge altogether, leaving just the operations part on the islands headquartered at Edinburgh. Not the sort of stuff to keep one focused on radio galaxies, I would think. Jasper thought it could all be headed off but it would take a blizzard of paper and meetings so maybe that is what Robert is time-sharing with Gemini these days. May need a commando raid on his office to get those u,v data?

> re the paper - no i think the idea was that i write the first draft
> whatever order the names.

Let's leave the order to be settled once all the work is actually done and we can see who has really done it. There's a fair amount to getting a paper into good shape! So even though Robert and I had more of a hand in the data reduction, a good bit of the original impetus and later push has come from Peter, and you are clearly doing all the real work on the galaxies, so it would take four-sided coin toss to come up with an order for the quasar paper at the moment. Let's not worry too much about that yet. I will promise to make time to read a first draft promptly unless it arrives just before I go to Canada. I just don't see myself having the time to prepare that draft soon, which is much harder than building upon the draft once it's there. And I imagine it will be good practice for you re the thesis.

> Is Mary out there too? if so send her my love. i hope she is doing well.

No this is my first solo trip since we had her diagnosis, we are conserving what is left of her holiday time from U.Va. for the Canadian trip. She is back at work 4 days a week, has chemotherapy at the end of the 4th day, then has the long weekend to shake off the side-effects. These are no fun but are normally manageable and only difficult for about a day. She is in good spirits and we have managed to get a fair bit of our normal lives back except on Fridays. It was good for her to get back to work once she was really ready physically, it has helped to her to feel more like her real self again.

Cheers, A.

From abridle Thu Jun 15 11:50:47 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil
["300" "Thu" "15" "June" "1995" "11:50:22" "-0400" "Alan Bridle" "abridle" nil "14" "Re: archives..." "^From:" nil nil
"6" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA52901; Thu, 15 Jun 1995 11:50:22 -0400
Message-Id: <9506151550.AA52901@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.950615115530.4367A-100000@mraosa>
References: <9506150340.AA61025@polaris.cv.nrao.edu>
<Pine.SOL.3.91.950615115530.4367A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: archives...
Date: Thu, 15 Jun 1995 11:50:22 -0400

A check of the actual logs suggests that what is actually there for
AV 127 is:

C config Dec 2 1986
B config Aug 29 1986
A config May 6 1986
A config Apr 9 1986

We will attempt to extract them all, clean the tapes, etc and
see what comes off. Hope it resembles what you expect

A.

From abridle Mon Jun 26 11:03:37 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["318" "Mon" "26" "June" "1995" "10:59:59" "-0400" "Alan Bridle" "abridle" nil "11" "Re: archives..." "^From:" nil nil "6" nil nil nil nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA36034; Mon, 26 Jun 1995 10:59:59 -0400

Message-Id: <9506261459.AA36034@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950615115530.4367A-100000@mraosa>

References: <9506150340.AA61025@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950615115530.4367A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: archives...

Date: Mon, 26 Jun 1995 10:59:59 -0400

Hi Jane,

I'm now back in C'ville and have mailed the archive tape from AV127 to you today. Also some mail for you that had accumulated in my mailbox while I was away, all from same place, looks like you may need to send someone an address change.

I will look into the 3C223.1 and 3C98 data situations a.s.a.p.

A.

From root Mon Jun 26 11:08:47 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["206" "Mon" "26" "June" "1995" "16:08:39" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "10" "Re: archives..." "^From:" nil nil "6" nil nil nil nil] nil)

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA65967; Mon, 26 Jun 1995 11:08:45 -0400

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp (Smail3.1.29.0 #2) id m0sQFmC-0005ehC; Mon, 26 Jun 95 16:08 BST

X-Sender: jdt@mraosa

In-Reply-To: <9506261459.AA36034@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950626160443.10605C-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: archives...

Date: Mon, 26 Jun 1995 16:08:39 +0100 (BST)

hi Alan,

great, thanks.

hmm, i can only presume the mail is from sprint whom i have tried to tell abt my address change *and*, unbelievably, to pay my bill my credit card, which they never docked!

j.

From root Wed Jul 19 14:43:54 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1083" "Wed" "19" "July" "1995" "19:43:33" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950719191229.12438A-100000@mraosa>" "30" "zerospacings...." "^From:" nil nil "7" nil nil nil nil]
nil)
Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA24037; Wed, 19 Jul 1995 14:43:45 -0400
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0sYe5m-0005cqC; Wed, 19 Jul 95 19:43 BST
X-Sender: jdt@mraosa
Message-Id: <Pine.SOL.3.91.950719191229.12438A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: zerospacings....
Date: Wed, 19 Jul 1995 19:43:33 +0100 (BST)

Hi Alan,

I'm not sure you're around, but I'll try this anyway:

3C403 is missing some frightening fraction of the X band flux due to lack of short spacings. Am messing with ZERO SP but the details of how to use it elude me.

I require a value and a weight. The value I can cope with. The weight however.... Cookbook refers me to the third summer school- we don't have it here. The 1985 one has the line "Choosing the weight for the zerospacing is difficult; the best estimate seems to simply the number of unfilled cells around the origin of the gridded uv plane."
Well how do i know what that number is?

Another question: as X isn't matched to anything, i'm simply chopping off the uv data at some uv range (X on outside, C/L at centre). should i be tapering it? what does tapering do for me (in "real life" not some fourier transform of that existence..)?

Status Report:

Have been messing with imaging. Seems like, despite all assurances to the contrary MX+VTESS isn't good for this. So I'm cleaning to the noise with MX, rice pudding or no.

hope all is well,
jane

From abridle Tue Aug 1 16:58:48 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["4857" "Tue" "1" "August" "1995" "16:58:42" "-0400" "Alan Bridle" "abridle" nil "87" "Re: zerospacings...."
"^From:" nil nil "8" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA19644; Tue, 1 Aug 1995 16:58:42 -0400
Message-Id: <9508012058.AA19644@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.950719191229.12438A-100000@mraosa>
References: <Pine.SOL.3.91.950719191229.12438A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: zerospacings....
Date: Tue, 1 Aug 1995 16:58:42 -0400

Hi Jane,

Unfortunately you were right about be not being here, I was
in Canada from Jul 15-now.

Re 3C403 and zero-spacing flux density. First, what fraction of the
total flux is missing? If it's more than a few tens of per cent, then
the zero-spacing flux game is no more than a crude fix and the details
of weighting etc. will not be as important as the fact that so much is
missing. The best way to get a feel for the "damage" will be to make
lower-frequency images with and without inner u-v cutoffs mimicing the
X-band sampling. See what this does first to the images and second to
the spectral indices between L and C band. This may tell you that
large regions of the source should be blanked out for detailed
spectral work, rather than rescued via zero-spacing games. Second,
what to put in? The value can be estimated from single-dish spectra
but if what you get that way is much (many tens of percent) more than
the nearest values in the gridded visibility function, the results may
be ugly. The optimum weighting is controversial, the "number of empty
cells" criterion being a way to give the value that is inserted about
the same weight as all the data that would have been there in the
absence of the hole and thus being an upper limit to the weight that
would be reasonable for the central cell. One way to look at the
gridded data and estimate this is to back-transform the dirty image
and look directly at the gridded visibilities. This is tedious
however. For a single VLA configuration in a full synthesis, a weight
of 2 or 3 usually works fairly well with MX. Most people start in
that range and tinker with the weight on subsequent image iterations
based on the zero level of the deconvolved images, choosing a weight
that does a decent job on the "bowl" effects. This is not always the
same as the one you would get by counting cells, the details depending
on the coverage, the shape of the visibility function of the
source, and the amount of missing flux. In other words, some trial
and error is required. Painful when the deconvolutions are long.

The weighting in the new AIPS imaging task IMAGR does not conform to
the "number of empty cells" rule in any case, but its "robust
weighting" algorithm gives much more control over the beam skirt shape
and this also can have a big effect on the deconvolution. New black
art emerging there ...

Re u-v limiting. yes you should exclude the innner u-v plane from the
low frequencies and the outer u-v plane from the high using uvrange to

match these limits as well as you can. The next step is to see how well doing this also matches the fitted beam shapes (it won't match them exactly because the truncated coverages will not have the same sampling densities). It is then quite legit to apply a bit of taper to whichever coverages give the smaller fitted beamsizes, to make their beams better resemble those with the larger fitted beamsizes before deconvolution. This is only a crude approach, as it does not take account of the detailed beam shapes (skirts, etc.) but it is reasonable in practice. For L, C and U bands and full syntheses it is usually not very important to do this, but for X it is worth doing to minimize differences in the deconvolutions done at different frequencies. If the source changes drastically between frequencies (big spectral gradients) it is less important however. Once again, the new IMAGR gives more control over the weighting and the beam shape but you may want to stick with MX for consistency now.

MX+VTESS known to be a tricky combination for sources with strong cores and strong hot spots. If you can average over the rice-pudding in interpreting the spectral indices, MX alone may indeed be acceptable. If the hot spots are dominated by point-like components, registering these on the grid before deconvolution is as important as how the deconvolution is managed. If you've had to put in large zero-spacing flux densities relative to the visibility data, VTESS is quite cranky and you may indeed have to stick with MX alone. I'm not sure why this is so, but it is empirically so. MX+VTESS usually works best with sources whose large-scale structure truly is defined by the gridded u-v data.

Hope this helps, vague though it be in crucial places.

Re all being well, yes indeed 'tis so. Mary is still taking chemotherapy but we were able to take her drugs with us to Canada and have her treated at the hospital where she used to work. She is still managing the side-effects pretty well and we had a good vacation apart from my attempt to slice the sole of my left foot off which left me hobbling for about a week and made entering and exiting a canoe very difficult. I am now back on my feet as opposed to my foot and have sworn off climbing into lakes down old wooden ladders whose rungs collapse.

Cheers, A.

From root Fri Sep 8 15:27:11 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1743" "Fri" "8" "September" "1995" "20:27:05" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950908200740.4079A-100000@mraosa>" "38" "things..." "^From:" nil nil "9" nil nil nil nil]
nil)
Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA76005; Fri, 8 Sep 1995 15:27:09 -0400
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0sr94t-0005crC; Fri, 8 Sep 95 20:27 BST
X-Sender: jdt@mraosa
Message-Id: <Pine.SOL.3.91.950908200740.4079A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: things...
Date: Fri, 8 Sep 1995 20:27:05 +0100 (BST)

hi Alan,

firstly i was wondering about the dirty tricks of polarisation data manipulation. firstly when making polarised intensity maps, I assume i should be using "POLC" not "POLI" in task COMB and that it does something sensible for the noise correction. Secondly, and more broadly I was wondering if you could remind/tell me of anything particularly 'arty' about poln things. I remember you telling me something about doing something in initial calibration stages (I think this was specifying the refant- but correct me if there was something else) - wondered if anything else came to mind.

secondly: update - spent ages trying to get 3c403 having anything other than an almost uniform spectrum of .7 -.8 . no avail - despite being ~400kpc across its wings it seems to be so - or at least in my data however i massage it. there are 2ptc in the X band, and the short spacing coverage is dodgy, but i can't think why this would make it go *this* way round (ultra steep spectrum, yes, but...).

3c135 now has high-res images of hotspots, and has had the spectral analysis done on it.

oh, and i finally got something i believed for 3c285.

next is 382, but am eager to get 223.1 going (seeing as it looks v similar to 403)... so that brings me to my final question: have you been able to locate your tape of 223.1, and a possible duplicate of 98? it occurs to me that 223.1 was the thing i was backing up the night before i left - i didn't do a final prttp, and the thing may have been sitting unprotected in the drive all night if i didn't issue a dismount....aarrgh.

only a couple of weeks til glorious fall i guess at your end. the damp has descended here....

thanks for your help,
all the best to you both
jane

From abridle Fri Sep 8 17:43:08 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["3599" "Fri" "8" "September" "1995" "17:43:04" "-0400" "Alan Bridle" "abridle" nil "73" "Re: things..." "^From:" nil
nil "9" nil nil nil nil
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA29362; Fri, 8 Sep 1995 17:43:04 -0400
Message-Id: <9509082143.AA29362@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.950908200740.4079A-100000@mraosa>
References: <Pine.SOL.3.91.950908200740.4079A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: things...
Date: Fri, 8 Sep 1995 17:43:04 -0400

Jane Dennett-Thorpe writes:

>
> firstly i was wondering about the dirty tricks of polarisation data
> manipulation. firstly when making polarised intensity maps, I assume i
> should be using "POLC" not "POLI" in task COMB and that it does something
> sensible for the noise correction. Secondly, and more broadly I was
> wondering if you could remind/tell me of anything particularly 'arty'
> about poln things. I remember you telling me something about doing
> something in initial calibration stages (I think this was specifying the
> refant- but correct me if there was something else) - wondered if
> anything else came to mind.

POLC will attempt to correct for the bias in the Ricean statistics of the P image by making a signal-to-noise dependent corrections for the offset and by summarily blanking anything that is below 2-sigma (where the correction becomes large). It is therefore a better thing to use when attempting to measure degrees of polarization, etc. reliably. You might however want to use 'POLI' images sometimes, e.g. when setting upper limits to depolarizations or depolarization asymmetries in analyses that might be compromised by having blanked pixels in places with low polarization. The refant trick is to find a refant that is present throughout the run. and thus to preserve the correct R-L phase relationships when self-calibrating. If you don't, then different refants may be used at different times and the polarization p.a. calibration can be degraded as self-calibration of the parallel hand channels progresses.

>
> secondly: update - spent ages trying to get 3c403 having anything other
> than an almost uniform spectrum of .7 -.8 . no avail - despite being
> ~400kpc across its wings it seems to be so - or at least in my data
> however i massage it. there are 2ptc in the X band, and the short spacing
> coverage is dodgy, but i can't think why this would make it go *this* way
> round (ultra steep spectrum, yes, but...).

Curiouser and curiouser, won't help the "old cavity" explanation much, will it?

> 3c135 now has high-res images of hotspots, and has had the spectral
> analysis done on it.
> oh, and i finally got something i believed for 3c285.
>
> next is 382, but am eager to get 223.1 going (seeing as it looks v

> similar to 403)... so that brings me to my final question: have you been
> able to locate your tape of 223.1, and a possible duplicate of 98?

Yes I have found your tape in the corner of the AIPS Cage and will copy it then mail it. I have found the archive data on 3C98 and will send you a copy of that. I'm making the copies in the next window to this E-mail.

> it occurs to me that 223.1 was the thing i was backing up the night
> before i left - i didn't do a final prttp, and the thing may have been
> sitting unprotected in the drive all night if i didn't issue a
> dismount....aarrgh.
>
> only a couple of weeks til glorious fall i guess at your end. the damp
> has descended here....

It's just become livable again here after a long hot spell, and we're enjoying seeing the mountains clearly. After tremendous flooding early in the summer we are now having another drought. Whoever is in charge of the weather needs better fine-motor skills this year.

I will be seeing Peter and Robert in Alabama week after next. What's the status of the paper draft you mentioned in June?

Mary says "hi", she's doing quite well but really looking forward to the end of her chemotherapy just before Christmas.

I'll put tapes in the mail Monday,

Cheers, A.

From root Sat Sep 9 09:37:13 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["1718" "Sat" "9" "September" "1995" "14:37:07" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.950909142310.5220A-100000@mraosa>" "38" "Re: things..." "^From:" nil nil "9" nil nil nil nil]
nil)

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA63191; Sat, 9 Sep 1995 09:37:10 -0400

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0srQ51-0005csC; Sat, 9 Sep 95 14:37 BST

X-Sender: jdt@mraosa

In-Reply-To: <9509082143.AA29362@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.950909142310.5220A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: things...

Date: Sat, 9 Sep 1995 14:37:07 +0100 (BST)

> polarization. The refant trick is to find a refant that is present
> throughout the run and thus to preserve the correct R-L phase relation
> ships when self-calibrating. If you don't, then different refants may
> be used at different times and the polarization p.a. calibration can
> be degraded as self-calibration of the parallel hand channels progresses.

hmm, actually something i wasn't clear abt is still not clear: does it
matter that diff refants are used for different arrays? and if i get to
calibrate them together (meaning using a model applied to both
simultaneously, as opposed to using,say, model C on uv B), do i just set
the refant to 0? or something suitable for both, if diff from both
preceeding ones?

> Yes I have found your tape in the corner of the AIPS Cage and will copy
> it then mail it. I have found the archive data on 3C98 and will send
> you a copy of that. I'm making the copies in th next window to this
> E-mail.
>

excellent! thank you.

re paper: peter's done an outline draft, (which i had set aside time to
do when i was house-sitting and couldn't anything but read and write...
but standard miscommunication...) and i'm going to get down to it on my
return from bologna. at present trying to get some of these results out
so i can put them on the poster i promised...

sounds like your weather has been the negative of ours this year- we were
wet, then hot and dry, dry, dry, and now wet again.

glad to hear Mary is doing well. i'm sure she will be more than delighted
to get off chemo.

i also thought of you this morning when i read the word "diarise" - as in
my bank tells me it has diarised to review my requirements on such and
such a date....

j.

From abridle Sat Sep 9 15:49:09 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["1932" "Sat" "9" "September" "1995" "15:49:04" "-0400" "Alan Bridle" "abridle" nil "35" "Re: things..." "^From:" nil nil "9" nil nil nil nil nil])

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA54135; Sat, 9 Sep 1995 15:49:04 -0400

Message-Id: <9509091949.AA54135@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950909142310.5220A-100000@mraosa>

References: <9509082143.AA29362@polaris.cv.nrao.edu>

<Pine.SOL.3.91.950909142310.5220A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: things...

Date: Sat, 9 Sep 1995 15:49:04 -0400

Jane Dennett-Thorpe writes:

>> polarization. The refant trick is to find a refant that is present
>> throughout the run and thus to preserve the correct R-L phase relation
>> ships when self-calibrating. If you don't, then different refants may
>> be used at different times and the polarization p.a. calibration can
>> be degraded as self-calibration of the parallel hand channels progresses.
>
> hmm, actually something i wasn't clear abt is still not clear: does it
> matter that diff refants are used for different arrays? and if i get to
> calibrate them together (meaning using a model applied to both
> simultaneously, as opposed to using,say, model C on uv B), do i just set
> the refant to 0? or something suitable for both, if diff from both
> preceding ones?
>

Couple of points here. Yes, it does matter when the arrays are self-calibrated "together". If they have had different refants then you should not do this, but calibrate them separately. (They can be re-dbcon'd for the re-imaging step but should be run separately through CALIB with the proper refant used for each). This gets olds after a while and is a strong reason for trying to find a common refant for all configurations if possible; that does take a little luck. Second point is that using refant=0 is actually the worst thing to do; CALIB interprets this as "find the refant with the greatest number of pairs during each solution interval", so as antennas drop in and out due to malfunctions, or due to your use of a u-v range, refant=0 may be changing the refant all the time in a constant search for the "best". This is o.k. for intensity calibration, but is one of the worst things that can go on during polarization calibration. So the rule is 1. always name a refant (avoid using 0) and 2) use the same refant for all configurations if you can.

"Diarise", eh? They should be dispossal of.

Cheers, A.

From abridle Mon Sep 11 09:17:01 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil

["720" "Mon" "11" "September" "1995" "09:12:01" "-0400" "Alan Bridle" "abridle" nil "19" "" "^From:" nil nil "9" nil nil nil nil])

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA17988; Mon, 11 Sep 1995 09:12:01 -0400

Message-Id: <9509111312.AA17988@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.950909142310.5220A-100000@mraosa>

References: <9509082143.AA29362@polaris.cv.nrao.edu>
<Pine.SOL.3.91.950909142310.5220A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Date: Mon, 11 Sep 1995 09:12:01 -0400

are on their way.

First is your "3C223.1" tape (as there were 900 MBytes of goodies on it I took a copy as a precaution in case it goes missing in the mail).

Second is the only tape I can resuscitate that has both the L and C band 3C98 data; this is the copy of VLA archive tapes so you will need to redo the calibration. (My calibrated uv data are on a 9-track that cannot be read through on the streaming drive from Hell in our AIPS Cage.) I do have readable images with CC tables if you would like them also as short-cuts. Maybe we could ftp those? The source was called 0356+102 for the observing and the standard calibrators were 3C48 and 3C138. Our reduction used antenna 4 as the refant.

Cheers, A.

From root Wed Sep 20 09:41:44 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1532" "Wed" "20" "September" "1995" "14:41:32" "+0100" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "36"
"Re: your mail" "^From:" nil nil "9" nil nil nil nil]
nil)
Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA106743; Wed, 20 Sep 1995 09:41:42 -0400
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0svPP4-0005csC; Wed, 20 Sep 95 14:41 BST
X-Sender: jdt@mraosa
In-Reply-To: <9509111312.AA17988@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.950920141930.5178B-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: your mail
Date: Wed, 20 Sep 1995 14:41:32 +0100 (BST)

hi Alan,

thanks for the tapes (you saviour!).

(although oddly i was expecting a different tape on 3c98 i think... i copied an exabyte of your whilst i was in CV, but apparently its gone walkabouts (or more likely never went anywhere at all). i didn't think it was the archive tape - although i didn't investigate too thoroughly. i mention this just in case we're at cross purposes here.)

thanks also for the tips on pol cal. looks like it was a good job i asked!

anyway i'm getting there, slowly.
i'm just about to start 3c390.3 again, as we've got some free disk space on the horizon, and i can't remember if you ever managed to pull the RSTOR images across (problem was: residuals look clean yet rings appear upon RSTOR, which are not due to CC. or so i think), and if you did if you had any thoughts on them.

I've just moved house: out of the Cavendish house (very cheap, a lovely room but most unhomely) into a house with friends (not exactly cheap, rather 1970's but with a great sitting/dining room and very much home.) It also happens to be on Madingley Rd, which is great for getting me in the lab at a reasonable time on days like these (its raining stairrods), although not terribly convenient for anything like milk or veg. That said, there are no hills to climb! We're right next to the pub, but i suspect that is *not* going to be our local - its another 1970's delight, now serving pub-chain food with children in mind. Anyway, i'm delighted and feeling much better for the move.

best,

j.

From root Mon Nov 13 10:44:06 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1601" "Mon" "13" "November" "1995" "13:16:21" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.951113104938.29779A-100000@mraosa>" "33" "uv matching." "^From:" nil nil "11" nil nil nil nil]
nil)
Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA65881; Mon, 13 Nov 1995 10:39:39 -0500
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tEyKI-0005e2C; Mon, 13 Nov 95 13:16 GMT
X-Sender: jdt@mraosa
Message-Id: <Pine.SOL.3.91.951113104938.29779A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: uv matching.
Date: Mon, 13 Nov 1995 13:16:21 +0000 (GMT)

Hi Alan,

I remember you & Mark had come up with some clever scheme to investigate the effects of baselines not being truly matched (i.e. not simply max & min bl matching). I wonder if you could elaborate on this again?

The reason I ask is because we've got an apparently surprising result here: both 3C223.1 & 3C403 (the sources with large wings) have super-uniform and pretty flat spectra (~0.7). 3C403 was a dodgy case - two pointings a big hole in the center of the uvplane etc.... but despite this fitted well to the single data values. And any straightforward arguments give us a observed steeper wing spectrum than 'reality', not a flatter one. (the only possible thing i come up with to give the observed result as an artifact is the position of the sidelobes & how this interacts with the source shape). 3C223.1 - here we have X, C & L data - is less dubious, especially given the consistency of the three frequencies. THing here is that, not being a member of LRL single dish measurements come few & far between.

So, as I see it, there is only really a couple more things to check (the above & the results of a VTESS run, although, i think i'm more inclined to believe MX anyway from the tests i've run...), and then I think we've got to believe it.

Things here are pretty good - not too cold yet, and the grey days are frequently alleviated by gorgeously crisp pale yellow ones. My new house is wonderful - am eating so well & healthily i've also managed to fend off the terrible-nesses that are loitering in the air all around cambridge. Please send my love to Mary.

j.

From abridle Mon Nov 13 11:53:57 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]
["4101" "Mon" "13" "November" "1995" "11:52:23" "-0500" "Alan Bridle" "abridle" nil "86" "Re: uv matching."
"^From:" nil nil "11" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA172532; Mon, 13 Nov 1995 11:52:23 -0500
Message-Id: <9511131652.AA172532@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.951113104938.29779A-100000@mraosa>
References: <Pine.SOL.3.91.951113104938.29779A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: uv matching.
Date: Mon, 13 Nov 1995 11:52:23 -0500

Jane Dennett-Thorpe writes:

>
> Hi Alan,
>
> I remember you & Mark had come up with some clever scheme to investigate
> the effects of baselines not being truly matched (i.e. not simply max &
> min bl matching). I wonder if you could elaborate on this again?
>

Hi Jane, I'm not sure it's particularly clever but here is what we tried for 3C353. This may or may not be what we were talking about when you were here, I'm a bit fuzzy on exactly how far we had proceeded with this during your visit.

We made our best L Band image using all the data available, and likewise for each of the higher frequencies. We then did deep CLEANs of all of these, to make u,v datasets that contained only residual "noise" at each frequency, but with the sampling the same as that of the real data.

Then we restored the L Band CLEAN components to the higher-frequency datasets using UVSUB, and re-imaged these datasets. This made a set of "phony" L-Band images that were based on the actual u,v coverages obtained at the higher frequencies. We then took ratios of these to the "real" L Band image to determine what regions of the source, if any, were compromised (to a given %) by coverage differences, whatever their nature.

We also separately made a set of L Band images using the same inner and outer u,v limits as for the higher frequencies. Comparing these images with the real L Band image shows the effect of "baseline limit matching" alone without allowing for differences in the weighting.

The differences between the "L Band errors" documented by these two approaches should be mainly due to differences in the weighting. In practice there will be some differences due to the deconvolution artifacts as well, and these may depend on signal-to-noise differences among the frequencies.

So interpretation of a big difference between the actual L-band data and the simulations these results could be complicated. But a "null result", i.e. the simulation recovering the L Band image correctly, means that one is pretty safe proceeding with the actual

data.

- > The reason I ask is because we've got an apparently surprising result
- > here: both 3C223.1 & 3C403 (the sources with large wings) have super-
- > uniform and pretty flat spectra (~0.7). 3C403 was a dodgy case - two
- > pointings a big hole in the center of the uvplane etc.... but despite this
- > fitted well to the single data values. And any straightforward arguments
- > give us a observed steeper wing spectrum than 'reality', not a flatter
- > one.

I agree. If it passes a test like the above, it should be safe.

If it doesn't, it will still be very puzzling as it's hard to remanufacture extended structure in the "correct shape" by artifacts, they are much more likely to put missing flux where it shouldn't be at all than they are to put it in the right place but with excess amplitudes. Especially not with excess amplitudes matching what actually happens at a lower frequency.

- > Things here are pretty good - not too cold yet, and the grey days are
- > frequently alleviated by gorgeously crisp pale yellow ones. My new house
- > is wonderful - am eating so well & healthily i've also managed to fend
- > off the terrible-nesses that are loitering in the air all around cambridge.
- > Please send my love to Mary.
- >

Glad to hear the new arrangements are working so well for you. We are having our first light snow of the year today, following a spell of nice warm weather that has softened us up. Mary and I are both a couple of crocks again at the moment, M. has a bad cold that she has been unable to shake off (probably because of the chemo, which they have now paused to give her a chance to get shot of it) and I am hobbling with a sore knee which I managed to bugged doing some work in the garden. But compared to this time last year we are having a relatively good time!

Hope the u,v test helps to make the spectral index result look solid, it is a nice puzzle to have dropped on the subject (the things we don't expect are always more informative in the long haul than the ones we do).

Cheers, A.

From root Mon Nov 13 12:25:21 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1619" "Mon" "13" "November" "1995" "17:24:59" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.951113171130.4771A-100000@mraosa>" "33" "Re: uv matching." "^From:" nil nil "11" nil nil nil nil]
nil)
Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA115311; Mon, 13 Nov 1995 12:25:12 -0500
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tF2cu-0005csC; Mon, 13 Nov 95 17:25 GMT
X-Sender: jdt@mraosa
In-Reply-To: <9511131652.AA172532@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.951113171130.4771A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: uv matching.
Date: Mon, 13 Nov 1995 17:24:59 +0000 (GMT)

> We made our best L Band image using all the data available, and likewise for
> each of the higher frequencies. We then did deep CLEANs of all of these,
> to make u,v datasets that contained only residual "noise" at each frequency,
> but with the sampling the same as that of the real data.
>
> Then we restored the L Band CLEAN components to the higher-frequency
> datasets using UVSUB, and re-imaged these datasets. This made a set
> of "phony" L-Band images that were based on the actual u,v coverages
> obtained at the higher frequencies. We then took ratios of these to
> the "real" L Band image to determine what regions of the source, if
> any, were compromised (to a given %) by coverage differences, whatever
> their nature.

Thanks Alan,

I have already tested for the max & min cutoffs in the way you suggest. I think I will go about the above slightly differently though - I'll outline my intentions here just to make sure i haven't got the wrong end of the stick.

In this data set the higher frequencies have better uv coverage (in order to get the required sensitivity). So the higher frequencies are the ones that effectively should be resampled with the uv coverage of the L-band, not v.v. (this way we are effectively reducing the amount of info... not magically increasing it.) Also as I'm interested in the effects of this resampling in the data i will be using for the spectral index maps, not the dataset as a whole, i will make the maps for this test with the uvranges and tapers i use for the final maps.

Sorry to hear you are both crocked up - make sure you get well soon!

j.

From abridle Mon Nov 13 13:10:42 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]
["1003" "Mon" "13" "November" "1995" "13:10:23" "-0500" "Alan Bridle" "abridle" nil "25" "Re: uv matching."
"^From:" nil nil "11" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA131384; Mon, 13 Nov 1995 13:10:23 -0500
Message-Id: <9511131810.AA131384@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.951113171130.4771A-100000@mraosa>
References: <9511131652.AA172532@polaris.cv.nrao.edu>
<Pine.SOL.3.91.951113171130.4771A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: uv matching.
Date: Mon, 13 Nov 1995 13:10:23 -0500

Jane Dennett-Thorpe writes:

>
> I have already tested for the max & min cutoffs in the way you suggest. I
> think I will go about the above slightly differently though - I'll
> outline my intentions here just to make sure i haven't got the wrong end
> of the stick.
>
> In this data set the higher frequencies have better uv coverage (in order
> to get the required sensitivity). So the higher frequencies are the ones
> that effectively should be resampled with the uv coverage of the L-band,
> not v.v. (this way we are effectively reducing the amount of
> info... not magically increasing it.) Also as I'm interested in the
> effects of this resampling in the data i will be using for the spectral
> index maps, not the dataset as a whole, i will make the maps for this
> test with the uvranges and tapers i use for the final maps.
>

Well, it'll work either way round, of course, but you're right I had forgotten which way round the deficit works in this case.

A.

From root Thu Nov 16 11:50:29 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["1185" "Thu" "16" "November" "1995" "16:05:43" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.951116154526.18559A-100000@mraosa>" "25" "Re: uv matching." "^From:" nil nil "11" nil nil nil nil]
nil)
Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA72998; Thu, 16 Nov 1995 11:50:17 -0500
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tG6or-0005eCC; Thu, 16 Nov 95 16:05 GMT
X-Sender: jdt@mraosa
In-Reply-To: <9511131810.AA131384@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.951116154526.18559A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Re: uv matching.
Date: Thu, 16 Nov 1995 16:05:43 +0000 (GMT)

Hmm, well that was very inconclusive.

Initially, I was inclined to believe this was the root of the result, because only ~50% of the higher freq flux showed up in the wings when it was UVSUBed on to the lower freq uv residuals. However, I then went through the same procedure of adding the low freq CC back onto its *own* residuals, and reimagining - and again only got back around half the original wing flux... (this isn't quite true as the brighter areas are much better represented in all cases (still only ~70% though)-- an area average over the 3sig wings of "resampled/original" image is around 0.5)

So, I guess, failing new inspiration on this, we have to believe it. I can, but I've sat here for weeks with the data - can you?

One thing that would surely help is to get some proper integrated flux measurements. There is (according to NED) only 408MHz & 4.85GHz. There's a 1.40GHz peak flux with no error, too, but, well - its in the right region, but that's about all that can be said with that. The 4.85GHz has an error of 15%. Is there anywhere you know of, that wouldn't be in NED, or could we get hold of any with any relative ease and accuracy?

best,
j

From abridle Mon Nov 20 09:19:13 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["799" "Mon" "20" "November" "1995" "09:16:22" "-0500" "Alan Bridle" "abridle" nil "20" "Re: uv matching."
"^From:" nil nil "11" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA69111; Mon, 20 Nov 1995 09:16:22 -0500
Message-Id: <9511201416.AA69111@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.951116154526.18559A-100000@mraosa>
References: <9511131810.AA131384@polaris.cv.nrao.edu>
<Pine.SOL.3.91.951116154526.18559A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: uv matching.
Date: Mon, 20 Nov 1995 09:16:22 -0500

Jane Dennett-Thorpe writes:

>
> Hmm, well that was very inconclusive.
>
> Initially, I was inclined to believe this was the root of the result,
> because only ~50% of the higher freq flux showed up in the wings when it
> was UVSUBed on to the lower freq uv residuals. However, I then went
> through the same procedure of adding the low freq CC back onto its *own*
> residuals, and reimaging - and again only got back around half the
> original wing flux... (this isn't quite true as the brighter areas are
> much better represented in all cases (still only ~70% though)-- an area
> average over the 3sig wings of "resampled/original" image is around 0.5)
>

Does than mean only that the CLEANs have not been run deeply enough to
extract the flux density from the wings?

A.

From abridle Mon Nov 20 09:40:15 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1042" "Mon" "20" "November" "1995" "09:36:08" "-0500" "Alan Bridle" "abridle" nil "23" "Re: uv matching."
"^From:" nil nil "11" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA106164; Mon, 20 Nov 1995 09:36:08 -0500
Message-Id: <9511201436.AA106164@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.951116154526.18559A-100000@mraosa>
References: <9511131810.AA131384@polaris.cv.nrao.edu>
<Pine.SOL.3.91.951116154526.18559A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Subject: Re: uv matching.
Date: Mon, 20 Nov 1995 09:36:08 -0500

Jane Dennett-Thorpe writes:

>
> One thing that would surely help is to get some proper integrated flux
> measurements. There is (according to NED) only 408MHz & 4.85GHz. There's
> a 1.40GHz peak flux with no error, too, but, well - its in the right
> region, but that's about all that can be said with that. The 4.85GHz
> has an error of 15%. Is there anywhere you know of, that wouldn't be in
> NED, or could we get hold of any with any relative ease and accuracy?
>

BDFL (AJ 77, 405 (1972)) give 1.86 ± 0.14 Jy for 3C223.2 and
 5.85 ± 0.14 Jy for 3C403

both at 1400 MHz. Robert would be the person to ask about the latest and
greatest recalibration of the BDFL flux density scale to modern dress.
The measurements were done with the NRAO 300-ft so should be relatively
good compromise between sensitivity to large scales while minimizing
confusion.

The other source of more modern flux densities from the same instrument
is Broderick and Condon's (1985) 1400-MHz slewing survey.

A.

From root Mon Nov 20 11:12:05 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil])

["1454" "Mon" "20" "November" "1995" "16:10:51" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.951120154602.14307A-100000@mraosa>" "33" "Re: uv matching." "^From:" nil nil "11" nil nil (number
" " mark " R Jane Dennett-Thor Nov 20 33/1454 " thread-indent "\\Re: uv matching.\\n") nil]
nil]

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA181814; Mon, 20 Nov 1995 11:11:22 -0500

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tHYo1-0005dpC; Mon, 20 Nov 95 16:10 GMT

X-Sender: jdt@mraosa

In-Reply-To: <9511201436.AA106164@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.951120154602.14307A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: uv matching.

Date: Mon, 20 Nov 1995 16:10:51 +0000 (GMT)

getting my head lost in this, but:

I dont' think its because i haven't cleaned deep enough. i will run a
check by using a lower resolution, which i have already decided is fine.
The sort of values we are talking about at present are, apparently:
residual flux in wing = 12mJy
total flux in wing, before all this proc. = 250mJy
ditto, after = 150mJy

Of course, I can't really tell how much flux is left, because it's left in
Jy/dirty beam but the algorithm uses the fitted beam to decide the flux I
dn't think this should make that much difference (not a fator of 100 which
we are missing), although this is a reason i want to do a lower
resolution, heavily tapered map.

Was also wondering if it might be because the reverse FT of the CC ends
up putting flux way out in the uvplane because of the point-like nature
of the cc- parts of the plane which aren't sampled. I might have gotten
this wrong, but i thought it might be a possibility.

But, other bizarre things are going on- the L band data with no taper fits
a beam of 7.42 x 5.80 arcsec. After the UVSUB, the fitted beam is 5.63 x
4.56" (all datasets post-UVSUB require a uvtaper of 28kl to give a fitted
beam of 7.19 x 6.08 arcsec). I'm baffled, astonished and in need of tea.
I'm off for something to eat and relax a while befere i come back to
investigate, because i can't see anything wrong with what i've done and
have no explanation for this at all.

i'll keep you posted.

j.

From brodrigu Mon Nov 20 13:28:31 1995
X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]
["133" "Mon" "20" "November" "1995" "13:28:29" "-0500" "Billie Rodriguez" "brodrigu@polaris.cv.nrao.edu"
"<9511201828.AA73094@polaris.cv.nrao.edu>" "9" "J. Dennett-Thorpe" "^From:" nil nil "11" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA73094; Mon, 20 Nov 1995 13:28:30 -0500
Message-Id: <9511201828.AA73094@polaris.cv.nrao.edu>
X-Mailer: ELM [version 2.4 PL23]
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Length: 133
From: "Billie Rodriguez, 804 296-0312" <brodrigu@polaris.cv.nrao.edu>
To: abridle@polaris.cv.nrao.edu (Alan Bridle)
Subject: J. Dennett-Thorpe
Date: Mon, 20 Nov 1995 13:28:29 -0500 (EST)

Dr. Bridle:

Would you happen to have a forwarding address for her? I have
mail that I need to send to her.

Thanks!

Billie

From abridle Mon Nov 20 13:40:57 1995
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["256" "Mon" "20" "November" "1995" "13:40:57" "-0500" "Alan Bridle" "abridle" nil "16" "Re: J. Dennett-Thorpe"
"^From:" nil nil "11" nil nil nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA174087; Mon, 20 Nov 1995 13:40:57 -0500
Message-Id: <9511201840.AA174087@polaris.cv.nrao.edu>
In-Reply-To: <9511201828.AA73094@polaris.cv.nrao.edu>
References: <9511201828.AA73094@polaris.cv.nrao.edu>
From: abridle (Alan Bridle)
To: "Billie Rodriguez, 804 296-0312" <brodrigu@polaris.cv.nrao.edu>
Subject: Re: J. Dennett-Thorpe
Date: Mon, 20 Nov 1995 13:40:57 -0500

Billie Rodriguez writes:

>
> Dr. Bridle:
>
> Would you happen to have a forwarding address for her? I have
> mail that I need to send to her.
>

Mullard Radio Astronomy Observatory
Cavendish Laboratory
Madingley Road
Cambridge CB3 0HE
U.K.

From root Mon Nov 20 16:11:23 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["1648" "Mon" "20" "November" "1995" "21:11:11" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.951120203021.17584A-100000@mraosa>" "32" "\"resampling\" at same points." "^From:" nil nil "11" nil
nil (number " " mark " R Jane Dennett-Thor Nov 20 32/1648 " thread-indent "\"resampling\" at same points.\"\\n") nil]
nil)

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA127905; Mon, 20 Nov 1995 16:11:15 -0500

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tHdUf-0005crC; Mon, 20 Nov 95 21:11 GMT

X-Sender: jdt@mraosa

In-Reply-To: <9511201436.AA106164@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.951120203021.17584A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: "resampling" at same points.

Date: Mon, 20 Nov 1995 21:11:11 +0000 (GMT)

Hi again,

Well, i'm afraid there is no way I can account for the missing flux in terms of residuals (at least not in a simple manner). There's a missing 0.1Jy or so (in 1.9Jy, ~.4Jy in the wings and essentially all of it missing there). I'm up for believing that this is due to the following:

the FT puts the flux outside the ranges of the actual sampling and we never get it back. Or simply in parts of the 'sampled' uv plane where we do actually a the FT puts the flux outside the ranges of the actual sampling and we never get it back. Or simply in parts of the 'sampled' uv plane where we do not actually sample. THis could be because

(i) our model is not actually a very good representation of the source- in particular it isn't very "good" in the wings where it attempts to represent the extended smooth structure as a (moderately small) number of point sources - here frailties of clean are particularly apparent, for whilst it might get all the flux and sort of put it in the right places (the wings), any "rice pudding" obviously sends things up the creek. And I'm not actually sure what UVSUB takes as its "clean cpts" - does it take the gaussians fitted to them, or does it genuinely take point sources. If the latter, I think the above is certainly a problem if not "the" problem.

(ii) Because the header now lies about the frequency. There are two IF's 1465 & 1446 MHz, but which were joined together with a supposed frq shift in DBCON, - the history file doesn't seem to record whether this was turned on or not. If the freq shift was operative i don't really see why this matters that much.

hope the above makes sense,

j.

From abridle Tue Nov 21 13:32:01 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["2098" "Tue" "21" "November" "1995" "13:31:48" "-0500" "Alan Bridle" "abridle" nil "49" "Re: uv matching."

"^From:" nil nil "11" nil nil nil nil]

nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA146051; Tue, 21 Nov 1995 13:31:48 -0500

Message-Id: <9511211831.AA146051@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.951120154602.14307A-100000@mraosa>

References: <9511201436.AA106164@polaris.cv.nrao.edu>

<Pine.SOL.3.91.951120154602.14307A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: uv matching.

Date: Tue, 21 Nov 1995 13:31:48 -0500

Jane Dennett-Thorpe writes:

>

> getting my head lost in this, but:

>

> I dont' think its because i haven't cleaned deep enough. i will run a

> check by using a lower resolution, which i have already decided is fine.

> The sort of values we are talking about at present are, apparently:

> residual flux in wing = 12mJy

> total flux in wing, before all this proc. = 250mJy

> ditto, after = 150mJy

>

> Of course, I can't really tell how much flux is left, because it's left in

> Jy/dirty beam but the algorithm uses the fitted beam to decide the flux I

> dn't think this should make that much difference (not a fator of 100 which

> we are missing), although this is a reason i want to do a lower

> resolution, heavily tapered map.

I got lost myself here, what's the factor of 100?

>

>

> Was also wondering if it might be because the reverse FT of the CC ends

> up putting flux way out in the uvplane because of the point-like nature

> of the cc- parts of the plane which aren't sampled. I might have gotten

> this wrong, but i thought it might be a possibility.

>

I don't think there's any flux "put" places where it should not be, it's simply a question of computing what the phase of the constant-flux visibility each point CC should be at the u,v co-ordinate of each actual measurement.

> But, other bizarre things are going on- the L band data with no taper fits

> a beam of 7.42 x 5.80 arcsec. After the UVSUB, the fitted beam is 5.63 x

> 4.56" (all datasets post-UVSUB require a uvtaper of 28kl to give a fitted

> beam of 7.19 x 6.08 arcsec). I'm baffled, astonished and in need of tea.

> I'm off for something to eat and relax a while befere i come back to

> investigate, because i can't see anything wrong with what i've done and

> have no explanation for this at all.

>

That part I simply don't understand, as the beam should just be the transform of the sampling function, and does not depend in any way on what was sampled. It sounds as if some data are being lost, or reweighted, somewhere in the process that they should not be.

A.

From abridle Tue Nov 21 13:36:55 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil])

["2124" "Tue" "21" "November" "1995" "13:35:41" "-0500" "Alan Bridle" "abridle" nil "45" "Re: \"resampling\" at same points." "^From:" nil nil "11" nil nil nil nil nil])

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA65956; Tue, 21 Nov 1995 13:35:41 -0500

Message-Id: <9511211835.AA65956@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.951120203021.17584A-100000@mraosa>

References: <9511201436.AA106164@polaris.cv.nrao.edu>

<Pine.SOL.3.91.951120203021.17584A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: "resampling" at same points.

Date: Tue, 21 Nov 1995 13:35:41 -0500

Jane Dennett-Thorpe writes:

>

> Hi again,

>

> Well, i'm afraid there is no way I can account for the missing flux in
> terms of residuals (at least not in a simple manner). There's a missing
> 0.1Jy or so (in 1.9Jy, ~.4Jy in the wings and essentially all of it
> missing there). I'm up for believing that this is due to the following:

>

> the FT puts the flux outside the ranges of the actual sampling and we
> never get it back. Or simply in parts of the 'sampled' uv plane where we
> do actually a the FT puts the flux outside the ranges of the actual
> sampling and we never get it back. Or simply in parts of the 'sampled' uv
> plane where we do not actually sample. THis could be because

>

> (i) our model is not actually a very good representation of the source- in
> particular isn't very "good" in the wings where it attempts to
> represent the extended smooth structure as a (moderately small) number of
> point sources - here frailties of clean are particularly apparent, for
> whilst it might get all the flux and sort of put it in the right places
> (the wings), any "rice pudding" obviously sends things up the creek. And
> I'm not actually sure what UVSUB takes as its "clean cpts" - does it take
> the gaussians fitted to them, or does it genuinely take point sources. If
> the latter,I think the above is certainly a problem if not "the" problem.

No, they are point sources, sine waves whose phases are to be determined, that's all. The problem may have to do with the CC not filling the wings, however. What does a CC image restored with a beamsize << the pixel, and with no residual noise restored, look like?

>

> (ii) Because the header now lies about the frequency. There are two IF's
> 1465 & 1446 MHz, but which were joined together with a supposed frq shift
> in DBCON, - the history file doesn't seem to record whether this was
> turned on or not. If the freq shift was operative i don't really see why
> this matters that much.

>

I think that should be only a minor detail (for the inner u,v, plane).

I might be missing something, though.

A.

From root Tue Nov 21 13:38:52 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["674" "Tue" "21" "November" "1995" "18:38:37" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "17"

"Re: uv matching." "^From:" nil nil "11" nil nil nil nil]
nil)

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA169818; Tue, 21 Nov 1995 13:38:46 -0500

Received: from mraosb.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tHxaZ-0005dpC; Tue, 21 Nov 95 18:38 GMT

X-Sender: jdt@mraosb

In-Reply-To: <9511211831.AA146051@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.951121183539.9631A-100000@mraosb>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: uv matching.

Date: Tue, 21 Nov 1995 18:38:37 +0000 (GMT)

> > The sort of values we are talking about at present are, apparently:
> > residual flux in wing = 12mJy
> > total flux in wing, before all this proc. = 250mJy
> > ditto, after = 150mJy
> >
> > Of course, I can't really tell how much flux is left, because it's left in
> > Jy/dirty beam but the algorithm uses the fitted beam to decide the flux I
> > dn't think this should make that much difference (not a factor of 100 which
> > we are missing)
>
> I got lost myself here, what's the factor of 100?

Sorry, TEN, factor of 10. To account for the fact that we apparently lose
100mJy, and if it was all in the residuals we thought this was only around
10mJY

j.

From root Tue Nov 21 13:55:47 1995

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["1751" "Tue" "21" "November" "1995" "18:54:54" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.951121184048.9631B-100000@mraosb>" "30" "Re: \"resampling\" at same points." "^From:" nil nil "11"
nil nil nil nil]
nil)

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA186110; Tue, 21 Nov 1995 13:55:28 -0500

Received: from mraosb.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tHxqL-0005dYC; Tue, 21 Nov 95 18:54 GMT

X-Sender: jdt@mraosb

In-Reply-To: <9511211835.AA65956@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.951121184048.9631B-100000@mraosb>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: "resampling" at same points.

Date: Tue, 21 Nov 1995 18:54:54 +0000 (GMT)

> > (i) our model is not actually a very good representation of the source- in
> > particular it isn't very "good" in the wings where it attempts to
> > represent the extended smooth structure as a (moderately small) number of
> > point sources - here frailties of clean are particularly apparent, for
> > whilst it might get all the flux and sort of put it in the right places
> > (the wings), any "rice pudding" obviously sends things up the creek. And
> > I'm not actually sure what UVSUB takes as its "clean cpts" - does it take
> > the gaussians fitted to them, or does it genuinely take point sources. If
> > the latter, I think the above is certainly a problem if not "the" problem.
>
> No, they are point sources, sine waves whose phases are to be determined,
> that's all. The problem may have to do with the CC not filling the
> wings, however. What does a CC image restored with a beamsize << the
> pixel, and with no residual noise restored, look like?

A: well, as a d-fn restoration it looks pretty speckly. as i said our
model isn't terribly good. (I don't understand why you start that sentence
with 'no' - what are we mis-communicating about?) My point was if it took
the restored beam it would be fine, because then it *is* transforming
something smooth and 'real-looking'. I don't understand what you mean
by "sine waves....". The FT of a point source -> constant (isn't it..
doesn't it...?) but i'm not sure how on earth this is physically relevant
to the case at hand so that was why i thought maybe a gaussian was used
as the CC.

And (o joy) the different beam sizes remained with the new lower-res run.

thanks for your efforts here, sorry if i'm being clueless on my synthesis
imaging understanding!

j.

From abridle Tue Nov 21 16:15:26 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1806" "Tue" "21" "November" "1995" "16:15:21" "-0500" "Alan Bridle" "abridle" nil "41" "Re: \"resampling\" at same points." "^From:" nil nil "11" nil nil nil nil] nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA168550; Tue, 21 Nov 1995 16:15:21 -0500

Message-Id: <9511212115.AA168550@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.951121184048.9631B-100000@mraosb>

References: <9511211835.AA65956@polaris.cv.nrao.edu>

<Pine.SOL.3.91.951121184048.9631B-100000@mraosb>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: "resampling" at same points.

Date: Tue, 21 Nov 1995 16:15:21 -0500

Jane Dennett-Thorpe writes:

>

> A: well, as a d-fn restoration it looks pretty speckly. as i said our
> model isn't terribly good. (I don't understand why you start that sentence
> with 'no' - what are we mis-communicating about?)

Sorry, I was answering the first part of the question -- are they gaussians?

> My point was if it took

> the restored beam it would be fine, because then it *is* transforming
> something smooth and 'real-looking'. I don't understand what you mean
> by "sine waves...". The FT of a point source -> constant (isn't it..
> doesn't it...?) but i'm not sure how on earth this is physically relevant
> to the case at hand so that was why i thought maybe a gaussian was used
> as the CC.
>

FT of point at the phase stopping center = constant. Point anywhere else is a sine wave. Each CC --> constant amplitude, phase depending on its position in sky and the value of u,v. That's all. But if we put the prediction back on each u,v sampled point, we are simply saying there's flux in that pixel as seen by our array with its dirty beam. We wouldn't be losing flux out of the u,v plane, we are just saying that because we don't have infinite sampling we have a certain beamshape and certain sidelobes.

> And (o joy) the different beam sizes remained with the new lower-res run.

>

> thanks for your efforts here, sorry if i'm being clueless on my synthesis
> imaging understanding!

Is this simply saying that because we have more data in the higher frequency observations then we need to taper their coverage differently to get the same beam as at the lower frequency. If this doesn't make sense, it may be because I'm beginning to get a bit confused about how, and when, you tried to match the coverages at the beginning of the procedure.

A.

From root Wed Nov 22 06:58:24 1995

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["1457" "Wed" "22" "November" "1995" "11:55:59" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "35"

"Re: \"resampling\" at same points." "^From:" nil nil "11" nil nil nil nil
nil)

Received: from mraos.ra.phy.cam.ac.uk by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA31301; Wed, 22 Nov 1995 06:56:13 -0500

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tIDmZ-0005e2C; Wed, 22 Nov 95 11:56 GMT

X-Sender: jdt@mraosa

In-Reply-To: <9511212115.AA168550@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.951122112805.28277A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: "resampling" at same points.

Date: Wed, 22 Nov 1995 11:55:59 +0000 (GMT)

hi Alan,

I think time has come for a recap of what i'm doing and the problems.
in an attempt to make this clear:

- [1] map L band with uvra 0-20, no taper. clean to noise.
- [2] use UVSUB to put CC of [1] onto uvresiduals of [1]
- [3] remap resultant uv data from [2] using uvra 0-20 again. clean to noise
- [4] divide maps [3]/[1]

results:

(i) in [3] the fitted beam is smaller than in [1], (and therefore one has to taper to get it to get the same resulting area as [1])

(ii) from [4] we find that flux goes missing in the wings. To make some assessment of whether this is due to the fact that some of the flux was not cleaned off in the wings:

total residual flux in a wing [1] 6 mJy

total res+CC flux in a wing [1] 240

total res flux in a wing [3] 9

total res+cc " " [3] 150

(no tapers applied to UVSUBED data)

I've messed around tinkering with things - applying the taper, reducing the amplitueds of the uv rediduals onto which the CC were added so as to be able to clean the resulting map much more deeply, and others, but the result doesn't get changed - it may put that flux in the wing down to 130mJy or up to 170mJy, but it isn't encouraging.

So whilst you may have convinced me that nothing i have suggested should be the source of the missing flux, (although i'm not sure you have), I have no more ideas at present and the question remains - where did it go?? and, why on earth does the beamfit change?

wonderingly,

jane

From root Thu Jan 25 14:14:32 1996

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["255" "Thu" "25" "January" "1996" "19:10:20" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.960125190602.14686A-100000@mraosa>" "12" "" "^From:" nil nil "1" nil nil nil nil]
nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA30532; Thu, 25 Jan 1996 14:14:28 -0500

Received: from mraos.ra.phy.cam.ac.uk (root@mraos.ra.phy.cam.ac.uk [131.111.48.8]) by cv3.cv.nrao.edu (8.7.1/8.7.1/CV-
2.1) with SMTP id OAA07523 for <abridle@polaris.cv.nrao.edu>; Thu, 25 Jan 1996 14:14:15 -0500 (EST)

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tfX3w-0005crC; Thu, 25 Jan 96 19:10 GMT

X-Sender: jdt@mraosa

Message-Id: <Pine.SOL.3.91.960125190602.14686A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Date: Thu, 25 Jan 1996 19:10:20 +0000 (GMT)

hi Alan,

I am in the process of doing applications for various astronomy jobs,
and wondered if you would be willing to be one of my referees?

Hope all is well with yourself and Mary, and that the new year is
behaving benevolently towards you.

j.

From abridle Thu Jan 25 15:40:26 1996

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil

["752" "Thu" "25" "January" "1996" "15:40:19" "-0500" "Alan Bridle" "abridle" nil "28" "" "^From:" nil nil "1" nil nil nil nil])

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA30676; Thu, 25 Jan 1996 15:40:19 -0500

Message-Id: <9601252040.AA30676@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.960125190602.14686A-100000@mraosa>

References: <Pine.SOL.3.91.960125190602.14686A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Date: Thu, 25 Jan 1996 15:40:19 -0500

Jane Dennett-Thorpe writes:

>

> hi Alan,

>

> I am in the process of doing applications for various astronomy jobs,

> and wondered if you would be willing to be one of my referees?

Most certainly, I would be glad to help.

>

> Hope all is well with yourself and Mary, and that the new year is

> behaving benevolently towards you.

>

We've been having "fun" with snow this year (two feet in one storm, followed by another six inches a few days later), but compared to our situation last year we are both having a fine old time. Mary continues to shake off the after-effects of her chemotherapy so life is much more as it should be for us both.

Are you starting on the thesis-writing now, or still beating on images, or both?

A.

From abridle Fri Jan 26 13:51:57 1996
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["1430" "Fri" "26" "January" "1996" "13:46:43" "-0500" "Alan Bridle" "abridle" nil "39" "" ""^From:" nil nil "1" nil nil
nil nil]
nil)
Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA46176; Fri, 26 Jan 1996 13:46:43 -0500
Message-Id: <9601261846.AA46176@polaris.cv.nrao.edu>
In-Reply-To: <Pine.SOL.3.91.960126094105.16767A-100000@mraosa>
References: <9601252040.AA30676@polaris.cv.nrao.edu>
<Pine.SOL.3.91.960126094105.16767A-100000@mraosa>
From: abridle (Alan Bridle)
To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
Date: Fri, 26 Jan 1996 13:46:43 -0500

Jane Dennett-Thorpe writes:

>
> Thanks Alan,
>
> And now for the, erm, even less pleasant part.... Two applications
> presently in the action file are a European Network job, which I'd like
> to take to Leiden (there are 6 institutions involved), and one in
> Potsdam. The thing is <shamefaced> the deadlines are 31 Jan (post by) & 2
> Feb (in Germany by). As my stuff will have arrived, I'm sure another few
> days for the referees reports won't matter. But if this is too soon for
> you to be able to do it, don't worry, i shall put another willing soul
> down as my third referee this time, and ask you (with more notice) next time.
>
>

Oops, next week is already looking like a small crisis for me so maybe
this time it would be better to use the "other willing soul". But thereafter,
I'd be happy to oblige.

> Also am too much of a perfectionist: if i
> start writing now i will take 9 months to write it, if i start in April
> i'll take 6....

Good to realize that, at this point. I do believe a thesis is a means to
an end, not the end in itself.

>
> Other thing is that I'm fortunate enough to have been in the right place
> at the right time when someone was desperately looking for someone to
> accompany her observing. So i'm off on the 2nd to learn how to do IR
> spectroscopy and imaging in Chile.
>

Sounds like a good investment all round, have a great trip!

A.

From root Mon Jan 29 13:21:08 1996

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["554" "Mon" "29" "January" "1996" "18:16:23" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.960129181015.3879A-100000@mraosa>" "15" "Re: your mail" "^From:" nil nil "1" nil nil nil nil]
nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA28443; Mon, 29 Jan 1996 13:20:56 -0500

Received: from mraos.ra.phy.cam.ac.uk (root@mraos.ra.phy.cam.ac.uk [131.111.48.8]) by cv3.cv.nrao.edu (8.7.1/8.7.1/CV-
2.1) with SMTP id NAA05658 for <abridle@polaris.cv.nrao.edu>; Mon, 29 Jan 1996 13:20:19 -0500 (EST)

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tgy7s-0005csC; Mon, 29 Jan 96 18:16 GMT

X-Sender: jdt@mraosa

In-Reply-To: <9601261846.AA46176@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.960129181015.3879A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: your mail

Date: Mon, 29 Jan 1996 18:16:23 +0000 (GMT)

Alan,

Things are pretty tricky here, Paul Alexander (the "other willing soul")
is also incredibly busy this week, it being term and all that, so will
also not be able to get it written this week. So its going to be late
whatever.

Given this I would prefer you as my referee both because you spent more
time with me, and because you are in a different institution. If you are
able to write the reference within a week of the deadlines, I would be
extremely grateful if you could. If not, then as I said, someone will...

Please let me know,
jane

From abridle Mon Jan 29 13:54:07 1996

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["651" "Mon" "29" "January" "1996" "13:53:41" "-0500" "Alan Bridle" "abridle" nil "19" "Re: your mail" "^From:"
nil nil "1" nil nil nil nil]
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)

id AA41486; Mon, 29 Jan 1996 13:53:41 -0500

Message-Id: <9601291853.AA41486@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.960129181015.3879A-100000@mraosa>

References: <9601261846.AA46176@polaris.cv.nrao.edu>

<Pine.SOL.3.91.960129181015.3879A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: your mail

Date: Mon, 29 Jan 1996 13:53:41 -0500

Jane Dennett-Thorpe writes:

>

> Alan,

>

> Things are pretty tricky here, Paul Alexander (the "other willing soul")

> is also incredibly busy this week, it being term and all that, so will

> also not be able to get it written this week. So its going to be late

> whatever.

>

> Given this I would prefer you as my referee both because you spent more

> time with me, and because you are in a different institution. If you are

> able to write the reference within a week of the deadlines, I would be

> extremely grateful if you could. If not, then as I said, someone will...

>

OK, I'll take a crack, who should it/they go to?

A.

From root Fri Jan 26 06:20:11 1996

X-VM-v5-Data: ([nil nil nil nil t nil nil nil nil]

["1996" "Fri" "26" "January" "1996" "11:15:50" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk"
"<Pine.SOL.3.91.960126094105.16767A-100000@mraosa>" "44" "" "^From:" nil nil "1" nil nil nil nil]
nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA55417; Fri, 26 Jan 1996 06:20:10 -0500

Received: from mraos.ra.phy.cam.ac.uk (mraos.ra.phy.cam.ac.uk [131.111.48.8]) by cv3.cv.nrao.edu (8.7.1/8.7.1/CV-2.1)
with SMTP id GAA18493 for <abridle@polaris.cv.nrao.edu>; Fri, 26 Jan 1996 06:20:02 -0500 (EST)

Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0tfm8F-0005dsC; Fri, 26 Jan 96 11:15 GMT

X-Sender: jdt@mraosa

In-Reply-To: <9601252040.AA30676@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.960126094105.16767A-100000@mraosa>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Date: Fri, 26 Jan 1996 11:15:50 +0000 (GMT)

Thanks Alan,

And now for the, erm, even less pleasant part.... Two applications presently in the action file are a European Network job, which I'd like to take to Leiden (there are 6 institutions involved), and one in Potsdam. The thing is <shamefaced> the deadlines are 31 Jan (post by) & 2 Feb (in Germany by). As my stuff will have arrived, I'm sure another few days for the referees reports won't matter. But if this is too soon for you to be able to do it, don't worry, i shall put another willing soul down as my third referee this time, and ask you (with more notice) next time.

> We've been having "fun" with snow this year (two feet in one storm,
> followed by another six inches a few days later), but compared to
> our situation last year we are both having a fine old time. Mary
> continues to shake off the after-effects of her chemotherapy so life
> is much more as it should be for us both.

Yes, the snows made the news here. i thought about you and wondered if you were snowed in. I'm glad Mary is recovering well, and that you both are beginning to feel freer from the medicinal constraints.

>

> Are you starting on the thesis-writing now, or still beating on
> images, or both?

Thesis writing hasn't started, although I've got to the stage to ensure that my outputs are in 'thesis format'!. There's another two sources to go (3c390.3 - don't suppose you ever got to the bottom of those mysterious rings? - and 3c98). Also planning to get back to the modelling for a while soon. I function better (or faster) when i have some deadline - self-imposed or otherwise. Also am too much of a perfectionist: if i start writing now i will take 9 months to write it, if i start in April i'll take 6....

Other thing is that I'm fortunate enough to have been in the right place at the right time when someone was desperately looking for someone to

accompany her observing. So i'm off on the 2nd to learn how to do IR spectroscopy and imaging in Chile.

j.

From root Tue Jan 30 07:35:19 1996
X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil
["548" "Tue" "30" "January" "1996" "11:32:04" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "22"
"Thank you" "^From:" nil nil "1" nil nil nil nil]
nil)
Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA32725; Tue, 30 Jan 1996 07:35:18 -0500
Received: from mraos.ra.phy.cam.ac.uk (root@mraos.ra.phy.cam.ac.uk [131.111.48.8]) by cv3.cv.nrao.edu (8.7.1/8.7.1/CV-
2.1) with SMTP id HAA18047 for <abridle@polaris.cv.nrao.edu>; Tue, 30 Jan 1996 07:35:14 -0500 (EST)
Received: from mraosa.ra.phy.cam.ac.uk by mraos.ra.phy.cam.ac.uk with smtp
(Smail3.1.29.0 #2) id m0thEI9-0005dpC; Tue, 30 Jan 96 11:32 GMT
X-Sender: jdt@mraosa
In-Reply-To: <9601291853.AA41486@polaris.cv.nrao.edu>
Message-Id: <Pine.SOL.3.91.960130112533.7397A-100000@mraosa>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>
To: Alan Bridle <abridle@polaris.cv.nrao.edu>
Subject: Thank you
Date: Tue, 30 Jan 1996 11:32:04 +0000 (GMT)

Alan, you really are a star. Thanks very much indeed. next time, I
promise I won't land this on you in such a manner.

The addresses are:

Attn Prof. Gunther Hasinger,
Astrophysikalisches Institut Potsdam
An der Sternwarte 16
14482 Potsdam
Germany

European Network Appointments Committee
Max-Planck Institut für Astrophysik
Karl-Schwarzschild-Str 1
85740 Garching bei Muenchen
Germany

i'll send my cv and one of the cover letters to follow.
again, thank you. as it is my birthday today i consider it a rather
excellent birthday present ;)

j.

From abridle Wed Jan 31 08:29:03 1996

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["367" "Wed" "31" "January" "1996" "08:28:34" "-0500" "Alan Bridle" "abridle" nil "13" "Re: your mail" "^From:"
nil nil "1" nil nil nil nil
nil)

Received: by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03)
id AA31260; Wed, 31 Jan 1996 08:28:34 -0500

Message-Id: <9601311328.AA31260@polaris.cv.nrao.edu>

In-Reply-To: <Pine.SOL.3.91.960129181015.3879A-100000@mraosa>

References: <9601261846.AA46176@polaris.cv.nrao.edu>

<Pine.SOL.3.91.960129181015.3879A-100000@mraosa>

From: abridle (Alan Bridle)

To: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

Subject: Re: your mail

Date: Wed, 31 Jan 1996 08:28:34 -0500

Hi Jane,

(Belated) happy birthday. Your letters are on their way.

I notice from your CV that something went into the Bologna proceedings re the spectral index project. Could you send me a copy when you have time? I also presume the "MN (submitted)" item re the quasars is actually "in preparation"?

Have a great trip to shorter wavelengths and summer

A.

From root Wed Jan 31 09:56:13 1996

X-VM-v5-Data: ([nil nil nil nil nil nil nil nil nil]

["703" "Wed" "31" "January" "1996" "14:52:19" "+0000" "Jane Dennett-Thorpe" "jdt@mrao.cam.ac.uk" nil "18" "Re: your mail" "^From:" nil nil "1" nil nil nil nil] nil)

Received: from cv3.cv.nrao.edu by polaris.cv.nrao.edu (AIX 3.2/UCB 5.64/4.03) id AA31113; Wed, 31 Jan 1996 09:56:13 -0500

Received: from mraos.ra.phy.cam.ac.uk (root@mraos.ra.phy.cam.ac.uk [131.111.48.8]) by cv3.cv.nrao.edu (8.7.1/8.7.1/CV-2.1) with SMTP id JAA06021 for <abridle@polaris.cv.nrao.edu>; Wed, 31 Jan 1996 09:56:11 -0500 (EST)

Received: by mraos.ra.phy.cam.ac.uk (Smail3.1.29.0 #2) id m0thdtU-0005e4C; Wed, 31 Jan 96 14:52 GMT

X-Sender: jdt@mraos

In-Reply-To: <9601311328.AA31260@polaris.cv.nrao.edu>

Message-Id: <Pine.SOL.3.91.960131143707.22759B-100000@mraos>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

From: Jane Dennett-Thorpe <jdt@mrao.cam.ac.uk>

To: Alan Bridle <abridle@polaris.cv.nrao.edu>

Subject: Re: your mail

Date: Wed, 31 Jan 1996 14:52:19 +0000 (GMT)

oops. did i not send a copy of the bologna proc to you. ah shucks. never mind, you've only got your bname on it. you didn't really want to see it did you? as for the quasars you most certainly will see that before it goes off, and you're right to say the 'submitted' is actually 'in prep' but as we actually thought this end it was closer to the common understanding of submitted than in prep.

i also notice, that if i actually sent the version of the cv i have here, i got the authors of IAU & MN things muddled. but, hey.

thanks very much for doing the references, so speedily too. i definitely owe you one for that.

IAU follows, and i'll be in contact re quasar paper when i get back.

j.