

I have developed two programs -- VLAPLAN and VLAUVPL -- to help continuum and line observers plan VLA observing strategies (and proposals) using an IBM PC or compatible computer. My aim has been to consolidate into one menu-driven, self-documenting package the main algorithms, graphs and other information that are useful when designing VLA observing strategies. These resources were previously scattered through many different NRAO documents.

VLAPLAN is a spreadsheet in which you can adjust imaging parameters (such as resolution, field of view, allowable distortion, bandwidth, averaging time and sensitivity) interactively while reviewing the consequences for VLA configuration choices, total integration times, data set sizes and other critical parameters. It contains several tools to help you resolve conflicts between your imaging parameters, the VLA hardware capabilities, and restrictions imposed by VLA computing policies. It also provides "help" screens with information on known RFI signals, VLA configuration schedules, and other sources of advice about VLA hardware or VLA observing strategies.

VLAUVPL is a spreadsheet that plots the u,v tracks of the innermost or outermost three VLA antennas for a specified VLA configuration, declination and elevation limits. It also produces graphs of u,v distance versus Hour Angle and of elevation angle versus Hour Angle. It is a useful adjunct to VLAPLAN for projects that are sensitive to the details of the u,v coverage at large Hour Angles, where baselines may be highly foreshortened by projection.

Both VLAPLAN and VLAUVPL can run under Lotus 1-2-3 Version 2, Borland Quattro, or any other spreadsheet programs that can read and execute worksheet files in .WK1 or .WKQ format. You need an IBM-compatible PC with at least 320k of available RAM, a graphics board, and the host spreadsheet program. Little or no user familiarity with the host program is assumed, however. The worksheets provide their own menus and on-screen documentation, and the graphical displays scale themselves to the context of your inputs.

Copies of the software are available on 5-1/4 inch diskettes upon request to Sandra Montoya at NRAO, P.O. Box 0, Socorro, NM 87801; ask for the VLAPLAN distribution diskette. The diskette contains its own documentation files, but hard copy of a User's Guide is also available from Sandra Montoya; ask for VLA Computer Memo No. 179.

Alan Bridle



NATIONAL RADIO ASTRONOMY OBSERVATORY  
Edgemont Road, Charlottesville  
Virginia

INTERNAL MEMORANDUM

**TO:** Sandra Montoya  
**FROM:** Alan Bridle  
**DATE:** April 25, 1989  
**SUBJECT:** Revised (V. 1.31) VLAPLAN distribution diskette

Here is the revised distribution diskette for the VLAPLAN package. To distinguish this version from the December 1988 one, I have called it Version 1.31.

Please use this revised diskette as the master when filling any new orders for the VLAPLAN software. Computer Memo No. 179 is still fully applicable to this revised distribution diskette.

I will contact the people who already have the earlier version of the software; they can either ignore the change, or make it themselves to the version they have received. They are not likely to need new distribution diskettes just to get this change, which fixes a minor "bug" in the program.

As we discussed when I was at the AOC, it would be helpful for me to know who has asked for VLAPLAN (especially when I make small changes like this one), so I would be grateful if you could send me copies of letters that request the distribution package.

Thanks for your help with this.

RICHARD BARVAINIS  
Massachusetts Institute of Technology  
Haystack Observatory  
Westford, MA 01886



SANDRA MONTOYA  
NRAO  
P.O. Box 0  
SOCORRO, NM 87801

2-13-89 sm

February 9, 1989

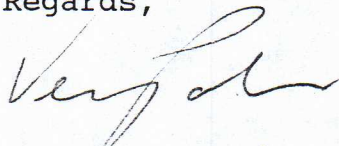
ATTENTION: Sandra Montoya

Would you please send me the VLAPLAN distribution diskette and VLA Computer Memo No. 179.

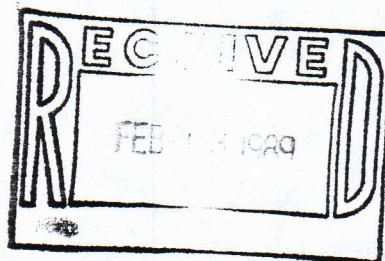
Vernon Pankonin  
National Science Foundation  
Room 615  
1800 G Street NW  
Washington, DC 20550

Thank you.

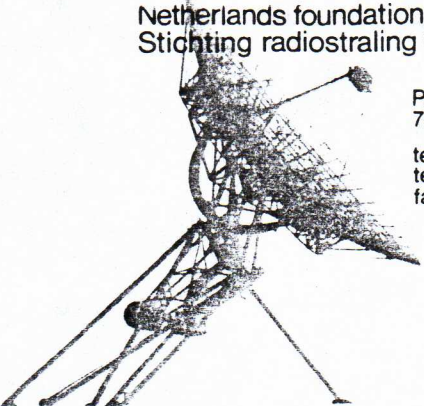
Regards,



Vernon Pankonin



Netherlands foundation for radio astronomy  
Stichting radiostraling van zonen melkweg



Postbus 2  
7990 AA Dwingeloo  
telefoon, 05219 - 7244  
telex, 42043 SRZM NL  
fax, 05219 - 7332

*2-17-89 sm*

S. Montoya  
NRAO  
P.O. Box 0  
SOCORRO NM87801  
U.S.A.

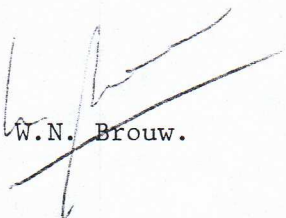
onze referentie:  
uw referentie:

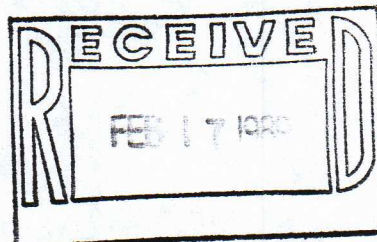
Dwingeloo, February 7, 1989

Dear Samiera,

We would like to receive a copy of the VLAPLAN distribution diskette.

Yours sincerely,  
Netherlands Foundation for  
Research in Astronomy (NFRA),

  
W.N. Brouw.



Bijlage(n):

DEPARTMENT OF ASTRONOMY



60 ST. GEORGE STREET  
UNIVERSITY OF TORONTO  
TORONTO ONTARIO  
CANADA M5S 1A1  
TEL. (416) 978-3149

*2-17-89 sm*

February 10, 1989.

Ms. Sandra Montoya,  
National Radio Astronomy Observatory,  
P.O. Box 0,  
Socorro, NM 87801  
U.S.A.

Dear Ms. Montoya:

I would be pleased to receive a copy of the VLA PLAN distribution diskette plus the User's Guide (VLA Computer Memo No. 179) advertised by Alan Bridle in NRAO Newsletter No. 38, 1989 Jan. 1.

I would also like to obtain VLA Test Memo No. 153, "The Tuning Range and Sensitivity of the VLA", by Rich Perley.

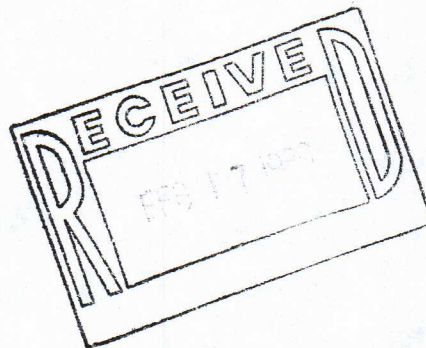
Thank you for your attention.

Yours sincerely,

A handwritten signature in cursive script that reads "E.R. Seaquist".

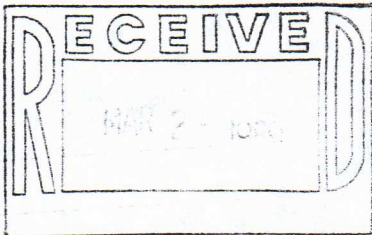
E.R. Seaquist  
Chairman

ERS:eo



VLA PLAN Dislette #179  
VLA Status Report  
Test Memo #153

GB - Wolfgang Bitla



THE UNIVERSITY OF BRITISH COLUMBIA

129 - 2219 MAIN MALL  
VANCOUVER, B.C., CANADA  
V6T 1W5

DEPARTMENT OF  
GEOPHYSICS AND ASTRONOMY

TELEPHONE(604) 228-2267  
TELEX 04-54245

February 14, 1989

Ms. Sandra Montoya  
NRAO  
P.O. Box 0  
Socorro, New Mexico  
87801

Dear Ms. Montoya:

I should very much appreciate if you could send me the VLAPLAN distribution diskette and a copy of the User's Guide (VLA Computer Memo no. 179).

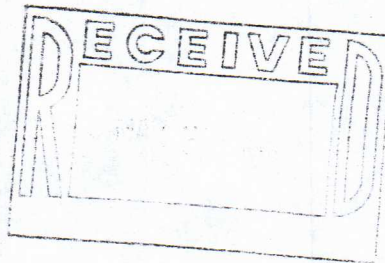
Thanking you, I remain,

Sincerely yours,

*T. K. Menon*

T.K. Menon  
Head and Professor

TKM/cr







**ONSA LA RYMDOBSERVATORIUM**  
CHALMERS TEKNISKA HÖGSKOLA

**ONSA LA SPACE OBSERVATORY**  
CHALMERS UNIVERSITY OF TECHNOLOGY

Onsala 23 February 1989

Ms Sandra Montoya  
National Radio Astronomy Observatory  
P.O. Box 0  
Socorro NM 87801  
U.S.A.

Dear Ms Montoya,

Please send me the VLAPLAN distribution diskette and the VLA Computer Memo No. 179.

Thank you in advance.

Yours sincerely

*Anders Winnberg*

Dr A. Winnberg

*3-2-89*

INPE ADDRESS  
FONE: (0123) 22-9977  
(0123) 3530 - CP 515  
JOSE DOS CAMPOS - SP

INSTITUTO DE PESQUISAS ESPACIAIS

INPE ADDRESS  
FONE: (0123) 22-9977  
TELEX: (0123) 3530 - CP 515  
12261 SÃO JOSE DOS CAMPOS - SP  
BRASIL

VLA Test Memo

3-2-89

by R. Perley

I WOULD GREATLY APPRECIATE RECEIVING A REPRINT OF  
GOSTARIA DE RECEBER UMA CÓPIA DE SEU TRABALHO INTITULADO:

VLA  
u!

- "The Tuning Range and Sensitivity of the VLA"  
(# 159 by R. Perley)
- a copy of the VLAPLAN /VLA UVPL software on 5 1/4" floppy disk with paper copy of User's Guide

WHICH APPEARED IN  
CITADO EM (see A. Bridle in NRAO Newsletter 38 (1989) 6)

(Can be included with my recent request of another VLA Memo to Alison Patrick)

ND SIGNATURE  
*Henric Anubali*

NAME AND SIGNATURE  
*Henric Anubali*

E ASSINATURA INPE-184

YOURS SINCERELY,  
ATENCIOSAMENTE

NOME E ASSINATURA

PARA RESPOSTA  
MAILING LABEL

To: smontoya@NRAO.BITNET  
Message-Id: <8903082357.AA23053@ast1.spa.umn.edu>

3-16-89 sm

8 March 1989

Hello. I am a graduate student at the University of Minnesota, working with Larry Rudnick. Larry is interested in getting a disk with a copy of

Press RETURN for more...

MAIL>

#1 9-MAR-1989 09:54:14

NEWMAIL

VLAPLAN. He mentioned that you might need to know what type of spreadsheet program we have here - we have Quattro. Our address is:

Larry Rudnick  
Dept. of Astronomy  
University of Minnesota  
116 S. Church St. SE  
Mpls., MN 55455

Thank you very much!

- Martha Anderson, UofM

MAIL>

University of Illinois  
at Urbana-Champaign

Department of Astronomy  
349 Astronomy Building  
1011 West Springfield Avenue  
Urbana, IL 61801

College of Liberal Arts  
and Sciences  
217 333-3090  
Telex: 9102409464 ASTRODEPT UOFIL

3-16-89 sm

March 13, 1989

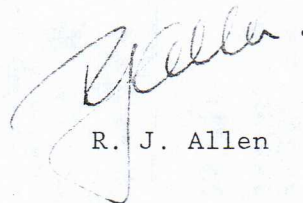
Ms. Sandra Montoya  
NRAO  
P.O. Box 0  
Socorro, NM 87801

Dear Ms. Montoya,

I am writing to request a copy of the VLAPLAN distribution diskette, as advertised in the NRAO newsletter No. 38. It would also be helpful to have a hard copy of the User's Guide, VLA Computer Memo No. 179.

Thank you for your help.

Sincerely,



R. J. Allen

Harold M. Butner  
Dept. of Astronomy  
University of Texas  
Austin, Tx 78712  
(512)471-1477

March 1, 1989

Sandra Montoya  
NRAO  
P. O. Box O  
Socorro, NM 87801

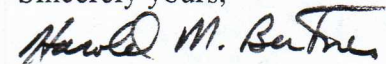
Dear Ms. Montoya,

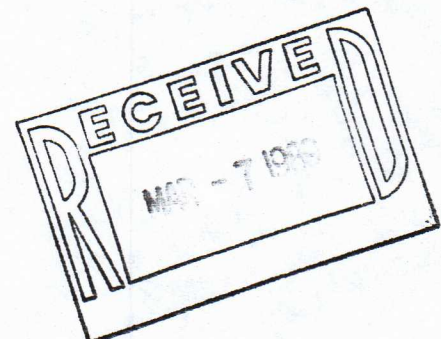
I request that copies of the following VLA products be sent to me at the address above:

- 1.) VLAPLAN distribution diskette
- 2.) VLA Computer Memo No.179.
- 3.) VLA Status Report
- 4.) VLA Test Memo. No. 153.

Thank you.

Sincerely yours,

  
Harold M. Butner





# Kapteyn Laboratorium

der Rijksuniversiteit te Groningen - Zernikegebouw  
Landleven 12 - Postbus 800 - 9700 AV Groningen - Nederland  
telefoon (050) 634073 - telex 53572 stars nl

Groningen, 23 February 1989

Dear Ellis Montoya,

In the recent NRAO Newsletter I read about the PC-based software for planning VLA observations by Alan Brindle. I would very much appreciate if you could send me a copy of the software VLAPLAN and VLAKVPL, and a copy of memorandum 179 for use at our Institute.

Thank you very much in advance,

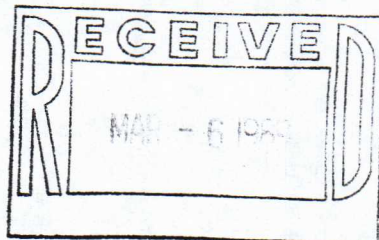
Sincerely,

*J. M. van der Sluis*

J. M. van der Sluis

Kapteyn Astronomical Institute  
Postbus 800

NL-9700 AV Groningen  
the Netherlands.



Send 4-12-89  
SR

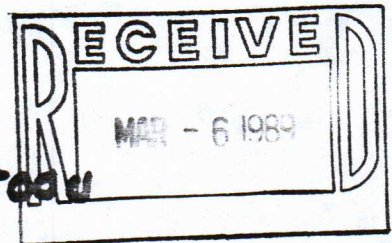
Dear Sandra

Would you please send me the VLAPLAN  
distribution diskettes along with the  
User Guide (VLA Computer Memo #179)?  
I would also appreciate receiving the  
most recent copy of the VLASORS distribution  
diskettes.

Thank you,  
Ralph

Telex: 62721450

Dr. Ralph Gaume  
Code 4134 G  
Naval Research Lab  
Washington DC 20375-5000





DEPARTMENT OF THE NAVY  
NAVAL RESEARCH LABORATORY  
WASHINGTON, D.C. 20375-5000

IN REPLY REFER TO:

*Code 4131*

27 February 1989

Ms. Sandra Montoya  
NRAO-VLA  
P.O. Box 0  
Socorro, NM 87801

Dear Ms. Montoya:

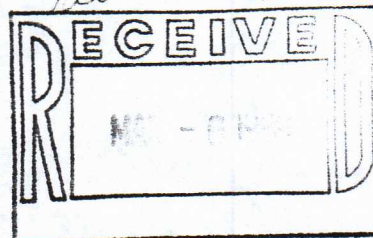
I would greatly appreciate it if you could send me a copy of the programs VLAPLAN and VLAUVPL which are mentioned as being available in the January NRAO Newsletter. Also, if you have it available, it would be most helpful if you could include a copy of the most recent version of the program and data for VLASORS.

Thanking you in advance, I remain

Sincerely,

Kurt W. Weiler  
NRL-Code 4131  
Washington, DC 20375-5000

*Telex: 627214 50*





=====

\$ mail

You have 1 new message.

MAIL> read

#1 11-APR-1989 17:22:47

NEWMAIL

From: VAX1::CVAX::CVAX::GATEWAY::"SKWOK@UNCAMULT.BITNET"

To: SMONTOYA AT NRAO

Subj:

Date sent: Tue, 11 Apr 89 17:10 MDT

To: smontoya@NRAO.BITNET

Message-ID: <890411231029.069036@UNCAMULT.BITNET>

To: SMONTOYA NRAO

Dear Ms. Smontoya:

I would like to receive a copy of the vlaplan software for IBM PC recently announced by Alan Bridle.

My address is : Dept. of Physics, University of Calgary, Calgary, Alberta, Canada T2N 1N4.

Thanks,

Sun Kwok

MAIL>

*Sent 4-12-89  
SK*

# Radiosterrenwacht

Postbus 2  
7990 AA DWINGELOO  
THE NETHERLANDS

S. A. BAUM  
tel. 05219-7244

8 February 1989

Sandra Montoya  
NRAO  
P.O. box 0  
Socorro, NM 87801 USA

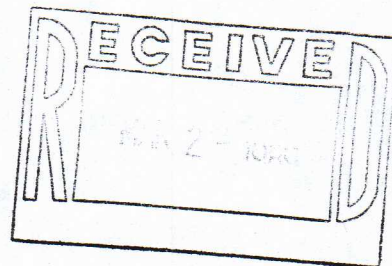
Dear Sandra,

Could you please send me diskettes with copies of the VLAPLAN and VLAUVPL software as well as a hard copy of the User's Guide (VLA Computer Memo No. 179).

Thanks,



Stefi A. Baum





Department of Physics and Astronomy

319/335-1686

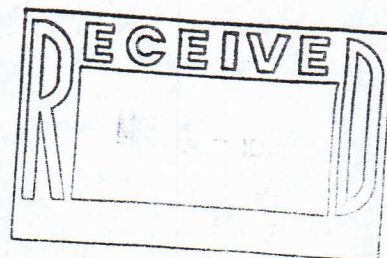
Sandy -

Could you please send Al Buidle's  
programs VLAPLAN and VLAUVPL on 5.25"  
diskettes (as per Jan '84 NRAO newsletter)?

Thanks

Robert Mutel

Also sent Computer memo # 179





STOCKHOLMS OBSERVATORIUM

S-133 36 SALTSJÖBADEN  
SWEDEN

Tel.: 08/717 03 80

TELEX: SOBSERV S 12972

TELEFAX: 08-717 4719

213-895N

89-02-07

Hi!

Please send me

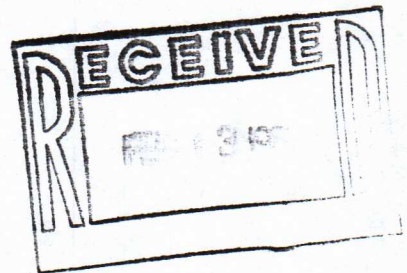
- 1) Copies of VLAPLAN and VLAUVPL diskettes
- 2) VLA Computer Memo No. 179
- 3) VLA Status Report
- 4) VLA Test Memorandum No. 153

I thank you very much.

Sincerely yours,

Aa. Sandqvist

(Aa. Sandqvist)



#3

10-FEB-1989 09:53:00

NEWMAIL

*Sent 2-10-89  
Jm*

From: VAX1::CVAX::SSL::PSI&IAFE::GDUBNER "Gloria Dubner"  
To: PSI&SSL::NRAO::TROMERO,GDUBNER  
Subj: Request from Argentina

Querida terry:

I should greatly appreciate if you can hand the following request to Sandra Montoya.

- a)the VLAPLAN and VLAUVPL diskettes for IBM/PC and
- b)the latest version of the VLA Status Report.

My postal address is: GLORIA DUBNER, IAFE,CC67,Suc.28  
1428 BUENOS AIRES, ARGENTINA.

Thanks a lot. Con mucho carinio, Gloria.

MAIL> reply

To: VAX1::CVAX::SSL::PSI&IAFE::GDUBNER,TROMERO

Subj: RE: Request from Argentina

Enter your message below. Press CTRL/Z when complete, or CTRL/C to quit:

Gloria, con mucho gusto! Exit



THE  
UNIVERSITY  
OF CALGARY

2500 University Drive N.W., Calgary, Alberta, Canada T2N 1N4

213-898m

Faculty of SCIENCE  
Department of PHYSICS

Telephone (403) 220-5385

BITNET ADDRESS: LEAHY@UNCAMULT

February 7, 1989

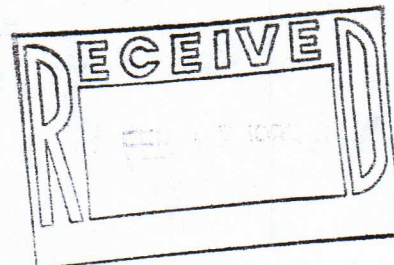
Sandra Montoya  
NRAO  
P.O. Box 0  
Socorro, New Mexico  
USA 87801

Dear Ms. Montoya:

I am writing to request a copy of the VLAPLAN diskette, VLA Computer Memo No. 179, the VLA Status Report, and VLA Test Memorandum No. 153. Thank you.

Sincerely

*Denis A. Leahy*  
Denis A. Leahy



Olympic Village and Speedskating - 1988

MAX-PLANCK-INSTITUT FÜR ASTRONOMIE

Dr. H.-J. Röser

2-13-89 SR

Sandra Montoya  
NR 40

HEIDELBERG 6.2.89  
TELEFON (06221) 528 (1) 206

Socorro, NM 87801

USA

UNSER ZEICHEN

IHR ZEICHEN

With reference to NRAO Newsletter #38, I  
would like to ask for a copy of the  
VLA PL AN and  
VLA U VPL programs.

Sincerely yours

Klausenfeld Röser



#1 2-MAY-1989 10:37:52

NEWMAIL

From: VAX1::VAX3::SMONTOYA  
To: ABRIDLE  
Subj: VLAPLAN

Chris Ruf called me, requesting a copy of the VLAPLAN. I did not have the revised edition in my PC at the time. Here is his address:

Chris Ruf  
JPL, MS 168-327  
4800 Oak Grove Dr.  
Pasadena, CA 91109

Have a nice day!!!

Sandra Montoya  
NRAO-VLA

MAIL)



#2 13-JUN-1989 12:48:23

NEWMAIL

From: VAX1::VAX3::SMONTOYA  
To: ABRIDLE  
Subj: VLAPLAN

I sent a copy of the new version of the VLAPlan, the diskette and Memo to:

C. P. Stern  
MS-70  
Center for Astrophysics  
60 Garden St.  
Cambridge, MA 02138

Sandra Montoya

MAIL> reply

■ CVAX

☐ CEX