

VLBA Utilization Report December 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA014	Aaron, S. Wardle, J. Roberts, D.	Brandeis Brandeis Brandeis	Polarization and spectral index mapping of the CSS quasar 3C309.1		2, 3.6	11	14.0
BB043	Beasley, A.J. Bastian, T.S. Niell, A.	NRAO-Socorro NRAO-Socorro Haystack	High-frequency VLBA observations of AE Aqr		1.3 with phased VLA	1	10.5
BC048	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Neill, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	REVISED:NASA space geodesy program observations for June-December, 95		3.6 Scheduled as RDGE04	7	24.0
BD023	Denn, G.R. Mutel, R.L.	Iowa Iowa	Monitoring BL Lac, with polarization		1.3, 2, 3.6	20	14.0
BD027	Diamond, P.J. Kemball, A.J.	NRAO-Socorro NRAO-Socorro	Multi-epoch observations of stellar SiO masers		0.7 with VLA single antenna	29	24.0
BG041	Geldzahler, B. Kafatos, B. Hollis, J.M. Bradshaw, C. Pedelty, J.A.	George Mason George Mason NASA-GSFC George Mason NASA-GSFC	High resolution observations of the symbiotic star R Aqr		6 with phased VLA	9	7.0
BG047	Greenhill, L. Koekemoer, A. Gwinn, C.R. Moran, J. Herrnstein, J. Henkel, C. van Breugel, W. Dey, A.	CfA Mt. Stromlo Calif.-Santa Barbara CfA CfA MPIFR Lawrence Livermore Lawrence Livermore	Ultraluminous water maser emission in an early-type galaxy at 100Mpc		1.3 with phased VLA	22	7.0
BJ020	Junor, B. Biretta, J.A. Wardle, J.	New Mexico STScI Brandeis	VLBA 6, 4cm polarimetry of Vir A.		6, 4	9	13.5
BK037	Kellermann, K. Zensus, A. Cohen, M. Vermeulen, R.	NRAO-CV NRAO-CV Caltech Caltech	Monitoring superluminal sources at 2cm		2	15	48.0
BL030	Lonsdale, C.J. Barthel, P.D.	Haystack Kapteyn	Resolving the interaction edge of 3C205 south		6 with phased VLA	31	18.0
BP026	Phillips, R.B. Deeney, B.D. Lestrade, J.-F.	Haystack Colorado Paris/JPL	WTT star polarization synthesis		3.6, 6 with phased VLA	12	7.0
BS019	Sjouwerman, L. Diamond, P. van Langevelde, H.J. Winnberg, A. Habing, A. Lindqvist, M.	Onsala NRAO-Socorro JIVE-Socorro Onsala Leiden Leiden	Stellar proper motions in galactic center from SiO and H2O masers		1.3 with phased VLA	23	4.0
GR012	Rupen, M.P. Bartel, N. Beasley, A.J. Conway, J. Bietenholz, M. Sorathia, B. Graham, D. Venturi, T. Umana, G. Rius, A. Altunin, V. Jones, D.	NRAO-Socorro York NRAO-Socorro JIVE-Onsala York York MPIFR Bologna Noto Barcelona JPL JPL	VLBI imaging of supernova 1993J in M81		3.6, 6, 18 with phased VLA	18	16.0
3MM			Three mm observations with Kitt Peak 12m	K	0.3	4	66.0
	Staff	NRAO	Maintenance Software			7, 14, 21,	126.0 24.0

Of a possible 744 hours, the VLBA was scheduled
Astronomical Observations: 213.6 hours, 29%
Tests and Calibrations: 158.5 hours, 21%
Maintenance: 94.2 hours, 13%
Downtime, 7.7 hours, 3.6%

Total number of projects was 13.

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA011	Alberdi, A. Lara, L. Marcaide, J.M. Kemball, A. Patnaik, A. Porcas, R. Pauliny-Toth, I.	ESA-LAEFF Bologna Valencia NRAO-Socorro MPIFR MPIFR MPIFR	Polarization sensitive VLBI measurements of 3C 454.3 and 3C 395		2, 3.6	27	12.0
BA012	Alberdi, A. Marcaide, J.M. Marscher, A.P. Gomez, J.L. Kemball, A.	ESA-LAEFF Valencia Boston Boston NRAO-Socorro	Dual polarization observations of the superluminal 4C 29.25		1.3, 2	3	14.0
BB049	Beasley, A.J. Bastian, T.S.	NRAO-Socorro NRAO-Socorro	Orbital monitoring of HR 1099 and UX ARI		3.6	16, 17, 18, 19, 20, 21	75.0
BB052	Bartel, N. Sorathia, B. Bietenholz, M. Carilli, C. Diamond, P.	York York York CfA NRAO-Socorro	Nuclear jet and counterjet in Cygnus A		1.3, 6	1	16.0
BB054	Bower, G.C. Backer, D.	Calif.-Berkeley Calif.-Berkeley	Multi-frequency polarimetry of 3C 454.3		1.3, 3.6	3, 4	24.0
BC046	Claussen, M.J. Braatz, J.A. Diamond, P.J. Wilson, A.S. Henkel, C.	NRAO-Socorro Maryland NRAO-Socorro STScI MPIFR	Water masers in the elliptical galaxy NGC 1052		1.3 With phased VLA	29	8.5
BC047	Coles, B. Grall, R. Klinglesmith, M.	Calif.-San Diego Calif.-San Diego Calif.-San Diego	Interplanetary scintillation measurements of the solar wind speed	LP	2, 3.6	11	0.3
BC048	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Hinwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Neill, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GSFC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	REVISED:NASA space geodesy program observations for June-December, 95		3.6	7	24.5
BG015	Greenhill, L. Diamond, P. Gwinn, C. Moran, J.	CfA NRAO-Socorro Calif.-Santa Barbara CfA	Tracing the dynamics of a protoplanetary disk		13	14	8.0
BG046	Greenhill, L.J. Braatz, J. Wilson, A.S. Moran, J.M. Herrnstein, J.R. Claussen, M.J.	CfA Maryland STScI CfA CfA NRAO-Socorro	The water maser in the Seyfert NGC 1386		1.3 With phased VLA	13	6.5
BH010	Hewitt, J.N. Haarsma, D.B. Katz, C.A. Moore, C.B. Trotter, C.S.	MIT MIT MIT MIT MIT	Gravitational lens monitoring with the VLBA		3.6, 18	25	20.0
BH012	Hough, D.H. Zensus, J.A. Porcas, R.W.	Trinity NRAO-CV MPIFR	The lobe-dominated superluminal 3C263		2,3,6,6	15	12.0
BJ020	Junor, B. Biretta, J.A. Wardle, J.	New Mexico STScI Brandeis	VLBA 6, 4cm polarimetry of Vir A.		4	22	13.5
BK034	Krichbaum, T.P. Britzen, S. Witzel, A. Zensus, J.A.	MPIFR MPIFR MPIFR NRAO-CV	Monitoring of 0528+134 after a mm outburst		1.3	11	14.5
BL024	Lazio, T.J.W. Cordes, J.M.	Cornell Cornell	Search for angular broadening in the galactic anticenter		90 With phased VLA	27	12.0
BL026	Lobanov, A.P. Zensus, J.A.	NRAO-CV NRAO-CV	Relativistic shocks and transition zones in 3C273		1.3, 2, 3.6, 6	6	12.5

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BP026	Phillips, R.B. Deeney, B.D. Lestrade, J.-F.	Haystack Colorado Paris/JPL	WTT star polarization synthesis		3.6, 6 With phased VLA	7, 25	13.5
BR035	Rioja, M.J. Porcas, R.W.	JIVE MPIFR	VLBA astrometry on the quasar pair 1038+528 A and B		3.6 With EB.	10	13.25
BT019	Tingay, S.J. Jauncey, D.L. Reynolds, J.E. Tzioumis, A.K. Preston, R.A. Jones, D.L. Murphy, D.W. Meier, D.L. Lovell, J.E.J. McCulloch, P.M. Costa, M.E.	Mt. Stromlo ATNF ATNF ATNF JPL JPL JPL JPL Tasmania Tasmania Western Australia	Sub-parsec scale structure of Centaurus A at the SVLBI frequency		1.3	17	6.25
BU006	Ulvestad, J.S. Wrobel, J.M.	JPL NRAO-Socorro	Continuum imaging of the Seyfert 1/Starburst Galaxy Mrk 231		6, 18	13	12.0
BV017	Venturi, T. Cotton, W.D. Feretti, L. Giovannini, G. Lara, L. Marcaide, J.M.	Bologna NRAO-CV Bologna Bologna Bologna Valencia	Proper motion monitoring in two FRI radio galaxies		3.6, 6, 18 With VLA single	26	12.0
BW019	Wilkinson, P. Browne, I. Jackson, N. Myers, S. Readhead, T. deBruyn, G.	Jodrell Bank Jodrell Bank Jodrell Bank Caltech Caltech NFRA (Dwingeloo)	Testing CLASS gravitational lens candidates with the VLBA		3.6, 6, 18	12	24.0
BZ017	Zensus, J.A. Lobanov, A.P. Leppanen, K.J.	NRAO-CV NRAO-CV Metsahovi	Monitoring the parsec-scale jet structure of 3C345		1.3, 2, 3.6, 6	5	14.0
MAINT			Maintenance				96.0
SOFTW			Software			2,8,16,28	22.5

The VLBA was scheduled 566.3 hours of a possible 720 hours

Astronomical Observations: 368.3 hours, 51%

Tests and Calibrations: 130.0 hours, 18%

Maintenance: 68.0 hours, 9%

Total Downtime: 12.9 hours, 3%

Actual Observing Time: 368.3 - 12.9 = 355.4 hours

Total number of projects was 23.

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB045	Benz, A.O. Conway, J.E. Alef, W. Gudel, M.	ETH JIVE-Onsala MPIFR Paul Scheirer	VLBA observations of nearby dMe stars		3.6 with phased VLA	27	16.0
BB048	Bondi, M. Dallacasa, D. Marcha, M.J.M. Stanghellini, C.	Jodrell Bank JIVE Lisbon Noto	Flat spectrum radio galaxies		6	28	24.0
BB052	Bartel, N. Sorathia, B. Bietenholz, M. Carilli, C. Diamond, P.	York York York CfA NRAO-Socorro	Nuclear jet and counterjet in Cygnus A		1.3, 6	30	14.0
BC047	Coles, B. Grall, R. Klinglesmith, M.	Calif.-San Diego Calif.-San Diego Calif.-San Diego	Interplanetary scintillation measurements of the solar wind speed	LP	2, 3.6	20, 21, 22	1.6
BC048	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Neill, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	REVISED:NASA space geodesy program observations for June-December, 95		3.6 Scheduled as BC0	2	24.0
BC051	Cotton, W.D. Feretti, L. Giovannini, G. Lara, L. Ventura, T. Marcaide, J.M.	NRAO-CV Bologna Bologna Bologna Bologna Valencia	VLBA polarization observations of NGC 315		6 with Phased VLA	28	10.0
BD023	Denn, G.R. Mutel, R.L.	Iowa Iowa	Monitoring BL Lac, with polarization		1.3, 2, 3.6	9	14.0
BE006	Eubanks, T.M. Archinal, B.A. Beasley, A.J. Fomalont, E.B. Walker, R.C. Napier, P.	USNO USNO NRAO-Socorro NRAO-CV NRAO-Socorro NRAO-Socorro	Two centimeter astrometric survey; proof of concept		3.6	17	24.0
BF012	Fey, A. Johnston, K. Fomalont, E. Eubanks, M.	USNO USNO NRAO-CV USNO	Astrometric observations for the radio reference frame		3.6	12	24.0
BF016	Frail, D.A. vanLangevelde, H.J.	NRAO-Socorro NRAO-Socorro	Extragalactic scattering in galaxy/quasar pairs		18, 90	14	9.0
BGD45	Greenhill, L.J. Moran, J.M. Danchi, W.C. Bester, M.	CfA CfA Calif.-Berkeley Calif.-Berkeley	Snapshot survey of SiO maser stars at maximum and minimum luminosity		0.7 with VLA single	16	12.0
BK036	Kemball, A.	NRAO	7mm polarization survey			9	24
BLO20	Ludke, E. Sanghera, H. Cotton, W. D.	Santa Maria JIVE NRAO-CV	Resolving faraday effects in CSS jets		6	6	24.0
BL022	Langston, G.	NRAO-CV	High resolution imaging of Einstein Ring MG1654+1346 at 90 cm		90 with GreenBank	3	7.0
BM047	Marscher, A.P. Gomez, J.L. Wehrle, A.E. Georganopoulos, M.	Boston Boston JPL-IPAC Boston	Coordinated multiband observations of blazars		1.3	15	12.0
BT018	Thakkar, D.D. Vermeulen, R.C. Pearson, T.J. Readhead, A.C.S.	Caltech Caltech Caltech Caltech	Morphology and proper motions of the radio cores in FR I galaxies		6 with Phased VLA	7	18.0
BV014	Vermeulen, R.C.	Caltech	Nature of the low-frequency compact emission from 3C84		18, 90	23	13.5

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BV016	Vermeulen, R.C. Readhead, A.C.S. Walker, R.C. Romney, J.D. Kellermann, K.I. Dhawan, V. Benson, J.M. Backer, D.C. Alef, W.	Caltech Caltech NRAO-Socorro NRAO-Socorro NRAO-CV NRAO-Socorro NRAO-Socorro Calif.-Berkeley MPIFR	Probing the accretion region in 3C84		1.3, 2, 3.6, 6 with VLA single antenna	9, 15, 21, 22	55.5
GM025	Marcaide, J.M. Ros, E. Alberdi, A. Diamond, P.J. Shapiro, I.I. Guirado, J.C. Preston, R. Jones, D. Witzel, A. Krichbaum, T. Schilizzi, R. Mantovani, F. Trigilio, C. Whitney, A.R.	Valencia Valencia ESA-LAEFF NRAO-Socorro CfA JPL JPL JPL MPIFR MPIFR JIVE Bologna Noto Haystack	Radio-shell expansion in SN 1993J		13, 18 with phased VLA	1	17.0
	Staff	NRAO	Maintenance Software			4, 12, 18,	112.0 23.5

The VLBA was scheduled 561 hours of a possible 744 hours of the time, 75%

Astronomical Observations 45% (337.7 hours)
 Tests and Calibrations 19% (143.3 hours)
 Maintenance 11% (80.1 hours)

Downtime was approximately 19.7 hours (5.8% of scheduled astronomical observations)

Actual Observing = (337.7 - 19.7) = 318 hours

Total number of projects was 19

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA013	Aaron, S. Wardle, J. Roberts, D.	Brandeis Brandeis Brandeis	Quest for Helical Jets		18	6	24.0
BB046	Bower, G. Backer, D. Wright, M.	Calif.-Berkeley Calif.-Berkeley Calif.-Berkeley	High frequency mapping of nearby active galactic nuclei		1.3	21, 22	24.0
BB047	Baudry, A. Diamond, P.J.	Bordeaux NRAO-Socorro	Mapping a new OH maser line with the VLBA		2	11	12.0
BB050	Blundell, K. Lacy, M.	Oxford Oxford	PC-Scale jets and core of the radio-quiet quasar E 1821+643		3.6, 6	14	8.0
BB053	Bower, G.C. Backer, D. Wright, M.	Calif.-Berkeley Calif.-Berkeley Calif.-Berkeley	Dramatic flare in the extremely flat-spectrum QSO NRAO 530		1.3, 3.6	16, 17	16.0
BC044	Conway, J. Wrobel, J. Carilli, C. Blanco, P.	JIVE-Onsala NRAO-Socorro CfA Calif.-San Diego	HI absorption toward the nucleus of Cygnus A		18	1	10.5
BC045	Coles, B. Grall, R. Klingesmith, M.	Calif.-San Diego Calif.-San Diego Calif.-San Diego	Interplanetary scintillation measurements of the solar wind speed	LP	3.6	1, 2	4.0
BC047	Coles, B. Grall, R. Klingesmith, M.	Calif.-San Diego Calif.-San Diego Calif.-San Diego	Interplanetary scintillation measurements of the solar wind speed	LP	2, 3.6	20, 21, 28, 29, 30	8.5
BC048	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Neill, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	REVISED:NASA space geodesy program observations for June-December, 95		3.6	18	25.0
BC049	Cawthorne, T. Hutchison, J.	Lancashire Lancashire	Polarization sensitive observations of 4C71.07		3.6, 6	20	14.0
BD026	Diamond, P.J. Kemball, A.J. Goss, M. Taylor, G.B.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Caltech	Mapping the small scale structure of the interstellar HI		18	10	12.0
BF013	Fomalont, E. Goss, M. Lyne, A. Manchester, R.	NRAO-CV NRAO-Socorro Jodrell Bank CSIRO	Pulsar parallax and proper motions: second and third epochs		18	23	17.0
BG015	Greenhill, L. Diamond, P. Gwinn, C. Moran, J.	CfA NRAO-Socorro Calif.-Santa Barbara CfA	Tracing the dynamics of a protoplanetary disk		0.7	9	8.0
BH010	Hewitt, J.N. Haarsma, D.B. Katz, C.A. Moore, C.B. Trotter, C.S.	MIT MIT MIT MIT MIT	Gravitational lens monitoring with the VLBA		3.6, 18	15	20.0
BH011	Hough, D.H. Vermeulen, R.C. Readhead, A.C.S	Trinity Caltech Caltech	Search for superluminal motion in lobe-dominated quasars		3.6	2	12.0
BL023	Lazio, T.J.W. Cordes, J.M. Frail, D.A.	Cornell Cornell NRAO-Socorro	Compact sources toward the galactic center		1.3, 3.6	22	8.0
BL030	Lonsdale, C.J. Barthel, P.D.	Haystack Kapteyn	Resolving the interaction edge of 3C205 south		6	8	19.0
BS027	Sivagnanam, P. Diamond, P.J. Etoka, S.	Meudon NRAO-Socorro Meudon	Anomalous structures and kinematics of OH circumstellar shells		18	13	6.0
BT017	Taylor, G. Vermeulen, R. Pearson, T. Readhead, T. Wilkinson, P. Browne, I.	Caltech Caltech Caltech Caltech Jodrell Bank Jodrell Bank	Completing a flux-limited VLBI survey of 295 flat-spectrum sources		6	4	24.0

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BV015	Vermeulen, R.C. Taylor, G.B. Cohen, M.H. Pearson, T.J. Readhead, A.C.S. Xu, W. Wilkinson, P.N. Browne, I.W.A. Henstock, D.R.	Caltech Caltech Caltech Caltech Caltech JPL-IPAC Jodrell Bank Jodrell Bank Jodrell Bank	Caltech-Jodrell Snapshot survey of superluminal motion		6	3	24.0
BV017	Venturi, T. Cotton, W.D. Feretti, L. Giovannini, G. Lara, L. Marcaide, J.M.	Bologna NRAO-CV Bologna Bologna Bologna Valencia	Proper Motion monitoring in two FRI radio galaxies		3, 6, 18	11	12.0
	Staff	NRAO	Maintenance Software			1, 7, 14,	196.0 30.0

The VLBA was scheduled 81% of the time (584 hours of 720 hours)

Astronomical Observations 42% (305.8 hours)

Tests and Calibrations 18% (126 hours)

Maintenance 21% (153 hours)

Downtime was approximately 8.3% = 48.5 hours

Total number of projects was 21

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BC040	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Niell, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6, 13	30	25.0
BC044	Conway, J. Wrobel, J. Carilli, C. Blanco, P.	JIVE-Onsala NRAO-Socorro CfA Calif.-San Diego	HI absorption toward the nucleus of Cygnus A		18 with phased VLA	31	1.5
BC045	Coles, B. Grall, R. Klingesmith, M.	Calif.-San Diego Calif.-San Diego Calif.-San Diego	Interplanetary scintillation measurements of the solar wind speed	LP	13, 6, 3.6, 2	...	20.5
BD023	Denn, G.R. Mutel, R.L.	Iowa Iowa	Monitoring BL Lac, with polarization		1.3, 2, 3.6	2	14.0
BD026	Diamond, P.J. Kemball, A.J. Goss, W.M. Taylor, G.B.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Caltech	Mapping the small scale structure of the interstellar HI		18 with phased VLA	19	12.0
BF015	Fomalont, E. Bradshaw, C. Geldzahler, B.	NRAO-CV George Mason George Mason	The parallax of Sco X-1		6	19	6.0
BL020	Ludke, E. Sanghera, H. Cotton, W.	Santa Maria JIVE NRAO-CV	Resolving faraday effects in CSS jets		6	13	24.0
BL021	van Langevelde, H.J. Diamond, P. Schilizzi, R. Cotton, B.	JIVE-Socorro NRAO-Socorro JIVE NRAO-CV	The parallax of nearby Miras		18	14	12.0
BM008	Migenes, V. Bowers, P.F. Cohen, R.J. Shepard, M.C.	ATNF NRL Jodrell Bank NRAL (Manchester)	OH maser shells		18 with VLA single	3	8.0
BM047	Marscher, A.P. Gomez, J.L. Wehrle, A.E. Georganopoulos, M.	Boston Boston JPL-IPAC Boston	Coordinated multiband observations of blazars		1.3	4	12.0
BO002	Otterbein, K. Krichbaum, T.P. Witzel, A. Wagner, S.	MPIfR MPIfR MPIfR Heidelberg	Ultraluminous quasar S5 0836+710		1.3, 3.6	24	12.0
BS020	Snellen, I. Fassnacht, C. de Bruyn, G. Schilizzi, R. Browne, I. Jackson, N. Wilkinson, P. Myers, S. Pearson, T. Readhead, A. Miley, G.	Leiden Caltech NFRA JIVE Jodrell Bank Jodrell Bank Jodrell Bank Caltech Caltech Caltech Leiden	VLBI imaging of two new gravitational lens systems		2, 6	20	12.0
BV015	Vermeulen, R.C. Taylor, G.B. Cohen, M.H. Pearson, T.J. Readhead, A.C.S. Xu, W. Wilkinson, P.N. Browne, I.W.A. Henstock, D.R.	Caltech Caltech Caltech Caltech Caltech JPL-IPAC Jodrell Bank Jodrell Bank Jodrell Bank	Caltech-Jodrell Snapshot survey of superluminal motion		6	25	96.0
BW017	Wilkinson, P. Browne, I. Nair, S.	NRAO-Socorro/NRAL Jodrell Bank Jodrell Bank	The gravitational lens B0218+357		18, 90 with VLA single	17	9.0

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BZ012	Zensus, J.A. Porcas, R.W. Lobanov, A.P. Leppanen, K.J.	NRAO-CV MPIFR NRAO-CV Metsahovi	Weak cores in double lobed radio quasars		2, 3.6 with EB	5	24.0
GR010	Rupen, M.P. Bartel, N. Conway, J. Beasley, A.J. Sramek, R. Romney, J. Bietenholz, M. Weiler, K. van Dyk, S. Panagia, N. Titus, M. Cannon, W. Popelar, J. Graham, D. Venturi, T. Umana, G. Davis, R. Rius, A. Altunin, V. Jones, D.	NRAO-Socorro York JIVE-Onsala NRAO-Socorro NRAO-Socorro NRAO-Socorro York NRL NRL STScI Haystack York Ottawa MPIFR Bologna Noto Jodrell Bank Barcelona JPL JPL	VLBI imaging of supernova 1993J in M81		3.6, 6, 18 with phased VLA & EB	17	15.0
	Staff	NRAO	Maintenance Software			3, 16, 23	216.0 18.0

The VLBA was scheduled 66.7% of the time (496.4 hours of 744 hours)

Astronomical Observations 37.7% (280.4 hours)
 Tests and Calibrations 12.4% (92 hours)
 Maintenance 16.7% (124 hours)

Total number of projects was 16

VLBA Utilization Report July 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB023	Beasley, A. Conway, J. Dhawan, V. Walker, C. Wrobel, J.M. Patnaik, A. Muxlow, T.	NRAO-Socorro JIVE-Onsala NRAO-Socorro NRAO-Socorro NRAO-Socorro MPIFR Jodrell Bank	VLBA calibrator survey		3.6	15	24.0
BB042	Bondi, M. Junor, W. Mantovani, F.	Jodrell Bank New Mexico Bologna	Compact steep-spectrum sources with very high rotation measures		3.6 With VLA single	21	8.0
BB047	Baudry, A. Diamond, P.J.	Bordeaux NRAO-Socorro	Mapping a new OH maser line with the VLBA		2	2	14.0
BC040	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Niell, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6 w/RDMSE1, WPS3, GTR3, GEC2	10, 24	50.0
BC043	Conway, J.E. Venturi, T. Giovannini, G. Feretti, L. Beasley, A.J.	JIVE-Onsala Bologna Bologna Bologna NRAO-Socorro	HI Absorption observations of the nearby CSO 4c31.04		18 With VLA single	7	12.0
BD021	Diamond, P.J. Kemball, A.J. Benson, J. Junor, W. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro New Mexico NRAO-Socorro	Monitoring stellar SiO Masers		0.7 with VLA single	1	24.0
BF014	Fix, J.D. Claussen, M.J.	Iowa NRAO-Socorro	Secular variations in the OH line profiles of U Her		18 With VLA single	6	5.0
BG015	Greenhill, L. Diamond, P. Gwinn, C. Moran, J.	CfA NRAO-Socorro Calif.-Santa Barbara CfA	Tracing the dynamics of a protoplanetary disk			9	8.0
BG030	Gabuzda, D.C. Cawthorne, T.V.	Lebedev Lancashire	Linear polarization of BL lacertae objects at 1.3cm		1.3 with EB	30	24.0
BG043	Giovannini, G. Cotton, W.D. Feretti, L. Lara, L. Marcaide, J. Venturi, T.	Bologna NRAO-CV Bologna JAA Valencia Bologna	VLBA observations of 6 low power compact radio galaxies		6, 18	22 With VLA single	24.0
BG045	Greenhill, L.J. Moran, J.M. Danchi, W.C. Bester, M.	CfA CfA Calif.-Berkeley Calif.-Berkeley	Snapshot survey of SiO maser stars at maximum and minimum luminosity		0.7 With VLA single	15	10.0
BH010	Hewitt, J.N. Haarsma, D.B. Katz, C.A. Moore, C.B. Trotter, C.S.	MIT MIT MIT MIT MIT	Gravitational lens monitoring with the VLBA		3.6, 18	7	20.0
BJ018	Jones, D.L. Preston, R.A. Meier, D.L. Murphy, D.W. Tingay, S.L. Jauncey, D.L. Reynolds, J.E. Tzioumis, A.K.	JPL JPL JPL JPL ANU ATNF ATNF ATNF	Confirmation of a counterjet in Centaurus A		3.6	2	6.0
BK033	Kollgaard, R.I. Gabuzda, D.C. Feigelson, E.D.	Penn State Lebedev Penn State	The parsec-scale morphology of X-ray selected BL lacertae objects		6	13	28.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL016	van Langevelde, H.J. Schilizzi, R. Israel, F. Diamond, P. Beasley, A. Conway, J.	JIVE-Socorro JIVE Leiden NRAO-Socorro NRAO-Socorro JIVE-Onsala	OH lines in Centaurus A		18	8	6.5
BM043	Marvel, K. Diamond, P.	NMSU/NRAO-Socorro NRAO-Socorro	Continued monitoring of water masers around AGB stars		1.3	3	48.0
BM450	Mattox, M.D.		To01629-295		2/1/7	26	7.0
BP020	Patnaik, A.R. Porcas, R.W. Browne, I.W.A.	MPIFR MPIFR Jodrell Bank	0218+357 gravitational lens images		1.3, 2	17	7.0
BP021	Perlman, E.S. Stocke, J.T. Carilli, C. Conway, J.	NASA-GSFC Colorado Cfa JIVE-Onsala	CSO PKS 1413+135		2, 3.6	16	12.0
BP022	Patel, N.A. Zhang, Q. Hernstein, J. Ho, P.T.P. Greenhill, L. Moran, J. Goldsmith, P.	Cfa Cfa Cfa Cfa Cfa Cfa Arecibo	Water maser emission from a circumstellar disk around IRAS 21391+5802		1.3	10	7.0
BS025	Shaffer, D. Kellermann, K.	Nevada NRAO-CV	CTD93: A gravitational minilens?		2, 3.6, 6, 18, 90	23	15.0
BW008	Walker, C. Fomalont, E.	NRAO-Socorro NRAO-CV	VLBA baselines		3.6	19	24.0
BZ014	Zensus, A. Kellermann, K. Vermeulen, R. Cohen, M.	NRAO-CV NRAO-CV Caltech Caltech	2 cm survey		2	28	48.0
	Staff	NRAO	Maintenance Software			5, 13, 20,	105.0 23.5

The VLBA was scheduled 80% of the time (594 hours of a possible 744 hours

Astronomical Observations 57% (421 hours)

Tests and Calibrations 16% (118 hours)

Maintenance 7% (55 hours)

Average downtime for the months was approximately 2.5%

Total number of projects was 24

VLBA Utilization Report June 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB040	Boboltz, D. Diamond, P.J. Kemball, A.J. Claussen, M.J. Kogan, L.	VPI NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	A polarization survey of OH masers in circumstellar envelopes		18 with VLA single	10	60.0
BB041	Beasley, A.J. Fomalont, E.B.	NRAO-Socorro NRAO-CV	Absolute core motions of superluminal radio sources		3.6	25	24.0
BC040	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Niell, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6	1, 7, 28	68.0
BC045	Coles, B. Grall, R. Klingesmith, M.	Calif.-San Diego Calif.-San Diego Calif.-San Diego	Interplanetary scintillation measurements of the solar wind speed	LP	3.6	15, 16, 17, 21, 22, 23	3.6
BD021	Diamond, P.J. Kemball, A.J. Benson, J. Junor, W. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro New Mexico NRAO-Socorro	Monitoring stellar SiO Masers		0.7 with VLA single	30	24.0
BD023	Denn, G.R. Mutel, R.L.	Iowa Iowa	Monitoring BL Lac, with polarization		1.3, 2, 3.6	5	14.0
BD026	Diamond, P.J. Kemball, A.J. Goss, W.M. Taylor, G.B.	NRAO-Socorro NRAO-Socorro NRAO-Socorro CalTech	Mapping the small scale structure of the interstellar HI		21 with phased VLA	19	12.0
BG042	Guirado, J.C. Jones, D.L. Preston, R.A. Lara, L. Marcaide, J.M. Rao, P. Sherwood, W.	JPL JPL JPL IAA Valencia GMRT MPIFR	Einstein Ring candidate PKS 1830-211		3.6	27	6.5
BL019	Lobanov, A.P. Zensus, J.A.	NRAO-Socorro NRAO-CV	Relativistic shocks in 3C345		1.3, 2, 3.6, 6	24	15.0
BM045	Mattox, J.R. Marscher, A.P. Wagner, S.	NASA-GSFC Boston Heidelberg	Radio structure and flaring gamma ray emission of blazars		1.3, 2	4	12.0
BM046	Mutel, R. Molnar, L. Goss, W. M.	Iowa Iowa NRAO-Socorro	HI absorption maps of ISS sources		18 with phased VLA	23	12.0
BM047	Marscher, A.P. Gomez, J.L. Wehrle, A.E. Georganopoulos, M.	Boston Boston JPL-IPAC Boston	Coordinated multiband observations of blazars		1.3	21	12.0
BR033	Rodriguez, L.F. Gomez, Y.	UNAM UNAM	Kinematic structure of OH maser emission in selected OH/IR stars		18	24	8.0
BT010	Taylor, G.B. Ge, J-P. Pearson, T. Roberts, D.	CalTech Brandeis CalTech Illinois	Faraday rotation measures of CSS sources		6, 18 with VLA single	4	9.0
BV012	van Langevelde, H.J. Chapman, J.M. Killeen, N.E.B.	JIVE-Socorro ATNF ATNF	OH/IR stars and galactic centre distance		18 with VLA single	2	21.0
BZ013	Zheng, X.W. Moran, J.M. Reid, M.J.	Nanjing CfA CfA	OH masers in G34.3+02: Bow shock or champagne flow?		18	3	11.0
MAINT			Maintenance				186.0
SOFTW			Software			2, 9, 22, 26	24.0

Of a possible 720 hours, the VLBA was scheduled
Astronomical Observations: 298.4 hours, 41%
Tests and Calibrations: 131.3 hours, 18%
Maintenance: 165.0 hours, 23%
Total Downtime: 7 hours

Actual Observing: 291 hours
Total number of projects was 16.

VLBA Utilization Report May 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB039	Bloom, S.D.	Pelham Manor, NY	Flat spectrum radio-loud quasars with spectral peaks near 43 GHz		1.3, 3.6	3	24.0
BC025	Conway, J. Romney, J. Rupen, M. Beasley, A.	Onsala NRAO-Socorro NRAO-Socorro NRAO-Socorro	HI absorption against 3C84		18	18	12.5
BC033	Cai, Z. Nan, R. Tian, W. Gabuzda, D. Taylor, R. Schilizzi, R. Inoue, M.	Beijing Beijing Beijing ASC Lebedev Calgary-NRAO JIVE Nobeyama	VLBI polarimetry of the high rotation measure source 3C147		6	1	20.0
BC034	Conway, J.E. Wrobel, J.M.	Onsala NRAO-Socorro	Helical distortions of the jet in Mrk 501		18	27	16.0
BC040	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Niell, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GSFC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6	31	4.0
BG022	Gussie, G.T. Norris, R.P. Ellingsen, S.P. McCulloch, P.M. Diamond, P.J.	Tasmania ATNF Tasmania Tasmania NRAO-Socorro	Proper motion study of 12GHz methanol masers		2	21	24.0
BK031	Kemball, A.J. Porcas, R.W. Patnaik, A.R.	NRAO-Socorro MPIfr MPIfr	VLBI polarimetry of gravitational lens system 0218+357		2, 3.6, 6	9	12.0
BL013	Lestrade, J.F. Phillips, R.B. Jones, D.L. Preston, R.A.	Meudon Haystack JPL JPL	Test of phase-referenced observations with the VLBA		3.6	20	12.0
BM027	Matveyenko, L.I. Diamond, P.J.	ASC Lebedev NRAO-Socorro	The H2O supermaser region of the Orion Nebula		1.3	26	12.0
BM036	Moran, J.M. Miyoshi, M. Inoue, M. Nakai, N. Hernstein, J. Greenhill, L.G. Diamond, P.J.	CfA NAO Nobeyama Nobeyama CfA CfA NRAO-Socorro	Measurement of proper motions of the water vapor masers in NGC 4258		1.3	29	11.0
BP017	Patnaik, A.R. Porcas, R.W. Browne, I.W.A. Muxlow, T.W.B.	MPIfr MPIfr Jodrell Bank Jodrell Bank	VLBA observations of two small separation gravitational lens systems		2	26	7.0
BP018	Pauliny-Toth, I. Kellermann, K.I.	MPIfr NRAO-CV	Morphology and spectral distribution of 2134+004		2, 3.6	27	14.0
BS015	Spencer, R.E. Newell, S.J.	Jodrell Bank Jodrell Bank	VLBI observations of Cyg X-3 in the quiescent state		2	7	9.0
BS019	Sjouwerman, L. Diamond, P. van Langevelde, H.J. Winnberg, A. Habing, A. Lindqvist, M.	Leiden NRAO-Socorro JIVE-Socorro Onsala Leiden Leiden	Stellar proper motions in galactic center from SiO and H2O masers		1.3	8	6.0
BS023	Stacy, J.G. Vestrand, W.T. Biretta, J.A.	New Hampshire New Hampshire STScI	VLBI observations of selected gamma-ray blazars		3.6	22	24.0
BT014	Taylor, G. Readhead, T. Pearson, T. Wilkinson, P. Henstock, D.	Caltech Caltech Caltech Jodrell Bank Jodrell Bank	Compact symmetric objects discovered in second Caltech-Jodrell survey		3.6, 18	28	24.0

VLBA Utilization Report May 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BV005	Vermeulen, R. Schilizzi, R. Spencer, R. Fejes, I.	Caltech JIVE Jodrell Bank Budapest	Spectral index imaging of the jets of SS433		2, 6, 18	6	11.0
BW005	Wrobel, J. Conway, J. Terlevich, R.	NRAO-Socorro Onsala RGO	Testing the starburst model for NGC 5548's Seyfert 1 nucleus		3.6	3	13.0
GB025	de Bruyn, A.G. Vermeulen, R.C. Verbunt, F. Lestrade, J.F. Schilizzi, R.T. van de Heuvel, E.P.	NFRA Caltech Utrecht Meudon JIVE Amsterdam	Determining motions and birthplaces of pulsars through VLBI astrometry		18	5	18.0
GC016	Gabuzda, D.C. Cawthorne, T.V.	ASC Lebedev Lancashire	Second epoch observations of a 1 Jy sample of BL Lacertae objects		6	11, 30	38.0
GC017	Conway, J.E. Schilizzi, R. van Langevelde, H.	Onsala JIVE JIVE-NRAO	HI absorption observations of 3C236		18	8	15.0
GMO24	Marcaide, J.M. Ros, E. Alberdi, A. Diamond, P.J. Shapiro, I.I. Guirado, J.C. Preston, R. Jones, D. Witzel, A. Schilizzi, R. Mantovani, F. Trigilio, C. Whitney, A.R.	Valencia Valencia IAA NRAO-Socorro CfA JPL JPL JPL MPIFR JIVE Bologna Noto Haystack	Radio shell expansion in SN 1993J at 6 cm			11	14.0
GR007	Rioja, M.J. Alberdi, A. deBruyn, G. Elosegui, P. Guirado, J.C. Lara, L. Saikia, D.J.	JIVE IAA NFRA CfA JPL IAA NCRA-Pune	Unification model test:phase-reference mapping of weak-cored double		6	13	11.0
GR010	Rupen, M.P. Bartel, N. Conway, J. Beasley, A.J. Sramek, R. Romney, J. Bietenholz, M. Weiler, K. van Dyk, S. Panagia, N. Titus, M. Cannon, W. Popelar, J. Graham, D. Venturi, T. Umana, G. Davis, R. Rius, A. Altunin, V. Jones, D.	NRAO-Socorro York JIVE-Onsala NRAO-Socorro NRAO-Socorro NRAO-Socorro York NRL NRL STScI Haystack York Ottawa MPIFR Bologna Noto Jodrell Bank IAA JPL JPL	VLBI imaging of supernova 1993J in M81		3.6, 6, 18	10	18.0
GS010	Snellen, I. Schilizzi, R.T. de Bruyn, G. Miley, G.K.	Leiden JIVE NFRA Leiden	Morphologies of faint gighertz peaked spectrum sources		6	14	48.0
MAINT			Maintenance				98.0
SOFTW			Software				18.0

Of a possible 744 hours, the VLBA was scheduled
 Astronomical Observations: 419.5 hours, 56%
 Tests and Calibrations: 81.0 hours, 11%
 Maintenance: 82.0 hours, 11%
 Total Downtime: 15 hours%, 2%

Actual Observing: 404.5
 Total number of projects was 25.

VLBA Utilization Report April 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA007	Alef, W. Preuss, E. Kellermann, K.	MPIR, Bonn MPIR, Bonn NRAO-CV	Superluminal motion in the lobe-dominated radio galaxy 3C390.3		6	16	14.0
BA010	Altunin, V. Migenes, V. Slysh, V.	JPL CSIRO Lebedev	OH maser survey in search of nonscattered masers	HMNO	18	30	2.0
BB021	Barvainis, R. Lonsdale, C.	Haystack Haystack	Free-free absorption from the obscuring tori of NLRGs		2, 3.6, 6, 18	5	12.5
BB023	Beasley, A. Conway, J. Dhawan, V. Walker, C. Wrobel, J. Patnaik, A. Muxlow, T.	NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro MPIR, Bonn Manchester	VLBA calibrator survey		3.6	19	24.0
BB034	Bujarrabal, V. Alcolea, J. Colomer, F.	Yebes Obs. Yebes Obs. Yebes Obs.	Interferometric SiD observation of OH/IR stars			15	12.0
BC040	Clark, T. Ryan, J. Ma, C. Vandenberg, N. Gipson, J. Himwich, W. MacMillan, D. Potash, R. Gordon, D. Niell, A. Corey, B. Rogers, A. Eubanks, T. Fomalont, E. Walker, R.	NASA/GFSC NASA/GSFC NASA/GSFC NVI/GSFC NVI/GSFC NVI/GSFC NVI/GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6, 13 Scheduled as RDGG23, RD9504, RDTPC1	20	24.5
BD024	Dewey, R. Beasley, A. Frail, D.	Princeton NRAO-Socorro NRAO-Socorro	Pulsar test observations with the VLBA		18	14	16.5
BG035	Garrett, M. Calder, R. Porcas, R. Patnaik, A.	Manchester Manchester MPIR, Bonn MPIR, Bonn	PKS 1830-211: A search for 10**4 - 10**6 Msun Black holes in the halo		2	10	10.5
BK016	Kellermann, K. Zensus, A. Cohen, M. Vermeulen, R. Gurvits, L. Lobanov, A.	NRAO-CV NRAO-CV Caltech Caltech NFRA NRAO-Socorro	2cm VLBA survey		2 Scheduled with BK 23	7	48.0
BK023	Kellermann, K. Zensus, A. Cohen, M. Vermeulen, R. Gurvits, L. Lobanov, A.	NRAO-CV NRAO-CV Caltech Caltech NFRA NRAO-Socorro	2cm VLBA survey		2 Scheduled with BK 16	7	48.0
BM038	Marscher, A. Moore, E. Wehrle, A. Georganopoulos, M.	Boston Boston JPL Boston	Coordinated multi-band observations of blazars		1.3	22	23.8
BM044	Mutel, R. Sauerbrei, P.	Iowa Iowa	Multifrequency maps of AR Lac and Algol		2, 3.6, 6 with phased VLA	23	12.0
BO001	Ojha, R. Aaron, S. Moellenbrock, G. Wardle, J. Roberts, D.	Brandeis Brandeis Brandeis Brandeis Brandeis	Polarization in the disrupted jet of 3C48		13	3	12.0
BR025	Russell, J. Fey, A. Fomalont, E. Johnston, K.	NRL NRL NRAO-CV USNO	Astrometric observations for radio/optical reference frame		3.6	12	24.0
BS022	Simon, R.	NRAO-CV	VLBI observations of turbulence in the interplanetary medium		6, 90	2	24.0
BV012	van Langevelde, H. Chapman, J. Killeen, N.	NRAO-Socorro CSIRO CSIRO	OH/IR stars and galactic centre distance		18 w/AC399	17	10.2

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BW011	Wehrle, A. Leon, F.	JPL Catania	Orientation of radio jet and dust torus in NGC 4261 (3C270)		3.6, 18	1	8.8
3MM			Record 3mm VLBI observations from 12m	K	0.3	24	72.0
MAIN			Maintenance				210.0
SOF			Software			6, 13, 20	18.0

Of a possible 720 hours, the VLBA was scheduled
 Astronomical Observations: 289.0 hours, 40%
 Tests and Calibrations: 106.25 hours, 15%
 Maintenance: 153.0 hours, 21%

Total number of projects was 17.

VLBA Utilization Report March 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA008	Aaron, S. Wardle, J. Roberts, D.	Brandeis Brandeis Brandeis	Linear polarization structure of 3C309.1 and 1652+398		6	24	24.0
BB036	Bartel, N. Bietenholz, M. Carilli, C. Diamond, P.	York U. York U. Leiden NRAO-Socorro	Search for the VLBI counter-jet in Cygnus A		2, 6, 18	10	14.0
BB041	Beasley, A. Fomalont, E.	NRAO-Socorro NRAO-CV	Absolute core motions of superluminal radio sources		3.6	11	24.0
BC030	Conway, J.	Chalmers, Onsala	Objects with double-peaked broad lines.		3.6	8	22.0
BC040	Clark, T. Ryan, J. Ma, C. Vandenberg, N. Gipson, J. Hinwich, W. MacMillan, D. Potash, R. Gordon, D. Niell, A. Corey, B. Rogers, A. Eubanks, T. Fomalont, E. Walker, C.	NASA/GSFC NASA/GSFC NASA/GSFC NVI/GSFC NVI/GSFC NVI/GSFC NVI/GSFC NVI/GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6	13	24.0
BD018	Dallacasa, D. Nan, R. Schilizzi, R. Cai, Z.	NFRA Beijing Obs. NFRA Beijing Obs.	3.6cm VLBI polarimetry of the CSS quasar 3C287		3.6	26	8.0
BD020	Diamond, P. Beasley, A.	NRAO-Socorro NRAO-Socorro	Observations of the proper motion of the OH and H2O masers in W43		1.3, 18	17	10.2
BF005	Flatters, C.	NRAO-Socorro	Rotation measure mapping of 3C119		6	27	12.0
BG040	Gwinn, C. Zheng, X. Moran, J.	Calif., Santa Barbara CFA CFA	Megamaser galaxy III Zw 35		18	25	8.0
BJ007	Junor, W. Biretta, J. Harris, D.	New Mexico STScI CFA	Core and jet in M87 at low frequency		90	20	16.0
BL010	Lo, K. Zhao, J-H Xu, W. Ho, L.	Illinois CFA Caltech Calif., Berkeley	Possible "counterparts" of Sgr A* in nuclei of nearby galaxies: M104		3.6	13	9.5
BR011	Reid, M. Readhead, A. Vermeulen, R.	CFA Caltech Caltech	Phase referencing the galactic center		0.7	4	5.0
BR026	Readhead, A. Unwin, S. Taylor, G. Xu, W. Pearson, T. Wilkinson, P.	Caltech Caltech Caltech Caltech Manchester	Systematic study of compact symmetric radio sources		2, 3.6, 6	22	24.8
BT006	Taylor, G. Ge, J. Pearson, T. Roberts, D.	Caltech Brandeis Caltech Brandeis	Mapping the high Faraday rotation measures of CSS source 3C318		6, 18	27	10.0
BT011	Taylor, G.	Caltech	Looking for the pc-scale jets in Hydra A		6, 18	17	12.0
BV003	van Langevelde, H. Diamond, P. Cotton, W. Schilizzi, R.	NRAO-Socorro NRAO-Socorro NRAO-CV NFRA	Parallax of nearby Miras		18 line	6	12.5
BW005	Wrobel, J. Conway, J. Terlevich, R.	NRAO-Socorro Chalmers, Onsala RGO	Testing the starburst model for NGC 5548's Seyfert 1 nucleus		3.6	21	12.0
BW015	Wardle, J. Roberts, D. Ge, J. Aaron, S. Gabuzda, D.	Brandeis Brandeis Brandeis Brandeis Lebedev	Emission-line BL Lacs and HPQ/OVV quasars		6	15	24.0
BZ005	Zensus, A. Krichbaum, T. Witzel, A. Leppanen, K. Schalinski, C.	NRAO-CV MPIR, Bonn MPIR, Bonn NRAO-Socorro MPIR, Bonn	Monitoring the helical trajectories in 3C345 at 43 GHz		0.7	31	16.0

VLBA Utilization Report March 1995

Progrm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GW013	Wehrle, A. Unwin, S. Zook, A.	Caltech Caltech Pomona College	3C 279; coordinated multiwavelength observations and evolution		1.3	19	13.0
MAINT			Maintenance				126.0
SOFTW			Software			3, 9, 14, 21, 30	30.0

Of a total 744 hours, the VLBA was scheduled
 Astronomical Observations: 297.2 hours, 40%
 Tests and Calibrations: 164.8 hours, 22%
 Maintenance: 174.0 hours, 23%
 Total Downtime: 10.7 hours, 3.6%
 Actual Observing Time: 286.6 hours

Total number of projects was 20.

VLBA Utilization Report February 1995

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB006	Beasley, A. Giampapa, M. Hjellming, R.	NRAO-Socorro NSO NRAO-Socorro	Close-binary stellar systems		3.6	10	24.0
BC040	Clark, T. Ryan, J. Ma, C. Vandenberg, N. Gipson, J. Hinwich, W. MacMillan, D. Potash, R. Gordon, D. Niell, A. Corey, B. Rogers, A. Eubanks, T. Fomalont, E. Walker, C.	NASA/GSFC NASA/GSFC NASA/GSFC NVI/GSFC NVI/GSFC NVI/GSFC NVI/GSFC NVI/GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6 Sched as RDGCx1, RDNAP2, RDPLR1, RDGG21, RD9502, RDPD1	1, 2	48.0
BG028	Gwinn, C. Ojeda, M. Desai, K.	Calif., Santa Barbara Calif., Santa Barbara Calif., Santa Barbara	Incoherently-scattered halos of H2O masers in W49N		1.3	26	11.0
BG034	Graham, D.	MPIR, Bonn	Second epoch phase-referencing of galaxies in Abell 2634		3.6, 6	13	7.0
BLO11	Lonsdale, C. Barthel, P.	Haystack Kapteyn Laboratory	The primary hotspot in 3C205 south		18	5	18.5
BM020	Marscher, A. Moore, E. Bania, T.	Boston Boston Boston	Variable molecular absorption toward 3C 111 and NRAO 150		6	4	16.0
BM037	Migenes, V. Booth, R. Harbison, P. Jauncey, D. Kingham, K.	ATNF Onsala Space Obs. CDSCC ATNF USNO	Water maser survey	HMNO	1.3	26, 27	12.2
BM038	Marscher, A. Moore, E. Wehrle, A. Georganopoulos, M.	Boston Boston JPL/IPAC Boston	Coordinated multi-band observations of blazars		1.3	24	24.0
GB022	Baath, L. Lerner, M. Rantakyro, F. Booth, R. Rogers, A. Doeleman, S. Wright, M. Backer, D. Plambeck, R. Inoue, M. Kameno, S. Hirabayashi, H. Kobayashi, H. Padin, S. Carlstrom, J. Woody, D. Predmore, C. Emerson, D. Jewell, P. Zensus, A. Graham, D. Krichbaum, T. Grewing, M. Greve, A. Valtaoja, E. Wiik, K. Moran, J.	Onsala Space Obs. Onsala Space Obs. Onsala Space Obs. Onsala Space Obs. Haystack Haystack Calif., Berkeley Calif., Berkeley Calif., Berkeley Nobeyama Obs. Nobeyama Obs. ISAS, Japan ISAS, Japan Caltech Caltech FCRAO NRAO-Tucson NRAO-Tucson NRAO-CV MPIR, Bonn MPIR, Bonn IRAM IRAM Metsahovi Metsahovi CFA	Global high frequency study of AGN's		0.7	15	23.5
GB023	Booth, R. Maszkowski, R. Olberg, M. Colomer Samartin, F. Graham, D. Diamond, P.	Onsala Space Obs. Onsala Space Obs. Onsala Space Obs. Yeibes MPIR, Bonn NRAO-Socorro	Comparison of SiO masers in two vibrational states		0.7	16	24.0

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GC014	Carilli, C. Schilizzi, R. Miley, G. Cai, Z. Nan, R.	Leiden JIVE Leiden Beijing Obs. Beijing Obs.	Imaging of two high redshift galaxies at 92cm		90	21	15.0
GD009	Dallacasa, D. Zhendong, C. Schilizzi, R. Fanti, C. Nan, R.	JIVE Beijing JIVE Bologna Beijing Obs.	Observations of bright peaked spectrum sources below turnover		90	20	24.0
GJ007	Junor, B. Biretta, J.	New Mexico STSCI	Structure and evolution on light-week scales in Nucleus of 3C274		0.7	15	16.2
GK015	Krichbaum, T. Alef, W. Graham, D. Schalinski, C. Zensus, A. Readhead, A. Lawrence, C. Vermeulen, R.	MPIR, Bonn MPIR, Bonn MPIR, Bonn MPIR, Bonn NRAO-CV Caltech Caltech Caltech	Monitoring 3C84 at 7mm		0.7	18	19.0
GMO21	Marcaide, J. Jones, D. Ros, E. Alberdi, A. Guirado, J. Rius, A. Diamond, P. Shapiro, I. Rogers, A. Whitney, A. Witzel, A. Krichbaum, T. de Bruyn, G. Schilizzi, R. Mantovani, F. Trigilio, C. Preston, R.	Valencia JPL Valencia IAA, Andalucia IAA, Andalucia IAA, Andalucia NRAO-Socorro CFA Haystack Haystack MPIR, Bonn MPIR, Bonn NFRA JIVE Bologna Noto, Italy JPL	Radio-shell expansion in SN 1993J		6	11, 23	27.8
GR010	Rupen, M. Bartel, N. Conway, J. Beasley, A. Sramek, R. Romney, J. Bietenholz, M. Weiler, K. van Dyk, S. Panagia, N. Titus, M. Cannon, W. Popelar, J. Graham, D. Venturi, T. Umana, G. Davis, R. Rius, A. Altunin, V. Jones, D.	NRAO-Socorro York U. NRAO-Socorro NRAO-Socorro NRAO-Socorro York U. NRL NRL STSCI Haystack York U. Ottawa MPIR, Bonn Bologna Noto, Italy Manchester IAA, Andalucia JPL JPL	VLBI imaging of supernova 1993J in M81		3.6, 6, 18	12	11.8
MAINT			Maintenance			1, 8, 9, 28	84.0
SOFTW			Software			9	6.0

Of a total 672 hours, the VLBA was scheduled
 Astronomical Observations: 279.0 hours, 41%
 Tests and Calibrations: 67.0 hours, 10%
 Maintenance: 90.0 hours, 13%

Total Downtime: 5.6 hours
 Actual Observing Time: 273 hours

Total number of projects was 16.

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB025	Bloom, S. Marscher, A.	Technion Boston	Multiwaveband study of strong millimete-wave quasars		1.3, 3.6	4	24.0
BC040	Clark, T.A. Ryan, J.W. Ma, C. Vandenberg, N.R. Gipson, J.M. Himwich, W.E. MacMillan, D.S. Potash, R.I. Gordon, D. Niell, A.E. Corey, B.E. Rogers, A.E.E. Eubanks, T.M. Fomalont, E.B. Walker, R.C.	NASA-GFSC NASA-GSFC NASA-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC NVI-GSFC Hughes Haystack Haystack Haystack USNO NRAO-CV NRAO-Socorro	NASA space geodesy program geodetic observations for 1995		3.6 Scheduled as RDGTR1 RDNAP1 RD9501	23	24.5
BD010	Desai, K. Diamond, P. Frail, D. van Langevelde, H.	Calif.-Santa Barbara NRAO-Socorro NRAO-Socorro JIVE-Socorro	Angular broadening of OH masers in OH/IR stars			7	8.0
BG031	Greenhill, L. Herrnstein, J. Moran, J.	CFA CFA CFA	The weak meagmaser in NGC 495		18	18	5.0
BG039	Greenhill, L.J. Moran, J.M. Reid, M.J. Lo, K.Y.	CFA CFA CFA Illinois	The nucleus of NGC 3079		1.3	9	14.0
BK029	Kellermann, K. Gurvits, L. Shaver, P. Wall, J. Lobanov, A.	NRAO-CV JIVE ESO-Garching RGO NRAO-Socorro	Milli-arcsecond structure of 1251-40 at z=4.46		6	28	8.5
BL006	Lonsdale, C. Smith, H. Lonsdale, C.	Haystack Calif.-San Diego Haystack	Phase-referenced mapping of ultraluminous IR galaxies		18	16	24.0
BL007	Leppanen, K. Zensus, A. Diamond, P.	NRAO-Socorro MPIFR/NRAO NRAO-Socorro	Polarization imaging of AGN at 22 & 43 GHz		1.3	21	16.0
BM010	Molnar, L.A. Mutel, R.L.	Iowa Iowa	Interstellar scattering in Cygnus X		6 line	1	4.0
BM036	Moran, J.M. Miyoshi, M. Inoue, M. Nakai, N. Herrnstein, J. Greenhill, L.G. Diamond, P.J.	CFA NAO Nobeyama Nobeyama CFA CFA NRAO-Socorro	Measurement of proper motions of the water vapor masers in NGC 4258		1.3	8	15.0
BMD43	Marvel, K. Diamond, P.	NMSU/NRAO-Socorro NRAO-Socorro	Continued monitoring of water masers around AGB stars		1.3	13	48.0
BP014	Patnaik, A.R. Garrett, M.A. Polatidis, A. Bagri, D.	MPIFR Jodrell Bank NRAL (Manchester) NRAO-Socorro	VLBA 15 GHz survey for small separation gravitational lens candidates		2	20	24.0
BR029	Romney, J. Kellermann, K. Alef, W. Dhawan, V.	NRAO-Socorro NRAO-CV MPIFR NRAO-Socorro	Continued structural monitoring of 3C84		2	29, 30	29.5
BT012	Thakkar, D.		Nuclei of complete sample of low-luminosity radio galaxies		6, 18	6	10.2
BV010	Vermeulen, R.C. Readhead, A.C.S. Backer, D.C.	Caltech Caltech Calif.-Berkeley	Structure & evolution of core and inner jet region of 3C84		1.3	15	16.0
BW012	Walker, C. Romney, J. Vermeulen, R. Benson, J.	NRAO-Socorro NRAO-Socorro Caltech NRAO-Socorro	Spectrum and motions of the "counterjet" feature in 3C84		3.6, 18	22	15.0
BW013	Wilkinson, P. Henstock, D. Augusto, P. Browne, I. Readhead, T. Pearson, T. Taylor, G.	Jodrell Bank Jodrell Bank NRAL (Jodrell Bank) Jodrell Bank Caltech CalTech CalTech	VLBA snapshot survey at 15 GHz		2	27	24.5

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GW013	Wehrle, A.E. Unwin, S.C. Zook, A.C.	JPL-IPAC CalTech Pomona	3C 279; coordinated multiwavelength observations and evolution		1.3	29	12.0
MAINT			Maintenance				108.0
SOFTW			Software			5, 12, 19, 24	24.0

Of a possible 744 hours, the VLBA was scheduled
 Astronomical Observations: 322.8 hours, 43%
 Tests and Calibrations: 147.0 hours, 20%
 Maintenance: 77.0 hours, 10%
 Total Downtime: 16.1 hours, 5%

Actual Observing: 306.7 hours
 Total number of projects was 18.