

VLBA Utilization Report December 2009

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G. Bolatto, A. Ford, E. Kalas, P.	Calif., Berkeley Calif., Berkeley CfA Calif., Berkeley	RIPL: Radio Interferometric Planet Search		4.0	4, 12, 19, 27	32.0
BB261	Braatz, J. Condon, J. Greenhill, L. Hao, L. Henkel, C. Kuo, C.-Y. Lah, P. Lo, K.Y. Reid, M. Tilak, A. Zaw, I.	NRAO NRAO CfA Cornell MPIfR UVa ANU NRAO CfA CfA NYU	The Megamaser Cosmology Project: Year 2		1.3 With EB, GB, Y27	6, 22	24.0
BB276	Bartkiewicz, A.	Torun	Searching for 12.2 GHz masers toward massive protostars		2	7	9.25
BB277	Brunthaler, A. Bower, G. Falcke, H. Henkel, C. Menten, K. Reid, M.	MPIfR Calif., Berkeley Nijmegen MPIfR MPIfR CfA	The evolution of SN 2008iz in M82		20,4,6,13	4 With EB	12.0
BD143	Deller, A. Archibald, A. Briskin, W. Chatterjee, S. Kaspi, V. Lorimer, D. McLaughlin, M. Ransom, S. Stairs, I.	NRAO McGill NRAO Sydney McGill West Virginia West Virginia NRAO British Columbia	A VLBA parallax of the binary MSP J1023+0038		20	7	4.0
BE055	Edwards, P. Piner, G.	Australia Telescope Whittier College	Seven new TeV gamma-ray emitting High-Peaked BL Lac		2,4,6	20,23	22.00
BF099	Freeland, E. Chomiuk, L. Wilcots, E.	Wisconsin at Madison Wisconsin at Madison Wisconsin at Madison	Resolving the Super-Luminous Supernova Remnant in Spiral Galaxy NGC 3631		20	31	8.0
BH164	Hough, D.	Trinity University	Acceleration on 10-100 pc Scales in Lobe-dominated Quasars-Part 11		4,2	2	8.0
BJ068	Johnston, K. Boboltz, D. Fey, A. Fomalont, E. Ojha, R.	USN USN USN NRAO USN	AGN Core Wander and the Stability of the Celestial Reference Frame		.7,1	12	8.0
BK159	Kanekar, N. Momjian, E.	NRAO NRAO	The Compact Structure of QSOs behind Damped Lyman-alpha Systems at z~1.3		20	30	4.75
BL149	Lister, M. Cooper, N. Formn, C. Kuchibhotla, H.	Purdue University Purdue University MPIfR Purdue University	The VLBA 2cm Mojave/GLAST Program		2	10,17,26	72
BL160	Loiuard, L. Mioduszewski, A. Rodriguez, L. Torres, R.	UNAM NRAO UNAM UNAM	Measuring the distance to the Serpens core with 1% precision		4	5	5.0
BH272	Menten, K. Brunthaler, A. Moscadelli, L. Reid, M. Xu, Y. Zheng, X.	MPIfR MPIfR Arcetri Obs. Harvard-Smithsonian MPIfR Nanjing	Parallaxes to Outer Galaxy H2O Masers: the Rotation Curve of the Milky Way		1	20	10.0
BH292	Ma, C. Behrend, D. Fey, A. Fomalont, E. Gaume, R. Gipson, J. Gordon, D. Johnston, K. Kingham, K. MacMillan, D. Ojha, R. Thomas, C. Walker, R.C. Boboltz, D.	NASA/GSFC NASA/GSFC USNO NRAO USNO NVI NVI USNO USNO NVI USNO NVI NRAO USNO	VLBA Geodesy/Astrometry Observations for 2009		3.6 With KbKkNyVwWf WzZc	2 Scheduled as RDV78	24.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM308	Miller-Jones, J. Fender, R. Koerding, E. Maitra, D. Markoff, S. Migliari, S. Remillard, R. Rupen, M. Russell, D. Sarazin, C. Sivakoff, G.	NRAO Southampton Commissariat a L'Ene Univ. van Amsterdam Wisconsin at Madison Calif., San Diego Massachusetts Instit NRAO Univ. van Amsterdam Virginia Ohio State	Probing jet acceleration and collimation in stellar-mass compact objects		4	8,13,30	16.0
BM316	Miller-Jones, J. Brisken, W. Jonker, P. Nelemans, G.	NRAO NRAO Harvard-Smithsonian Radboud Univ. Nijmeg	The proper motion and parallax of the closest quiescent black hole X-ray binary		4	19	1.0
BM331	Miller-Jones, J. Sivakoff, G.	NRAO Virginia	An unexpected transition to the soft state in a peculiar X-Ray binary		4,13	16,19,22,2 4	24.0
BR146	Sogorb-Roca, M. Agudo, I. Gomez, J.	Inst. de Astrofisica Inst. de Andalucia Inst. de Andalucia	Multifrequency study of 3C120:the inner jet and beyond		2,4,6	14	12.0
BS194	Schinzl, F. Lobanov, A. Taylor, G. Zensus, A.	Max-Planck-Institut Max-Planck-Institut UNM Max-Planck-Institut	Follow-up monitoring of a flaring event in 3C 345		1,2,.7	28	10.0
BS196	Stocke, J. Darling, J. Yan, T.	Univ. of Colorado Univ. of Colorado Univ. of Colorado	Mapping Compact Radio Sources in Non-Elliptical Host Galaxies		20	8,10	20.0
BT104	Taylor, G. Romani, R. Tremblay, S. Zavala, R.	UNM Stanford University UNM USN	Constraining the Orbits of the Supermassive Binary Black Holes in 0402+379		4,6,1,2	28	12.0
S2078	Taylor, G. Readhead, A.	UNM Caltech	The Parsec-Scale Characteristics of Fermi AGN		6	13	11.0
S2087	Kovalev, Y. Gehrels, N. Kadler, M. Savolainen, T. Sokolovsky, K. Wilms, J.	Max-Planck-Institut NASA Univ. Nurnberg NPIFR NPIFR Univ. Nurnberg	Follow-Up Study of the Brightest Gamma-Ray Flares in Fermi Blazars		6,.7,2,1,4	3,5,18	24.0
	Staff	NRAO	Maintenance				107.0

Based on Actual Hours Observed

The average downtime was 10.817 hours 2.90%

Actual observing time was 362.183 hours

The VLBA was scheduled 100.0% of the time 744 hours of a possible 744 hours

Astronomical Observations = 50.13% (373.00 hours)
 Tests and Calibrations = 11.58% (86.19 hours)
 Maintenance = 10.62% (79.00 hours)
 Number of unscheduled hours = 23.23% (172.81 hours)
 Number of Shutdown hours = 4.44% (33.00 hours)

 Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 893.994 hrs

Downtime = 2.90% (25.925826 hours)

Actual observing = 868.068174 hours

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric Planet Search		3.6 With GB	2, 5, 16, 22	32.0
BB261	Braatz, J.A. Condon, J.J. Greenhill, L.J. Henkel, C. Lo, K.Y. Reid, M.J. Kuo, C. Zaw, I. Tilak, A. Hao, L. Lah, P.	NRAO-GB NRAO-CV CfA MPIFR NRAO-CV CfA Virginia New York Univ. CfA Texas-Austin ANU	The Megamaser Cosmology Project: Year 2		1.3 with EB, GB, Y27	13, 25, 29	36.0
BB269	Briskin, W. Coles, B. Deller, A. Gao, J. Macquart, J-P. Rickett, B. Tingay, S.	NRAO Calif., San Diego NRAO Calif., San Diego NRAO Calif., San Diego Curtin	Distance to extreme scintillating pulsar B0834+06		4,13,20	12	4.0
BB283	Behrend, D. Charlot, P.	NVI-GSFC Bordeaux	Very Large Astrometry Session for IYA2009		3.6 For correlatin at Haystack	18	24.0
BC188	Choi, Y.K. Brunthaler, A. Menten, K. Reid, M.	MPIFR MPIFR MPIFR CfA	Parallax of PPN OH 231.8+4.2-a Laboratory of advanced stellar evolution		0.7, 1	9	8.0
BD142	Desmurs, J-F. Alcolea, J. Bujarrabal, V. Colomer, F. Lindqvist, M. Soria-Ruiz, R.	OAN OAN OAN OAN Onsala OAN	SiO v=3 J=1-0 maser emission from AGB stars		0.7	13	8.0
BD143	Deller, A. Archibald, A. Briskin, W. Chatterjee, S. Lorimer, D. Ransom, S. Stairs, I.	NRAO McGill NRAO Sydney WVU NRAO UBC	VLBA parallax of binary MSP J1023+0038		20	21	4.0
BH159	Hachisuka, K. Brunthaler, A. Hagiwara, Y. Menten, K. Mochizuki, N. Reid, M.	Shanghai MPIFR NAOJ MPIFR ISAS CfA	Distance of water maser source at the Outer arm II		1	10	6.0
BM257	McClintock, J. Dhawan, V. Narayan, R. Reid, M. Remillard, R.	CfA NRAO CfA CfA MIT	Is the black hole in the microquasar GRS1915+105 spinning maximally		1	1,3	16.0
BM272	Menten, K. Brunthaler, A. Moscadelli, L. Reid, M. Xu, Y. Zheng, X.	MPIFR MPIFR Arcetri CfA MPIFR Nanjing	Parallaxes to outer galaxy H2O masers		1	13,14	20.0
BM290	Miller-Jones, J.C.A Rupen, M.P. Mioduszewski, A.J. Dhawan, V. Gallo, G. Jonker, P.G. Briskin, W.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro Calif.-SantaBarbara SRON NRAO-Socorro	Direct geometric distance to a quiescent black hole X-ray binary		3.6 With GB, Y27	21	5.5
BM303	Marscher, A. Agudo, I. Gomez, J.L. Hagen-Thorn, V. Jorstad, S. Larionov, V.	Boston IAA IAA St. Petersburg Boston St. Petersburg	Comprehensive multi-waveband monitoring of Gamma-ray bright blazars		0.7	28	24.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM308	Miller-Jones, J. Fender, R. Heinz, S. Koerding, E. Maitra, D. Markoff, S. Migliari, S. Remillard, R. Rupen, M. Russell, D. Sarazin, C. Sivakoff, G.	NRAO Southampton Wisconsin Koerding UVA UVA Calif., San Diego MIT NRAO UVA UVA Ohio State	Probing jet acceleration and collimation in stellar-mass compact objects		4	19,22,25,27	20.5
BR141	Reid, M. Gou, L. McClintock, J. Narayan, R. Remillard, R.	CfA CfA CfA CfA MIT	Spin of the black hole in Cygnus X-1		4,13	1	5.75
BR145	Reid, M. Bartkiewicz, A. Brunthaler, A. Choi, Y.K. Dame, T. Hachisuka, K. Menten, K. Moellenbrock, G. Moscadelli, L. Moscadelli, L. Sanna, A. Sata, M. Xu, Y. Xu, Y. Zhang, B. Zheng, X.	CfA Torun MPIfR MPIfR CfA Shanghai MPIfR NRAO Arcetri Arcetri Astrofisica Tokyo Chinese Academy of S Chinese Academy of S Nanjing Nanjing	Mapping the Milky Way		4	16	1.25
BS194	Schinzell, F. Lobanov, A. Taylor, G. Zensus, A.	MPIfR MPIfR UNM MPIfR	Follow-up monitoring of a flaring event in 3C345		0.7, 2,1	7,30	20.0
GB065	Bach, U. Krichbaum, T.P. Middelberg, E. Alef, W. Witzel, A. Zensus, J.A.	MPIfR MPIfR Bochum MPIfR MPIfR MPIfR	Resolving the jets in Cygnus A		0.7 For correlatio n at JIVE	11	15.75
GF015	Fenech, D. Beswick, R. Argo, M. Muxlow, T. Pedlar, A. Van Eymeren, J.	Jodrell Bank Jodrell Bank Jodrell Bank Jodrell Bank Manchester Manchester	Multi-frequency Global VLBI and MERLIN monitoring of SNR in M82		6, 18 For correlatio n at JIVE	8	18.0
S2078	Taylor, G. Readhead, A.	UNM Caltech	Parsec-scale characteristics of Fermi AGN		6	22	11.0
S2087	Kovalev, Y. Kadler, M. Savolainen, T. Savolainen, T. Sokolovsky, K. Wilms, J.	MPIfR Nurnberg MPIfR MPIfR MPIfR Nurnberg	Active galactic nuclei		4,7,2,1,6	18	8.0
	Staff	NRAO	Maintenance				115.0

Based on Actual Hours Observed

The average downtime was 8.34 hours 2.90%

Actual observing time was 279.40 hours

The VLBA was scheduled 100.0% of the time 720 hours of a possible 720 hours

Astronomical Observations	=	39.97%	(287.75 hours)
Tests and Calibrations	=	7.81%	(56.26 hours)
Maintenance	=	9.44%	(68.00 hours)
Number of unscheduled hours	=	39.44%	(283.99 hours)
Number of Shutdown hours	=	3.33%	(24.00 hours)

Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 755.06 hrs

Downtime = 2.90% (21.89674 hours)

Actual observing = 733.16326 hours

VLBA Utilization Report September 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric Planet Search		3.6 With GB	4, 7, 18, 26	32.0
BB276	Bartkiewicz, A. Brunthaler, A. Reid, M. Szymczak, M. vanLangeveide, H.	Torun MPIFR CfA Torun JIVE	Searching for 12.2 GHz masers toward massive protostars		2	30	3.5
BJ068	Johnston, K. Boboltz, D. Fey, A. Fomalont, E. Ojha, R.	USNO USNO USNO NRAO USNO	AGN Core wander and stability of celestial reference frame		0.7, 1	14	8.0
BK159	Kanekar, N. Momjian, E.	NRAO NRAO	Compact structure of QSOs behind damped Lyman-alpha systems at $z \sim 1.3$		20,50	5,11	9.25
BL149	Lister, M. Cooper, N. Fromm, C. Kuchibhotla, H.	NRAO Purdue MPIFR Purdue	MOJAVE Program		2	22	24.0
BM257	McClintock, J. Dhawan, V. Narayan, R. Reid, M. Remillard, R.	CfA NRAO CfA CfA MIT	Is the black hole in the microquasar GRS1915+105 spinning maximally?		1	2,24	16.0
BM303	Marscher, A. Agudo, I. Gomez, J.L. Hagen-Thorn, V. Jorstad, S. Larionov, V.	Boston IAA, Spain IAA, Spain St. Petersburg Boston St. Petersburg	Comprehensive multi-waveband monitoring of Gamma-ray bright blazars		0.7	16	24.0
BM306	Mioduszewski, A. Torres, R. Lojnard, L.	NRAO-Socorro UNAM UNAM	Imaging the interacting young binary V773 Tau A/B		3.6 With AR, EB, GB, Y27	27	6.5
BP150	Pihlstrom, Y. Claussen, M. Day, F. Sahai, R.	UNM NRAO UNM Caltech	Parallax and OH and H2O maser studies of water fountain PPNe		1,20	20	8.0
BP157	Peterson, W. Mutel, R. Goss, M.	Iowa Iowa NRAO-Socorro	Confirmation of Large Coronal Loops on an RS CVN Binary		2 With GB	15	10.0
BZ039	Zhang, B. Menten, K. Reid, M. Zheng, X.	Nanjing MPIFR CfA Nanjing	Trigonometric parallax for the luminous supergiant VX Sgr		0.7, 1	17	7.0
S2087	Kovalev, Y. Gehrels, N. Kadler, M. Savolainen, T. Sokolovsky, K. Wilms, J.	MPIFR NASA Nurnberg MPIFR MPIFR Nurnberg	Follow-up study of the brightest gamma-ray flares in Fermi blazars		0.7, 1, 2, 4, 6	22	8.0
	Staff	NRAO	Maintenance				222.0

Based on Actual Hours Observed

The average downtime was 6.718 hours 4.30%

Actual observing time was 149.53 hours

The VLBA was scheduled 100.0% of the time 720 hours of a possible 744 hours

Astronomical Observations	=	21.70%	(156.25 hours)
Tests and Calibrations	=	15.00%	(108.00 hours)
Maintenance	=	17.14%	(123.40 hours)
Number of unscheduled hours	=	46.16%	(332.35 hours)
Number of Shutdown hours	=	0.00%	(0 hours)

Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 412.164 hrs

Downtime = 4.30% (17.723052 hours)

Actual observing = 394.440948 hours

VLBA Utilization Report August 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric PLANet Search		3.6 With GB	8, 13, 21, 29	32.0
BB268	Brunthaler, A. Sjouwerman, L. Garrett, M. Loinard, L.	MPIfR NRAO-Socorro NFRA UNAM	Detecting the Nucleus of M31		6 With EB, GB, Y27	2	16.0
BB269	Brisken, W. Coles, B. Deller, A. Gao, J-J Macquart, J-P Rickett, B. Tingay, S.	NRAO Calif., San Diego NRAO Calif., San Diego NRAO Calif., San Diego Curtin Univ.	Distance to extreme scintillating pulsar B0834+06		4,13,20	1	4.0
BB271	Borthakur, S. Bowen, D. Momjian, E. Tripp, T. York, D. Yun, M.	UMASS Princeton NRAO UMASS Chicago UMASS	Probing fundamental sizes of HI clouds in external galaxies		6	23,27	16.75
BC186	Cheung, C.C. Harris, D.E.	NASA SAO	Tracking the aftermath of the giant flare in the M87 jet		20	22	7.75
BD142	Desmurs, J-F. Alcolea, J. Bujarrabal, V. Colomer, F. Lindqvist, M. Soria-Ruiz, R.	OAN OAN OAN OAN Onsala OAN	SiO v=3 J=1-0 maser emission from AGB stars		0.7	31	8.0
BK153	Kanekar, N. Lane, W. Momjian, E.	NRAO NRL NRAO	Compact structure of QSOs behind damped Lyman-alpha systems		90	18	6.75
BL149	Lister, M. Cooper, N. Fromm, C. Kuchibhotla, H.	Purdue Purdue MPIfR Purdue	VLBA 2cm MOJAVE/GLAST Program		2	19	24.0
BL160	Loinard, L. Mioduszewski, A. Rodriguez, L. Torres, R.	UNAM NRAO-Socorro UNAM UNAM	Measuring the distance to the Serpens core with 1% precision		4	31	5.25
BM303	Marscher, A. Agudo, I. Gomez, J.L. Hagen-Thorn, V. Jorstad, S. Larionov, V.	Boston IAA IAA St. Petersburg Boston St. Petersburg	Comprehensive multi-waveband monitoring of a gamma-ray bright blazars		0.7	16	24.0
BM308	Miller-Jones, J. Fender, R. Heinz, S. Koerding, E. Maitra, D. Markoff, S. Migliari, S. Remillard, R. Rupen, M. Russell, D. Sarazin, C. Sivakoff, G.	NRAO Southampton Wisconsin l'Energie Amsterdam Amsterdam Calif., San Diego MIT NRAO Amsterdam UVa Ohio State	Probing jet acceleration and collimation in stellar mass compact objects		4	6	5.0
BP157	Peterson, W. Mutel, R. Goss, M.	Iowa Iowa NRAO-Socorro	Confirmation of Large Coronal Loops on an RS CVN Binary		2 With EB, GB	21	10.0
BS194	Schinzal, F. Lobanov, A. Taylor, G. Zensus, A.	MPIfR MPIfR UNM MPIfR	Follow-up monitoring of flaring event in 3C345		1,2,0.7	26	10.0
S2087	Kovalev, Y. Gehrels, N. Kadler, M. Savolainen, T. Sokolovsky, K. Wilms, J.	Bonn NASA Germany MPIfR MPIfR Germany	Follow up study of the brightest gamma-ray flares in FERMI blazars		1,2,4,6, 0.7	28	8.0
	Staff	NRAO	Maintenance				92.0

Based on Actual Hours Observed

The average downtime was 2.13 hours 1.20%

Actual observing time was 175.37 hours

The VLBA was scheduled 100.0% of the time 720 hours of a possible 744 hours

Astronomical Observations	=	23.86%	(177.50 hours)
Tests and Calibrations	=	19.39%	(144.23 hours)
Maintenance	=	8.87%	(66.00 hours)
Number of unscheduled hours	=	47.89%	(356.27 hours)
Number of Shutdown hours	=	0.00%	(0 hours)

Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 511.308 hrs

Downtime = 1.20% (6.135696 hours)

Actual observing = 505.17hours

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Prog#	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric PLANet Search		3.6 With GB	7, 14, 23, 26	24.0
BB268	Brunthaler, A. Sjouerman, L. Garrett, M. Loiuard, L.	MPIFR NRAO-Socorro NFRA UNAM	Detecting the Nucleus of M31		6 With EB, GB, Y27	19	16.0
BF094	Fomalont, E. Bagri, D. Majid, W.	NRAO JPL JPL	Milli-arcsecond structure of weak radio sources at 8 GHz		4, 13	2,3,9	24.0
BH159	Hachisuka, K. Brunthaler, A. Hagiwara, Y. Menten, K. Mochizuki, N.	Shanghai MPIFR NAOJ MPIFR ISAS	Distance of water maser source at the Outer arm II		1	25	6.0
BL149	Lister, M. Cooper, N. Fromm, C. Kuchibhotla, H.	Purdue Purdue MPIFR Purdue	MOJAVE/GLAST Program		2	5,23	48.0
BM256	Marscher, A. Chatterjee, R. D'Arcangelo, F. Gear, W. Gomez, J.L. Hagen-Thorn, V.A. Jorstad, S.	Boston Boston Boston Cardiff IAA St. Petersburg Boston	Probing blazars through multi-waveband variability of flux, polarization and structure		0.7	26	24.0
BM290	Miller-Jones, J.C.A. Rupen, M.P. Mioduszewski, A.J. Dhawan, V. Gallo, G. Jonker, P.G. Briskin, W.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro Calif.-Santa Barbara CFA NRAO-Socorro	Direct geometric distance to a quiescent black hole X-ray binary		3.6 With GB, Y27	3	5.0
BM292	Ma, C. Gordon, D. Fey, A. Johnston, K. Boboltz, D. Ojha, R. Gaume, R. Kingham, K. Behrend, D. Gipson, J. MacMillan, D. Fomalont, E. Thomas, C. Walker, R.	NASA-GSFC NVI-GSFC USNO USNO USNO USNO USNO USNO NVI-GSFC GSFC NVI-GSFC NRAO-CV NVI-GSFC NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2009		3.6 With KbkKnyVwWf WzZc	29 Scheduled as RDV76	25.0
BM295	Miller-Jones, J. Fender, R.	NRAO Southampton	Frequency dependence of the milliarsecond-scale jet in Cygnus X-1		4,20,90	14	8.0
BM308	Miller-Jones, J. Fender, R. Heinz, S. Koerding, E. Maitra, D. Markoff, S. Migliari, S. Remillard, R. Rupen, M. Russell, D. Sarazin, C. Siyakoff, G.	NRAO Southampton Wisconsin Comm. l'Energie Atom Amsterdam Amsterdam Calif., San Diego UMASS NRAO UVA UVA Ohio State	Probing jet acceleration and collimation in stellar-mass compact objects		4	9,11,12,18,20	25.0
BP146	Piner, B.G. Edwards, P.G.	Whittier CSIRO	Multi-epoch monitoring of recently detected TeV blazars		1,4	1	15.0
BP150	Pihlstrom, Y. Claussen, M. Day, F. Sahai, R.	UNM NRAO UNM Caltech	Parallax and OH and H2O maser studies of water fountain PPNe		1,20	21	8.0
BP159	Mioduszewski, A. Pastorius, M.	NRAO DePaul	Summer Student Observations		1	5,17	4.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR141	Reid, M. Gou, L. McClintock, J. Narayan, R. Remillard, R.	CfA CfA CfA CfA MIT	Spin of the black hole in Cygnus X-1		4,13	13	10.0
BS194	Schinzal, F. Lobanov, A. Taylor, G. Zensus, A.	MPIfR MPIfR UNM MPIfR	Follow-up monitoring of a flaring event in 3C345		0.7, 1,2	27	10.0
	Staff	NRAO	Maintenance				110.0

Based on Actual Hours Observed

The average downtime was 12.096 hours 4.80%

Actual observing time was 239.90 hours

The VLBA was scheduled 100.0% of the time 720 hours of a possible 744 hours

Astronomical Observations = 33.87% (252.00 hours)
 Tests and Calibrations = 14.09% (104.83 hours)
 Maintenance = 9.54% (71.00 hours)
 Number of unscheduled hours = 42.50% (316.17 hours)
 Number of Shutdown hours = 0.00% (0 hours)

 Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 628.594 hrs

Downtime = 4.80 (30.172512 hours)

Actual observing = 598.42 hours

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric PLANet Search		3.6 with GB	6, 14, 20, 27	32.0
BB273	Bietenholz, M. Soderberg, A. Bartel, N. Phillips, C. Tzioumis, A. Wieringa, M. Horiuchi, S.	York Princeton York U. JIVE ATNF ATNF Swinburne	Resolving a Hypernova Jet in SN 2009bb		3.6 with TI, HO	11	10.0
BD143	Deller, A. Archibald, A. Brisken, W. Chatterjee, S. Kaspi, V. Lorimer, D. McLaughlin, M. Ransom, S. Stairs, I.	NRAO McGill NRAO Sydney McGill West Virginia U. West Virginia U. NRAO UBC	VLBA parallax of the binary MSP J1023+0038		20	12	4.0
BF092	Fish, V. Reid, M.J.	NRAO CfA	OH Maser motions as kinematic tracers inmasive star forming regions		20	7	3.0
BF094	Fomalont, E. Bagri, D. Majid, W.	NRAO JPL JPL	Milli-arcsecond structure of weak radio sources at 8 GHz		4,13	29	8.0
BJ067	Jones, D. Border, J. Dhawan, V. Fomalont, E. Lanyi, G. Romney, J.	JPL JPL NRAO NRAO JPL NRAO	VLBA Astrometry of Cassini: The Sequel		4, 13	24	6.0
BJ068	Johnston, K. Boboltz, D. Fey, A. Fomalont, E. Ojha, R.	USNO USNO USNO NRAO USNO	AGN Core wander and stability of the Celestial reference frame		1, 0.7	8	8.0
BK150	Kovalev, Y.Y.	MPIfR	Physics of GLAST year-1 early data release AGN		1,2,4,6,0.7	1, 20	28.0
BL149	Kijima, M.	Graduate University	High resolution image of flared NRA0512 at K,Q,W-band		2	3,15,25	72.0
BL160	Loinard, L. Mioduszewski, A. Rodriguez, L.F. Torres, R.S.	UNAM NRAO UNAM UNAM	Mesuring the distance to the Serpens core with 1% precision		4	3	5.0
BM256	Marscher, A. Chatterjee, R. D'Arcangelo, F. Gear, W.K. Gomez, J.L. Hagen-Thorn, V. Jorstad, S.	Boston Boston Boston Cardiff IAA St. Petersburg Boston	Probing blazars through multi-waveband variability of flux, polarization, and structure		0.7	21	24.0
BM305	Momjian, E.	NRAO-Socorro	Resolving the Radio Emission of the Luminous SMM Galaxy GOODS 850-16		18 With GB, Y27	27	8.0
BM308	Miller-Jones, J. Fender, R. Heinz, S. Koerding, E. Maitra, D. Markoff, S. Migliari, S. Remillard, R. Rupen, M. Russell, D. Sarazin, C. Sivakoff, G.	NRAO Southampton Wisconsin Comm. l'Energie Atom Amsterdam Amsterdam Calif., San Diego MIT NRAO Amsterdam UVa Ohio State	Probing jet acceleration and collimation in stellar-mass compact objects		2,4	2,5,6,8,9,11,13,15	40.0
BR148	Rushton, A. Dhawan, V. Maccarone, T. Miller-Jones, J. Paragi, Z. Pooley, G. Spencer, R. Tudose, V.	Manchester NRAO Southampton NRAO JIVE Cambridge Manchester NFRA	June 2009 Cygnus X-1 outburst		4	28	8.5

VLBA Utilization Report June 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BS194	Schinzel, F. Lobanov, A. Taylor, G. Zensus, A.	MPIfR MPIfR UNM MPIfR	Follow-up monitoring of flaring event in 3C 345		1,2,0.7	29	10.0
BY127	Yusef-Zadeh, F. Brunthaler, A. Cotton, W. DePree, C.	Northwestern MPIfR NRAO Agnes Scott	Search for non-thermal radio continuum emission from Sgr B2		13,4	19	8.0
	Staff	NRAO	Maintenance				109.0

Based on Actual Hours Observed

The average downtime was 9,61 hours 3.50%

Actual observing time was 264.89 hours

The VLBA was scheduled 100.0% of the time 720 hours of a possible 744 hours

Astronomical Observations = 38.13% (274.50 hours)
 Tests and Calibrations = 10.69% (104.77 hours)
 Maintenance = 10.69% (77.00 hours)
 Number of unscheduled hours = 40.49% (291.50 hours)
 Number of Shutdown hours = 0.00% (0 hours)

 Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 680.696 hrs

Downtime = 3.5% (23.82 hours)

Actual observing = 656.87 hours

VLBA Utilization Report May 2009

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB233	Bietenholz, M.F. Bartel, N.	York U. York U.	Does the Ursa Minor Dwarf Spheroidal Host an Intermediate-Mass BlackHole		6 With GB	17	8.0
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric PLANet Search		3.6 With GB	16, 26	16.0
BB269	Briskin, W.	NRAO	Distance to the extreme scintillating pulsar B0834+06		4,6,13,20	15	4.0
BB272	Brunthaler, A. Bower, G. Falcke, H. Henkel, C. Menten, K. Reid, M.	MPIfR Calif., Berkeley Radboud Univ. MPIfR MPIfR CfA	New Radio Supernova in M82?		4,6,13,20	30	12.0
BC186	Cheung, C. Harris, D.E.	NASA SAO	Tracking the aftermath of the giant flaire in the M87 jet		20	21	8.0
BC188	Choi, Y.K. Brunthaler, A. Menten, K. Reid, M.	MPIfR MPIfR MPIfR CfA	Parallax of the PPN OH 231.8+4.2		0.7, 1	1	8.0
BD143	Deller, A. Archibald, A. Briskin, W. Chatterjee, S. Kaspi, V. Lorimer, D. McLaughlin, M. Ranson, S. Stairs, In.	NRAO McGill NRAO Sydney McGill West Virginia West Virginia NRAO UBC	VLBA parallax of the binary MSP J1023+0038		20	17	4.0
BH159	Hachisuka, K. Bruthaler, A. Hagiwara, Y. Menten, K. Mochizuki, N. Reid, M.	Shanghai MPIfR NAOJ MPIfR Japan Aerospace CfA	Distance of water maser source at the Outer Arm II		1	3	6.0
BI037	Imai, H. Deguchi, S. Diamond, P.J. Kwok, S. Nakashima, J.	Kagoshima Nobeyama Manchester Univ. Hong Kong Univ. Hong Kong	Annual parallax distance and orbit of the water fountain source IRAS 18286-0959		1	19	6.0
BK145	Kovalev, Y.Y. Kellermann, K. Lister, M.L. Homan, D.C. Lobanov, A.	MPIfR NRAO-CV Purdue Denison U. MPIfR	The inner jet of the radio galaxy M87		2, 3.6 With EB, Y1	22, 23, 24	36.0
BK150	Kovalev, Y.Y.	MPIfR	Physics of GLAST year 1 early data release AGN		1,2,4,6,7	14	14.0
BL149	Kijima, M.	NAO	High resolution image of flared NRA0512 at K,Q,W Band		2	2,28	48.0
BM256	Marscher, A.P. Chatterjee, S. D'Arcangelo, F. Gear, W. Gomez, J.L. Hagen-Thorn, V. Jorstad, S.	Boston Boston Boston Cardiff IAA St. Petersburg Boston	Probing blazars through multi-waveband variability of flux, polarization, and structure		0.7	30	24.0
BM272	Menten, K. Brunthaler, A. Moscadelli, L. Reid, M. Xu, Y. Zheng, X.W.	MPIfR MPIfR Arcetri CfA MPIfR Nanjing	Parallaxes to outer galaxy H30 masers		1	6,7,13	30.0
BM286	Moscadelli, L. Beltran, M.Y. Cesaroni, R. Codella, C. Sanna, A. Zhang, Q.	INAF Barcelona INAF INAF INAF CfA	G31.41+0.31 high mass core		1	18	8.0

VLBA Utilization Report May 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM292	Ma, C. Gordon, D. Fey, A. Johnston, K. Boboltz, D. Ojha, R. Gaume, R. Kingham, K. Behrend, D. Gipson, J. MacMillan, D. Fomalont, E. Thomas, C. Walker, R.	NASA-GSFC NVI-GSFC USNO USNO USNO USNO USNO USNO NVI-GSFC GSFC NVI-GSFC NRAO-CV NVI-GSFC NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2009		3.6 Scheduled as RDV75	13	24.0
BM296	Miller-Jones, J. Migliari, S. Fender, R. Jonker, P. Tomsick, J.	NRAO-CV Calif.-San Diego Southampton CFA Calif.-Berkeley	Resolving the compact jet in a neutron star X-ray binary system		3.6 With GB, Y27	31	8.0
BM307	Marecki, A.	Torun	Investigation of two extreme cases of double-double radio galaxies		2,6	17	6.0
BM308	Miller-Jones, J. Fender, R. Heinz, S. Koerding, E. Maitra, D. Markoff, S. Migliari, S. Remillard, R. Russell, D. Sarazin, C. Sivakoff, G.	NRAO Southampton Wisconsin l'Energie Atomique Amsterdam Amsterdam Calif., San Diego UMASS Asterdam UVa Ohio State	Probing jet acceleration and collimation in stellar-mass compact objects		4	28,30	10.0
BP150	Pihlstrom, Y. Claussen, M. Day, F. Sahai, R.	UNM NRAO UNM Caltech	Parallax and OH and H2O maser studies of water fountain PPNe		1,20	21	8.0
BR138	Ribo, M. Moldon, J. Parades, J.	Barcelona Barcelona Barcelona	Who is coming from SNR G016.8-01.1?		6	4	6.0
BS193	Schinzal, F. Lobanov, A. Taylor, G. Zensus, A.	MPIfR MPIfR UNM MPIfR	Monitoring an imminent flaring event in 3C345		1,2,0.7	27	10.0
BT097	Torres, R.M. Loinard, L. Mioduszewski, A. Rodriguez, L.F.	UNAM UNAM NRAO UNAM	Distance to, and structure of the Ophiuchus star forming region		4	16	6.0
BZ036	Zhang, B. Reid, M. Zheng, X.	Nanjing Cfa Nanjing	Trigonometric parallax for the luminous supergiant NML Cygni		0.7, 1	3	7.0
GA024	Agudo, I. Roy, A. Gomez, J.L. Bach, U. Marscher, A.	IAA MPIfR IAA MPIfR Boston Univ.	3mm GMVA polarimetric monitoring of NRAO 150		0.3 for Correlatio n in Bonn	8	14.0
GF014	Fuhrmann, L. Krichbaum, T. Giroletti, M. Ciprini, S. Angelakis, E. Zensus, J.	MPIfR MPIfR Bologna INFN MPIfR MPIfR	A new gamma-ray blazar in outburst discovered by Fermi-GST: Search for the		0.3, 0.7 for Correlatio n in Bonn	8	12.0
GK041	Krichbaum, T.P. Graham, D. Alef, W. Witzel, A. Zensus, A. Bremer, M. Walker, C.	MPIfR MPIfR MPIfR MPIfR MPIfR IRAM NRAO-Socorro	Imaging the jet-nozzle of M87 with micro-arcsecond resolution		0.3 for Correlatio n in Bonn	9, 10	25.0
GK042	Krichbaum, T.P. Bach, U. Alef, A. Witzel, A. Zensus, A.	MPIfR MPIfR MPIfR MPIfR MPIfR	The jets of Cygnus A on milli-parsec scales		0.3 for Correlatio n in Bonn	9	18.0

VLBA Utilization Report May 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
GM063	Marscher, A.	Boston Univ.	3mm imaging of gamma-ray blazars		0.3 for Correlatio n in Bonn	10, 11	51.0
	Krichbaum, T.	MPiFR					
	Jorstad, S.	Boston Univ.					
	Fuhrmann, L.	MPiFR					
	Kovalev, Y.	MPiFR					
	Savolainen, T.	MPiFR					
	Agudo, I.	IAA					
Bremer, M.	IRAM						
	Staff	NRAO	Maintenance				184.0

Based on Actual Hours Observed

The average downtime was 11.79 hours 2.70%

Actual observing time was 425.20 hours

The VLBA was scheduled 100.0% of the time 744 hours of a possible 744 hours

Astronomical Observations = 58.74% (437.00 hours)
 Tests and Calibrations = 7.44% (55.37 hours)
 Maintenance = 12.18% (90.60 hours)
 Number of unscheduled hours = 21.64% (161.02 hours)
 Number of Shutdown hours = 0.00% (0 hours)

 Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 1001.268 hrs

Downtime = 2.7% (27.03 hours)

Actual observing = 974.23 hours

VLBA Utilization Report April 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric Planet Search		3.6 with GB	7, 23	16.0
BB242	Braatz, J.A. Greenhill, L.J. Condon, J.J. Reid, M. Henkel, C. Lo, K.Y.	NRAO-GB CfA NRAO-CV CfA MPIFR NRAO-CV	The Megamaser Cosmology Project		1.3 With EB, GB	15, 19, 25	35.5
BB255	Brunthaler, A. Reid, M. Henkel, C. Menten, K. Bower, G. Falcke, H.	MPIFR CfA MPIFR MPIFR Calif.-Berkeley Nijmegen	Measuring the orbits of M81 and M82		1.3, 2, 3.6 With EB, GB Y27	8, 10	24.0
BB261	Braatz, J.A. Condon, J.J. Greenhill, L.J. Henkel, C. Lo, K.Y. Reid, M.J. Kuo, C. Zaw, I. Tilak, A. Hao, L. Lah, P.	NRAO-GB NRAO-CV CfA MPIFR NRAO-CV CfA Virginia New York Univ. CfA Cornell ANU	The Megamaser Cosmology Project: Year 2		1.3 With EB, GB	6, 11, 18	35.5
BB272	Brunthaler, A. Bower, G. Falcke, H. Henkel, C. Menten, K. Reid, M.	MPIFR Calif., Berkeley Nijmegen MPIFR MPIFR CfA	New radio supernova in M82?		2,4,6,24,30	30	12.0
BC178	Chen, X. Nakashima, J. Imai, H. Shen, Z-Q.	Shanghai Hong Kong Kagoshima U. Shanghai Obs.	VLBA observations of VY CMa in the SiO J=1-0 v=1, 2 and 3 lines		0.7 With Y1	27	6.0
BJ061	Jones, D. Border, J. Dhawan, V. Fomalont, E. Preston, B. Romney, J. Standish, M.	JPL JPL NRAO NRAO JPL NRAO JPL	Improvement of the Saturn Ephemeris through VLBA obs. of the Cassini spacecraft		1	6,11,18	4.0
BK150	Kovalev, Y.Y.	MPIFR	Physics of GLAST year 1 early data release AGN		1,2,4,6	9,22	28.0
BK153	Kanekar, N. Lane, W. Momjian, E.	NRAO NRL NRAO	Compact structure of QSOs behind Damped Lyman-alpha systems		90	26	6.75
BL155	Loinard, L. Mioduszewski, A. Rodriguez, L.F. Torres, R.A.	UNAM NRAO UNAM UNAM	Obtaining the distance to Cepheus to a few percents precision		4	7	5.0
BM256	Marscher, A. Chatterjee, R. D'Arcangelo, F. Gear, W. Gomez, J.L. Hagen-Thorn, V. Jorstad, S.	Boston Boston Boston Cardiff IAA St. Petersburg Boston	Probing blazars through multi-waveband variability of flux, polarization, and structure		0.7	1	24.0
BM272	Menten, K. Brunthaler, A. Moscadelli, L. Reid, M. Xu, Y. Zheng, X.W.	MPIFR MPIFR Arcetri CfA MPIFR Nanjing	Parallaxes to outer galaxy H30 masers		1	15,19	18.0
BM290	Miller-Jones, J.C.A Rupen, M.P. Mioduszewski, A.J. Dhawan, V. Gallo, G. Jonker, P.G. Brisken, W.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro Calif.-SantaBarbara SRON NRAO-Socorro	Direct geometric distance to a quiescent black hole X-ray binary		3.6 With GB, Y27	26	5.5

VLBA Utilization Report April 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BM292	Ma, C. Gordon, D. Fey, A. Johnston, K. Boboltz, D. Ojha, R. Gaume, R. Kingham, K. Behrend, D. Gipson, J. MacMillan, D. Fomalont, E. Thomas, C. Walker, R.	NASA-GSFC NVI-GSFC USNO USNO USNO USNO USNO NVI-GSFC GSFC NVI-GSFC NRAO-CV NVI-GSFC NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2009		3.6 With KbKkNyTaVa WfWzZc	21 Scheduled as RDV74	24.0
BP146	Piner, B.G. Edwards, P.G.	Whittier CSIRO	Multi-epoch monitoring of recently detected TeV blazars		1,4	4	15.0
BR129	Reid, M. Brunthaler, A. Menten, K. Moscadelli, L. Xu, Y. Zheng, X.W.	Cfa MPIFR MPIFR Arcetri Nanjing Nanjing	Spiral structure and kinematics of the Milky Way		2	16,24	18.0
BR130	Ros, E. Angelakis, E. Chang, C.S. Fuhrmann, L. Kovalev, Y.Y. Zensus, J.A.	MPIFR MPIFR MPIFR MPIFR MPIFR MPIFR	NGC 1052, the key to explore the disk-jet connection in AGN continuation of the VLBA campaign		1,0.7	16	6.0
BR134	Reid, M. Brunthaler, A. Menten, K.	Cfa MPIFR MPIFR	Mapping the Sagittarius Spiral Arm		1	8,15,27,30	36.0
BR141	Reid, M. Gou, L. McClintock, J. Narayan, R. Remillard, R.	Cfa Cfa Cfa Cfa MIT	Spin of the blackhole in Cygnus X-1		4, 13	13	10.0
BS192	Soderberg, A. Bartel, N. Bietenholz, M. Chevalier, R.	Princeton York York Univ. of Virginia	Search for relativistic Ejecta components in nearby SNe		4	14	8.0
BS193	Lobanov, A. Schinzel, F. Taylor, G. Zensus, A.	MPIFR MPIFR UNM MPIFR	Monitoring an imminent flaring event in 3C345		1,2,0.7	21	10.0
BY126	Yusef-Zadeh, F. Reid, M. Goldwurm, A. Cotton, W. Roberts, D. Wardle, M.	Northwestern Cfa Service d'Astrophys. NRAO-CV Northwestern Macquarie	Minute-time Scale variability of Flare Emission from Sgr A* ?		0.7 With Y	1, 3, 5	24.0
	Staff	NRAO	Maintenance				111.0

Based on Actual Hours Observed

The average downtime was 10.76 hours 2.90%

Actual observing time was 360.48 hours

The VLBA was scheduled 100.0% of the time 720 hours of a possible 720 hours

Astronomical Observations	=	51.56%	(371.25 hours)
Tests and Calibrations	=	12.75%	(91.8 hours)
Maintenance	=	11.26%	(81.05 hours)
Number of unscheduled hours	=	24.43%	(175.90 hours)
Number of Shutdown hours	=	0.00%	(0 hours)

Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 870.83 hrs

Downtime = 2.9% (25.25 hours)

Actual observing = 845.57 hours

VLBA Utilization Report March 2009

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland Cfa/Florida Calif.-Berkeley	RIPL: Radio Interferometric Planet Search		3.6 With GB	10	8.0
BB261	Braatz, J.A. Condon, J.J. Greenhill, L.J. Henkel, C. Lo, K.Y. Reid, M.J. Kuo, C. Zaw, I. Tilak, A. Hao, L. Lah, P.	NRAO-GB NRAO-CV Cfa MPIfR NRAO-CV Cfa Virginia New York Univ. Cfa Cornell ANU	The Megamaser Cosmology Project: Year 2		1.3 With EB, GB	20, 23, 28	30.0
BB267	Bartkiewicz, A. Brunthaler, A. Reid, M. Szymczak, M. van Langevelde, H.	Torun MPIfR Cfa Torun JIVE	Imaging the rings around massive protostars toward the galactic plane		2	1	5.0
BC184	Claussen, M. Morris, M. Sahai, R.	NRAO UCLA Caltech	Acceleration, Genesis, and expiration of water maser features in the shaping flows of pre-planetary nebulae		1	2	6.0
BF092	Fish, V. Reid, M.	NRAO Cfa	OH maser motions in kinematic tracers in massive star forming regions		20	19,27	7.5
BJ068	Johnston, K. Boboltz, D. Fey, A. Fomalont, E. Ojha, R.	USNO USNO USNO NRAO USNO	AGN Core Wander and stability of the Celestial Reference Frame		1, 0.7	16	8.0
BL149	Lister, M. Cooper, N. Fromm, C. Kuchibhotla, H.	Purdue Purdue MPIfR Purdue	VLBA 2 cm MOJAVE/GLAST Program		2	25	24.0
BM257	McClintock, J. Dhawan, V. Narayan, R. Reid, M. Remillard, R.	Cfa NRAO Cfa Cfa MIT	Is the black hole in the microquasar GRS1915+105 spinning maximally?		1	21,25	16.0
BM286	Moscadelli, L. Beltran, M. Cesaroni, R. Codella, C. Sanna, A. Zhang, Q.	INAF Barcelona INAF INAF INAF Cfa	G31.41+0.31 high mass core: rotating toroid or bipolar outflow?		1	18	8.0
BM291	Middelberg, E. Norris, R. Tingay, S.	Bochun ATNF Curtin Univ.	Search for in-beam calibrators in the Chandra Deep Field South		20	13	4.5
BP150	Pihlstrom, Y. Claussen, M. Day, F. Sahai, R.	UNM NRAO UNM JPL	Parallax and OH and H2O maser studies of water fountain PPNe		1,20	20	8.0
BR129	Reid, M. Brunthaler, A. Menten, K. Moscadelli, L. Xu, Y. Zheng, X.W.	Cfa MPIfR MPIfR Arcetri Nanjing Nanjing	Spiral structure and kinematics of the Milky Way		2	23,28	18.0
BR130	Aller, H.D. Aller, M. Angelakis, E. Chang, C.S. Fuhrmann, L. Irwin, J. Kadler, M. Kaufmann, S. Kerp, J. Kovalev, Y.Y. Marscher, A. Ros, E. Tueller, J. Weaver, K.A. Zensus, J.A.	Michigan Michigan MPIfR MPIfR MPIfR Michigan GSFC Heidelberg Argelander MPIfR Boston MPIfR GSFC GSFC MPIfR	NGC 1052, the key to explore the disk jet connection in AGN continuation of the VLBA campaign		1, 0.7	8	6.0

VLBA Utilization Report March 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BS176	Schaefer, G. Prato, L. Zavala, B.	STScI Lowell USNO	Trigonometric parallax of the young triple star Elias 12		4	6	10.0
BS192	Soderberg, A. Bartel, N. Bietenholz, M. Chevalier, R.	Princeton York York Uva	Search for relativistic ejecta components in nearby SNe		4	29	8.0
BS193	Schinzl, F. Lobanov, A. Taylor, G. Zensus, A.	MPIfR MPIfR UNM MPIfR	Monitoring an imminent flaring event in 3C345		1,2,0.7	16	10.0
BV067	Vlemmings, W. Amiri, N. Desmurs, J-F. Diamond, P. Kemball, A. vanLangevelde, H.	Bonn JIVE OAN Manchester Kentucky JIVE	Magnetic field around evolved stars		1	1,5,15	32.0
BW091	Wrobel, J. Greene, J. Ho, L.	NRAO Princeton Carnegie	Local analogs of the first active galactic nuclei: GH10		4,20	6	1.0
BW092	Walker, R.C. Beilicke, M. Cheung, C. Hardee, P. Harris, D. Junor, B. Krawczynski, H. Ly, C. Davies, F.	NRAO Univ. Washington NASA Tuscaloosa CfA LANL Univ. Washington UCLA NMIMT	Confirming the association of flaring TeV emission with the core of M87		1, 0.7	13	10.75
GB065	Bach, U. Krichbaum, T.P. Middelberg, E. Alef, W. Witzel, A. Zensus, J.A.	MPIfR MPIfR Bochum MPIfR MPIfR MPIfR	Resolving the jets in Cygnus A		0.7 For correlation at Bonn	19 With GB, Y1	16.0
	Staff	NRAO	Maintenance				127.0

Based on Actual Hours Observed

The average downtime was 5.44 hours 2.30%

Actual observing time was 231.30 hours

The VLBA was scheduled 100.0% of the time 744 hours of a possible 744 hours

Astronomical Observations = 31.82% (236.75 hours)
 Tests and Calibrations = 14.83% (110.30 hours)
 Maintenance = 13.58% (101.00 hours)
 Number of unscheduled hours = 39.78% (295.95 hours)
 Number of Shutdown hours = 0.00% (0 hours)

 Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 500.81 hrs

Downtime = 2.3% (11.51 hours)

Actual observing = 489.29 hours

VLBA Utilization Report February 2009

Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA084	Agudo, I. Gomez, J.L. Jorstad, S. Marscher, A. Martí, J. Perucho, M. Roca, M. Roy, A.	IAA IAA Boston Boston Valencia MPIFR IAA MPIFR	Astrometric monitoring of wobbling jets in blazars		1, 0.7	16	16.0
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland CfA/Florida Calif.-Berkeley	RIPL: Radio Interferometric Planet Search		3.6 With GB	24	8.0
BB242	Braatz, J.A. Greenhill, L.J. Condon, J.J. Reid, M. Henkel, C. Lo, K.Y.	NRAO-GB CfA NRAO-CV CfA MPIFR NRAO-CV	The Megamaser Cosmology Project		1.3 with EB, GB	12	12.0
BB261	Braatz, J.A. Condon, J.J. Greenhill, L.J. Henkel, C. Lo, K.Y. Reid, M.J. Kuo, C. Zaw, I. Tilak, A. Hao, L. Lah, P.	NRAO-GB NRAO-CV CfA MPIFR NRAO-CV CfA Virginia New York Univ. CfA Cornell ANU	The Megamaser Cosmology Project: Year 2		1.3 With EB, GB	14, 18	10.0
BB262	Braatz, J. Condon, J. Greenhill, L. Hao, L. Henkel, C. Lah, P. Lo, K.Y. Reid, M. Tilak, A. Yu Kuo, C. Zaw, I.	NRAO NRAO CfA Cornell MPIFR ANU NRAO CfA CfA UVa NYU	Megamaser Cosmology Project		0.7	20,27	10.0
BB267	Bartkiewicz, A. Brunthaler, A. Reid, M. Szymczak, M. vanLangevelde, H.	Nicolaus Copernicus MPIFR CfA Nicolaus Copernicus JIVE	Imaging the rings around massive protostars toward the galactic plane		2	28	6.25
BC184	Claussen, M.J. Morris, M. Sahai, R.	NRAO UCLA Caltech	Acceleration, Genesis, and Expiration of water maser features in shaping flows of pre-planetary nebulae		1	1	6.0
BC185	Cheung, C.C. Stawarz, L. Taylor, G. Tueller, J.	NASA Stanford UNM NASA	VLBA Imaging of VLBI of a hard x-ray selected radio galaxy sample for GLAST studies		6	6,7,8	34.0
BC186	Cheung, C.C. Harris, D.E.	NASA SAO	Tracking the aftermath of the giant flare in the M87 jet		20	21	7.75
BC188	Choi, Y.K. Brunthaler, A. Menten, K. Reid, M.	MPIFR MPIFR MPIFR CfA	Parallax of the PPN OH 231.8+4.2 - a Laboratory of advanced stellar evolution		0.7, 1	1	2.0
BD141	Deller, A. Archibald, A. Briskin, W. Chatterjee, S. Kaspi, V. Lorimer, D. McLaughlin, M. Ransom, S. Stairs, I.	NRAO McGill NRAO Sydney McGill West Virginia Univ. West Virginia Univ. NRAO British Columbia	Exploratory obs. for a VLBA parallax of the binary MSP J1023+0038		20	14	4.0
BF098	Fomalont, E.	NRAO-CV	Saturn, Cassini, J1127+0555 and the Aberration of Gravity		3.6	9, 10, 11	36.0
B1036	Imai, H. Deguchi, S. Diamond, P. Kwok, S. Nakashima, J.	Kagoshima Nobeyama Manchester Univ. of Hong Kong Univ. of Hong Kong	Proper motions of the H ₂ O masers in the water fountain source IRAS 18460-0151		1	6	7.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BI037	Deguchi, S. Diamond, P. Imai, H. Kwok, S. Nakashima, J.	Nobeyama Manchester Kagoshima Hong Kong Univ. of Hong Kong	Annual parallax distance and orbit of the water fountain source IRAS 18286-0959		1	13	6.0
BK150	Kovalev, Y.	MPIFR	Physics of GLAST year 1 data release AGN		1,2,4,6,0.7	2,5	28.0
BL149	Lister, M. Cooper, N. Fromm, C. Kuchibhotla, H.	Purdue Purdue MPIFR Purdue	VLBA 2cm MOJAVE/GLAST Program		2	25	24.0
BL160	Loiuard, L. Mioduszewski, A. Rodriguez, L.F. Torres, R.M.	UNAM NRAO UNAM UNAM	Measuring the distance to the Serpens core with 1% precision		4	27	5.0
BM256	Marscher, A.P. Chatterjee, R. D'Arcangelo, F. Gear, W.K. Gomez, J.L. Hagen-thorn, V. Jorstad, S.	Boston Boston Boston Cardiff IAA St. Petersburg Boston	Probing blazars through multi-waveband variability of flux, polarization and structure		0.7	22	24.0
BM284	Momjian, E. Riechers, D. Carilli, C.	NRAO-Socorro Caltech NRAO-Socorro	Testing the AGN vs. AGN+starburst hypothesis in two z~6 QSOs		18 With AR, GB, Y27	22	12.5
BM290	Miller-Jones, J.C.A Rupen, M.P. Mioduszewski, A.J. Dhawan, V. Gallo, G. Jonker, P.G. Briskin, W.	NRAO-CV NRAO-Socorro NRAO-Socorro NRAO-Socorro Calif.-Santa Barbara SRON NRAO-Socorro	Direct geometric distance to a quiescent black hole X-ray binary		3.6 With GBT, Y27	15	5.5
BP143	Piner, B.G. Edwards, P.G.	Whittier CSIRO	High-bandwidth, high resolution obs. of TeV blazars		0.7	12	8.0
BS193	Schinzal, F. Lobanov, A. Taylor, G. Zensus, A.	MPIFR MPIFR UNM MPIFR	Monitoring an imminent flaring event in 3C 345		1,2,0.7	19	10.0
BT097	Torres, R.M. Loiuard, L. Mioduszewski, A. Rodriguez, L.F.	UNAM UNAM NRAO UNAM	Distance to, and structure of the Ophiucus star-forming region		4	14	6.0
BT102	Tamura, S. Asada, K. Murata, Y.	ISAS ISAS ISAS	Kinematic aging and spectral aging of CSO Mrk 231		2,6	13	4.0
BV067	Vlemmings, W. Amiri, N. Desmurs, J-F. Diamond, P. Kemball, A. van Langevelde, H.	Bonn JIVE OAN Manchester Kentucky JIVE	Magnetic field around evolved stars		1	20	8.0
GC031	Conway, J.E. Hurley, R. Diamond, P.J. Parra, R. Lonsdale, C.J. Thrall, H. Lonsdale, C.J.	Onsala Onsala Jodrell Bank Catholic Univ. Haystack Jodrell Bank Haystack	Monitoring of variable compact sources in Arp 220		6 For correlation at JIVE	28	8.0
	Staff	NRAO	Maintenance			3, 11, 18, 24	89.5

Based on Actual Hours Observed

The average downtime was 8.01 hours 2.60%

Actual observing time was 299.99 hours

The VLBA was scheduled 100.0% of the time 672 hours of a possible 672 hours

Astronomical Observations	=	45.83%	(308.00 hours)
Tests and Calibrations	=	11.14%	(74.85 hours)
Maintenance	=	9.08%	(61.00 hours)
Number of unscheduled hours	=	33.95%	(228.15 hours)
Number of Shutdown hours	=	0.00%	(0 hours)

Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 639.28 hrs

Downtime = 2.6% (16.62 hours)

Actual observing = 622.66 hours

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BA078	Agudo, I. Bach, U. Gomez, J.L. Krichbaum, T.P. Roy, A.L. Witzel, A. Zensus, J.A.	MPIfR Torino IAA, Granada MPIfR MPIfR MPIfR MPIfR	Monitoring NRAO 150 with multi-frequency polarimetry		1,2,4,0.7	17	12.0
BB240	Bower, G.C. Bolatto, A. Ford, E. Kalas, P.	Calif.-Berkeley Maryland Cfa/Florida Calif.-Berkeley	RIPL: Radio Interferometric Planet Search		3.6 with GB	3,9,19,31	32.0
BB242	Braatz, J.A.	NRAO-GB	The Megamaser Cosmology Project		1.3 line with EB, GB	11	12.0
BB262	Boboltz, D. Driebe, T. Ohnaka, K. Scholz, M. Wittkowski, M.	USNO MPIfR MPIfR Heidelberg ESO	Polychromatic interferometry of the Mira Variable Stars R CnC and X Hya		1, 0.7	4,9,10	15.0
BH152	Homan, D.C. Aller, H.D. Aller, M.F. Lister, M. Wardle, J.	Denison Michigan Michigan Purdue Brandeis	Full stokes spectra of parsec-scale jets: modeling the 3-D magnetic field		1,2,4	14	72.0
BK150	Kovalev, Y.Y.	MPIfR	Physics of GLAST year-1 early data release AGN		1,2,4,6,0. 7	12	14.0
BK153	Kanekar, N. Lane, W. Momjian, E.	NRAO NRL NRAO	Compact structure of QSOs behind damped Lyman-alpha systems		90	28	6.75
BL149	Kijima, M.	Graduate Univ.	High resolution image of flared NRAO512 at K,Q, W-band		2	7,30	48.0
BL155	Kijima, M.	Graduate Univ.	High resolution imaging of flared NRAO512		4	4	5.0
BL164	Lenc, E. Garrett, M. Tingay, S. Wucknitz, O.	ATNF NFRA Curtin Univ. Univ. Bonn	90cm study of the powerful hotspot in the nearby radio galaxy Pictor A		90	20	5.0
BH256	Marscher, A.P. Jorstad, S.	Boston Boston	Probing blazars through multi-waveband variability of flux, polarization, and structure		0.7	24	24.0
BH269	Moscadelli, L. Cesaroni, R. Goddi, C. Reid, M. Rioja, M.	Arcetri Arcetri Cfa Cfa OAN	Distance to the high mass protostar IRAS 20126+4104		1	26	10.0
BH286	Beltran, M. Cesaroni, R. Codella, C. Moscadelli, L. Sanna, A. Zhang, Q.	Barcelona INAF INAF INAF INAF Cfa	G31.41+0.31 high mass core: rotating toroid or bipolar outflow?		1	18	8.0
BH292	Ma, C. Gordon, D. Fey, A. Johnston, K. Boboltz, D. Ojha, R. Gaume, R. Kingham, K. Behrend, D. Gipson, J. MacMillan, D. Fomalont, E. Thomas, C. Walker, R.C.	NASA-GSFC NVI-GSFC USNO USNO USNO USNO USNO NVI-GSFC GSFC NVI-GSFC NVI-GSFC NRAO-CV NVI-GSFC NRAO-Socorro	VLBA Geodesy/Astrometry Observations for 2009		3.6 With KbKkNyVaWf WzZc	21 Scheduled as RDV73	24.0
BP143	Piner, B.G. Edwards, P.G.	Whittier CSIRO	High bandwidth, high resolution obs. of TEV blazars		0.7	10	8.0
BP146	Edwards, P.	CSIRO	Multi-epoch monitoring of recently detected TEV blazars		1,4	2	15.0
BP150	Pihlstrom, Y. Claussen, M. Day, F. Sahai, R.	UNM NRAO UNM Caltech	Parallax and OH and H2O maser studies of water fountain PPNe		1,20	25	8.0

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Progm	Observer	Affiliation	Program Title	Stns	Bands cm	Observing Date	Sched Hours
BR130	Ros, E. Aller, H.D. Aller, M. Angelakis, E. Chang, C. Fuhrmann, A. Irwin, J. Kadler, M. Kaufmann, S. Kerp, J. Kovalev, Y.Y. Marscher, A. Tueller, J. Weaver, K.A. Zensus, J.A.	MPIfR Michigan MPIfR MPIfR MPIfR Michigan GSFC Heidelberg Argelander MPIfR Boston GSFC GSFC MPIfR	NGC 1052, the key to explore the disk-jet connection in AGN continuation of the VLBA campaign		1, 0.7	18	6.0
BR141	Reid, M. Gou, L. McClintock, J. Narayan, R. Remillard, R.	Cfa Cfa Cfa Cfa MIT	Spin of the black hole in Cygnus X-1		4, 13	23	10.0
BW092	Walker, R.C. Beilicke, M. Cheung, C. Davies, F. Hardee, P. Harris, D. Krawczynski, H. Ly, C.	NRAO Washington NASA NMIMT Alabama Cfa Washington Calif., Los Angelis	Confirming the association of flaring TeV emission with the core of M87		1, 0.7	19	10.75
BZ036	Zhang, B. Reid, M. Zheng, X. Staff	Nanjing Cfa Nanjing NRAO	Trigonometric parallax for the luminous supergiant NML Cygni Maintenance		1, 0.7	27	7.0 92.0

Based on Actual Hours Observed

The average downtime was 27.85 hours 7.90%

Actual observing time was 324.65 hours

The VLBA was scheduled 100.0% of the time 744 hours of a possible 744 hours

Astronomical Observations = 47.38% (352.50 hours)
 Tests and Calibrations = 13.53% (100.70 hours)
 Maintenance = 7.66% (57.00 hours)
 Number of unscheduled hours = 28.40% (211.30 hours)
 Number of Shutdown hours = 0.03% (22.50 hours)

 Based on Scaled (128Mbps) Observing Hours

Number of scaled hours of astronomical observations = 703.81 hrs

Downtime = 7.90% (55.6 hours)

Actual observing = 648.21 hours