

VLBA Utilization Report December 2005 2007

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA071	Agudo, I. Alef, W. Bach, U. Bremer, M. Graham, D. Grewing, M. Krichbaum, T. Terasranta, H. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR IRAM MPIfR IRAM MPIfR MPIfR Metsahovi MPIfR MPIfR	NRAO 150: A moving helical jet?		1,2,7	20	11.9
BB174	Bower, G. Bolatto, A. Plambeck, R.	Calif., Berkeley Calif., Berkeley Calif., Berkeley	Trigonometric parallax of radio stars in the Orion Nebula		2	11	6.0
BB191	Barvainis, R. Ulvestad, J.S. Birkinshaw, M. Lehar, J.	NSF NRAO-Socorro Bristol CfA	Radio-quiet quasars		6 HSA: EB, AR, GB, Y27	26	10.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T. 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 NRAO-Socorro Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	9	4.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NASA-GSFC	VLA Astrometry of X-ray binaries		2, 4	20	5.25
BD102	DeBreuck, C. deVries, W. Miley, G. Overzier, R. Perez-Torres, M. van Breugel, W.	ESO IGPP Leiden Leiden IAA, Spain IGPP	VLBA Imaging of two high redshift radio galaxies		6	9	6.0
BG131	Gabuzda, D. Croke, S. Vetukhnovskaya, Y.	Cork Cork ASC	Nature of variable sheath structures surrounding the jets of compact AGN		1,2,4,6	22	24.0
BG153	Goddi, C. Brand, J. Moscadelli, L. Tarchi, A.	Cagliari IRA-CNR, Bologna Cagliari IRA-CNR Cagliari	H2O maser kinematics close to high-mass YSOs		1	8	12.0
BG155	Greenhill, L.J. Madejski, G. Henkel, C. Peck, A. Braatz, J.A. Wilson, A.	CfA NASA-GSFC MPIfR CfA NRAO-GB Maryland	Water masers in IC 2560 AGN		1	30	8.0
BH126	Harris, D. Cheung, C.C. Junor, W.	SAO Brandeis LANL	Ongoing outburst of Knot 'HST-1' in the M87 jet		90	23, 29	16.0
BH128	Hough, D.H. Aars, C.	Trinity Trinity	Faint nuclei 3CR FR II radio sources		4	23	7.3
B1030	Imai, H. Diamond, P.J.	Kagoshima Jodrell Bank	Evolution on a water fountain in W43A		1	4	10.0
BJ036	Jorstad, S. Marscher, A. Yurchenko, A.	Boston Boston St. Petersburg	BL Lac objects with high proper motion		.4, .7, 1, 2	10	16.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BJ048	Johnston, K. Fey, A. Ma, C. Gordon, D. Boboltz, D. Kingham, K. Vandenberg, N. Himwich, E. MacMillan, D. Petrov, L. Fomalont, E. Walker, R.C.	USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC NVI-GSFC NASA-GSFC NRAO-CV NRAO-Socorro	Geodesy/astrometry observations for 2004		3.6 With GcGgKkMaMc NyOnTsVaWf Wz	1 Scheduled as RDV48	25.0
BJ054	Jackson, N. Browne, I.W.A. York, T. Mao, S. Porcas, R. Biggs, A.	Jodrell Bank Jodrell Bank Jodrell Bank Jodrell Bank MPIFR JIVE	Search for a third image in CLASS B1030+074		20	27	4.25
BK113	Kemball, A.J. Diamond, P.J.	Univ. Illinois Jodrell Bank	Monitoring SiO masers at 7mm and 3mm in two evolved stars		0.3, 0.7	5, 31	12.25
BL104	Lobanov, A. Roland, J. Ros, E. Zensus, J.A.	MPIFR IAP, Paris MPIFR MPIFR	Cross band monitoring of a flare in the VLBI core of 3C345		1,2,7	5	4.0
BL105	Lobanov, A. Klare, J. Ros, E. Zensus, J.A.	MPIFR MPIFR MPIFR MPIFR	Multi-frequency monitoring of the parsec-scale jet in 3C345		2,4,6	12	8.0
BL111	Lister, M. Aller, H. Aller, M. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A. Ros, E. Vermeulen, R. Zensus, J.A.	NRAO-CV Michigan Michigan Caltech NRAO-CV MPIFR NRAO-CV Lebedev MPIFR MPIFR NFRA MPIFR	MOJAVE Program		2	2	24.0
BL122	Lanyi, G. Boboltz, D. Charlot, P. Fey, A. Fomalont, E. Gordon, D. Ma, C. Romney, J. Sovers, O. Taylor, G. Ulvestad, J.	JPL USNO Bordeaux USNO NRAO-CV NASA-GSFC NASA-GSFC NRAO-Socorro Remote Sensing NRAO-Socorro NRAO-Socorro	High precision K/Q band astrometry		1	14	24.0
BL124	Loiuard, L. Mioduszewski, A.	UNAM NRAO-Socorro	Parallax and proper motions of young stellar sources in Taurus		4	28	6.0
BM211	Aller, M. Gomez, J.L. Jorstad, S. McHardy, I.	Michigan IAA, Granada Boston Southampton	Multi-frequency monitoring of the jets and selected blazars and radio galaxies		.7, 1	13	16.0
BM215	Middelberg, E. Bach, U. Krichbaum, T. Roy, A.	ATNF MPIFR MPIFR MPIFR	Fate of polarized emission in NGC 4261, Hydra A and Cygnus A		.7	20	8.0
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIFR Tel Aviv Maryland	Accretion in low-luminosity AGN: A radio, UV, and X-ray variability study		6	1,9	5.25
BP116	Piner, B.G. Edwards, P.G. Jones, D. Murphy, D.	Whittier College ISAS JPL JPL	Measuremnts of high brightness temperatures		6 HSA: GB, EB	27	6.0
BP117	Polatidis, A. Conway, J.E. Marcha, M. Bondi, M. Owsianik-Rottmann,	MPIFR Onsala Lisbon Bologna MPIFR	Measurements of expansion velocities in CSOs		4,6	17	48.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR092	Ratner, M. Bartel, N. Bietenholz, M. Lebach, D. Lederman, J. Lestrade, J. Ransom, R. Shapiro, I.	CfA York U. York U. CfA York University Meudon York U. CfA	Astrometric monitoring of HR 8703 for GP-B mission		4	11	17.75
BR096	Garrett, M. Rawlings, S. Sansigre, A.M. Simpson, C.	JIVE Oxford Oxford Durham	In-beam VLBI calibrators for the Subaru/XMM-Newton Deep Survey		20	31	6.25
BV053	Vlemmings, W. Chatterjee, S. Diamond, P. van Langevelde, H.	Cornell Cornell Jodrell Bank JIVE	Parallax and proper motions of late-type stars OH maser VLBA astrometry with in-beam calibrators		20	6	18.0
BV056	Vlemmings, W. van Langevelde, H.	Cornell Cornell	Magnetic fields on the proto-stellar and proto-planetary nebulae H2O masers		1	8	8.0
BW069	Wiik, K. Raiteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Torino	Multi-wavelength monitoring of a highly active blazar: BL Lac object AO 0235+16 during an outburst		.3, .7, 1, 2, 4, 6, 13	4	9.0
BW076	Winn, J.N. Rusin, D. Kochanek, C.	CfA Pennsylvania Ohio State	Deep search for fourth image, due to a SMBH in lens at z=1		.4	24	10.0
RDV048	Gordon, D.	NASA-GSFC	Geodetic Observations		4, 13	1	24.0
	Staff	NRAO	Maintenance PT Link Tests	P			102.0 2.0

Based on Actual Hours Observed

The average downtime was 17.8 hours (4.5%)

Actual observing time was 377.40 hours

The VLBA was scheduled 82.0% of the time 553.6 hours of a possible 672 hours

Astronomical Observations = 59.0% (395.20 hours)
 Tests and Calibrations = 13.0% (88.40 hours)
 Maintenance = 10.0% (70.00 hours)

 Based on Scaled Observing Hours

The average downtime was 20.6 hours (4.5%)

Actual observing time was 436.9 hours

The VLBA was scheduled 91.0% of the time 615.9 hours of a possible 672 hours

Astronomical Observations = 68.0% (457.50 hours)
 Tests and calibrations = 13.0% (88.40 hours)
 Maintenance = 10.0% (70.00 hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB172	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	MPIfR MPIfR CfA MPIfR CfA	Proper motions in the local group		1	5, 20	23.4
BB190	Bietenholz, M.F. Bartel, N.	York U. York U.	SN 2001em		.4	22	12.0
BB207	Bower, G. Backer, D. Falcke, H. Goss, M. Herrnstein, R. Lithwick, Y. Muno, M.	Calif., Berkeley Calif., Berkeley ASTRON NRAO-Socorro Columbia Calif., Berkeley Calif., Los Angeles	X-ray/radio transient 2.5" from Sgr A		.4	7	4.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T. 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 Calif., Berkeley Jodrell Bank NRAO-Socorro Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	16	2.0
BC146	Colomer, F. Alcolea, J. Bujarrabal, V. Desmurs, J. Soria-Ruiz, R.	OAN, Spain OAN, Spain OAN, Spain OAN, Spain OAN, Spain	Relative spatial distribution of SiO masers in AGB Stars		.7	19	6.0
BC147	Cotton, W.D. Danchi, W. Lacasse, M. Ragland, S. Schloerb, F. Townes, C. Traub, W.	NRAO-CF NASA/GSFC CfA CfA Calif., Berkeley Calif., Berkeley CfA	VLBA/IOTA observations of Miras with photospheric asymmetries		.7	8	10.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NASA-GSFC	Astrometry of X-ray binaries		1, 2	21	2.7
BD099	Dallacasa, D. Orienti, M. Tinti, S. Stanghellini, C.	Bologna Bologna SISSA-Trieste IRA-Noto	Spectral imaging of two classes of CSOs		.4, 6, 20	24	9.0
BD102	DeBreuck, C. Perez-Torres, M. deVries, W. Miley, G. Overzier, R. van Breugel, W.	ESO IAA, Spain IGPP Leiden Leiden IGPP	VLBA Imaging of two high redshift radio galaxies		20	29	6.0
BG121	Gabuzda, D. Cawthorne, T. Pashchenko, I. Pushkarev, A.	JIVE Univ. Central Lancas Moscow State Univ. ASC	High frequency polarization of a complete sample of BL Lac objects		.7, 1, 2,	5	12.0
BG150	Giovannini, G. Feretti, L. Giroletti, M. Taylor, G. Edwards, P.G.	Bologna Bologna Bologna NRAO-Socorro ISAS	Jet and counterjet in Mrk 501		20	26	8.25
BG152	Gabuzda, D. Rastorgueva, E.A. Smith, P.	Cork Moscow Univ. Arizona	Simultaneous radio and optical polarimetry of AGN jets		0.7, 1, 2	1	24.0
BG154	Greenhill, L. Michelson, P. Romani, R.	CfA Stanford Stanford	Jet proper motion and millimeter spectral index in the high z blazar Q0906-6930		2	22	2.3

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BJ058	Cimo, G. Fey, A. Jauncey, D. Johnston, K. Lovell, J. Ojha, R. Quick, J.	Tasmania USNO ATNF USNO ATNF ATNF HarRAO	Measure the scattered size of the remarkable scintillator PKS 0405-385 in order to determine the distance to the scattering screen		20	17	15.5
BK107	Krichbaum, T. Sohn, B. Agudo, I. Witzel, A. Zensus, J. Ungerechts, H. Terasranta, H.	MPIfR MPIfR IAA MPIfR MPIfR IRAM Metsahovi	Polarimetric monitoring of blazar 1633+382 after major flare		.3, .7, 1	15	15.0
BK113	Kemball, A.J. Diamond, P.J.	Univ. Illinois Jodrell Bank	Monitoring SiO masers at 7mm and 3mm in two evolved stars		.3, .7	14	6.0
BK114	Kondratko, P.T. Greenhill, L.J. Moran, J. Reid, M.	Harvard Cfa Cfa Cfa	Imaging three NGC 4258-like water megamasers		1	27, 28	30.0
BK115	Kunert, M. Marecki, A.	Torun Torun	Looking for prematurely dying, young radio sources		.4, 6, 20	13	6.0
BL124	Loinard, L. Mioduszewski, A. Rodriguez, L. Rodriguez, M. Torres, R.	UNAM NRAO-Socorro UNAM UNAM UNAM	Parralax and proper motions of young stellar sources in Taurus		.4	9	6.0
BM208	Middelberg, E. Krichbaum, T. Roy, A. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR MPIfR	Proper motions in NGC 3079: Infall, outflow or jet?		1, 6	3	11.8
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Maryland	Accretion in low luminosity AGN: a radio and X-ray variability study		6	11, 19, 20	7.25
BS133	Savolainen, T. Bottcher, M. Raïteri, C. Takalo, L. Villata, M. Wiik, K.	Tuorla Ohio Univ. INAF Tuorla INAF Tuorla	Multi-frequency properties of the blazar 3C 66A		.3, .7, 1, 4, 6, 13	20	8.0
BT078	Taylor, G. Gugliucci, N.	NRAO-Socorro Lycoming	VLBA Imaging of two exotic sources from the Caltech-Jodrell Bank VLBI Surveys		1, 2, 4, 6	11	8.0
BT079	van der Tak, F. Hachisuka, K. Menten, K.	MPIfR MPIfR MPIfR	Proper motions of H2O		1	14	2.0
BV055	Vlemmings, W. Diamond, P. van Langevelde, H.	Cornell Jodrell Bank JIVE	Monitoring the magnetic field on the water masers of U Ori		1	29	6.25
BW069	Wiik, K. Raïteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Torino	Multi-wavelength monitoring of a highly active blazar: BL Lac object AO 0235+16 during an outburst		.3, .7, 1, 2, 4, 6, 13	7	9.0
BW077	Walker, R. Benson, J. Hardee, P.	NRAO-Socorro NRAO-Socorro Alabama	Constraining a possible helical flow in 3C120 at 1.7 GHz, II		20	4	13.0
BW079	Yusef-Zadeh, F. Bower, G. Cotton, W.D.	Northwestern Calif., Berkeley NRAO-CV	VLA&VLBA Study of Sgr A* at 6cm		20	4, 8, 12, 18	24.0
BY018	Yusef-Zadeh, F. Cotton, W.D. Bower, G.	Northwestern NRAO-CV Calif.-Berkeley	VLA+PT+VLBA study of Sgr A* at 6cm		6	19	7.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GG057	Gurvits, L.I. Pogrebenko, S. Avruch, I.M. Bignall, H. Campbell, R. Garrett, M.A. Lebreton, J. vantKlooster, C. Folkner, W.M. Preston, R. Romney, J. Bird, M.	JIVE JIVE NFRA JIVE NFRA JIVE ESA ESA-ESTEC JPL JPL NRAO-Socorro Univ. Bonn	VLBI and Doppler tracking of the Huygens Titan Probe		13, 3.6 for correlatio n at JIVE	17	7.5
	Staff	NRAO	Maintenance				108.0

Based on Actual Hours Observed

The average downtime was 17.4 hours (5.4%)

Actual observing time was 305.85 hours

The VLBA was scheduled 72.4% of the time 486.53 hours of a possible 672 hours

Astronomical Observations = 48.0% (322.25 hours)
 Tests and Calibrations = 12.8% (86.28 hours)
 Maintenance = 11.6% (78.00 hours)

 Based on Scaled Observing Hours

The average downtime was 20.5 hours (3.8%)

Actual observing time was 519.5 hours

The VLBA was scheduled 92.0% of the time 682.1 hours of a possible 744 hours

Astronomical Observations = 73.0% (540.0 hours)
 Tests and calibrations = 10.0% (72.4 hours)
 Maintenance = 9.0% (69.7 hours)



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BB174	Bower, G. Bolatto, A. Plambeck, R.	Calif., Berkeley Calif., Berkeley Calif., Berkeley	Trigonometric parallax of radio stars in the Orion Nebula		2	15	6.0
BB207	Bower, G. Backer, D. Falcke, H. Goss, M. Herrnstein, R. Lithwick, Y. Muno, M.	Calif., Berkeley Calif., Berkeley ASTRON NRAO-Socorro Columbia Calif., Berkeley Calif., Los Angeles	An X-ray/radio transient 2.5" from Sgr A*		4,1	20	4.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NASA-GSFC	VLB Astronomy of X-ray binaries		1,2	16	2.7
BD101	Dougherty, S. Beasley, A.J. Pittard, J. Claussen, M. Bolingbroke, N. Zauderer, A.	DRAO OVRO Leeds NRAO-Socorro NRC Maryland	Observing wind-collision and orbital motion in WR140		0.7, 1.3, 2, 3.6 with Y1	15	12.0
BD102	DeBreuck, C. deVries, W. Miley, G. Overzier, R. Perez-Torres, M.A. van Breugel, W.	ESO IGPP Leiden Leiden IAA, Spain IGPP	Imaging of two high redshift galaxies		6	2	6.0
BG153	Goddi, C. Brand, J. Moscadelli, L. Tarchi, A.	Cagliari IRA-CNR Cagliari IRA-CNR	H2O maser kinematics close to high-mass YSOs		1	21	12.0
BJ048	Johnston, K. Fey, A. Ma, C. Gordon, D. Boboltz, D. Kingham, K. Vandenberg, N. Himwich, E. MacMillan, D. Petrov, L. Fomalont, E. Walker, R.C.	USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC NVI-GSFC NASA-GSFC NRAO-CV NRAO-Socorro	Geodesy/astrometry observations for 2004		13, 4	6 Scheduled as RDV47	25.0
BL104	Lobanov, A. Roalnd, J. Ros, E. Zensus, J.A.	MPiFR IAP, Paris MPiFR MPiFR	Cross-band monitoring of a flare in the VLBI core of 3C345		7,1,2	13	4.0
BL111	Lister, M. Aller, H. Aller, M. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A. Ros, E. Vermeulen, R. Zensus, J.A.	NRAO-CV Michigan Michigan Caltech NRAO-CV MPiFR NRAO-CV Lebedev MPiFR MPiFR NFRA MPiFR	MOJAVE		2	18	24.1
BM211	Marscher, A. Aller, M. Gomez, J.L. Jorstad, S. McHardy, I.	Boston Michigan IAA, Granada Boston U. Southampton	Multi-frequency monitoring of the Jets of selected blazars and radio galaxies		1, 7	28	16.0
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPiFR Tel Aviv Univ. of Maryland	Accretion in low-luminosity AGN: A radio, UV, and X-ray variability study		6	1,13	5.25
BR095	Ramsdale, P. Caswell, J. Cragg, D. Ellingsen, S. Godfrey, P.	Tasmania CSIRO Monash Univ. Tasmania Monash Univ.	Multi-transition observations of OH masers in G353.41-0.36		20,6	30	7.0

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BR103	Romney, J. Antreasian, P. Benson, J. Border, J. Dhawan, V. Fomalont, E. Jacobs, C. Lanyi, G. McElrath, T. Mur, T.J.M. Naudet, C. Roth, D. Walker, R.C.	NRAO-Socorro JPL NRAO-Socorro JPL NRAO-Socorro NRAO-CV JPL JPL JPL JPL JPL NRAO-Socorro	Spacecraft navigation observations of Cassini spacecraft during a flyby of Iapetus		4	14,16,17,19,20	9.2
BS133	Savolainen, T. Bottcher, M. Raiteri, C. Takalo, L. Villata, M. Wiik, K.	Tuorla Ohio Univ. Torino Tuorla Torino Tuorla	Multi-frequency properties of the blazar 3C 66A		.3, .7, 1,4,6,13	14	8.0
BS144	Iguchi, S. Murata, Y. TAKABA, H. Taniguchi, Y. Wakamatsu, K.	NAOJ JAXA/ISAS Gifu Univ. Tohoku Gifu	Astrometric monitoring of the radio galaxy 3C 66B		1,4,13	20	10.3
BT078	Taylor, G. Gugliucci, N.	NRAO-Socorro Lycoming	VLBA Imaging of two exotic sources from Caltech-Jodrell Bank VLBI Surveys		1,2,4,6	26	8.0
BV055	Vlemmings, W. Diamond, P. Langevelde, H.	Cornell Jodrell Bank JIVE	Monitoring the magnetic field on the water masers of U Ori		1	3,4	14.0
BW069	Wiik, K. Raiteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Torino	Multi-wavelength monitoring of a highly active blazar: BL lac object AO 0235+6 during an outburst		.3,.7,1,2,4,6,13	6	9.0
BW079	Winn, J. Kochanek, C. Rusin, D.	CfA Ohio State Pennsylvania	Test for free-free absorption of a central lensed image		13	4	8.0
GA019	Agudo, I. Bach, U. Krichbaum, T. Alef, W. Graham, D. Bremer, M. Grewing, M. Terasranta, H. Witzel, A. Zensus, J.	IAA MPIfR MPIfR MPIfR MPIfR Bristol IRAM Metsahovi MPIfR MPIfR	Structural monitoring of jet in NRAO 150		.3, .7	11	17.0
GA021	Argo, M. Beswick, R. Pedlar, A. Muxlow, T.	Manchester Jodrell Bank Jodrell Bank Jodrell Bank	Possible radio supernova in the outer part of NGC 3310		6 Correlation at JIVE	29	10.0
GB051	Bach, U. Friedrichs, S. Impellizzeri, C. Krichbaum, T. Witzel, A. Zensus, J.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR	Polarimetric monitoring of IDV blazar 0716+714		0.3 Correlation at Bonn	9	11.5
GC024	Colomer, F. Soria-Ruiz, R. Bujarrabal, V. Alcolea, J. Desmurs, J.F.	OAN OAN OAN OAN OAN	Distribution of SiO masers in AGB stars		0.3 Correlation at Bonn	12	21.0
GG056	Gwinn, C. Ramachandran, R. Deshpande, A.A. Walker, M.A. Stinebring, D.R. Boldyrev, S.	Calif.-Santa Barbara Calif.-Berkeley NAIC Sydney U. Oberlin Univ. Chicago	Spatial arrangement of subimages in scattered pulsars		90 with WB, JB, AR	22	15.0
GG058	Gwinn, C. Deshpande, A.A. Ramachandran, R. Boldyrev, S. Desai, K.	Calif.-Santa Barbara NAIC Calif.-Berkeley Univ. Chicago Renaissance Tech	Structure of scattering disks of pulsars		90 with WB, JB, AR	23, 24	14.0

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GG059	Gomez, J.L. Marscher, A.P. Jorstad, S.G. Agudo, I. Krichbaum, T. Lobanov, A. McHardy, I.M.	IEEC-Barcelona Boston Univ. Boston Univ. IAA MPIfR MPIfR Southampton	Structural monitoring of jet in 3C120		0.3, 0.7	12	11.0
GG060	Garrett, M.A. Campbell, B.	JIVE JIVE	Wide field 327 MHz observations of M81 and M82		90 correlation at JIVE	24	9.0
GI002	Impellizzeri, C. Bach, U. Krichbaum, T. Kraus, A. Friedrichs, S. Britzen, S. Witzel, A.	MPIfR MPIfR MPIfR MPIfR MPIfR Heidelberg MPIfR	Intermediate scales in the BL Lac object 0716+714		90 with WB, JB, UR	23	11.0
GK023	Krichbaum, T. Sohn, B. Agudo, I. Witzel, A. Zensus, J. Ungerechts, H. Terasranta, H.	MPIfR MPIfR IAA MPIfR MPIfR IRAM Metsahovi	Structural monitoring of blazar 1633+382 after major flare		0.3, 0.7	8, 9	16.0
GK025	Klare, J. Krichbaum, T. Lobanov, A. Ros, E. Zensus, J. Witzel, A.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR	Structural monitoring of jet in quasar 3C 345		0.3, 0.7	10	11.5
GK027	Kadler, M. Ros, E. Krichbaum, T. Kraus, A. Zensus, J.A. Graham, D. Lobanov, A. Bremer, M. Grewing, M.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR Bristol IRAM	Structure of NGC1052 at 3mm		0.3, 0.7	10	10.5
GK028	Krichbaum, T. Britzen, S. Strom, R. Gabanyi, K. Witzel, A. Ros, E.	MPIfR Heidelberg NFRA MPIfR MPIfR MPIfR	Imaging the large scale curvature in the jet of 1803+784		90 with WB, JB, UR	25	12.0
GM055	Marcaide, J. Marti-Vidal, I. Guirado, J. Alberdi, A. Lara, L. Perez-Torres, M. Ros, E. Diamond, P.J. Shapiro, I. Preston, R. Schilizzi, R. Mantovani, F. Trigilio, C. VanDyk, S. Weiler, K. Sramek, R. Whitney, A.	Valencia Valencia Valencia IAA Granada IAA MPIfR Jodrell Bank Cfa JPL SKA Bologna Noto Caltech-IPAC NRL NRAO-Socorro Haystack	Structural monitoring of SN 1993J in M81		6 with EB, JB, ON, MC, GB, Y27	31	10.75
GM056	Mittal, R. Porcas, R. Browne, I.W.A. Biggs, A.	MPIfR MPIfR Jodrell Bank JIVE	3mm observations of gravitational lens B0218+357		0.3, 0.7	9	12.0
GP040	Pagels, A. Klare, J. Krichbaum, T. Witzel, A. Zensus, J.	MPIfR MPIfR MPIfR MPIfR MPIfR	Structural monitoring of jet in quasar 3C 454.3		0.3, 0.7	11	10.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GP041	Pagels, A. Krichbaum, T. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR	Structural monitoring of 3C84 at 3mm		0.3, 0.7	8	13.0
GR024	Ramachandran, R. Deshpande, A. Gwinn, C. Ghosh, T.	Calif.-Berkeley NAIC Calif.-Santa Barbara Arecibo	Apparent angular sizes of pulsars behind HII regions		90 with WB, JB, AR	21, 25	34.0
GS023	Smith, N. Gabuzda, D.	Cork Inst. Cork	Polarization of three radio-intermediate quasars		6 Correlated at JIVE	29	13.75
	Staff	NRAO	Maintenance				120.0

Based on Actual Hours Observed

The average downtime was 17.3 hours (3.8%)

Actual observing time was 437.6 hours

The VLBA was scheduled 80% of the time 597.05 hours of a possible
744 hours

Astronomical Observations = 61.0% (454.95 hours)
 Tests and Calibrations = 10.0% (72.40 hours)
 Maintenance = 9.0% (69.70 hours)

 Based on Scaled Observing Hours

The average downtime was 20.5 hours (3.8%)

Actual observing time was 519.5 hours

The VLBA was scheduled 92.0% of the time 682.1 hours of a possible 744 hours

Astronomical Observations = 73.0% (540.0 hours)
 Tests and calibrations = 10.0% (72.4 hours)
 Maintenance = 9.0% (69.7 hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB164	Browne, I. Jackson, N. Myers, S. Wilkinson, P.	Manchester Manchester NRAO-Socorro Manchester	Extreme scattering as an explanation of the anomalous quad/double		2	24	24.0
BB172	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	MPIfR MPIfR CfA MPIfR CfA	Proper motions in the local group		1	18	12.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T. Lyne, A. Thorsett, S. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Manchester NRL Manchester Calif.-Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	10, 21	4.0
BC135	Cotton, W.D. Bakker, E. Chagnon, G. Coude du Foresto, V Diamond, P.J. Kononen, P. McAllister, H. Mennesson, B. Perrin, G. Ragland, S. Ridgway, S. Traub, CfA van Langevelde, H. Vlemmings, W. Waters, R.	NRAO-CV Univ. Leiden Obs. de Paris Obs. de Paris Manchester Metsahovie Obs. Georgia State Univ. JPL DESPA CfA NOAO JIVE Univ. Leiden Univ. Amsterdam	VLBA obs. of bright O-rich Mira stars		.7	4	8.0
BC145	Cotton, W.D. Chagnon, G. Lopez, B. Niccolini, G. Perrin, G. Schuller, P. Waters, R.	NRAO-CV Obs. de Paris Cote d'Azur Cote d'Azur DESPA MPIfR Univ. of Amsterdam	VLBA obs. of bright O-rich AGB stars		.7	5	20.0
BD099	Dallacasa, D.	Bologna	Spectral imaging of two classes of CSOs		3, 6, 6, 18 with Y1	6	9.0
BE026	Brand, J. Engels, D. Perez-Torres, M.A.	Bologna Hamburger Sternwarte Bologna	Search for bipolar outflows in young Proto-planetary nebulae		1	15	8.0
BE035	Edwards, P. Chen, A. Digel, S. Fomalont, E. Hartman, R. Mattox, J. Piner, G. Vercellone, S.	ISAS IASF-Milan Stanford NRAO-CV GSFC Fayetteville State Whittier College IASF-Milan	Testing the Mattox et al hypothesis		4, 13	15	1.0
BF079	Fish, V. Reid, M.	CfA CfA	Proper motions of OH masers in massive star-forming regions		20	16, 19	24.25
BG114	Gabuzda, D. Cawthorne, T. Pushkarev, A.	JIVE Central Lancashire ASC	Toroidal B fields in BL lac objects		1, 2, 4, 6	9	9.0
BG144	Gabuzda, D. Cronin, P. Murray, E.	Cork Cork Cork	Investigating the Toroidal B fields of BL Lac object jets		2, 4, 6	2, 10	48
BG147	Gallimore, J. Cool, R. Thornley, M.D.	Bucknell Univ. of Arizona Bucknell Univ.	Proper motions of H2O masers in a candidate protostellar disks		1 6.0	13	6.0
BG148	Gabuzda, D. Pashchenko, I.	Cork Moscow	Probing the core regions of X-ray		2, 4, 6	23, 24	48.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BH118	Hough, D.H. Aars, C. Porcas, R. Taylor, G. Zensus, J.A.	Trinity Univ. Trinity Univ. MPIfR NRAO-Socorro MPIfR	Multi-frequency polarization imaging of five Jodrell Bank lobe-dominated quasars		2,4,6	13	23.5
BJ036	Jorstad, S. Marscher, A. Yurchenko, A.	Boston Univ. Boston Univ. St. Petersburg	BL Lac objects with high proper motion		0.4, 0.7, 1, 2	3	16.0
BK107	Krichbaum, T.	MPIfR	Polarimetric monitoring of blazar 1633+382 after major flare		0.7, 1.3 with EB	6	16.25
BL104	Lobanov, A. Roland, J. Ros, E. Zensus, J.A.	MPIfR IAP, Paris MPIfR MPIfR	Cross-bank monitoring of a flare in the VLBI core of 3C345		.7, 1, 2	12	4.0
BL111	Lister, M. Aller, H.D. Aller, M.F. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A. Ros, E. Vermeulen, R. Zensus, J.A.	NRAO-CV Univ. of Michigan Univ. of Michigan Caltech NRAO-CV MPIfR NRAO-CV Lebedev Inst. MPIfR MPIfR NFRA MPIfR	MOJAVE Program		2	11	24.0
BL124	Loinard, L. Mioduszewski, A. Rodriguez, L.F. Rodriguez, M. Torres, R.	UNAM NRAO-Socorro UNAM UNAM UNAM	Parralax and proper motions of young stellar sources in Taurus		4	16, 19, 22	24.0
BM211	Marscher, A. Aller, M.F. Gomez, J.L. Jorstad, S. McHardy, J.M.	Boston Univ. Univ. of Michigan IAA, Granada Boston Univ. Univ. of Southampton	Multi-frequency monitoring of the jets of selected blazars		.7, 1	30	12.0
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Univ. of Maryland	Accretion in low-luminosity AGN		6	15, 16	7.25
BN027	Nagar, N.	Arcetri	Multiple supermassive black holes in merger systems		6	20	16.0
BP114	Partridge, B. Cabanela, J. Marr, J.	Haverford St. Cloud State Univ Union College	VLBI structure of sources with inverted spectra at gigahertz frequencies		1, 2, 0.4	9	4.75
BS133	Bottcher, M. Raiteri, C. Savolainen, T. Takalo, L. Villata, M. Wiik, K.	Ohio Univ. INAF, Oss. Astron. d Tuorla Obs. Tuorla Obs. INAF Tuorla Obs.	Multi-frequency properties of the blazar 3C 66A		.3, .7, 1,4,6,13	2	8.0
BT075	Tarchi, A.	IRA-Bologna	Water megamaser in an FRII galaxy, 3C 403		1.3 with GB, Y27	5	4.25
BU029	Umana, G. Buemi, C. Leto, P. Toscano, S. Trigilio, C.	IRA, Noto IRA, Noto IRA, Noto Catania IRA, Noto	VLA & VLBA obs. of HR 1099 during a radio burst		4, 6	26	9.75
BV053	Chatterjee, S. Diamond, P. van Langevelde, H.	Cornell Manchester JIVE	Parallax and proper motions of late-type stars		20	8	18.0
	Staff	NRAO	Maintenance				238.0

Based on Actual Hours Observed

The average downtime was 11.0 hours (2.7%)

Actual observing time was 398.1 hours

The VLBA was scheduled 82% of the time 398.1 hours of a possible 593.6 hours

Astronomical Observations	=	57.0%	(409.1	hours)
Tests and Calibrations	=	13.0%	(95.0	hours)
Maintenance	=	12.0%	(89.5	hours)

Based on Scaled Observing Hours

The average downtime was 12.6 hours (2.7%)

Actual observing time was 453.1 hours

The VLBA was scheduled 90.0% of the time 650.2 hours of a possible 720 hours

Astronomical Observations	=	65.0%	(465.7	hours)
Tests and calibrations	=	13.0%	(95.0	hours)
Maintenance	=	12.0%	(89.5	hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA068	Asaki, Y. Deguchi, S. Hachisuka, K. Honma, M. Imai, H. Miyoshi, M.	ISAS NRAO Valencia NAOJ JIVE NAOJ	Measuring the ranserverse motion of a galactic star		1,2	11	7.0
BA071	Agudo, I. Alef, W. Bach, U. Bremer, M. Graham, D. Grewing, M. Krichbaum, T. Terasranta, H. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR IRAM MPIfR IRAM MPIfR Metsahovi MPIfR MPIfR	A moving helical jet?		.7, 1,2	20	12.0
BB172	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	MPIfR MPIfR CfA MPIfR CfA	Proper motions in the local group		1	23	12.0
BB185	Boboltz, D. Driebe, T. Ohnaka, K. Wittkowski, M.	USNO MPIfR MPIfR ESO	Coordinated VLBA/VLTI observations of two evolved stars		.7	20,22	10.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, 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-Socorr NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Manchester NRL Manchester NRAO-Socorro Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	21,29	4.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NRAO-Socorro	Astrometry of X-ray binaries		1,2	10,31	5.75
BD099	Dallacasa, D. Orienti, M. Tinti, S. Stanghellini, C.	Bologna Bologna SISSA-Trieste Noto	Spectral imaging of two classes of CSOs		3.6, 6, 18 With Y1	12	9.0
BE035	Edwards, P.G. Chen, A. Digel, S. Fomalont, E. Hartman, R. Mattox, J. Piner, G. Vercellone, S.	ISAS IASF-Milan Stanford NRAO-CV GSFC Fayetteville State Whittier College IASF-Milan	Testing the Mattox et al hypothesis		4, 13	7	1.0
BF072	Fassnacht, C. Fomalont, E. Gehrels, N. Michelson, P. Myers, S. Pearson, T. Pearson, T. Readhead, T. Sjouwerman, L. Taylor, G. Ulvestad, J. Walker, R.C. Wrobel, J.	Calif., Davis NRAO-CV NASA Stanford NRAO-Socorro Caltech Caltech Caltech NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	VLBA Imaging and polarimetry survey		2,6	18	12.0
BG147	Gallimore, J. Cool, R. Thornley, M.	Bucknell Univ. of Arizona Buckell Univ.	Proper motions of H2O masers in a candidate protostellar disk		1	17	6.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BI030	Imai, H. Diamond, P.	Kagoshima Manchester	Evolution of a water fountain in W43A		1	23	10.0
BJ048	Johnston, K. Fey, A. Ma, C. Gordon, D. Boboltz, D. Kingham, K. Vandenberg, N. Himwich, E. MacMillan, D. Petrov, L. Fomalont, E. Walker, R.C.	USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC NVI-GSFC NASA-GSFC NRAO-CV NRAO-Socorro	Geodesy/astrometry observations for 2004		3.6	25	25.0
BJ051	Jonker, P. Chatterjee, S. Fender, R. Gaensler, B. Nelemans, G.	CfA Cornell Amsterdam CfA IoA, Cambridge	Milliarcsec scale jets in black hole X-ray transients		4,13	15	7.0
BL104	Lobanov, A.P. Roland, J. Ros, E. Zensus, J.A.	MPIfR IAP MPIfR MPIfR	Cross-band monitoring of a flare in the VLBI core of 3C345		.7, 2, 1	12	4.0
BL105	Lobanov, A. Klare, J. Ros, E. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR	Multi-frequency monitoring of the parsec scale jet in 3C345		2,4,6	27	8.0
BL111	Bucknell, M. Aller, R. Aller, M.F. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A. Ros, E. Vermeulen, R. Zensus, J.A.	NRAO-CV U. of Michigan U. of Michigan Caltech NRAO-CV MPIfR NRAO-CV Lebedev MPIfR MPIfR NFRA MPIfR	NOJAVE Program		2	9	24.0
BM205	McIntosh, G. Phillips, R.	Univ. of Minnesota MIT	Observations of the V=0, 1, and 2; J=1-0 SiO maser emission from Mira		.7	14	6.0
BM207	Middelberg, E. Briskin, W. Krichbaum, T. Ly, C. Roy, A. Walker, R.C.	MPIfR NRAO-Socorro MPIfR Univ. of Arizona MPIfR NRAO-Socorr	Measuring the core shift in M87 and NGC 4261		.3,.7,1,2, 20	1,6	26.0
BM209	Marcaide, J. Guirado, J.C. Perez-Torres, M.A. Ros, E.	Valencia Valencia IAA, Granada MLPIfR	Multi-wavelength absolute kinematics in the S5 polar cap sample		.7, 2	16,19	48.0
BM211	Marscher, A. Aller, M.F. Gomez, J.L. Jorstad, S. McHardy, I.M.	Boston Univ. U. Michigan IEEC Boston Univ. Southampton	Multi-frequency monitoring of the jets of selected blazars and radio galaxies		.7, 1	30	16.25
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Univ. Univ. of Maryland	Accretion in low-luminosity AGN: a radio, UV, and X-ray variability study		6	11	2.75
BN026	Neff, S. Ulvestad, J.	NASA NRAO-Socorro	VLBA Survey for AGN in galaxy mergers		6	13	4.0
BP114	Partridge, B. Cabanela, J. Marr, J.	Haverford College St. Cloud State Univ Union College	VLBI Structure of sources with inverted spectra at Gigahertz frequencies		1	5	8.0
BS096	Rawlings, S. Garrett, M. Martinez-Sansigre, Simpson, C.	Oxford Univ. JIVE Oxford Univ. Durham Univ.	In-beam VLBI calibrators for the Subaru/XMM Newton Deep Survey		1	8	8.0
BS146	Sokoloski, J. Brocksopp, C. Kaiser, C. Mioduszewski, A. Rupen, M.	CfA MSSL Southampton NRAO-Socorro NRAO-Socorro	Observations of radio jets from outbursting symbiotic stars		4	5	4.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BT076	Thorsett, S. Backer, D. Benson, J. Briskin, W. Chatterjee, S. Cordes, J. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T.J. Lyne, A. McKinnon, M. Vlemmings, W.	Calif., Santa Cruz Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Cornell NRAO-CV Ireland NRAO-Socorro Manchester NRL Manchester NRAO-Socorro Cornell	Astrometry of a nearby merging binary pulsar system		6,20	11, 21	4.0
BU026	Uvestad, J. Gehrels, N. Macomb, D. Michelson, P. Romani, R.	NRAO-Socorro NASA Boise State Univ. Stanford Univ. Stanford Univ.	Multi-epoch imaging of recently identified EGRET blazars		2	12	24.0
BV052	Voronkov, M. Moscadelli, L. Sylsh, V.	CSIRO Cagliari ASC	Methanol and H2O masers in GL2789		1,2	27	12.0
BW069	Wiik, K. Raiteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Obs. Torino	Multi-wavelength monitoring of a highly active blazar: BL Lac object AO 0235+16 during an outburst		.3,.7,1,2, 4,6,13	28	9.0
BW072	Wiik, K. Savolainen, T. Tornikoski, M. Valtaoja, E.	ISAS Tuorla Obs. Metsahovi Tuorla Obs.	Multi-wavelength monitoring of an intraday variable blazar		.3,.7,1,6, 20	29	9.0
GG057	Gurvits, L.I. Pogrebenko, S. Avruch, I.M. Bignall, H. Campbell, R. Garrett, M.A. Lebreton, J. vantKlooster, C. Folkner, W.M. Preston, R. Romney, J. Bird, M.	JIVE JIVE NFRA JIVE NFRA JIVE ESA ESA-ESTEC JPL JPL NRAO-Socorro Univ. Boonn	VLBI and Doppler tracking of the Huygens Titan Probe		13	27	5.75
	Staff	NRAO	Maintenance				234.0

Based on Actual Hours Observed

The average downtime was 12.7 hours (3.7%)

Actual observing time was 330.8 hours

The VLBA was scheduled 76% of the time 568.3 hours of a possible
744.0 hours

Astronomical Observations = 46.0% (343.5 hours)
Tests and Calibrations = 16.0% (118.8 hours)
Maintenance = 14.0% (106.0 hours)

Based on Scaled Observing Hours

The average downtime was 15.5 hours (3.7%)

Actual observing time was 404.2 hours

The VLBA was scheduled 86.0% of the time 644.5 hours of a possible 744 hours

Astronomical Observations = 56.0% (419.7 hours)
Tests and calibrations = 16.0% (118.8 hours)
Maintenance = 14.0% (106.0 hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB176	Boboltz, D. Marvel, Kevin	USNO AAS	OH12.8-0.9: An overlooked water fountain?		20	25	5.0
BB185	Boboltz, D. Driebe, T. Ohnaka, K. Wittkowski, M.	USNO MPIfR MPIfR ESO	Coordinated VLBA/VLTI observations of two evolved stars		.7	29, 31	10.0
BB197	Brisken, W. Shirley, Y. Summer Students	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Summer Student Observing		20, 90	8	4.0
BC087	Dhawan, V. Fomalont, E. Lestrade, J-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-Socorro Obs. de Paris NRAO-Socorro NRAO-Socorro	Astrometry of X-ray binaries		4, 13	13	2.75
BC120	Chatterjee, S. Backer, D. Benson, J. Brisken, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T.J. Lyne, A. McKinnon, M. Thorsett, S. Wong, D.	NRAO-Socorro 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	Pulsar Astrometry with the VLBA		20	9, 23	4.25
BC127	Cawathorne, T. Gabuzda, D. Jorstad, S. Marscher, A. Stirling, A.	Lancashire Cork Boston Boston Lancashire	Precessing jet in BL Lacertae?		7,1,2,4	9	6.
BC141	Claussen, M. Morris, M. Sahai, R. Sanchez-Contreras,	NRAO-Socorro UCLA JPL OVRO	Magnetic fields in bipolar prelanetary nebulae		20	9,10	8.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J.-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NRAO-Socorr	Astrometry of X-ray binaries		4, 13	13	2.75
BD098	Deacon, R. Chapman, J.M. Green, A.	Univ. of Sydney ATNF Sydney U.	Imaging OH masers in post-AGB stars		18 with Y1	24, 26, 30	27.0
BD101	Dougherty, S. Beasley, A.J. Pittard, J. Claussen, M. Bolingbroke, N. Zauderer, A.	DRAO OVRO Leeds NRAO-Socorro NRC Maryland	Observing wind-collision and orbital motion in WR140		0.7, 1.3, 2, 3.6 with Y1	17	12.0
BE035	Edwards, P. Chen, A. Digel, S. Fomalont, E. Hartman, R. Mattox, J. Piner, G. Vercellone, S.	ISAS Milan Stanford NRAO-CV NASA Fayetteville State Whittier Milan	Testing the Mattox et al hypothesis		4, 13	13,14,15,16	21.0
BG147	Gallimore, J. Cool, R. Thornley, M.	Bucknell Arizona STScI	Proper motions of H2O masers in a candidate protostellar disk		1	5,23	12.0
BK107	Krichbaum, T. Sohn, B. Agudo, I. Witzel, A. Zensus, J. Ungerechts, H. Terasranta, H.	MPIfR MPIfR IAA MPIfR MPIfR IRAM Metsahovi	Polarimetric monitoring of blazar 1633+382 after major flare		0.7, 1.3 with EB	2	15.0
BL118	Loinard, L. Mioduszewski, A. Rodriguez, L.F.	UNAM NRAO-Socorro UNAM	Astronomic study of T Tau Sb		4	8	6.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM203	Marr, J. Taylor, G. Morris, A.	Union College NRAO-Socorro Union College	Spectral study of CSO candidates 0026+346 and 1321+410		1.3, 2, 3.6, 6, 18 with EB, Y1	3	24.25
BM205	McIntosh, G. Phillips, R.B.	Minnesota Haystack	Observations of the V=0, 1, and 2		.7	30	4.0
BM207	Middelberg, E. Briskin, W. Krichbaum, T. Ly, C. Roy, A. Walker, R.C.	MPIfR NRAO-Socorro MPIfR Arizona MPIfR NRAO-Socorro	Measuring the core shifts in M87 and NGC 4261		3,7,1,2,20	30	11.0
BM209	Marcaide, J. Guirado, J.C. Perez-Torres, M.A. Ros, E.	Valencia Valencia IAA, Granada MPIfR	Multi-wavelength absolute kinematics in S5 polar cap sample		4	10	24.0
BM211	Marscher, A. Aller, M.F. Gomez, J.L. Jorstad, S. McHardy, I.	Boston Michigan IEEC Boston Southampton	Multi-frequency monitoring of the jets of selected blazars and radio galaxies		1, 7	26	16.0
BM212	Marcha, M. Caccianiga, A. Polatidis, A.	CAAUL OAB, Milano MPIfR	Accretion in low-luminosity AGN: A rado, UV, and X-ray variability study		6	1	24.0
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arctetri MPIfR Tel Aviv Maryland	Accretion in low luminosity AGN		6	15,16,19,2 8	
BN026	Neff, S. Ulvestad, J.	NASA NRAO-Socorro	VLBA Survey for AGN in galaxy mergers		6	1,5,8	10.25
BP114	Partridge, B. Cabanela, J. Marr, J.	Haverford St. Cloud State Union College	VLBI Structure of sources with inversted spectra at gigahertz frequencies		2,4	17	5.25
BR091	Romani, R. Briskin, W. Dodson, R. Manchester, R.	Stanford NRAO-Socorro ISAS CSIRO	PSR B1706-44's origin and kick from an astrometric proper motion		6	16	2.0
BS133	Savolainen, T. Bottcher, M. Raiteri, C. Takalo, L. Villata, M. Wiik, K.	Tuorla Ohio Univ. INAF Tuorla INAF Tuorla	Multi-frequency properties of blazar 3C 66A		3,7,1,4,6, 13	22	8.0
BS140	Shen, Z-Q. Lo, K.Y. Miyoshi, M. Ho, P.T.P. Zhao, J.-H. Tsuboi, M. Miyazaki, A. Tsutsumi, T.	Shanghai Obs. NRAO-CV NAOJ-Mizusawa CfA CfA Ibaraki NAOJ-Nobeyama NAOJ-Nobeyama	Monitoring the temporal variation in the structure of Sgr A*		0.3	6, 7, 12, 19	28.0
BS143	Stockdale, C. Panagia, N. Sramek, R. Van Dyk, S. Weiler, K.	Marquette STScI NRAO-Socorro IPAC NRL	Late-time radio emission from SN 2001 em		4	1	6.0
BW069	Wiik, K. Raiteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Torino	Multi-wavelength monitoring of a highly active blazar		3,7,1,2,4, 6,13	28	9.0
BW072	Wiik, K. Savolainen, T. Tornikoski, M. Valtaoja, E.	ISAS Tuorla Metsahovi Tuorla	Multi-wavelength monitoring of an intraday variable blazar		3,7,1,6,20	29	9.0
BX005	Xu, Y. Greenhill, L. Menten, K. Moscadelli, L. Reid, M. Zheng, X.W.	Nanjing CfA MPIfR Cagliari CfA Nanjing	Distance to the Persius Spiral arm		2	25	8.0
	Staff	NRAO	Maintenance				130.0

Based on Actual Hours Observed

The average downtime was 7.1 hours (2%)

Actual observing time was 348.9 hours

The VLBA was scheduled 69% of the time 517.5 hours of a possible 744.0 hours

Astronomical Observations	=	48.0%	(356.00	hours)
Tests and Calibrations	=	8.0%	(63.3	hours)
Maintenance	=	13.0%	(98.2	hours)

Based on Scaled Observing Hours

The average downtime was 9.5 hours (2.0%)

Actual observing time was 463.5 hours

The VLBA was scheduled 85.0% of the time 634.5 hours of a possible 744 hours

Astronomical Observations	=	64.0%	(473.0	hours)
Tests and calibrations	=	8.0%	(63.3	hours)
Maintenance	=	13.0%	(98.2	hours)

VLBA Utilization Report June 2004

Progrm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB174	Bower, G. Bolatto, A. Plambeck, R.	Calif., Berkeley Calif., Berkeley Calif., Berkeley	Trigonometric Parallax of radio stars in the Orion Nebula		2	12	6.0
BB176	Boboltz, D. Marvel, K.	USNO AAS	OH12.8-0.9: An overlooked water fountain?		1	21	6.0
BB186	Bignall, H. Black, G. Campbell, D. Ojha, R. Reynolds, C.	JIVE Virginia Cornell ATNF JIVE	"Extreme" IDV Quasar PKS 1257-326: filling in the picture on milliarcsecond scales		2,4,6	13	6.0
BB187	Black, G. Campbell, D.	Virginia Cornell	Interferometric radar observations of Asteroid (25143) Itokawa		13 With GBT	13	2.0
BB188	Brunthaler, A. Friedrichs, S. Fuhrmann, L. Krichbaum, T. Witzel, A. Zensus, J.A.	JIVE MPIfR MPIfR MPIfR MPIfR MPIfR	Position waning due to interstellar scattering		4,13	9,10,13,17	16.0
BC120	Chatterjee, S. Backer, D. 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. 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	Pulsar astrometry with the VLBA		20	4,9,10,13, 23,24	14.0
BC137	Cesaroni, R. Beltran, M. Codella, C. Furuya, R. Moscadelli, L. Testi, L.	Arcetri Arcetri Firenze Arcetri Cagliari Arcetri	Study of H2O and OH masers tracing two bipolar outflows in the high-mass protocluster G24.78+0.08		1	9	19.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J.-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NRAO-Socorro	Astrometry of X-ray binaries		4,13	9, 11	11.0
BD095	Darline, J. Carilli, C.	Carnegie Obs. NRAO-Socorro	Precise constraint on cosmic evolution of the fine structure constant from OH absorption lines		20	1,2	22.75
BF072	Fassnacht, C. Fomalont, E. Gehrels, N. Michelson, P. Myers, S. Pearson, T. Readhead, T. Sjouwerman, L. Taylor, G. Ulvestad, J. Walker, C. Wrobel, J.	Calif., Davis NRAO-Socorro NASA Stanford NRAO-Socorro Caltech Caltech NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	Imagig and Polarimetry Survey		2,6	28	12.25
BH119	Hardcastle, M. Worrall, D. Pearson, T.	Bristol Bristol Caltech	Proper motion and polarization of jet in CSS quasar 3C 48		3,6, 6, 18 With Y1	25	12.0
BJ036	Jorstad, S. Marscher, A. Yurchenko, A.	Boston Boston St. Petersburg	BL Lac objects with high proper motion		.7,1,2,4	19	15.00
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	4	4.0

VLBA Utilization Report June 2004

Prog#	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL111	Lister, M. Aller, H. Aller, M. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A.P. Ros, E. Vermeulen, R. Zensus, J.	NRAO-CV Michigan Michigan Caltech Univ. of Texas MPIfR NRAO-CV Lebedev MPIfR MPIfR NFRA MPIfR	MOJAVE program		2	11	24.0
BL121	Lang, C. Bower, G.	Univ. Iowa Calif.-Berkeley	Search for emission from colliding wind binaries in Arches cluster		3.6 With Y27	23	5.5
BM208	Middelberg, E. Krichbaum, T. Roy, A. Witzel, A. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR MPIfR	Proper motions in NGC3079: Infall, Outflow or Jet?		1,6	14	11.75
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Maryland	Accretion in low-luminosity AGN: A radio, UV and X-ray variability study		6	11,21	5.25
BN026	Neff, S. Ulvestad, J.	NASA NRAO-Socorro	VLBA Survey for AGN in galaxy mergers		6	7,18,20,24	28.0
BR092	Ratner, M. Bartel, N. Bietenholz, M. Lebach, D. Lederman, J. Lestrade, J. Ransom, R. Shapiro, I.	CfA York U. York U. CfA York University Meudon York U. CfA	Astrometric monitoring of HR 8703 for GP-B mission		2, 3.6, 6 With RO GO TI EB Y27	26	18.75
BU027	Ulvestad, J.S. Neff, S. Teng, S.	NRAO-Socorro NASA-GSFC Maryland	Monitoring young supernovae in Arp 299		3.6 With GB	27	10.0
BV053	Vlemmings, W. Chatterjee, S. Diamond, P. van Langevelde, H.	Cornell NRAO-Socorro Manchester JIVE	Parallax and proper motions of late-type stars		20	24	18.25
BW069	Wiik, K. Raïteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Obs. di Torino Tuorla Obs. Tuorlo Obs. di Torino	Multi-wavelength monitoring of a highly active blazar		.3, .7,1,2,4,6 ,13	22	9.25
BW072	Savolainen, T. Tornikoski, M. Valtaoja, E. Wiik, K.	Tuorla Obs. Metsahovi Tuorla Obs. ISAS	Multi-wavelength monitoring of an intraday variable blazar		.3,.7,1,6, 20	18	9.0
GB049	Bartel, N. Bietenholz, M.F. Beasley, A.J. Graham, D. Altunin, V. Venturi, T. Umana, G. Cannon, W. Conway, J.	York U. York U. OVRO MPIfR JPL Bologna Noto York U. Onsala	SN1993J: structural and spectral evolution of shell		6, 18 With EbWbJbOnMc NtTrRoGbY2 7	6	11.75
GI001	Imai, H. Diamond, P.J.	Kagoshima U. Jodrell Bank	Kinematics of expanding circumstellar envelope of W43A		18 For correlatio n at JIVE	8	12.0
GM051	Mack, K.-H. Snellen, I.A.G. Vermuelen, R.C. Schilizzi, R.T. Klockner, H.-R.	ASTRON Edinburgh ASTRON SKA Groningen	HI absorption observations of young radio sources		18 For correlatio n at JIVE	1	15.0
GM053	McHardy, I. Seymour, N. Uttley, P.	Southampton Inst. d'Astrophys Southampton	Imaging the narrow-line Seyfert 1 galaxy NGC 4051		18 For correlatio n at JIVE	4	11.25
GS021	Snellen, I.A.G. Mack, K.-H. Schilizzi, R.T.	Edinburgh ASTRON SKA	Nearby compact radio sources		6, 18 For correlatio n at JIVE	5	12.0

VLBA Utilization Report June 2004

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GV017	Kanekar, N. Vermeulen, R.C. Chengalur, J. Ghosh, T.	TIFR-Pune NFRA TIFR Arecibo	OH absorption and emission at z~0.25 toward PKS 1413+135		18 With EbWbJbOnMc TrGb	9	20.0
	Staff	NRAO	Maintenance				247.0

Based on Actual Hours Observed

The average downtime was 10.7 hours (3%)

Actual observing time was 347.0 hours

The VLBA was scheduled 80.3% of the time 578.25 hours of a possible 720.0 hours

Astronomical Observations = 49.7% (357.75 hours)
 Tests and Calibrations = 16.8% (121.60 hours)
 Maintenance = 13.7% (98.90 hours)

 Based on Scaled Observing Hours

The average downtime was 12.5 hours (3.0%)

Actual observing time was 405.3 hours

The VLBA was scheduled 88.5% of the time 638.3 hours of a possible 720 hours

Astronomical Observations = 58.0% (417.8 hours)
 Tests and calibrations = 16.8% (121.6 hours)
 Maintenance = 13.7% (98.9 hours)

VLBA Utilization Report May 2004

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA068	Asaki, Y. Deguchi, S. Hachisuka, K. Honma, M. Imai, H. Miyoshi, M.	ISAS NRO Valencia NAOJ JIVE NAOJ	Measuring transverse motion of a galactic evolved star		1,2	2	7.0
BB183	Bower, G. Backer, D. Falcke, H. Goss, M. Herrnstein, R. Zhao, J.-H.	Calif., Berkeley Calif., Berkeley MPIfR NRAO-Socorro Columbia Cfa	Intrinsic size and morphology of Sag A*		.7	16	6.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T. Lyne, A. McKinnon, M. Thorsett, S. Wong, D.	NRAO-Socorro Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Manchester NRL Manchester NRAO-Socorro Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	3,4,5	18.0
BC135	Cotton, W.D. Bakker, E. Chagnon, G. Coude du Foresto, V. Diamond, P. Kononen, P. McAllister, H. Mennesson, B. Perrin, G. Ragland, S. Ridgway, S. Traub, W. van Langevelde, H. Vlemmings, W. Waters, R.	NRAO-CV Leiden DESPA DESPA Manchester Metsahovie Georgia State Univ JPL DESPA Cfa NOAO Cfa JIVE Leiden Amsterdam	VLBA obs. of O-rich Mira stars		.7	16	8.0
BC139	Claussen, M. Beasley, A.J. Goss, M. Moellenbrock, G.	NRAO-Socorro OVRO NRAO-Socorro NRAO-Socorro	Tests of water maser phase referencing for astrometry of galactic water masers		1	1	10.0
BD095	Darling, J. Carilli, C.	Carnegie Obs. NRAO-Socorro	Precise constraint on cosmic evolution of the fine structure constant		20	7,8,9	73.5
BE036	Eisner, J. Greenhill, L. Menten, K. Moran, J.	Caltech Cfa MPIfR Cfa	SiO masers and outflow from an obscured protostar in W51 IRS2		.7	31	11.0
BG114	Gabuzda, D. Cawthorne, T. Pushkarev, A.	JIVE Central Lancashire ASC	Toroidal B Fields in BL Lac objects		2,4,6,1	22	9.0
BG131	Gabuzda, D. Croke, S. Vetukhnovskaya, Y.	Cork Cork ASC	Nature of variable sheath structures surrounding the jets of compact AGN		1,2,4,6	29	24.0
BG142	Gal-Yam, A. Frail, D. Levinson, A. Ofek, E. Soderberg, A. Waxman, E.	Tel Aviv NRAO-Socorro Tel Aviv Tel Aviv Caltech Weizmann Inst.	An unidentified radio transient toward NGC 4216		4,20	2	10.0

VLBA Utilization Report May 2004

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BJ048	Johnston, K. Fey, A. Ma, C. Gordon, D. Boboltz, D. Kingham, K. Vandenberg, N. Himwich, E. MacMillan, D. Petrov, L. Fomalont, E. Walker, R.C.	USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC NVI-GSFC NASA-GSFC NRAO-CV NRAO-Socorro	Geodesy/astrometry observations for 2004		3,6 With ApGcGgMaMc NtOnTcVaWf Wz	5 Scheduled as RDV44	25.0
BL105	Lobanov, A. Klare, J. Ros, E. Zensus, J.	MPIfR MPIfR MPIfR MPIfR	Multifrequency monitoring of the parsec-scale jet in 3C345		2,4,6	3	8.0
BL118	Loiuard, L. Mioduszewski, A. Rodriguez, L.	UNAM NRAO-Socorro UNAM	Astrometric study of T Tau Sb		4	13	6.0
BM191	Marscher, A. Aller, M. Gomez, J.L. Jorstad, S. McHardy, I.	Boston Michigan IAA, Granada Boston Southampton	Relationship between X-ray events and superluminal ejections in blazar		.7, 1	14	16.0
BM213	Momjian, E. Ghosh, T. Salter, C.	Arecibo Arecibo Arecibo	VLBA obs. of a possible phase calibrator for L-band Arp 220 obs.		20	4	2.0
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Maryland	Accretion in low luminosity AGN: a radio, UV and X-ray variability study		6	16,21,22	8.0
BN026	Neff, S. Ulvestad, J.	NASA NRAO-Socorro	VLBA Survey for AGN in galaxy mergers		6	21, 28	16.0
BP110	Petrov, L. Fomalont, E. Gordon, D. Kovalev, Y.Y. Volvach, A.	NVI NRAO-Socorro NASA NRAO-GB CrAO	VLBA calibrator survey: densification		4,13	1,8,27	50.0
BR092	Ratner, M. Bartel, N. Bietenholz, M. Lebach, D. Lederman, J. Lestrade, J.-F. Ransom, R. Shapiro, I.	Cfa York York Cfa York Obs. de Paris York Cfa	Astrometry of HR 8703 in 2004		2,4,6	18	17.75
BS096	Suda, H. Honma, M. Sasao, T.	Univ. of Tokyo NAOJ NAOJ	Phase referencing VLBA obs. of water maser source in the inner galaxy		1	20	8.0
BS133	Savolainen, T. Botcher, M. Raiteri, C. Takalo, L. Villata, M. Wiik, K.	Tuorla Ohio Univ. Torino Tuorla Torino Tuorla	Multi-frequency properties of the Blazar 3C 66A		.3,.7,1,4, 6,13	10	8.0
BW069	Wiik, K. Raiteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Torino	Multi-wavelength monitoring of a highly active blazar		.3,.7,1,2, 4,6,13	7	9.0
BW072	Wiik, K. Savolainen, T. Tornikoski, M. Valtaoja, E.	ISAS Tuorla Metsahovi Tuorla	Multi-wavelength monitoring of an intraday variable blazar: BL Lac object 0716+714		.3,.7,1,6, 20	3	9.0
GB049	Bartel, N. Altunin, V. Beasley, A. Bietenholz, M. Cannon, W. Conway, J. Graham, D. Rupen, M. Umana, G. Venturi, T.	York JPL OVRO York York OSO MPIfR NRAO-Socorro Noto Bologna	SN 1993J: center of the shell and it's structural and spectral evolution		6	25	12.0

VLBA Utilization Report May 2004

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GK029	Krips, M.	Cologne	Parsec scale radio emission in th enuclei of nearby Seyfert and LINER galaxies		6	22	30.0
GS021	Snellen, I. Mack, K.-H. Schillizzi, R.	IfA ASTRON SKA	Young radio sources at low redshift		6	24	11.75
	Staff	NRAO	Maintenance				160.0

Based on Actual Hours Observed

The average downtime was 16.0 hours (4.0)

Actual observing time was 386.0 hours

The VLBA was scheduled 79% of the time 592.7 hours of a possible
744.0 hours

Astronomical Observations = 54.0% (402.00 hours)
 Tests and Calibrations = 15.0% (116.00 hours)
 Maintenance = 10.0% (74.70 hours)

 Based on Scaled Observing Hours

The average downtime was 18.7 hours (4.0%)

Actual observing time was 453.15 hours

The VLBA was scheduled 88.0% of the time 661.55 hours of a possible 720 hours

Astronomical Observations = 63.0% (471.85 hours)
 Tests and calibrations = 15.0% (116.00 hours)
 Maintenance = 10.0% (74.70 hours)

VLBA Utilization Report April 2004

Progrm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA068	Asaki, Y. Deguchi, S. Hachisuka, K. Honma, M. Imai, H. Miyoshi, M.	ISAS NRO Valencia NAOJ JIVE NAOJ	Measuring the transverse motion of a galactic evolved star		1,2	3	7.0
BB174	Bolatto, A. Plambeck, R.	Calif., Berkeley Calif., Berkeley	Trigonometric parallax of radio stars in the Orion Nebula		2	2,8	12.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, W. Cordes, J.M. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T. Lyne, A. McKinnon, M. Thorsett, S. Wong, D.	NRAO-Socorro Calif., Berkeley NRAO-CV NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Manchester NRL Manchester NRAO-Socorro Calif., Santa Cruz Cornell	Pular astrometry with the VLBA		20	6,9,14,16, 21,22,23,2 9	20.0
BC139	Claussen, M. Beasley, A.J. Goss, M. Moellenbrock, G.	NRAO-Socorro OVRO NRAO-Socorro NRAO-Socorro	Tests of water maser phase referencing for astrometry of galactic water masers		1	25	10.0
BD087	Dhawan, V. Fomalont, E. Lestrade, J-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NRAO-Socorro	VLB Astrometry of X-ray binaries		4,13	25	6.0
BG144	Gabuzda, D. Cronin, P. Murray, E.	Cork Cork Cork	Investigating the Toroidal B fields of BL Lac object jets		2,4,6	12	24.0
BH113	Hong, X.Y. An, T. Jiang, D. Wang, W. Zhao, J.-H.	ShAO ShAO ShAO ShAO CfA	Millimeter VLBA observations of the core structure on a sub-parsec scale in AGN		0.7, 2, 3	1	13.0
BH118	Hough, D.H. Aars, C. Zensus, J. Porcas, R. Taylor, G.	Trinity Trinity MPIfR MPIfR NRAO-Socorro	Polarimetric imaging of lobe-dominated quasars		2, 3.6, 6 With Y1	24	24.0
BI028	Imai, H. Morris, M. Sahai, R.	JIVE Calif., Los Angeles JPL	Kinematics of collimated molecular jets in evolved stars		1	26	8.0
BJ036	Jorstad, S. Marscher, A.P. Yurchenko, A.	Boston Boston St. Petersburg	BL Lac objects with high proper motion		1,2,4,7	2	16.0
BJ046	Junor, B. Owen, F. Eilek, J. Hardee, P. Walker, R.C.	LANL NRAO-Socorro NMIMT Alabama NRAO-Socorro	M87 Jet at 25 mas resolution		90	4,22,23	29.2
BK107	Krichbaum, T. Sohn, B. Agudo, I. Witzel, A. Zensus, J. Ungerechts, H. Terasranta, H.	MPIfR MPIfR IAA MPIfR MPIfR IRAM Metsahovi	Polarimetric monitoring of blazar 1633+382 after major flare		0.7, 1.3 With EB	28	14.7
BK110	Kondratko, P.T. Greenhill, L. Lovell, J. Kuiper, T. Moran, J. Jauncey, D.	Harvard CfA ATNF JPL CfA ATNF	Imaging the nuclear H2O maser in NGC 3393		1	26	7.0
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		0.7, 1, 2	21	4.0

VLBA Utilization Report April 2004

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL105	Lobanov, A. Klare, J. Ros, E. Zensus, J.A.	MPIfR MPIfR MPIfR MPIfR	Multi-frequency monitoring of the parsec-scale jet in 3C345		2,4,6	3,8	16.0
BL111	Lister, M. Aller, H. Aller, M. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y.A. Lobanov, A. Ros, E. Vermeulen, R.C. Zensus, J.A.	NRAO-CV Michigan Michigan Caltech NRAO-CV MPIfR NRAO-CV Lebedev MPIfR MPIfR NFRA MPIfR	MOJAVE Program: monitoring of jets in AGN with VLBA experiments		2	10	24.0
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Maryland	Accretion i low-luminosity AGN: A Radio UV and X-ray variability study		6	28	2.5
BP109	Perlman, E. Landt, H. Padovani, P. Rector, T. Stoeke, J.	Maryland STScI STScI CASA	Parsec scale structure of a new population of radio quasars		6	14,15,21,22	48.0
BP110	Fomalont, E. Gordon, D. Kovalev, Y. Volvach, A.	NRAO-CV NASA NRAO-GB CrAO	VLBA Calibrator survey: Densification		4,13	30	22.25
BV053	Vlemmings, W. Chatterjee, S. Diamond, P. van Langevelde, H.	Cornell NRAO-Socorro Manchester JIVE	Parallax and proper motions of late-type stars OH maser VLBA astrometry with in-beam calibrators		20	11	18.0
BW070	Walker, R.C. Wrobel, J. Ly, C.	NRAO-Socorro NRAO-Socorro Univ. Arizona	Imaging the jet base in FRI galaxy M84		0.7 With GB, EB	4	12.5
BX005	Xu, Y. Greenhill, L. Menten, K. Moscadelli, L. Reid, M. Zheng, X.W.	Nanjing Cfa MPIfR Cagliari Cfa Nanjing	Distance to the Persius spiral arm		2	23	8.0
GA019	Agudo, I. Bach, U. Krichbaum, T. Alef, W. Graham, D. Bremer, M. Grewing, M. Terasranta, H. Witzel, A. Zensus, J.	IAA MPIfR MPIfR MPIfR MPIfR Bristol IRAM Metsahovi MPIfR MPIfR	Structural monitoring of jet in NRAO 150		0.3 With PdB, PV, ON, MH, EB	17 for Corr. in Bonn	11.5
GB051	Bach, U. Friedrichs, S. Impellizzeri, C. Krichbaum, T. Witzel, A. Zensus, J.	MPIfR MPIfR MPIfR MPIfR MPIfR	Polarimetric monitoring of IDV blazar 0716+714		0.3 With PdB, PV, ON, MH, EB	18 for Corr. in Bonn	13.0
GK023	Krichbaum, T. Sohn, B. Agudo, I. Witzel, A. Zensus, J. Ungerechts, H. Terasranta, H.	MPIfR MPIfR IAA MPIfR MPIfR IRAM Metsahovi	Structural monitoring of blaazr 1633+382 after major flare		0.3 With PdB, PV, ON, MH, EB	17 for Corr. in Bonn	13.5
GK024	Krichbaum, T. Graham, D. Alef, W. Witzel, A. Zensus, J.	MPIfR MPIfR MPIfR MPIfR MPIfR	Structural monitoring of the jet in M87		0.3 With PdB, PV, ON, MH, EB	19 for Corr. in Bonn	13.0

VLBA Utilization Report April 2004

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GK025	Klare, J. Krichbaum, T. Lobanov, A. Ros, E. Zensus, J. Witzel, A.	MPIfR MPIfR MPIfR MPIfR MPIfR MPIfR	Structural monitoring of jet in quasar 3C 345		0.3 With PdB, PV, ON, MH, EB	18 for Corr. in Bonn	14.0
GP040	Pagels, A. Klare, J. Krichbaum, T. Witzel, A. Zensus, J.	MPIfR MPIfR MPIfR MPIfR MPIfR	Structural monitoring of jet in quasar 3C 454.3		0.3 With PdB, PV, ON, MH, EB	19 for Corr. in Bonn	12.0
TV007			Mark V test with AT	P		15	3.0
	Staff	NRAO	Maintenance				126.0

Based on Actual Hours Observed

The average downtime was 19.5 hours (4.3)

Actual observing time was 411.5 hours

The VLBA was scheduled 85% of the time 614.1 hours of a possible 720.0 hours

Astronomical Observations = 60.0% (430.50 hours)
 Tests and Calibrations = 15.0% (111.00 hours)
 Maintenance = 10.0% (72.60 hours)

 Based on Scaled Observing Hours

The average downtime was 21.2 hours (4.3%)

Actual observing time was 472.9 hours

The VLBA was scheduled 94.0% of the time 677.7 hours of a possible 744 hours

Astronomical Observations = 69.0% (494.10 hours)
 Tests and calibrations = 15.0% (111.00 hours)
 Maintenance = 10.0% (72.60 hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB176	Boboltz, D. Marvel, K.	USNO AAS	An overlooked water fountain?		20	16	5.0
BB178	Bower, G. Anderson, J.	Calif.-Berkeley Rice Univ.	Trigonometric parallax of radio stars in Pleiades open cluster		4	20, 21	8.0
BC120	Chatterjee, S. Backer, D. Benson, J. Briskin, W. Cordes, J. 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 Manchester NRL Manchester NRAO-Socorro Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	1,3,5,6,12 ,13,17,25, 29,31	20.0
BC127	Cawthorne, T. Gabuzda, D. Jorstad, S. Marscher, A.P. Stirling, A.	Central Lancashire Cork Boston Boston Central Lancashire	Precessing jet in BL Lacertae?		.7,1,2,4	28	6.0
BC128	Claussen, M. Marvel, K. Wilking, B. Wootten, H.	NRAO-Socorro AAS UMSL NRAO-CV	Water masers around low and intermediate luminosity young stellar objects		1	8,24	12.0
BC142	Claussen, M. Morris, M. Sahai, R. Sanchez-Contreras,	NRAO-Socorro UCLA JPL OVRO	Water masers in newly discovered protoplanetary nebulae		1	19	6.0
BF072	Fassnacht, C. Taylor, G. Fomalont, E. Gehrels, N. Michelson, P. Myers, S. Pearson, T. Readhead, T. Sjouerman, L. Ulvestad, J. Walker, C. Wrobel, J.	Calif., Davis NRAO-Socorro NRAO-CV NASA NASA NRAO-Socorro Caltech Caltech NRAO-Socorro NRAO-Socorro NRAO-Socorro NRAO-Socorro	VLBA Imaging and polarimetry survey		2,6	14,15	24.0
BG144	Gabuzda, D. Cronin, P. Murray, E.	Cork Cork Cork	Investigating the Toridal B fields of BL Lac object jets		2,4,6	22	24.0
BH116	Homan, D.C. Cheung, T. Wardle, J.F.C.	Denison U. Brandeis Brandeis	Jet structure in 180-deg misaligned blazar PKS 1510-089		90 with Y1	11	10.0
BJ046	Junor, B. Eilek, J. Hardee, P. Owen, F. Walker, R.C.	LANL NMIMT Alabama NRAO-Socorro NRAO-Socorro	M87 Jet at 25 mas resolution		90	1,2,5,6,12 ,13,17,18, 25,27,28,3 0	107.6
BJ048	Johnston, K. Fey, A. Ma, C. Gordon, D. Boboltz, D. Kingham, K. Vandenberg, N. Himwich, E. MacMillan, D. Petrov, L. Fomalont, E. Walker, R.C.	USNO USNO NASA-GSFC Raytheon-GSFC USNO USNO NVI-GSFC NVI-GSFC NVI-GSFC NASA-GSFC NRAO-CV NRAO-Socorro	Geodesy/astrometry observations for 2004		3.6 Scheduled as RDV43	3	25.0
BL104	Lobanov, A. Roland, J. Ros, E. Zensus, J.A.	MPIfR IAP, Paris MPIfR MPIfR	Cross-band monitoring of a flare in the VLBI core of 3C345		.7, 1,2	7	4.0
BL118	Loiuard, L. Mioduszewski, A. Rodriguez, L.F.	UNAM NRAO-Socorro UNAM	Astrometric study of T Tau Sb		4	26	6.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM198	Massi, M. Menten, K. Ros, E.	MPIfR MPIfR MPIfR	Polarimetry of young binary system V773 Tau A		4	11,12,13,14, 15,16,17	44.8
BN021	Nagar, N. Falcke, H. Maoz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Maryland	Accretion in low-luminosity AGN: Radio, UV, and X-ray variability study		6	19,21,22,25, 31	12.65
BR092	Ratner, M. Bartel, N. Bietenholz, M. Lebach, D. Lederman, J. Lestrade, J. Ransom, R. Shapiro, I.	CfA York U. York U. CfA York University Meudon York U. CfA	Astrometric monitoring of HR 8703 for GP-B mission		4	6	18.0
BR093	Romani, R. Greenhill, L. Sowards-Emmerd, D.	Stanford CfA Stanford	Exploratory imaging of Q0906+6930		.7	3	1.4
BS131	Shen, Z.-Q. Lo, K.Y. Ho, P.T.P. Miyoshi, M.	Academia Sinica NRAO-CV CfA NAOJ-Mizusawa	VLBA observations of Sgr A* at 3 and 7mm		0.7 With GB	8, 20	13.8
BS135	Stanghellini, C. Cassaro, P. Dallacasa, D. Tao, A. Venturi, T. Xiang, L. Xiaoyu, H.	IRA-CNR IRA-CNR Bologna Shanghai IRA-CNR Urumqi Shanghai	VLBI monitoring of four CSOs		4	26	9.0
RDV043	Gordon, D. Staff	NASA NRAO	Geodetic Observations Maintenance		4, 13	3	24.0 114.0

Based on Actual Hours Observed

The average downtime was 9.3 hours (2.6)

Actual observing time was 347.05 hours

The VLBA was scheduled 70.1% of the time 537.15 hours of a possible 744.0 hours

Astronomical Observations = 47.2% (356.25 hours)
 Tests and Calibrations = 14.9% (111.00 hours)
 Maintenance = 9.4% (69.90 hours)

 Based on Scaled Observing Hours

The average downtime was 10.9 hours (2.6%)

Actual observing time was 407.95 hours

The VLBA was scheduled 81.2% of the time 598.75 hours of a possible 744 hours

Astronomical Observations = 56.9% (417.85 hours)
 Tests and calibrations = 14.9% (111.00 hours)
 Maintenance = 9.4% (69.90 hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB168	Bartel, N. Bietenholz, M. Lebach, D. Ratner, M. Shapiro, I.	York York CfA CfA CfA	Proper motion of the "core" of the quasar 3C 345		4, 13	1	24.0
BB177	Bolton, R. Chandler, C. Cotter, G. Pearson, T. Pooley, G. Readhead, T. Riley, J. Waldram, E.	Cambridge NRAO-Socorro Cambride Caltech Cambridge Caltech Cambridge Cambridge	VLBI Mapping of compact radio sources selected at 15 GHz		6	6	11.96
BC120	Chatterjee, S. Backer, D. 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. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-Socorro Ireland NRAO-Socorro Manchester NRL Manchester NRAO-Socorro Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	1, 8, 12, 27	11.01
BC128	Claussen, M. Marvel, K. Wilking, B. Wootten, H.	NRAO-Socorro AAS UMSL NRAO-CV	Monitoring of water masers around low and intermediate luminosity young stellar objects		1	7, 23	12.0
BC137	Cesaroni, R. Beltran, M. Codella, C. Furuya, R. Mosadelli, L. Testi, L.	Arcetri Arcetri Firenze Arcetri Cagliari Arcetri	Study of H2O and OH masers tracing two bipolar outflows in the high-mass cluster G24.78+0.08		1	18	8.99
BE030	Edwards, P. Holder, J. Piner, B.	ISAS Leeds Whittier College	Puzzling parsec-scale structure of the TeV gamma-ray source 1ES1956+650		1, 2	8	5.98
BG140	Goddi, C. Moscadelli, L.	Cagliari Cagliari	22.2 GHz maser observations to test the circumstellar disk/jet model toward the high mass		1	8	12.0
BG145	Greenhill, L. Argon, A. Humphreys, E. Moran, J. Reid, M.	CfA CfA CfA CfA CfA	Something interesting is happening in NGC 4258		1	19,20,28,2 9	47.20
BI028	Imai, H. Morris, M. Sahai, R.	JIVE UCLA JPL	Kinematics of collimated molecular jets in evolved stars: case of IRAS 19134+2131		1	9	7.99
BJ045	Junor, B.	LANL	Deep 3mm observations of a Virgo A Core		.3, .7	7	6.27
BJ046	Junor, B. Eilek, J. Hardee, P. Owen, F. Walker, R.C.	LANL NMIMT Alabama NRAO-Socorro NRAO-Socorro	M87 Jet at 25 mas resolution		90	3,24	13.69
BK107	Krichbaum, T. Sohn, B. Agudo, I. Witzel, A. Zensus, J. Ungerechts, H. Terasranta, H.	MPIfR MPIfR IAA MPIfR MPIfR IRAM Metsahovi	Polarimetric monitoring of blazar 1633+382 after major flare		.3, .7, 1	25	14.05

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BL111	Lister, M. Aller, H. Aller, F. Cohen, M. Homan, D. Kadler, M. Kellermann, K. Kovalev, Y. Lobanov, A. Ros, E. Vermeulen, R. Zensus, J.A.	NRAO-CV Michigan Michigan Caltech NRAO-CV MPIfR NRAO-CV Lebedev MPIfR MPIfR NFRA MPIfR	MOJAVE Program		2	11	23.92
BL115	Lanyi, G. Boboltz, D. Charlot, P. Fey, A. Fomalont, E. Gordon, D. Ma, C. Sovers, O. Taylor, G. Ulvestad, J.	JPL USNO Bordeaux USNO NRAO-CV NASA NASA Remote Sensing NRAO-Socorro NRAO-Socorro	High precision K/Q-band astrometry		.4, 1, 13	15	23.92
BN019	Nagar, N. Falcke, H. Wilson, A.	Arcetri MPIfR Maryland	Parsec-scale radio cores in low luminosity AGN		6	27	0.98
BN021	Nagar, N. Falcke, H. Maoz, D.	Arcetri MPIfR Tel Aviv	Accretion in low luminosity AGN: a radio, UV and X-ray variability study		6	27	2.52
BR091	Romani, R. Briskin, W. Dodson, R. Manchester, R.	Stanford NRAO-Socorro ISAS CSIRO	PSR B1706-44s origin and kick from an astrometric proper motion		20	12	2.00
BR093	Romani, R. Greenhill, L. Sowards-Emmerd, D.	Stanford CfA Stanford	Exploratory imaging of Q0906+6930		2	27	1.41
BR094	Rupen, M. Dhawan, V. Moduszevski, A.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Observations of possible microquasar J1628-4152		.4, 13	3	3.99
BT072	Thorsett, S. Briskin, W.	Calif., Santa Cruz NRAO-Socorro	Parallax obs. of a merging binary pulsar		20	1	2.0
BV053	Vlemmings, W. Chatterjee, S. Diamond, P. van Langevelde, H.	Cornell NRAO-Socorro Manchester JIVE	Parallax and proper motions of late-type stars OH maser VLBA astrometry with in-beam calibrators		20	5	17.99
BW069	Wiik, K. Raïteri, C. Savolainen, T. Takalo, L. Villata, M.	Tuorla Torino Tuorla Tuorla Torino	Multi-wavelength monitoring of a highly active blazar		.3, .7, 1, 2, 4, 6, 13	16	9.01
BW072	Wiik, K. Savolainen, T. Tornikoski, M. Valtaoja, E.	ISAS Tuorla Metsahovi Tuorla	Multi-wavelength monitoring of an intraday variable blazar		.3, .7, 1, 6, 20	10	8.97
BZ031	Zhang, H. Gabuzda, D. Gurvits, L. Jin, C. Nan, R. Reynolds, L.	NAOC UCC JIVE NAOC NAOC JIVE	Search for parsec-scale rotation measures in VLBA pls sources		4, 6	25	23.54
GG053	Garrett, M.	JIVE	Deep imaging of the Hubble Deep Field region		20	20, 21, 22	36.0
GM052	Mantovani, F. Junor, W. Saikia, D. Salter, C.	Bologna Los Alamos NCRA-Pune Arecibo	Imaging the jet and counter-jet in quasar B1524-136		4	13, 14	24.0
	Staff	NRAO	Maintenance				96.0

Based on Actual Hours Observed

The average downtime was 10.6 hours (3.0)

Actual observing time was 344.79 hours

The VLBA was scheduled 73% of the time 509.84 hours of a possible 696.0 hours

Astronomical Observations	=	51.0%	(355.39	hours)
Tests and Calibrations	=	13.0%	(88.45	hours)
Maintenance	=	9.0%	(66.00	hours)

Based on Scaled Observing Hours

The average downtime was 12.6 hours (3.0%)

Actual observing time was 407.67 hours

The VLBA was scheduled 82.0% of the time 574.72 hours of a possible 696 hours

Astronomical Observations	=	60.0%	(420.27	hours)
Tests and calibrations	=	13.0%	(88.45	hours)
Maintenance	=	9.0%	(66.00	hours)

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB168	Bartel, N. Bietenholz, M.F. Lebach, D. Ratner, M. Shapiro, I.	York York CfA CfA CfA	Proper motion of the "core" of the quasar 3C345		0.7, 2	14,15,23,31	41.0
BB172	Brunthaler, A. Falcke, H. Greenhill, L. Henkel, C. Reid, M.	MPIfR MPIfR CfA MPIfR CfA	Proper motions in the local group		1	8,10	23.75
BC120	Chatterjee, S. Backer, D.C. Benson, J. Briskin, W. Cordes, J. Ellis, R. Fomalont, E. Golden, A. Goss, M. Kramer, M. Lazio, T.J.W. Lyne, A. McKinnon, M. Wong, D.	Cornell Calif., Berkeley NRAO-Socorro NRAO-Socorro Cornell Calif., Santa Cruz NRAO-CV Ireland NRAO-Socorro Manchester NRL Manchester Calif., Santa Cruz Cornell	Pulsar astrometry with the VLBA		20	1,3,4,13,15,18,19,22,27	26.0
BC127	Cawthorne, T. Gabuzda, D. Jorstad, S. Marscher, A. Stirling, A.	Central Lancashire Ireland Boston Boston Central Lancashire	Precessing jet in BL Lacertae?		0.7, 1,2,4	29	6.0
BC128	Claussen, M. Marvel, K. Wilking, B. Wootten, A.	NRAO-Socorro AAS UMSL NRAO-CV	Monitoring of water masers around low and intermediate luminosity young stellar objects		1	6, 23	12.0
BC138	Cheung, T. Taylor, G. Wardle, J.	Brandeis NRAO-Socorro Brandeis	Three lobe-dominated quasars with radio/optical hotspots		90 With Y1	30	9.75
BD087	Dhawan, V. Fomalont, E. Lestrade, J.-F. Mioduszewski, A. Rupen, M.	NRAO-Socorro NRAO-CV Obs. de Paris NRAO-Socorro NRAO-Socorro	Astrometry of X-ray binaries		0.7,2,4	11,12	6.75
BE033	Edwards, P.G. Kataoka, J. Murphy, D.W.	ISAS Tokyo Inst. Technolo JPL	Radio/optical X-ray jet source 3C15		2,4,6,13,20	2	7.0
BG139	Gabuzda, D. Murray, E. Reynolds, C. Virtrischak, V.	Cork Cork JIVE Moscow State Univ.	Magnetic fields of the extended jets of BL lac objects		20	16,17	48.0
BG140	Goddi, C. Moscadelli, L.	Cagliari Cagliari	22.2 GHz maser observations to test the circumstellar disk/jet model toward the high-mass YSO in AFGL 5142		1	1	12.0
BJ045	Junor, B.	Los Alamos	Deep 3mm observations of Virgo A core		0.3, 0.7	28	6.25
BJ046	Junor, B. Eilek, J. Hardee, P. Owen, F. Walker, R.C.	LANL NMIMT Univ. of Alabama NRAO-Socorro NRAO-Socorro	M87 Jet at 25 mas resolution		90	3	4.75
BJ049	Jackson, N. Browne, I. Todorovic, M. Wilkinson, P.	Manchester Manchester Manchester Manchester	Followup of possible small separation lenses in the CLASS survey		6	24,27,29	9.0
BK108	Kunert, M. DeBreuck, C. Marecki, A.	TRAO ESO TRAO	Looking for restarted small scale radio sources		20	24	12.0
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		0.7, 1, 2	2	4.0
BL118	Loinard, L. Mioduszewski, A. Rodriguez, L.F.	UNAM NRAO-Socorro UNAM	Astrometric study of T Tau Sb		4	15	6.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM191	Marscher, A. Aller, M.F. Gomez, J.L. Jorstad, S. McHardy, I.	Boston Michigan IAA Boston Southampton	Relationship between X-ray events and superluminal ejections		0.7, 1	12	16.0
BN021	Nagar, N. Falcke, H. Macz, D. Wilson, A.	Arcetri MPIfR Tel Aviv Univ. of Maryland	Accretion in low-luminosity AGN: A Radio, UV and X-ray variability study		6	18,19,21,2 2	12.5
BS133	Savolainen, T. Raiteri, C.M. Takalo, L. Villata, M. Wiik, K.	Tuorla Obs. Torino Tuorla Univ. Torino Tuorla Obs.	Multi-frequency properties of the Blazar 3C 66A		0.3, 0.7, 1,4,6,13	28	8.0
BS135	Stanghellini, C. Cassaro, P. Dallacasa, D. Tao, A. Venturi, T. Xiang, L. Xiaoyu, H.	IRA-CNR IRA-CNR Bologna Shanghai IRA-CNR Urumqi Obs. Shanghai Obs.	VLBI monitoring of four CSOs		4	25,26	18.0
BW069	Raiteri, C. Savolainen, T. Takalo, L. Villata, M. Wiik, K.	Torino Tuorla Obs. Tuorla Obs. Torino Tuorla Obs.	Multi-wavelength monitoring of a highly active blazar: BL Lac object AO 0235+16 during an outburst		0.3,0.7,1, 2,4,6,13	9	9.0
BW074	Wrobel, J. Condon, J.J. Garrett, M.A. Morganti, R.	NRAO-Socorro NRAO-CV JIVE ASTRON	Calibrator search in the SIRTf First-look survey		20	9	5.25
BX005	Xu, Y. Greenhill, L. Menten, K. Moscadelli, L. Reid, M. Zheng, X.W.	Nanjing Cfa MPIfR Cagliari Cfa Nanjing	Distance to the Persius spiral arm		2	30	8.0
TG002			Fringe Test		7mm with GB	5	3.5
	Staff	NRAO	Maintenance				96.0

Based on Actual Hours Observed

The average downtime was 11.4 hours (3.8)

Actual observing time was 311.0 hours

The VLBA was scheduled 68% of the time 494.4 hours of a possible
728.0 hours

Astronomical Observations = 43.0% (311.0 hours)
Tests and Calibrations = 16.0% (115.4 hours)
Maintenance = 9.0% (68.0 hours)

Based on Scaled Observing Hours

The average downtime was 15.0 hours (3.8%)

Actual observing time was 380.9 hours

The VLBA was scheduled 79.0% of the time 567.3 hours of a possible 728 hours

Astronomical Observations = 54.0% (395.9 hours)
Tests and calibrations = 16.0% (115.4 hours)
Maintenance = 9.0% (68.0 hours)