VLBA Utilization Report December 2002

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA053	Attridge, J. Homan, D.C. Phillips, R.B Wardle, J.F.C.	Haystack Brandeis Haystack Brandeis	86 and 43 GHz linear polarization of five AGN with the VLBA		0.3, 0.7	28,31	16.25
BA063	Alcolea, J. Bujarrabal, V. Colomer, F. Desmurs, J.F. Soria, R.	OAN OAN OAN OAN OAN	VLBA 3mm observations of HCN masers in CIT6		0.3, 0.7	11	11.50
BA064	Asada, K. Inoue, M. Kameno, S. Nagai, H. Uchida, Y.	NAO NAO NAO NAO Univ. of Tokyo	Faraday rotation measure survey of AGN jets search for helicalmagnetic field in jets		2,4,6,13	8,14	20.0
BA066	Asada, K. Inoue, M.	NAO NAO	Faraday rotation measure observation of 3C 273 jet		2,4,6	15	8.0
BB154	Boboltz, D. Wittkowski, M.	USNO ESO	Joint VLBA/VLTI observations of the Mira variables S Ori and V Mon		0.7	29,30	12.0
BC123	Chatterjee, S. Backer, D.C. Benson, J. Brisken, W. Cordes, J. Ellis, R. Fomalont, E.B. Golden, A. Goss, W.M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Thorsett, S.E. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro Jodrell Bank Cornell	First epoch pulsar with the VLBA		20	1,7,9	18.0
BC127	Cawthorne, T.V. Gabuzda, D. Jorstad, S. Marscher, A. Stirling, A.	Lancashire Ireland Boston Boston Lancashire	Precessing jet in BL lacertae		1,2,4,7	29	6.0
BD073	Doeleman, S. Attridge, J. Lonsdale, C.	Haystack Haystack Haystack	Magnetic fields in environments of SiO masers		0.3, 0.7	22	8.0
BG129	Greenhill, L.J. Chandler, C.J. Reid, M.J. Moran, J.M. Diamond, P.J.	CfA NRAO-Socorro CfA CfA Jodrell Bank	SiO proper motions in Orion KL		0.7 With Y1	10	8.0
BG131	Gabuzda, D.C. Croke, S. Vetukhnovskaya, Y.	Ireland Ireland ASC	Nature of variable sheath structures surrounding th ejets of compact AGN		1,2,4,6	13	24.0
BH105	Hough, D.H. Aars, C.	Trinity Univ. Texas Christian Univ	Variability in the nuclei of lobe-dominated quasars, Part II		2,4	16	12.0
BH106	Hough, D.H. Porcas, R.W. Zensus, J.A.	Trinity Univ. MPIfR MPIfR	Multi-frequency polarization imaging of nuclei in the lobe-dominated quasars 0723+679		2,4,6	4	24.0
BJ042	Johnston, K. Fey, A. Boboltz, D. Ma, C. Gordon, D. Gaume, R. Kingham, K. Vandenberg, N. Himwich, E. Shaffer, D. Fomalont, E. Walker, C.	USNO USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC Radiometrics NRAO-CV NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2002		3.6 Scheduled as RDV36	11	25.0
BK094	Koopmans, L. de Bruyn, G.	Caltech NFRA	The gravitationally lensed jet of B1600+434		2	9	6.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL098	Lovell, J.E.J. Edwards, P.G. Jauncey, D.L. Jones, D.L. Reynolds, J.E. Reynolds, J.E. Tzioumis, A.K. Wieringa, M.H.	ATNF ISAS ATNF JPL ATNF ATNF ATNF ATNF	Improving the precision of Ho measured from the gravitational lens 1830-211		1,2,4	21	10.5
BL104	Lobanov, A. Roland, J. Ros, E. Zensus, J.A.	MPIfR IAP MPIfR MPIfR	Cross-band monitoring of a flare in the VLBI core of 3C345		1,2,0.7	29	4.0
BM171	Marscher, A.P. Aller, M.F. Gomez, J.L. Jorstad, S.G. McHard, I.M.	Boston Univ. Michigan IAA, Granada Boston Southampton	Relationship between X-ray events and superluminal ejections in blazars		1, 0.7	6	15.0
BM178	Marvel, K. Alcolea, J. Boboltz, D. Bujarrabal, V. Colomer, F. Desmurs, J.F. Diamoand, P.J. Kemball, A. Soria, R.	AAS OAN USNO OAN OAN OAN Jodrell Bank NRAO-Socorro OAN	Relative spatial distribution of SiO masers in AGB stars at 43 and 86 GHz		0.3, 0.7	7,28	18.0
BP102	Pihlstrom, Y. Conway, J.	NRAO-Socorro Onsala	Search for excited OH in Cygnus A		2 With GB	22	12.0
BP104	Peck, A. Taylor, G.	CfA NRAO-Socorro	Jet and hotspot velocities in compact symmetric objects		3.6 With Y1	2	24.0
BR074	Romney, J.D. Dhawan, V. Kellermann, K.I. Walker, R.C. Zensus, J.A.	NRAO-Socorro NRAO-Socorro NRAO-CV NRAO-Socorro MPIfR	VLBA 3mm commissioning observations of four bright sources		0.3, 0.7	19	9.0
BR079	Resch, G. Boboltz, D. Charlot, P. Fey, A. Gordon, D. Lanyi, G. Ma, C. Sovers, O. Taylor, G. Ulvestad, J.	JPL USNO Bordeaux USNO GSFC NRAO-Socorro GSFC Remote Sensing NRAO-Socorro NRAO-Socorro	Extending the international celestial reference frame to multiple wavelengths		1, 0.7	26	24.0
BR081	Rector, T. Fassnacht, C.D. Myers, S. Taylor, G.B. Wrobel, J.	NRAO-Socorro STScI NRAO-Socorro NRAO-Socorro NRAO-Socorro	AGN Content of Cetus field of the NOAO deep wide-field survey		6	21	5.25
BT064	Taylor, G. Peck, A. O'Dea, C. Ulvestad, J.	NRAO-Socorro CfA STScI NRAO-Socorro	HI and continuum imaging in the gigamaser galaxy TXS 2226-184		6	16	6.0
BU023	Ulvestad, J.S. Falcke, H. Henkel, C. Peck, A.B.	NRAO-Socorro MPIfR MPIfR CfA	Emerging jet component in Mrk 348		1,2,4	12	10.0
BW063	Walker, R.C. Pihlstroem, Y.	NRAO-Socorro NRAO-Socorro	Fishing for molecules in the 3C84 accretion disk		2	19	14.0
BY013	York, T. Blandford, R.D. Browne, I.W.A. Fassnacht, C.D. Jackson, N.J. Koopmans, L.V.E. McKean, J.P. Myers, S.T. Wilkinson, P.N.	Jodrell Bank Caltech Jodrell Bank STSci Jodrell Bank Caltech Jodrell Bank NRAO-Socorro Jodrell Bank	VLBA observations of the most recent CLASS gravitational lens candidates		20	1	8.0
	Staff	NRAO	Maintenance				114.0

The average downtime was 17.45 hours (4.7%)

Actual observing time was 354.05 hours

The VLBA was scheduled 75.0% of the time 525.75 hours of a possible 698.0 hours

Astronomical Observations	= 53.0%	(371.50	hours)
Tests and Calibrations	= 11.0%	(76.25	hours)
Maintenance	= 11.0%	(78.00	hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA063	Alcolea, J. Bujarrabal, V. Colomer, F. Desmure, J.F. Soria, R.	OAN OAN OAN OAN OAN	3mm observations of HCN masers in CIT 6		0.3, 0.7	20	12.0
BB142	Brunthaler, A. Falcke, H. Greenhill, L.J. Henkel, C. Reid, M.	CfA MPIR, Bonn CfA CfA CfA	Second epoch observations for extragalactic proper motions in the local group with the VLBA		1	12	10.0
BC119	Cheung, C.C. Homan, D. Roberts, D.H. Sambruna, R.M. Urry, C.M. Wardle, J.F.C.	Brandeis Brandeis Brandeis George Mason STScI Brandeis	Full stokes imaging of a sample of detected and non-detected		2,4	2	24.0
BC123	Chatterjee, S. Backer, D.C. Benson, J. Benson, J. Brisken, W. Cordes, J. Ellis, R. Fomalont, E.B. Golden, A. Goss, M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Thorsett, S.E. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro Calif., Santa Cruz Cornell	First-epoch pulsar astrometry with the VLBA		20	1, 4, 9	14.75
BD082	Desmurs, J.F. Alcolea, J. Bujarrabal, V. Colomer, F. Sanchez-Contreras,	OAN OAN OAN OAN JPL	Water masers in the proto planetary nebula OH 231.8+4.2		1	24	11.0
BG116	Bradshaw, C.F. Fomalont, E.B. Geldzahler, B.J.	George Mason NRAO-CV George Mason	Astrometric observations of the compact radio source G127.11+0.54		4	22	6.0
BG126	Gomez, Y. Anglada, G. Marvel, K. Miranda, L.F. Patel, N. Torrelles, J.M.	UNAM CSIC AAS CSIC CfA IEEC	Tracking th eproper motions of the H2O masers in the planetary nebula K3-35		1	6	10.0
BG129	Greenhill, L.J. Chandler, C.J. Reid, M.J. Moran, J.M. Diamond, P.J.	CfA NRAO-Socorro CfA CfA Jodrell Bank	SiO proper motions in Orion KL		0.7 With Y1	6	8.0
BH081	Healy, K. Claussen, M.J. Hester, J.	Arizona NRAO-Socorro Arizona	Protostars and water masers in M16, the Eagle Nebula		1	21	5.25
BH083	Hirota, T. Hachisuka, K. Imai, H. Omodaka, T. Sasao, T.	Kagoshima Graduated Univ. NAO Kagoshima NAO	Measurements of proper motion of the Orion-Monoceros molecular cloud complex		1	25	7.0
BH106	Homan, D.C.	NRAO-CV	The 180d misaligned jet in PKS 1510-089		18 With Y1	30	9.0
BI024	Imai, H. Diamond, P.J.	NAO Jodrell Bank	Collimated molecular jet in W 43A traced by water maser emission		1	24	10.0
BJ041	Junor, B.	Los Alamos	Core of Virgo A at 3mm		.3, .7	14	6.0
BK089	Nanekar, N. Briggs, F.H. Chengalur, J.N. Lane, W.	NCRA Kapteyn NCRA NRL	Compact structure of QSOs behind damped Lyman systems		90	26	17.30

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BK092	Krichbaum, T.P. Aller, H.D. Aller, M.F. Bach, U. Polatidis, A. Ros, E. Terasranta, H. Ungerechts, H. Witzel, A. Zensus, J.A.	MPIR Michigan Michigan MPIR MPIR MPIR Metsahovi IRAM MPIR MPIR	VLBA Monitoring of 1633+382 during a major millimeter flare		1, .3, .7	1	13.25
BL111	Lister, M. Aller, H.D. Aller, M.F. Cohen, M.C. Homan, D.C. Kadler, M. Kellermann, K. Kovalev, Y.A. Lobanov, A. Ros, E. Vermeuelη, R.C. Zensus, J.A.	NRAO-CV Michigan Michigan Caltech NRAO-CV MPIR NRAO-CV Lebedev MPIR MPIR NFRA MPIR	MOJAVE Program		2	23	24.0
BM171	Marscher, A. Aller, M.F. Gomez, J.L. Jorstad, S.G. McHardy, I. McHardy, I.	Boston Michigan IAA, Granada Boston Southampton Southampton	Relationship between X-ray events and superluminal ejections in blazars		1, .7	8	15.0
BP089	Edwards, P.G. Jones, D. Piner, B.G.	ISAS JPL Whittier	Monitoring of Ultra-fast blazars		1,2,.7	15	18.0
BS088	Shen, Z-Q. Ho, P.T.P. Lo, K.Y. Zhao, J-H.	ISAS CfA NRAO-CV CfA	Probing the intrinsic source structure of Sgr A*		.3, .7	3	7.0
BT064	Taylor, G. O'Dea, C. Peck, A. Ulvestad, J.	NRAO-Socorro STScI CfA NRAO-Socorro	HI and continuum imaging in the gigamaser galaxy TXS 2226-184		6	27	6.0
GB045	Bartel, N. Bietenholz, M.F. Rupen, M.	York York NRAO-Socorro	SN 1986J - evolution of its shell and search for a pulsar nebula		6 With EbWbJnOnMcTr+Y27	10	12.0
GG048	Garrington, S. van Langevelde, H-J Campbell, R.M. Gunn, A.	Jodrell Bank JIVE NFRA Jodrell Bank	High resolution imaging and astrometry of Theta1 Ori A2		6 With EVN	9	11.0
GL026	Lonsdale, C.J. Lonsdale, C.J. Smith, H.E. Diamond, P.J.	Haystack Haystack IPAC Jodrell Bank	High sensitivity imaging of supernovae and masers in Arp 220		18 With EbWbJbMcTr+AR+Y27	16	11.5
GM047	Marcaide, J.M. Guirado, J.C. Alberdi, A. Lara, L. Perez-Torres, M.A. Ros, E. Diamond, P.J. Van Dyk, S.D. Weiler, K.	Valencia Valencia IAA IAA Bologna MPIfR Jodrell Bank IPAC NRL	Monitoring the expansion of SN 1979C at 6cm and 18cm		18 With EbWbJb+RO+AR+GB	18	13.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GM048	Marcaide, J.M.	Valencia	Monitoring the expansion of SN 1993J at 6 and 18cm		6, 18 With EbJbOnMc+Y 27	7, 17	25.0
	Guirado, J.C.	Valencia					
	Alberdi, A.	IAA					
	Lara, L.	IAA					
	Ros, E.	MPIfR					
	Diamond, P.J.	Jodrell Bank					
	Shapiro, I.I.	CfA					
	Preston, R.A.	JPL					
	Schilizzi, R.T.	JIVE					
	Mantovani, F.	Bologna					
	Perez-Torres, M.A.	Bologna					
	Trigilio, C.	Noto					
	Van Dyk, S.	IPAC					
	Weiler, K.W.	NRL					
	Sramek, R.A.	NRAO-Socorro					
	Whitney, A.R.	Haystack					
GP034	Peck, A.	CfA	Megamasers in Mrk 1066 and Mrk 34		1.3 With EbJbOnMc	21	8.0
	Henkel, C.	MPIfR					
	Tarchi, A.	Bologna					
	Nagar, N.	Arcetri					
GV016	Vermeulen, R.C.	NFRA	OH and HI in Seyfert galaxy NGC 1052		18 With EVN	18	12.0
	Ros, E.	MPIfR					
	Kadler, M.	MPIfR					
	Zensus, J.A.	MPIfR					
	van Langevelde, H.J	JIVE					
	Kellermann, K.I.	NRAO-CV					
	Cohen, M.H.	Caltech					
R1A57	Chatterjee, S.	Cornell	VLB pulsar parallaxes		18 with GB	26	6.0
	Cordes, J.	Cornell					
	Lazio, J.	NRL					
	Goss, M.	NRAO-Socorro					
	Fomalont, E.B.	NRAO-CV					
	Benson, J.M.	NRAO-Socorro					
	Stairs, I.	NRAO-GB					
	Brisken, W.	NRAO-Socorro					
	Thorsett, S.	Calif., Santa Cruz					
	Staff	NRAO	Maintenance				95.5

The average downtime was 18.3 hours (5.5%)

Actual observing time was 314.25 hours

The VLBA was scheduled 75.0% of the time 512.75 hours of a possible 684.0 hours

Astronomical Observations = 49.0% (332.55 hours)
Tests and Calibrations = 16.0% (112.20 hours)
Maintenance = 10.0% (68.00 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA064	Asada, K. Inoue, M. Kameno, S. Nagai, H. Uchida, Y.	NAO NAO NAO NAO Univ. of Tokyo	Faraday rotation measure survey of AGN jets		2, 4,6,13	31	10.0
BB142	Brunthaler, A. Falcke, H. Greenhill, L.G. Henkel, C. Reid, M.	CfA MPIR, Bonn CfA MPIR, Bonn CfA	Second epoch observations for extragalactic proper motions in the local group with the VLBA		1	1, 11, 30	30.0
BC081	Cotton, W.D. Fanti, C. Fanti, R. Dallacasa, D. Foley, A.R. Schilizzi, R.T. Spencer, R.E.	NRAO-CV Bologna Bologna Bologna NFRA JIVE Jodrell Bank	Faraday rotation in the core of 3C138		6 With Y1	14	12.0
BC123	Chatterjee, S. Backer, D.C. Benson, J. Brisken, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Thorsett, S.E. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro Calif., Santa Cruz Cornell	First epoch pulsar astrometry with the VLBA		20	3,5,6,8,10,13,17,18,19,30	22.0
BC127	Cawthorne, T. Gabuzda, D. Jorstad, S. Marscher, A. Stirling, A.	Lancashire Ireland Boston Boston Lancashire	A precessing jet in BL lacertae		1,2,4,7	22	6.0
BG129	Greenhill, L.J. Chandler, C.J. Reid, M.J. Moran, J.M. Diamond, P.J.	CfA NRAO-Socorro CfA CfA Jodrell Bank	SiO proper motions in Orion KL		0.7 With Y1	7	8.0
BH097	Hoffman, I. Goss, M. Brogan, C. Claussen, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	Full stokes observations of the 1720 MHz OH masers in W28		18 With Y1	7, 14	10.0
BJ036	Jorstad, S. Marscher, A.P. Yurchenko, A.V.	Boston Boston St. Petersburg	BL Lac objects with high proper motion		1,2,4,7	20	16.0
BK094	Koopmans, L. de Bruyn, G.	Caltech NFRA	The gravitationally lensed jet of B1600+434		2 With EB	21	6.0
BL104	Lobanov, A.P. Roland, J. Ros, E. Zensus, J.A.	MPIR, Bonn IAP, Paris MPIR, Bonn MPIR, Bonn	Cross-band monitoring of a flare in the VLBI core of 3C345		1,2,7	11	4.0
BL111	Lister, M.L. Aller, H.D. Aller, M.F. Cohen, M.C. Homan, D.C. Kadler, M. Kellermann, K.I. Kellermann, K.I. Kovalev, Y.A. Lobanov, A.P. Ros, E. Vermeulen, R.C. Zensus, J.A.	NRAO-CV Michigan Michigan Caltech NRAO-CV MPIR, Bonn NRAO-CV NRAO-CV Lebedev MPIR, Bonn MPIR, Bonn NFRA MPIR, Bonn	MOJAVE Program		1,7	9	24.0
BM171	Aller, M.F. Gomez, J.L. Jorstad, S.G. Marscher, A.P. McHardy, I.	Michigan IAA, Granada Boston Boston Southampton	Relationship between X-ray events and superluminal ejections in blazars		1,7	12	15.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR077	Cohen, M.H. Kadler, M. Kellermann, K.I. Lister, M.L. Ros, E. Vermeulen, R.C. Zensus, J.A.	Caltech MPIR, Bonn NRAO-CV NRAO-CV MPIR, Bonn ASTRON MPIR, Bonn	Kinematics of parsec-scale structure in AGN: a survey of 2cm		2	20	8.0
BR082	Roy, A.L. Colbert, E.J.M. Falcke, H. Krichbaum, T.P. Middelberg, E. Wilson, A.S.	MPIfR Johns Hopkins MPIfR MPIfR MPIfR Maryland	Seyfert galaxy NGC 2639 following a radio outburst		0.7, 1.3, 2 With EB	2	12.0
BS117	Schmitt, H. Spangler, S.R. Cordes, J.M. Mutel, R.L.	NRAO-Socorro Iowa Cornell Iowa	Proper motion and absorption in the jet of the Seyfert galaxy IRAS 01475-0740		6	8,13,15,18	16.0
BS120	Spangler, S. Cordes, J.M. Mutel, R.L.	Iowa Cornell Iowa	Investigation of shock-associated turbulence in two supernova remnants		6,13,20	6	12.0
BT065	Taylor, G. Hough, D. Venturi, T.	NRAO-Socorro Trinity CNR	Polarimetry of powerful radio cores		6	4	24.0
BW051	Benson, J.M.	NRAO-Socorro	Constraining a possible helical flow in 3C120 at 1.7 GHz		20	4	13.0
BY013	York, T.D. Blandford, R.D. Browne, I.W.A. Fassnacht, C.D. Jackson, N.J. McKean, J.P. Myers, S.T. Pearson, T. Readhead, T. Wilkinson, P.N.	Jodrell Bank Caltech Jodrell Bank STScI Jodrell Bank Jodrell Bank NRAO-Socorro Caltech Caltech Jodrell Bank	Observations of the most recent CLASS gravitational lens candidates		20	19	8.0
CMVA			Combined Millimeter VLBI Array			24-29	135.0
	Staff	NRAO	Maintenance				114.0

The average downtime was 10.2 hours (2.6%)

Actual observing time was 380.8 hours

The VLBA was scheduled 78.0% of the time 580.0 hours of a possible 744.0 hours

Astronomical Observations = 53.0% (391.0 hours)
Tests and Calibrations = 14.0% (110.0 hours)
Maintenance = 11.0% (79.0 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA053	Attridge, J. Homan, D.C. Phillips, R.B. Wardle, J.	Haystack Brandeis Haystack Brandeis	86 and 43 GHz linear polarization of five AGN with the VLBA		3, 7	23	8.0
BA057	Andre, P. Lestrade, J.-F. Bontemps, S. Charlot, P. Ducourant, C.	CEA-Saclay Meudon Bordeaux Bordeaux Bordeaux	Kinematics and distance of the Oph Protocluster		3.6 with GB	7, 8, 9, 12, 13, 14, 15	28.0
BA061	Attridge, J.M. Homan, D.C. Pollack, L.K.	Haystack NRAO-CV Calif.-Berkeley	Polarimetric imaging of the blazar J1058+0133		2, 3.6, 6 with Y1	20, 21	24.0
BC123	Chatterjee, S. Backer, D.C. Benson, J. Brisken, W. Cordes, J.M. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Thorsett, S. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro Calif., Santa Cruz Cornell	First epoch pulsar astrometry with the VLBA		20	1,2,6,7,11 ,13,23,29, 30	22.0
BG120	Gawronski, M. Booth, R. Kus, A.J. Wilkinson, P.	Poland Onsala Poland Jodrell Bank	Study of helical jet and strong interaction with ISM in the CSS quasar 3C309.1		2	1	10.0
BG129	Greenhill, L.J. Chandler, C.J. Reid, M.J. Moran, J.M. Diamond, P.J.	CfA NRAO-Socorro CfA CfA Jodrell Bank	SiO proper motions in Orion KL		0.7 with Y1	5	8.0
BH083	Hirota, T. Hachisuka, K. Imai, H. Omadaka, T. Sasao, T.	Kagoshima Graduate University NAO Kagoshima NAO	Measurements of proper motion of the Orion-Monoceros molecular cloud complex		1	29	7.0
BH097	Hoffman, I. Goss, M. Brogan, C. Claussen, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	Full stokes observations of the 1720 MHz OH masers in W28		18 with Y1	26	6.0
BH099	Hachisuka, K. Horiuchi, S. Inoue, M. Miyoshi, M. Mochizuki, N. Umemoto, T.	NAO JPL Kagoshima NAO NAO NAO	Determination of outer galactic rotation curve through phase-referencing VLBI astrometry with water masers II: source selection with VLBA		1	6,10	8.0
BJ042	Johnston, K. Fey, A. Boboltz, D. Ma, C. Gordon, D. Gaume, R. Kingham, K. Vandenberg, N. Himwich, E. Shaffer, D. Fomalont, E. Walker, C.	USNO USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC Radiometrics NRAO-CV NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2002		3.6 with NAVNET	25	25.0
BK085	Kopeikin, S.M. Fomalont, E.B. Gwinn, C.R.	Missouri NRAO-CV Calif.-Santa Barbara	Measuring the propagation of gravity by VLBI		3.6 with EB	4, 7, 8, 9, 12	50.0
BK087	Koopmans, L. deBruyn, G.	Caltech ASTRON	The gravitationally lensed jet of B1600+434		2 with EB	2	10.0
BK095	Kortenkamp, P.S. Mutel, R.L. Spangler, S.R.	Iowa Iowa Iowa	Inner solar wind turbulence using VLBI phase scintillations		13,6,3.6	10	11.0
BK096	Kulkarni, S.	Caltech	SN1998 bw-like object		4	30	4.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL110	Lazio, J. Lockman, F.J. Roshi, D.A.	NRL NRAO-GB NRAO-GB	Search for ionized gas in the galactic warp		20	2,3,8,9,11,13,14,15,16,17	11.5
BM170	Middelberg, E. Krichbaum, T.P. Roy, A. Witzel, A. Zensus, A.	MPIfR MPIfR MPIfR MPIfR MPIfR	The complex jet in NGC 3079		3.6, 6, 18 with EB	22	12.0
BM171	Marscher, A.P. Aller, M.F. Gomez, J.L. Jorstad, S.G. McHardy, I.M.	Boston Michigan IAA, Granada Boston Southampton	Relationship between x-ray events and superluminal ejections in blazars		1,7	16	15.0
BM175	Middelberg, E. Krichbaum, T.P. Roy, A.L. Walker, R.C.	MPIfR MPIfR MPIfR NRAO-Socorro	Beating the sensitivity limits: 3mm imaging of NGC 4261		2,3,7	27	12.25
BP090	Perez-Torres, M.A. Alberdi, A. Guirado, J.C. Ros, E.	IRA IAA Valencia MPIfR	M81* at 43 GHz		7	13	7.25
BS095	Shinnaga, H. Claussen, M. Lim, J. Tsuboi, M. Van Trung, D.	ASIAA NRAO-Socorro ASIAA Ibaraki ASIAA	Study of the circumstellar magnetic field of the peculiar red supergiant VY CMa		7	14	8.0
BT065	Taylor, G. Hough, D. Ventuir, T.	NRAO-Socorro Trinity CNR	VLBA Polarimetry of powerful radio galaxy cores		6	28	24.0
BW054	Walker, R.C. Wrobel, J.	NRAO-Socorro NRAO-Socorro	Jet collimation regions		7	19	10.0
BW064	Winn, J.	CfA	Completion of a southern gravitational lens survey		6	10	3.0
	Staff	NRAO	Maintenance				96.0

The average downtime was 13.6 hours (4%)

Actual observing time was 318.4 hours

The VLBA was scheduled 73.0% of the time 526.0 hours of a possible 720.0 hours

Astronomical Observations = 46.0% (332.0 hours)
Tests and Calibrations = 17.0% (126.0 hours)
Maintenance = 10.0% (68.0 hours)

VLBA Utilization Report August 2002

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA062	Anderson, J.M. Ho, L.C. Ulvestad, J.S.	NRAO-Socorro Carnegie Obs. NRAO-Socorro	Survey of emission mechanisms in low-luminosity active galactic nuclei: centimeter observations of flat spectrum sources		2,4,6,13	2,26	20.0
BB157	Black, G.	NRAO-Socorro	Near earth asteroid 2002 NY40		13	18	2.25
BC123	Fomalont, E.B. Chatterjee, S. Backer, D.C. Benson, J. Brisken, W. Cordes, J.M. Ellis, R. Golden, A. Goss, M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Thorsett, S.E. Wong, D.	NRAO-CV Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz Ireland NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro Calif., Santa Cruz Cornell	First-epoch pulsar astrometry with the VLBA		20	3,5,6,8,9, 23,30,31	22.0
BG121	Gabuzda, D.C. Cawthorne, T.V. Pashchenko, I.N. Pushkarev, A.B.	JIVE Lancashire Moscow ASC	High-frequency polarization observations of a complete sample of BL lac objects		1,2,7	24	24.0
BG125	Garrett, M.A. Wrobel, J.	JIVE NRAO-Socorro	Very Deep VLBA GBT pilot survey of the NOAO deep-wide field		18 with GBT	3, 4, 5	24.0
BG128	Gabuzda, D.C. Rastorgueva, E.A. Smith, P.A.	Cork Moscow Arizona	Simultaneous optical and VLBI polarization observations		0.7, 1.3, 2	7	24.0
BG129	Greenhill, L.J. Chandler, C.J. Reid, M.J. Moran, J.M. Diamond, P.J.	CfA NRAO-Socorro CfA CfA Jodrell Bank	SiO proper motions in Orion KL		0.7 With Y1	9	8.0
BH083	Hirota, T. Hachisuka, K. Imai, H. Omodaka, T. Sasao, T.	Kagoshima Graduate Univ. NAO Kagoshima NAO	Measurments of proper motion of the Orion-MOnoceros molecular cloud complex		1	8	7.0
BH099	Hachisuka, K. Horuchi, S. Inoue, M. Miyoshi, M. Unemoto, T.	NAO JPL Kagoshima NAO NAO	Determination of outer galactic rotation curve through phase-referencing VLBI astronometry with water masers II		1	12, 27	12.0
BK092	Krichbaum, T.P. Aller, H.D. Aller, M.F. Bach, U. Polatidis, A. Ros, E. Terasranta, H. Ungerechts, H. Witzel, A. Witzel, A. Zensus, J.A.	MPIfR Michigan Michigan MPIfR MPIfR MPIfR Metsahovi IRAM MPIfR MPIfR MPIfR	VLBA Monitoring of 1633+382 during a major millimeter flare		1,3,7	28	13.25
BL110	Lockman, F.J. Roshi, D.A.	NRAO-GB NRAO-GB	Search for ionized gas in the galactic wrap		20	8,9	2.25
BL112	Lazio, T.J.W.	NRL	B1849+005 and PSR B1849+00: A scattering comparison		13	23	1.50
BM171	Marscher, A.P. Aller, M.F. Gomez, J.L. Jorstad, S.G. McHardy, I.M.	Boston Michigan IAA, Granada Boston Southampton	Relationship between x-ray events and superluminal ejections in blazars		1,7	11	15.0
BP089	Piner, B.G. Edwards, P.G. Jones, D.	Whittier College ISAS JPL	Monitoring of ultra-fast blazars		1,2,7	30	18
BP090	Perez-Torres, M.A. Alberdi, A. Guirado, J.C. Marcaide, J.M. Ros, E.	IAR IAA, Andalucia Valencia Valencia MPIfR	M81* at 43 GHz		7	31	8.50

VLBA Utilization Report August 2002

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR077	Ros, E. Cohen, M.H. Kadler, M. Kellermann, K. Lister, M.L. Vermeulen, R.C. Zensus, J.A.	MPIfR Caltech MPIfR NRAO-CV NRAO-CV ASTRON MPIfR	Kinemataics of parsec-scale structure in AGN		2	2,12	16.0
BR079	Boboltz, D. Charlot, P. Fey, A. Gordon, D. Ma, C. Sovers, O. Taylor, G. Ulvestad, J.	USNO Bordeaux USNO GSFC GSFC RSAS NRAO-Socorro NRAO-Socorro	Extending the international celestial reference frame to multiple wavelengths		1, 7	25	22.0
BS094	Sudou, H. Iguchi, S. Kameno, S. Murata, Y. Taniguchi, Y.	Tohoku University NAO NAO ISAS Tohoku University	Search for an accretion disk and a dusty torus in NGC 4261		1,2,7	1,29	19.50
BS096	Suda, H. Honma, M. Sasao, T.	Univ. of Tokyo NAO NAO	Phase-referencing VLBA observations of water maser source in the inner galaxy for resolving distance ambiguity and determining galactic constants		1	10	8.0
BV044	Vlemmings, W.H.T. Diamond, P.J. van Langevelde, H.	Leiden Jodrell Bank JIVE	Polarization of circumstellar H20 masers		1	10	24.0
BV045	Vir Lal, D. Gabuzda, D.	IIA, Bangalore University College	Structure and motion of Mrk 533		2,4,6,13	28	10.25
BW064	Winn, J.	CfA	Completion of a southern gravitational lens survey		6	23	3.0
	Staff	NRAO	Maintenance				246.0

The average downtime was 24.2 hours (8%)

Actual observing time was 278.6 hours

The VLBA was scheduled 71.5% of the time 532.2 hours of a possible 744 hours

Astronomical Observations = 41.0% (303.0 hours)
Tests and Calibrations = 15.0% (108.4 hours)
Maintenance = 16.0% (120.8 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA045	Alberdi, A. Gomez, J.L. Marcaide, J.M. Marscher, A.P. Perez-Torres, M.A.	IAA IAA Univ. Valencia Boston IRA	Interaction of moving and standing components in 4C39.25		1,2,7	19	13.75
BA062	Anderson, J.M. Ho, L.C. Ulvestad, J.	NMIMT Carnegie Obs. NRAO-Socorro	Survey of emmision mechanisms in low-luminosity active galactic nucleu		2,4,6,13	29	10.0
BB138	Bach, U. Krichbaum, T.P. Alef, W. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR MPIfR	Motion in the counter jet of Cygnus A		2, 6 With EB, Y1	7	16.0
BB149	Baan, W. Garrett, M. Hofner, P. Klockner, H-R. Pihlstrom, Y.	ASTRON JIVE Puerto Rico Kapteyn NRAO-Socorro	TORUS/Disk structures in powerful OH megamasers		20	8	12.25
BC123	Chatterjee, S. Backer, D. Benson, J. Brisken, W. Cordes, J.M. Ellis, R. Fomalont, E.B. Golden, A. Goss, M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Thorsett, S. Wong, D.	Cornell UC, Berkeley NRAO-Socorro NRAO-Socorro Cornell UC, Santa Cruz NRAO-CV Ireland NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro UC, Santa Cruz Cornell	First-epoch pulsar astrometry with the VLBA		20	2,6,12	18.0
BC130	Chollet, E. Anderson, J. Brisken, W. Cyganowski, C. Devine, K. Glendenning, L. Petric, A.	NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro CV-Socorro NRAO-Socorro NRAO-Socorro	Crab pulsar observation		20	2	4.0
BE023	Edwards, P. Piner, G.	ISAS Whittier	Markarian 421-Monitoring after a TeV outburst		1	2	6.0
BG103	Gabuzda, D. Pushkarev, A.B.	JIVE ASC	Unique parsec scale properties of the BL lac object 0820+225		1,2,4,6,7	17	13.75
BG121	Gabuzda, D. Cawthorne, T.V. Pashchenko, I.N. Pushkarev, A.B.	JIVE Central Lancashire Moscow State ASC	High-frequency polarization observations of a complete sample of BL lac objects		1,2,7	28	24.0
BG130	Gabuzda, D. Pushkarev, A.B.	JIVE ASC	Unique parsec-scale properties of the BL lac objects 0820+255		1,2,4,6,7	17	13.75
BH096	HOng, X.Y. An, T. Jiang, D.R. Venturi, T. Wang, W.H.	Shanghai Shanghai Shanghai IRA Shanghai	Why do some EGRET detected blazars show double radio structures?		2,4,6	20	18.0
BH097	Hoffman, I. Goss, M. Brogan, C. Claussen, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	Full stokes observations of the 1720 MHz OH masers in W28		18 With Y1	8, 13	10.0
BI024	Imai, H. Diamond, P.	NAOJ Jodrell Bank	Collimated molecular jet in W43A traced by water maser emission		1,20	22,26	20.0
BJ042	Johnston, K. Fey, A. Boboltz, D. Ma, C. Gordon, D. Gaume, R. Kingham, K. Vandenberg, N. Himwich, E. Shaffer, D. Fomalont, E. Walker, C.	USNO USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC Radiometrics NRAO-CV NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2002		3.6 Scheduled as RDV34	24	25.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BK076	Kurayama, T. Sasao, T.	NAO NAO	Parallax measurement of Miras for period-luminosity relation		1	12	5.0
BK086	Krichbaum, T.P. Fuhrmann, L. Beckert, T. Cimo, G. Kraus, A. Witzel, A.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR	Intermittently IDV source 0917+62		1.3, 2 With EB	13	12.0
BK087	Koopmans, L. de Bruyn, G.	Caltech ASTRON	Relativistic speeds in the gravitationally lensed jet of B1600+434		2	14	9.50
BK093	Kunert, M. Marecki, A. Spencer, R.E.	Torun Torun Jodrell Bank	Weak and small CSS sources		18 With EB	27	20.0
BL098	Lovell, J. Edwards, P. Jauncey, D.L. Jones, D. Reynolds, J.E. Tzioumis, A.K. Wieringa, M.H.	ATNF ISAS ATNF JPL ATNF ATNF ATNF	Improving the precision of H measured from the gravitational lens 1830-211		1,2,4	5	10.50
BL107	Lara, L. Cotton, W.D. Feretti, L. Giovannini, G. Marcaide, J.M. Venturi, T.	IAA NRAO-CV IRA IRA Valencia IRA	Parsec-scale properties of large angular size radio galaxies		6	4, 22	20.0
BL110	Lazio, T.J.W. Lockman, F.J. Roshi, A.	NRL NRAO-GB NRAO-GB	Search for ionized gas in the galactic wrap		20	17,18,20	3.50
BM162	Marscher, A.P. Aller, M.F. Jorstad, S.G. McHardy, I.	Boston Michigan Boston Southampton	Relationship between X-ray flares and superluminal ejections in blazars		1,7	11	12.0
BM166	Middelberg, E. Gabuzda, D. Roy, A.	MPIfR JIVE MPIfR	Polarimetry of compact radio sources		2	5	12.0
BM171	Marscher, A.P. Aller, M.F. Gomez, J.L. Jorstad, S.G. McHardy, I.	Boston Michigan IAA Boston Southampton	Relationship between X-ray events and superluminal ejections		1,7	16	15.0
BP089	Piner, B.G. Edwards, P.G. Jones, D.	Whittier ISAS JPL	Monitoring of ultra-fast blazars		1,2,7	3	18.0
BP095	Palmer, P. Devine, K. Goss, M.	Chicago Carleton College NRAO-Socorro	1720 MHz OH emission in W3 (OH)		20	31	14.0
BP097	Pihlstrom, Y. Aalto, S. Morganti, R. Oosterloo, T.	NRAO-Socorro Onsala NFRA NFRA	Evolution of ISM in radio galaxies - the radio properties of B21506+34		20	18	12.25
BR080	Ratner, M.I. Bartel, N. Bietenholz, M.F. Lebach, D.E. Lestrade, J.-F. Ranson, R.R. Shapiro, I.I.	CfA York York CfA Meudon York CfA	Astrometry of HR 8703 in 2002 for gravity Probe-B mission		3.6 With EB, RO, GO, TI	14	18.0
BS084	Sarma, A.P. Romney, J.D. Troland, T.	Kentucky NRAO-Socorro Kentucky	Zeeman measurement of the magnetic field in 22 GHz H20 masers in OH43.8-0.1 and W3 (OH)		1	1	11.75
BS102	Sahai, R. Claussen, M.J. Morris, M.	JPL NRAO-Socorro Calif.-Los Angeles	The water masers in the "water-fountain" protoplanetary IRAS 16342-3814		1.3	3	5.0
BV044	Vlemmings, W.H.T. Diamond, P.J. van Langevelde, H.J	Leiden Jodrell Bank JIVE	Polarization of circumstellar H20 masers		1	26	24.0
	Staff	NRAO	Maintenance				114.0

The average downtime was 12.0 hours (3.6%)

Actual observing time was 386.25 hours

The VLBA was scheduled 76% of the time 558.25 hours of a possible 744 hours

Astronomical Observations	= 54.0%	(398.25	hours)
Tests and Calibrations	= 11.0%	(81.0	hours)
Maintenance	= 11.0%	(79.0	hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB142	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	CfA MPIfR CfA MPIfR CfA	Second epoch obs. for extragalactic proper motions in the local group with the VLBA		1	20, 30	15.5
BB149	Baan, W. Garrett, M. Hofner, P. Klockner, H-R. Pihlstroem, Y.	Westerbork JIVE Univ. Puerto Rico Kapteyn NRAO-Socorro	Torus/Disk structures in powerful OH megamasers		20	17	12.0
BB152	Bach, U. Alef, W. Graham, D. Greve, A. Krichbaum, T.P. Terasranta, H. Witzel, A. Zensus, J.A.	MPIfr MPIfR MPIfR IRAM MPIfR Metsahovi MPIfR MPIfR	Precessing or helical jet in NRAO 150?		1,4,7	23	12.0
BC123	Chatterjee, S. Backer, D. Benson, J. Brisken, W. Cordes, J. Ellis, R. Fomalont, E.B. Golden, A. Goss, M. Kramer, M. Lazio, T.J. Lyne, A. McKinnon, M. Thorsett, S. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV National Univ. of Ir NRAO-Socorro Jodrell Bank NRL Jodrell Bank NRAO-Socorro Calif., Santa Cruz Cornell	First-epoch pulsar astrometry with the VLBA		20	27, 28	4.0
BC125	Clarke, T. Punsly, B.	NRAO-Socorro	Observations to determine the structure of an IXO in the Halo IC2597		20, 4	22	3.0
BG118	Greenhill, L. Chandler, C.J. Diamond, P. Moran, J.M. Reid, M.J.	CfA NRAO-Socorro Jodrell Bank CfA CfA	SiO maser motions in Orion BN/KL		0.7 With Y1	28	8.0
BH069	Fujisawa, K. Honma, M. Imai, H. Kameya, O. Kawaguchi, N. Manabe, S. Miyoshi, M. Nishio, M. Omodaka, T. Sasao, T. Sawada-Satoh, S.	NAO NAO NAO NAO NAO NAO NAO Kagoshima University Kagoshima University NAO NAO	Determination of the velocity of Galactic rotation at IRAS 21008+4700		1	21	5.0
BH097	Hoffman, I. Goss, M. Brogan, C. Claussen, M.	UNM/NRAO NRAO-Socorro NRAO-Socorro NRAO-Socorro	Full stokes observations of the 1720 MHz OH masers in W28		18 With Y1	23, 24, 25, 30	21.0
BK076	Kurayama, T. Sasao, T.	University of Tokyo NAO	Parallax measurment of Miras for period-luminosity relation		1	26	5.0
BK085	Kopeikin, S.M. Fomalont, E.B. Gwinn, C.R.	Missouri NRAO-CV Calif.-Santa Barbara	Measuring the propagation of gravity by VLBI		3.6	19	8.0
BK092	Krichbaum, T.P. Bach, U. Ros, E. Polatidis, A. Witzel, A. Zensus, J.A. Ungerechts, H. Terasranta, H. Aller, H.D. Aller, M.F.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR IRAM Metsahovi Michigan Michigan	VLBA Monitoring of 1633+382 during a major millimeter-flare		0.7, 1.3 With EB	12	14.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL111	Lister, M. Aller, H. Aller, M.F. Cohen, M. HOman, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A. Ros, E. Vermeulen, R. Zensus, J.	NRAO-CV Univ. of Michigan University of Michig Caltech NRAO-CV MPIfR NRAO-CV Lebedev MPIfR MPIfR NFRA MPIfR	MOJAVE Program		2	1, 15	41.5
BM162	Marscher, A. Aller, M.F. Jorstad, S. McHardy, I.	Boston University University of Michig Boston University Southampton	Relationship between X-ray flares and superluminal ejections in blazars		1,7	13	12.0
BM171	Marscher, A.P. Aller, M.F. Gomez, J.L. I.M., McHardy Jorstad, S.G.	Boston University Univ. of Michigan IAA, Granada Southampton Boston University	Relationship between X-ray events and superluminal ejections in blazars		1,7	10	15.0
BP089	Piner, B.G. Edwards, P.G. Jones, D.	Whittier College ISAS JPL	Monitoring of ultra-fast blazars		1,2,7	27	18.0
BP100	Perez-Torres, M.A. Mantovani, F. Marcaide, J.M. Guirado, J.C. Alberdi, A. Lara, L. Ros, E. Panagia, N. Shapiro, I. Sramek, R. Stockdale, C. Weiler, K. Van Dyk, S. Lundqvist, P.	Bologna Bologna Valencia Valencia IAA IAA MPIfR STScI CfA NRAO-Socorro NRL NRL IPAC Stockholm	SN2001 GD in NGC 5033		3.6 with GB, EB	26	8.0
BR077	Ros, E. Cohen, M.H. Kadler, M. Kellermann, K. Lister, M.L. Vermeulen, R.C. Zensus, J.A.	MPIfR Caltech MPIfR NRAO-CV NRAO-CV Dwingeloo MPIfR	Kinematics of parsec-scale structure in AGN		2	2, 12	16.0
BS087	Sudou, H. Iguchi, S. Murata, Y. Murata, Y. Taniguchi, Y.	Tohoku University NAO ISAS ISAS Tohoku University	Phase referencing VLBI observations of 3C 66B		13,1,4,	14	12.5
BS100	Sanchez-Contreras, Alcolea, J. Bujarrabal, V. Colomer, F. Desmurs, J.-F.	JPL OAN OAN OAN OAN	Phase referencing mapping of 43 GHz SiO masers in the PPN OH231.8+4.2		7	24	11.25
BS102	Sahai, R. Claussen, M.J. Morris, M.	JPL NRAO-Socorro Calif.-Los Angeles	The water masers in the "water-fountain" protoplanetary IRAS 16342-3814		1.3	3	5.0
BS111	Storchi-Bergmann, T Schmitt, H.R. Wilson, A.S.	UFRGS NRAO-Socorro University of Maryla	Connection between the accretion-disk and radio jet in NGC 1097		4	22	3.5
BU021	Ulvestad, J.S. Ho, L.C.	NRAO-Socorro Carnegie Observatori	ADAFs or jets in low-luminosity active galaxies?		1,2,4,7	1,20	20.0
BW061	Wrobel, J.M. Fassnacht, C.D. Myers, S. Taylor, G.B. Taylor, G.B.	NRAO-Socorro STScI NRAO-Socorro NRAO-Socorro NRAO-Socorro	AGN Content of the Bootes Field of the NOAO Deep wide-field survey		6	15	6.5

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BY013	York, T.D. Blandford, R.D. Browne, I.W.A. Fassnacht, C.D. Jackson, N.J. Koopmans, L.V.E. McKean, J.P. Myers, S. Pearson, T. Readhead, T. Wilkinson, P.N.	Jodrell Bank Caltech Jodrell Bank STScI Jodrell Bank Caltech Jodrell Bank NRAO-Socorro Caltech Caltech Jodrell Bank	VLBA observations of the most recent CLASS gravitational lens candidates		20	19	8.0
W405	Argon, A.L. Reid, M.J. Greenhill, L.J. Moran, J.M.	CfA CfA CfA CfA	Nuclear jet in M87		18 With GB	21	8.0
W406	Junor, B. Biretta, J.	New Mexico STScI	Following evolution of the Vir A jet		6 With GB, MP	16	9.0
W421	Lobanov, A.P. Zensus, J.A. Abraham, Z. Carrara, E.	MPIfR MPIfR Sao Paulo Sao Paulo	Parsec scale jet in superluminal quasar 3C 273		6 With AT, MP, GB	29	6.0
	Staff	NRAO	Maintenance				210.0

The average downtime was 12.6 hours (4.1%)

Actual observing time was 295.15 hours

The VLBA was scheduled 80% of the time 573.2 hours of a possible 720 hours

Astronomical Observations = 43.0% (307.7 hours)
Tests and Calibrations = 21.0% (75.5 hours)
Maintenance = 26.0% (190.0 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA047	Asaki, Y. Deguchi, S. Honma, M. Imai, H. Miyoshi, M.	ISAS Nobeyama Mizusawa Mizusawa Mizusawa	Determination of positions of a galactic evolved star with a distance of 2.3 kpc		1	3, 28	10.0
BA049	Attridge, J. Doeleman, S. Homan, D.C. Phillips, R.B. Wardle, J.	Haystack Haystack Brandeis Haystack Brandeis	3 and 7mm linear polarization observations of AGN with the VLBA		3, 7	9	11.0
BB130	Bower, G. Backer, D.C. Falcke, H. McGary, R. Zhao, J.-H.	NRAO-Socorro Calif., Berkeley MPIfR CfA CfA	Detecting outflow and expansion in Sagittarius A		7	3, 13	14.5
BB148	Baganoff, F. Taylor, G. Morris, M.	MIT NRAO-Socorro Calif.-Los Angeles	Simultaneous Chandra/VLBA observations of Sagitarrius A*		0.7	23-30	40.0
BC125	Clarke, T.	NRAO-Socorro	Observations to determine the structure of an IXO in the Halo		20, 4	18	3.0
BD077	Dallacasa, D. Fanti, R. Stanghellini, C. Tinti, S.	Bologna Bologna Noto Bologna	High frequency peakers		1, 2, 4, 6, 7	2	11.5
BD080	Diamond, P.J. Kemball, A.J.	Jodrell Bank NRAO-Socorro	TX CAM		0.7 With Y1	26	8.0
BE023	Edwards, P. Piner, G.	ISAS Whittier College	Markarian 421-Monitoring after a TeV outburst		1	18	10.0
BF071	Fomalont, E. Benson, J. Taylor, G. Walker, C. Wrobel, J. Beasley, T. Peck, A. Ma, C. Gordon, D. Petrov, L.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro OVRO CfA NASA-GSFC Raytheon-GSFC GSFC	VLBA Calibrator survey: filling the holes		3.6	14	24.0
BG116	Geldzahler, B. Bradshaw, C. Fomalont, E.	George Mason George Mason NRAO-CV	Astrometric observations of the compact radio source G127.11+0.54		4	20	8.0
BG118	Greenhill, L. Chandler, C.J. Diamond, P. Moran, J.M. Reid, M.J.	CfA NRAO-Socorro Jodrell Bank CfA CfA	SiO maser motions in Orion BN/KL		0.7 With Y1	27	8.0
BG121	Gabuzda, D. Cawthorne, T. Pashchenko, I. Pushkarev, A.	JIVE Lancashire Moscow State ASC	High frequency polarization observations of a complete sample of BL Lac objects		1, 2, 7	19	24.0
BH069	Hachisuka, K. Fujisawa, K. Honma, M. Imai, H. Kameya, O. Kawaguchi, N. Manabe, S. Miyoshi, M. Nishio, M. Omodaka, T. Sasao, T. Sawada-Satoh, S.	Graduated University NAO NAO NAO NAO NAO NAO NAO Kagoshima Kagoshima NAO NAO	Determination of the velocity of Galactic rotation at IRAS 21008+4700		1	6	5.0
BH077	Hachisuka, K. Fujisawa, K. Honma, M. Imai, H. Kameya, K. Manabe, S. Miyoshi, M. Mochizuki, N. Nisio, M. Omodaka, T. Sasao, T. Sawada-Satoh, S.	Graduated University NAO NAO NAO NAO NAO NAO Graduated University Kagoshima Kagoshima NAO NAO	Detection of an annual parallax of water masers in W3 (OH)		1	6	4.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BH083	Hachisuka, K. Hirota, T. Imai, H. Sasao, T.	Graduated University Kagoshima NAO NAO	Measurements of proper motion of the Orion-Monoceros molecular cloud complex		1	17	7.0
BJ042	Johnston, K. Fey, A. Boboltz, D. Ma, C. Gordon, D. Gaume, R. Kingham, K. Vandenberg, N. Himwich, E. Shaffer, D. Fomalont, E. Walker, C.	USNO USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC Radiometrics NRAO-CV NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2002		3.6 Scheduled as RDV33	8	25.0
BK076	Kurayama, T. Sasao, T.	NAO NAO	Parallax measurement of Miras for period-luminosity relation		1	23	5.0
BL106	Lazio, J. Goss, M. Brogan, C. Faison, M. Zauderer, A. DePree, C.	NRL NRAO-Socorro NRAO-Socorro Northwestern Agnes Scott Agnes Scott	AU Scale HI Opacity Variations		18 With AR, Y27	12	12.0
BL108	Lazio, J. Chatterjee, S. Cordes, J. Fey, A.	NRL Cornell Cornell USNO	Dection of intergalactic radio-wave scattering		90	21	10.0
BL111	Lister, M. Aller, H.D. Aller, M. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y.A. Lobanov, A.P. Ros, E. Vermeulen, R.C. Zensus, J.	NRAO-CV Michigan Michigan NFRA NRAO-CV MPIfR NRAO-CV Lebedev MPIfR MPIfR NFRA MPIfR	MOJAVE Program		2	31	6.25
BM162	Minier, V. Minier, V. Aller, M.F. Balasubramanyam, R. Burton, M. Jorstad, S.G. Marscher, A.P. McHardy, I. Walsh, A.	UNSW UNSW Michigan UNSW UNSW Boston Boston Southampton CfA	Relationship between X-ray flares and superluminal ejections in blazars		1, 7	6	12.0
BM165	Minier, V. Balasubramanyam, R. Burton, M. Walsh, A.	UNSW UNSW UNSW CfA	Search for protostellar disks in hot cores		2	1, 18	12.1
BR077	Ros, E. Cohen, M. Kadler, M. Kellermann, K. Lister, M. Vermeulen, R.C. Zensus, J.	MPIfR Caltech MPIfR NRAO-CV NRAO-CV ASTRON MPIfR	Kinematics of parsec-scale structure in AGN		2	8,23,28,29	32.0
BR079	Resch, G. Boboltz, D. Fey, A. Gordon, D. Ma, C. Sovers, O. Taylor, G. Ulvestad, J.	JPL USNO USNO Goddard Space Flight Goddard Space Flight RSAS NRAO-Socorro NRAO-Socorro	Extending the international celestial eference frame to multiple wavelengths		1, 7	15	24.0
BS084	Sarma, A.P. Romney, J.D. Troland, T.	Kentucky NRAO-Socorro Kentucky	VLBA Zeeman measurement of the magnetic field in 22 GHz H2O masers			4	12.0
BS102	Sahai, R. Claussen, M.J. Morris, M.	JPL NRAO-Socorro Calif.-Los Angeles	The water masers in the "water-fountain" protoplanetary IRAS 16342-3814		1.3	5	5.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BS111	Storchi-Bergmann, T Schmitt, H.R. Wilson, A.S.	UFRGS NRAO-Socorro Maryland	Connection between the accretion disk and radio jet in NGC 1097		6	10	3.5
BS113	Stairs, I. Brisken, W. Manchester, D. Lyne, A.	NRAO-GB NRAO-Socorro ATNF Jodrell Bank	Precise position for a massive binary pulsar		18 With Y27	14	4.5
BU021	Ulvestad, J.S. Ho, L.C.	NRAO-Socorro Carnegie Observatori	ADAFs or jets in low-luminosity active galaxies?		1, 2, 4, 7	10	10.0
BU022	Ulvestad, J.S. Wong, D.S. Taylor, G.B. Mundell, C.G.	NRAO-Socorro Cornell NRAO-Socorro John Moores	NGC 4151: where is the nucleus, and how fast is the jet?		2, 3.6, 6 With EB, GB, Y27	16	10.0
BV043	Vlemmings, W. Diamond, P. Habing, H. van Langevelde, H.	Leiden Jodrell Bank Leiden JIVE	Monitoring the stellar image of enshrouded AGB stars		20	4, 12	22.0
BV044	Vlemmings, W. Diamond, P. van Langevelde, H.	Leiden Jodrell Bank JIVE	Polarization of circumstellar H2O masers		1	5	24.0
BW062	Wehrle, A. Boboltz, D. Fey, A. Johnston, K. Jones, D. Unwin, S.	JPL USNO USNO USNO JPL JPL	How far do radio cores wander: multi-epoch astrometry		2, 4	1	9.0
GB042	Bartel, N. Rupen, M. Bietenholz, M. Beasley, A.J. Graham, D.A. Altunin, V.I. Venturi, T. Umana, G. Cannon, W.H. Conway, J.E.	York NRAO-Socorro York OVRO MPIfR JPL Bologna Noto York Onsala	SN 1993J and the core jet counterjet in M81		6 With EbWbJbMcNt On-Y27	24	12.5
GF010	Frey, S. Mosoni, L. Gurvits, L.I. Garrett, M.A. Garrington, S.T. Tsvetanov, Z.I.	FOMISGO FOMISGO JIVE JIVE Jodrell Bank Johns Hopkins	Deep extragalactic VLBI/optical survey (DEVOS)		6 For correlation at JIVE	30	14.0
	Staff	NRAO	Maintenance			1, 7, 13, 21, 28	102.0

The average downtime was 13.6 hours (3%)

Actual observing time was 439.1 hours

The VLBA was scheduled 81% of the time 605.4 hours of a possible 744 hours

Astronomical Observations = 61.0% (452.7 hours)
Tests and Calibrations = 17.0% (84.7 hours)
Maintenance = 9.0% (68.0 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA053	Attridge, J.M. Homan, D.C. Phillips, R.B. Wardle, J.F.	Haystack Brandeis Haystack Brandeis	86 and 43 GHz linear polarization of five AGN with the VLBA		3,7	11	10.0
BB130	Bower, G. Backer, D. Falcke, H. Goss, M. McGary, R. Zhao, J-H.	Calif., Berkeley Calif., Berkeley MPIfR NRAO-Socorro Calif., Berkeley CfA	Detecting outflow and expansion in Sagittarius A*		7	15,25	14.25
BB140	Bujarrabal, V. Alcolea, J. Colomer, F. Desmurs, D.F. Sanchez-Contreras,	OAN OAN OAN OAN JPL	86 GHz SiO masers from the proto planetary nebula OH231.8+4.2		3,7	18	8.75
BB144	Aller, M. Aller, H. Bower, G. Brunthaler, A. Terasranta, H.	Michigan Michigan Calif., Berkeley MPIfR Metsahovi	Search for superluminal motion in the radio-intermediate quasar PG2209+184		1,2,7	4	8.75
BC113	Chatterjee, S. Cordes, J.M. McLaughlin, M. Lazio, T.J.W. Arzoumanian, Z.	Cornell Cornell Jodrell Bank NRL NASA-GSFC	A very high proper motion pulsar		18 With AR	19	2.5
BD078	Dhawan, V. Kellermann, K. Romney, J.	NRAO-Socorro NRAO-CV NRAO-Socorro	Monitoring the accelerating, bent jet in 3C84		7	5	13.75
BF070	Falcke, H. Backer, D. Bower, G.C. Doeleman, S. Krichbaum, T. Rogers, A. Wright, M. Zhao, J-H.	MPIfR Calif., Berkeley Calif., Berkeley Haystack MPIfR Haystack Calif., Berkeley CfA	Detecting internal structure at 3mm in Sagittarius A* during a flare		3,7	13	5.0
BG118	Greenhill, L. Chandler, C.J. Diamond, P. Moran, J.M. Reid, M.J.	CfA NRAO-Socorro Jodrell Bank CfA CfA	SiO maser motions in Orion BN/KL		0.7 With Y1	1, 28	16.0
BH084	Hirotani, K. Kameno, S. Marcaide, J.M. Perez-Torres, M.A.	NAO NAO Valencia Bologna	Pair plasma dominance in the pc-scale jets of B1150+812 and B1213+350?		13,6,4,2,1	5	11.0
BI024	Imai, H. Diamond, P.J.	NAO Jodrell Bank	Collimated molecular jet in W43A traced by water maser emission		1	1,3	20.0
BK076	Kurayama, T. Sasao, T.	NAO NAO	Parallax measurement of Miras for period-luminosity relation		1	25	5.0
BK081	Kemball, A. Diamond, P.	NRAO-Socorro Jodrell Bank	TX Cam and S Per: complementary observations of 3mm v=1,2, J=2-1 SiO		3,7	17	8.0
BK084	Kameno, S. Inoue, M. Sawada-Satoh, S. Wajima, K. Zhi-Qiang, S.	NAO NAO ISAS ISAS ISAS	Free-free absorption towards an active galaxy NGC 1052		13,2,4	7	10.75
BM162	Marscher, A. Aller, M. Jorstad, S. McHardy, I.	Boston University Univ. of Michigan Boston University Southampton	Relationship between X-ray flares and superluminal ejections in blazars		1,7	12	12.0
BM165	Minier, V. Balasubramanyam, R. Burton, M. Walsh, A.	New South Wales New South Wales New South Wales CfA	Search for protostellar disks in hot cores		2	7,8	12.0
BM173	Momjian, E. Carilli, C. Romney, J. Troland, T.	NRAO-Socorro NRAO-Socorro NRAO-Socorro University of Kentuc	VLBA obs on two possible in-beam calbirators for low frequency observations on the target source IRAS 17208-0014		90	8	2.0
BP091	Peck, A. Taylor, G.	CfA NRAO-Socorro	Spare Change - collecting the last few COINS from the bottom of the VCS		2,6	6,26	48.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR077	Ros, E. Cohen, M. Kadler, M. Kellermann, K. Lister, M. Vermeulen, R. Zensus, J.A.	MPIfR Caltech MPIfR NRAO-CV NRAO-CV Dwingeloo MPIfR	Kinematics of parsec-scale structure in AGN: a survey at 2cm		2	2	8.0
BR080	Ratner, M.I. Bartel, N. Bietenholz, M.F. Lebach, D.E. Lestrade, J.-F. Ranson, R.R. Shapiro, I.I.	CfA York York CfA Meudon York CfA	Astrometry of HR 8703 in 2002 for gravity Probe-B mission		3.6 With Y27, EB, RO, GO, TI	14	18.0
BS102	Sahai, R. Claussen, M.J. Morris, M.	JPL NRAO-Socorro Calif.-Los Angeles	The water masers in the "water-fountain" protoplanetary IRAS 16342-3814		1.3	4	5.0
BS108	Shen, Z-Q. Kellermann, K. Moran, J.	ISAS NRAO-CV CfA	Central parsec of the quasar PKS 1921-293		6,7	17,18	14.0
BU024	Ulvestad, J.S. Teng, S.H. Neff, S.G.	NRAO-Socorro Maryland NASA-GSFC	Possible AGN in the NGC 3690 system		13 with GB	29	11.0
BW061	Wrobel, J. Fassnacht, C. Myers, S. Taylor, G.	NRAO-Socorro STScI NRAO-Socorro NRAO-Socorro	AGN Content of the Bootes field of the NOAO deep wide field survey		6	26,28	13.0
	Staff	NRAO	Combined Millimeter VLBI Array Maintenance		0.3, 0.2	16, 20	199.0 240.0

The average downtime was 40.4 hours (10.9%)

Actual observing time was 330.6 hours

The VLBA was scheduled 80% of the time 582.7 hours of a possible 720 hours

Astronomical Observations = 51.0% (371.0 hours)
Tests and Calibrations = 18.0% (132.0 hours)
Maintenance = 11.0% (79.7 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB136	Brisken, W.F.	NRAO-Socorro	Parallax for PSR B0656+14 and measuring		18	25	5.5
	Golden, A.	Ireland	the radius of a neutron star				
	Goss, M.	NRAO-Socorro					
	Thorsett, S.	Calif., Santa Cruz					
BB146	Biggs, A.	Jodrell Bank	High resolution observations of JVAS		4	17	12.0
	Augusto, P.	Madeira	B2114+022				
	Browne, I.	Jodrell Bank					
	Chae, K.	Jodrell Bank					
	Mao, S.	Jodrell Bank					
	Wilkinson, P.	Jodrell Bank					
BC116	Chatterjee, S.	Cornell	High frequency VLBA astrometry of pulsars		6	14, 20	12.0
	Cordes, J.M.	Cornell					
	Goss, M.	NRAO-Socorro					
	Fomalont, E.B.	NRAO-CV					
	Benson, J.	NRAO-Socorro					
	Lazio, T.	NRL					
	Arzoumanian, Z.	NASA-GSFC					
BC121	Claussen, M.	NRAO-Socorro	VLBA Proper Motion Study of Water Masers		1	4	5.0
	Brogan, C.L.	NRAO-Socorro	in the FU Orionis Object Z CMa				
BD077	Dallacasa, D.	Bologna	High frequency peakers		1,2,4,6,7	24	12.0
	Fanti, R.	Bologna					
	Stanghellini, C.	Noto					
	Tinti, S.	Bologna					
BF066	Fomalont, E.	NRAO-CV	VLBI Observations of SA 13 deep field		18 With	19, 21, 22	24.0
	Kellermann, K.	NRAO-CV			EB, GB, Y1		
	Richards, E.	Alabama					
	Garrett, M.	JIVE					
	Baan, W.	NFRA					
	Muxlow, T.	Jodrell Bank					
	Garrington, S.	Jodrell Bank					
	Alberdi, A.	IAA					
BG109	Girart, J.M.	Illinois	Radio identification of the very strong		6	11	4.0
	Curiel, S.	UNAM	X-ray source in YLW 15				
	Rodriguez, L.F.	UNAM					
BG118	Greenhill, L.	CfA	SiO maser motions in Orion BN/KL		0.7 With	2	8.0
	Chandler, C.J.	NRAO-Socorro			Y1		
	Diamond, P.	Jodrell Bank					
	Moran, J.M.	CfA					
	Reid, M.J.	CfA					
BH069	Hachisuka, K.	Graduated University	Determination of the velocity of Galactic		1	3	5.0
	Honma, M.	NAO	rotation at IRAS 21008+4700				
	Imai, H.	NAO					
	Kameya, O.	NAO					
	Kawaguchi, N.	NAO					
	Kawaguchi, N.	NAO					
	Manabe, S.	NAO					
	Miyoshi, M.	NAO					
	Nishio, M.	Kagoshima					
	Omodaka, T.	Kagoshima					
	Sasao, T.	NAO					
	Sawada-Satoh, S.	NAO					
BH080	Hough, D.	Trinity	Variability in the nuclei of		4	18	6.0
			lobe-dominated quasars				
BH081	Healy, K.	Arizona State Univer	Protostars and water masers in M16, the		1	29	5.0
	Claussen, M.	NRAO-Socorro	Eagle Nebula				
	Hester, J.	Arizona State Univer					
BH084	Hirotani, K.	NAO	Pair plasma dominance in the pc-scale jets		20,13,6,4,	30	11.0
	Kameno, S.	NAO	of B1150+812		2,1		
	Marcaide, J.M.	Valencia					
	Perez-Torres, M.A.	Bologna					
BH091	Henkel, C.	MPIfR	Circumnuclear disk in the sprial galaxy IC		1	12	6.0
	Braatz, J.	NRAO-GB	2560?				
	Patnaik, A.	MPIfR					
	Peck, A.	MPIfR					
	Wilson, A.S.	Maryland					

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BJ042	Johnston, K. Fey, A. Boboltz, D. Ma, C. Gordon, D. Gaume, R. Kingham, K. Vandenberg, N. Himwich, E. Shaffer, D. Fomalont, E. Walker, C.	USNO USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC Radiometrics NRAO-CV NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2002		3.6 Scheduled as RDV32	6	25.0
BK076	Kurayama, T. Sasao, T.	NAO NAO	Parallax measurement of Miras for period-luminosity relation		1	30	5.0
BK081	Kemball, A. Diamond, P.	NRAO-Socorro Jodrell Bank	TX Cam and S Per: complementary observations of the 3mm		3,7	16	8.0
BK082	Klare, J. Krichbaum, T.P. Lobanov, A. Ros, E. Witzel, A. Zensus, J.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR	Absolute kinematics of the innermost jet region in 3C345		3,7	27	10.0
BK086	Krichbaum, T.P. Fuhrmann, L. Beckert, T. Cimo, G. Kraus, A. Witzel, A.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR	Intermittently IDV source 0917+62		1.3, 2 With EB	27	12.0
BK089	Kanekar, N. Briggs, F. Chengalur, J.N. Lane, W.	NCRA Kapteyn NCRA NRL	Compact structure of QSOs behind damped Lyman-a systems		20, 9	6	15.5
BL098	Lovell, J. Edwards, P.G. Jauncey, D.L. Jones, D.L. Reynolds, J.E. Tzioumis, A.K. Wieringa, M.H.	ATNF ISAS ATNF JPL ATNF ATNF ATNF	Improving the precision of Ho measured from the gravitational lens 1830-211		1,2,4	24	10.5
BL104	Lobanov, A. Roland, J. Ros, E. Zensus, J.	MPIfR IAP, Paris MPIfR MPIfR	Cross-band monitoring of a flare in the VLBI core of 3C345		1,2,7	18	4.0
BM162	Marscher, A.P. Aller, M.F. Jorstad, S.G. McHardy, I.	Boston U. Michigan Boston U. Southampton	Relationship between X-ray flares and superluminal ejections in blazars		1,7	8	12.0
BM173	Momjian, E. Carilli, C. Romney, J.D. Troland, T.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Kentucky	VLBA observations on two possible in-beam calibrators for low frequency lobserations on the target source IRAS 17208-0014		90	29	2.0
BN014	Nagar, N. Falcke, H. Wilson, A.S.	Maryland MPIfR Maryland	Accretion and obscuration in LINERs: What can we learn from the AGN core and twin pc-scale jets in M89?		20,2,4,6	1	10
BP089	Piner, B.G. Edwards, P.G. Jones, D.	Whittier College ISAS JPL	Monitoring of ultra-fast blazars		1,7	22	18.0
BP090	Perez-Torres, M.A. Alberdi, A. Guirado, J.C. Marcaide, J.M. Ros, E.	Bologna Andalucia Valencia Valencia MPIfR	M81* at 43 GHz		7	5	1.0
BP092	Polatidis, A. Anton, S. Bondi, M. Caccianiga, A. Marcha, M.	MPIfR OAL IRA Brera OAL	VLBA observations of flat spectrum weak line radio galaxies		6	10,16	24.0
BP094	Phillips, R.B. Attridge, J.M. Doeleman, S. Lonsdale, C.J. Straughn, A.	Haystack Haystack Haystack Haystack Arkansas	Registration of the 86 and 43 GHz transitions of SiO: the followup		3,7	11,23	24.0

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR077	Ros, E. Cohen, M.H. Kadler, M. Kellermann, K. Lister, M.L. Vermuelen, R. Zensus, J.A.	MPIfR Caltech MPIfR NRAO-CV NRAO-Socorro Dwingeloo MPIfR	Kinematics of parsec-scale structure in AGN: a survey at 2cm		2	92	8.0
BS096	Suda, H. Honma, M. Sasao, T.	Tokyo NAO NAO	Phase-referencing VLBA observations of water maser source in the inner galaxy for resolving distance ambiguity and determining galactic constants		1	25	8.0
BS102	Sahai, R. Claussen, M.J. Morris, M.	JPL NRAO-Socorro Calif.-Los Angeles	The water masers in the "water-fountain" protoplanetary IRAS 16342-3814		1.3	3	5.0
BS103	Schmitt, H. Antonucci, R. Kinney, A.L. Pringle, J.E. Ulvestad, J.	NRAO-Socorro Calif.,Santa Barbara NASA IoA NRAO-Socorro	Orientation of jets relative to dust disks in radio galaxies		13	4,20	8.0
BS104	Schmitt, H.R. Antonucci, R. Kinney, A.L. Pringle, J.E. Ulvestad, J.S.	NRAO-Socorro Calif., Santa Barbar NASA IoA NRAO-Socorro	Parsec-scale jets and the inner structure of Seyfert galaxies		6	10,15,29	11.0
BT060	Trinidad, M.A. Anglada, G. Canto, J. Curiel, S. Garay, G. Gomez, J.F. Ho, P.T.P. Patel, N. Rodriguez, L.F. Torrelles, J.M.	UNAM CSIC UNAM UNAM Chile LAEFF CfA CfA UNAM CSIC	Proper motions studies of circumstellar water masers in AFGL 2591 and Likha 234		1	5	12.0
BT061	Tarchi, A. Greve, A.	MPIfR IRAM	Does the starburst galaxy NGC 2146 contain an AGN?		6	8	11.0
BU021	Ulvestad, J. Ho, L.C.	NRAO-Socorro Carnegie Obs.	ADAFs or Jets in low-luminosity active galaxies?		4,2,1,7	31	10.0
BU023	Ulvestad, J. Falcke, H. Henkel, C. Peck, A.	NRAO-Socorro MPIfR MPIfR MPIfR	Emerging jet component in Mrk 348		1,2,4	18, 28	20.0
BW060	Winn, J. Kochanek, C. Rusin, D.	CfA CfA CfA	Possible third image in gravitational lens J1632-0033		20,4	14,1516.0	16.0
GK022	Kharb, P. Shastri, P. Gabuzda, D.	IIA IIA JIVE	Polarization of four FR I radio galaxies		3.6 To correlate at JIVE	1	24.0
	Staff	NRAO	Maintenance				96.0

The average downtime was 21.5 hours (5%)

Actual observing time was 403.5 hours

The VLBA was scheduled 83% of the time 629.0 hours of a possible 744 hours

Astronomical Observations = 57.0% (425.0 hours)
Tests and Calibrations = 18.0% (136.5 hours)
Maintenance = 9.0% (68.0 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB123	Brotherton, M.S. Beasley, A.J. Becker, R.H. Lacy, M. Laurent-Muehleisen,	NOAO OVRO LLNL Calif., Davis Calif., Davis	Milliarcsecond structure of radio bright broad absorption line quasars		20	2	12.50
BB142	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	CfA MPIfR CfA MPIfR CfA	Second epoch observations for extragalactic proper motions in the local group with the VLBA		1	3	10.0
BB145	Biggs, A.D. Rusin, D.	Jodrell Bank CfA	Resolving the radio jets in CLASS B1152+199		4	10	11.75
BB146	Biggs, A.D. Augusto, P. Browne, I.W.A. Chae, K. Mao, S. Wilkinson, P.	Jodrell Bank Madeira Jodrell Bank Jodrell Bank Jodrell Bank Jodrell Bank	High resolution observations of JVAS B2114+022		4	9	11.75
BB148	Baganoff, F. Taylor, G. Morris, M.	MIT NRAO-Socorro Calif.-Los Angeles	Simultaneous Chandra/VLBA observations of Sagitarrius A*		0.7	19	5.0
BD077	Dallacasa, D. Fanti, R. Stanghellini, C. Tinti, S.	Bologna Bologna CNR Bologna	High frequency peakers		6,4,2,1,.7	10,16	23.50
BF069	Fish, V.L. Argon, A. Reid, M.J.	CfA CfA CfA	Mapping magnetic fields in massive star-forming regions		20	6	9.25
BF071	Fomalont, E. Benson, J. Taylor, G. Walker, C. Wrobel, J. Beasley, T. Peck, A. Ma, C. Gordon, D. Petrov, L.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro Caltech MPIFR NASA-GSFC Raytheon-GSFC GSFC	VLBA Calibrator survey: filling the holes		3.6	1	18.0
BG123	Giroletti, M. Dallacasa, D. Falomo, R. Giovannini, G. Treves, A.	Bologna Bologna Padova Bologna Como	VLBA observations of a sample of nearby BL-Lacs		6	17,18,19	15.25
BG124	Giovannini, G. Cotton, W.D. Feretti, L. Lara, L. Taylor, G. Venturi, T.	Bologna NRAO-CV Bologna IAA NRAO-Socorro Bologna	VLBI observations of the giant superluminal source 1144+35		6,4	17	12.25
BK076	Kurayama, T. Sasao, T.	NAO NAO	Parallax measurement of Miras for period luminosity relation		1	4	5.25
BK090	Krichbaum, T.P. Bach, U. Terasranta, H. Ungerechts, H. Witzel, A. Zensus, J.A.	MPIfR MPIfR Metsahovi IRAM MPIfR MPIfR	TOO VLBA Monitoring of 1633+382 after a major millimeter-flare		1,.7, .3	6	13.75
BK091	Kovalev, Y.	ASC	Dual frequency sub-mass structure in the highly variable source 0524+034		2	19	5.75
BM162	Marscher, A.P. Aller, M.F. Jorstad, S.G. McHardy, I.	Boston University Michigan Boston University Southampton	Relationship between X-ray flares and superluminal ejections in blazars		1, .7	8	12.25
BM167	Mioduszewski, A. Dhawan, V. Rupen, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	High resource observation of X-ray binary Cygnus X-3 in quiescence		2, .7	15	15.00
BP094	Attridge, J.M. Doeleman, S. Lonsdale, C. Phillips, R.B. Straughn, A.	Haystack Haystack Haystack Haystack U. of Arkansas	Registration of the 86 and 43 GHz transitions of SiO: the followup		.7, .3	22	12.00
BR075	Roshi, D. Goss, M. Subrahmanyan, R.	NRAO-GB NRAO-Socorro ATNF	Study of scatter broadening of the compact radio source in the direction of NGC 1977		20, 4	14	10.25

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR077	Ros, E. Cohen, M.H. Kadler, M. Kellermann, K. Lister, M.L. Vermeulen, R.C. Zensus, J.A.	MPIfR Caltech MPIfR NRAO-CV NRAO-CV Dwingeloo MPIfR	Kinematics of parsec-scale structure in AGN: a survey at 2cm		2	18	8.25
BS087	Sudou, H. Iguchi, S. Murata, Y. Taniguchi, Y.	Tohoku University NAO ISAS Tohoku University	Phase referencing VLBI observations of 3C 66B		13, 4	8, 21	23.25
BS102	Sahai, R. Claussen, M.J. Morris, M.	JPL NRAO-Socorro Calif.-Los Angeles	The water masers in the "water-fountain" protoplanetary IRAS 16342-3814		1.3	3	5.0
BS103	Schmitt, H.R. Antonucci, R. Kinney, A.L. Pringle, J. Ulvestad, J.	NRAO-Socorro Calif.,Santa Barbara NASA IofA NRAO-Socorro	Orientation of jets relative to dust disks in radio galaxies		13	21	7.25
BS104	Schmitt, H.R. Antonucci, R. Kinney, A.L. Pringle, J.E. Ulvestad, J.	NRAO-Socorro Calif.,Santa Barbara NASA IofA NRAO-Socorro	Parsec-scale jets and the inner structure of Seyfert galaxies		6	3,5,9,11,12,16	22.50
BT060	Trinidad, M.A. Anglada, G. Canto, J. Curiel, S. Garay, G. Gomez, J.F. Ho, P.T.P. Patel, N. Rodriguez, L.F. Torrelles, J.M.	UNAM IAA UNAM UNAM Chile LAEFF CfA CfA UNAM CSIC	Proper motions studies of circumstellar water masers in AFGL 2591 and Lkha 234		1	11	12.00
BV043	Vlemmings, W.H.T. Diamond, P.J. Habing, H.J. van Langevelde, H.	Leiden Jodrell Bank Leiden Dwingeloo	Monitoring the stellar image of enshrouded AGB stars		20	23	12.00
BW054	Walker, R.C. Wrobel, J.	NRAO-Socorro NRAO-Socorro	Jet collimation regions		7	14	10.25
BW056	Winn, J. Lovell, J.	MIT ATNF	An unusual gravitationally lensed quasar		2	2	11.25
GL026	Lonsdale, C.J. Lonsdale, C.J. Smith, H.E. Diamond, P.J.	Haystack IPAC Calif.-San Diego Jodrell Bank	High sensitivity imaging of supernovae and masers in Arp 220		18 With EbMcWbTrJbCa-Go-GbArY27	24	14.0
GP030	Porcas, R.W. Patnaik, A.R. Garrett, M.A. Nair, S.	MPIfR MPIfR JIVE Raman	Global VLBI study of gravitational lens 2016+112		18 With EbMcWbOnTrJbCa-Go-ArY27	25	13.0
GP032	Polatidis, A.G. Conway, J.E. Owsianik-Rottman, I	MPIfR Onsala MPIfR	Estimating kinematical ages of compact symmetric objects		3.6 Correlate at JIVE	27	20.0
	Staff	NRAO	Maintenance				96.0

The average downtime was 10.9 hours (3%)

Actual observing time was 351.6 hours

The VLBA was scheduled 77% of the time 517.5 hours of a possible 672 hours

Astronomical Observations = 54.0% (362.5 hours)
Tests and Calibrations = 13.0% (87.0 hours)
Maintenance = 10.0% (68.0 hours)

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA051	Aller, H.D. Aller, M.F. Homan, D.C. Hughes, P.A. Roberts, D.H. Wardle, J.F.C.	Michigan Michigan Brandeis Michigan Brandeis Brandeis	Oblique shocks in jets: the evolution of Parsec-scale structures of sources with rapidly variable polarization		4,2,1.7	7	24.25
BB123	Brotherton, M.S. Beasley, A.J. Becker, R.H. Gregg, M. Lacy, M. Laurent-Muehleisen,	NOAO Owens Valley Calif.-Davis Calif.-Davis Calif.-Davis Calif.-Davis	Milliarcsecond structure of radio-bright broad absorption line quasars		20	28	12.25
BB138	Bach, U. Krichbaum, T.P. Alef, W. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR MPIfR	Motion in the counter jet of Cygnus A		2, 6 With EB, Y1	10	16.0
BB141	Biggs, A. Browne, I. Jackson, N. Norbury, M. Wilkinson, P. Wucknitz, O.	Jodrell Bank Jodrell Bank Jodrell Bank Jodrell Bank Jodrell Bank Hamburg	The quadruple gravitational lens system B0128+437		3.6 With EB	2	14.0
BB142	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	CfA MPIfR CfA MPIfR CfA	Second epoch observations for extragalactic proper motions in the local group with the VLBA		1	12,17,21,28	41.0
BC113	Chatterjee, S. Cordes, J.M. McLaughlin, M. Lazio, T.J.W. Arzoumanian, Z.	Cornell Cornell Cornell NRL NASA-GSFC	A very high proper motion pulsar		18 With AR	27	2.0
BC117	Cotton, W.D. Saslaw, W.C.	NRAO-CV Virginia	Search for lensing by the star in front of 3C 435 B		3.6 With EB	30	11.0
BD077	Dallacasa, D. Fanti, R. Stanghellini, C. Tinti, S.	Bologna Bologna Noto Bologna	High frequency peakers		6,4,2,1,.7	11	12.0
BD079	Diamond, P.J. Kemball, A.J.	Jodrell Bank NRAO-Socorro	TX Cam returns		0.7 With Y1	25	8.0
BE023	Edwards, P.G. Piner, B.G.	ISAS Whittier College	MArkarian 421 - Monitoring after a TeV outburst		1	26	6.25
BF063	Fix, J.D. Mutel, R.L. Gayley, K. Ignace, R.	Huntsville Iowa Iowa Iowa	Hydroxyl masers in late type stars		18 With AR, Y27	4	17.0
BF071	Fomalont, E. Benson, J. Taylor, G. Walker, C. Wrobel, J. Beasley, T. Peck, A. Ma, C. Gordon, D. Petrov, L.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro Caltech MPIFR NASA-GSFC Raytheon-GSFC GSFC	VLBA Calibrator survey: filling the holes		3.6	31	6.0
BG118	Greenhill, L. Chandler, C.J. Diamond, P. Moran, J.M. Reid, M.J.	CfA NRAO-Socorro Jodrell Bank CfA CfA	SiO maser motions in Orion BN/KL		0.7 With Y1	27	8.0
BH069	Hachisuka, K. Fujisawa, K. Honma, M. Imai, H. Kameya, O. Kawaguchi, N. Manabe, S. Miyoshi, M. Nishio, M. Omodaka, T. Sasao, T. Sawada-Satoh, S.	Graduated University NAO NAO NAO NAO NAO NAO NAO Kagoshima Kagoshima NAO NAO	Determination of the velocity of Galactic rotation at IRAS 21008+4700		1	11	5.25

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BH077	Hachisuka, K. Fujisawa, K. Honma, M. Imai, H. Kameya, K. Manabe, S. Miyoshi, M. Mochizuki, N. Nisio, M. Omodaka, T. Sasao, T. Sawada-Satoh, S.	Graduated University NAO NAO NAO NAO NAO NAO Graduated University Kagoshima Kagoshima NAO NAO	Detection of an annual parallax of water masers in W3 (OH)		1	12	4.25
BH080	Hough, D.H.	Trinity University	Variability in the nuclei of lobe-dominated quasars		4	12	6.0
BH087	Ho, P.T.P. Anglada, G. Canto, J. Curiel, S. Garay, G. Gomez, J.F. Greenhill, L.J. Patel, N. Rodriguez, L.F. Sollins, P.K. Torrelles, J.M.	CfA IAA UNAM Universidad de Chile Universidad de Chile LAEFF CfA CfA UNAM CfA CSIC	Tracking a "Puff" of spherically symmetric ejection in Cepheus A		1	27	12.0
BJ042	Johnston, K. Fey, A. Boboltz, D. Ma, C. Gordon, D. Gaume, R. Kingham, K. Vandenberg, N. Himwich, E. Shaffer, D. Fomalont, E. Walker, C.	USNO USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC Radiometrics NRAO-CV NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2002		3.6 Scheduled as RDV31	16	25.0
BL104	Lobanov, A.P. Roland, J. Ros, E. Zensus, J.A.	MPIfR IAP, Paris MPIfR MPIfR	Cross-band monitoring of a flare in the VLBI core of 3C345		2, 1, .7	24	4.25
BM154	Marvel, K. Alcolea, J. Boboltz, D. Bujarrabal, V. Colomer, F. Desmurs, J.F. Diamond, P. Kemball, A.	AAS OAN USNO OAN OAN OAN NRAL NRAO-Socorro	Spatial distribution of SiO masers in AGB stars at 43 and 86 GHz		.7, .3	5	8.25
BM155	Mutel, R. Helton, A. Su, B.	Iowa Iowa Yuman Observatory	Structure of magnetic fields in AGN jets: Testing the Shock Model		2, 1, .7	20	10.25
BM162	Marscher, A.P. Aller, M.F. Jorstad, S.G. McHardy, I.	Boston University Michigan Boston University Southampton	Relationship between X-ray flares and superluminal ejections in blazars		1, .7	6	12.25
BP080	Porcas, R.W. Rioja, M.J.	MPIfR OAN	Investigation of the quasar pair 1308+326/1308+326/1308+328 GHz		.7, .3	19	7.0
BP084	Porcas, R.W. Browne, I.W.A. Wucknotz, O. Biggs, A.	MPIfR Jodrell Bank Hamburg Jodrell Bank	Astrometrically registered, multi-frequency imaging of B0218+357		2, 3.6, 6, 18 with EB	13, 14	28.0
BR073	Roy, A. Falcke, H. Krichbaum, T. Middelerg, E. Walker, R.C.	MPIfR MPIfR MPIfR MPIfR NRAO-Socorro	Towards fainter sources: test of fast frequency switching for phase calibration at 3mm		2,.7,.3	5	8.50
BR075	Roshi, D.A. Goss, M. Subrahmanyan, R.	NRAO-GB NRAO-Socorro ATNF	Study of scatter broadening of the compact radio source in the direction of NGC 1977		20, 4	19	10.0
BS079	Stocke, J. Carilli, C. Taylor, G. Tumlunson, J.	Colorado NRAO-Socorro NRAO-Socorro Colorado	HI Absorption structures of a galaxy halo cloud		20	31	12.25

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BS096	Suda, H. Honma, M. Sasao, T.	University of Tokyo NAO NAO	Phase-referencing VLBA observations of water maser source in the inner galaxy for resolving distance ambiguity and determining galactic constants		1	25	8.25
BS101	Sato, N. Diamond, P. Ishihara, Y. Nakai, N. Yamauchi, A.	Nobeyama NRAL Nobeyama Nobeyama Nobeyama	High velocity features of water maser in the Seyfert IC 2560		1.3	4	6.0
BS103	Schmitt, H.R. Antonucci, R.J. Kinney, A.L. Pringle, J.E. Ulvestad, J.	NRAO-Socorro Calif.-Santa Barbara NASA IoA NRAO-Socorro	Orientation of jets relative to dust disks in radio galaxies		13	2,21,23	21.75
BS104	Schmitt, H.R. Antonucci, R.J. Kinney, A.L. Pringle, J.E. Ulvestad, J.	NRAO-Socorro Calif.-Santa Barbara NASA IoA NRAO-Socorro	Parsec-scale jets and the inner structure of Seyfert galaxies		6	7,10,12,16,18,20,24,25,30	33.75
BT060	Trinidad, M.A. Anglada, G. Canto, J. Curiel, S. Garay, G. Gomez, J.F. Ho, P.T.P. Patel, N. Rodriguez, L.F. Torrelles, J.M.	UNAM CSIC UNAM UNAM Universidad de Chile LAEFF CfA CfA UNAM CSIC	Proper motions studies of circumstellar water masers in AFGL 2591 and Lkha 234		1	18	12.25
V047	Gurvits, L.I.	JIVE	Structure of extremely high redshift quasars at 1.6 and 5 GHz		6	24	10.0
W330	Kameno, S. Wajima, K. Zhi-Qiang, S. Inoue, M. Sawada-Satoh, S.	NAO-Nobeyama ISAS ISAS NAO-Nobeyama ISAS	Complementary multi-frequency GPS survey		18 with TI	23	10.0
W401	Frey, S. Gurvits, L. Gabuzda, D.C. Altschuler, D.R. Salter, C.J. Perillat, P. Aller, H.D. Aller, M.F. Hirabayashi, H. Davis, M.M.	FOMISGO JIVE JIVE Arecibo Arecibo Arecibo Michigan Michigan ISAS SETI	Structural variability in the brightest AGN: AO 0235+164		6 with AR	26	5.0
TC002	Claussen, M.	NRAO-Socorro	PieTown link tests	P			5.5
	Staff	NRAO	Maintenance				114.0

The average downtime was 18.3 hours (4.2%)

Actual observing time was 419.7 hours

The VLBA was scheduled 81% of the time 601 hours of a possible 744 hours

Astronomical Observations = 59.0% (438 hours)
Tests and Calibrations = 11.0% (79 hours)
Maintenance = 11.0% (84 hours)