

VLA Utilization Report December 2004

Progrm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA295	Aalto, S. Beswick, R. Huttemeister, S. Pedlar, A.	Onsala Jodrell Bank Bochum Jodrell Bank	HI and OH absorption toward the Medusa merger	20 line	5	12.0
AA296	Araya, E. Hagiwara, Y. Hofner, P. Baan, W. Mateen, M.	NMIMT ASTRON NMIMT ASTRON NMIMT	Formaldehyde absorption in starburst galaxies	6 line	10, 18, 19, 26	19.50
AB1139	Brisken, W. Thorsett, S. Goss, M.	NRAO-Socorro Calif.-Santa Cruz NRAO-Socorro	Proper motion of the Duck pulsar B1757-24	20 HTRP, PT Link	10	4.0
AC710	Cannon, J. vanZee, L. Skillman, E.	Minnesota Indiana Minnesota	HI imaging of low-metallicity galaxy I Zw 18	20 line	3, 5	9.0
AC740	Chandler, C. Low, F. Wilner, D. Claussen, M.	NRAO-Socorro Arizona CfA NRAO-Socorro	Debris disk around HD 98800	0.7, 3.6 PT Link	19, 26	9.5
AC741	Carilli, C. Bertoldi, F. Menten, K. Walter, F. Cox, P. Beelen, A. Omont, A. Fan, X. Strauss, M.	NRAO-Socorro MPIfR MPIfR MPIA IAP-Paris IAP-Paris IAP-Paris Arizona Princeton	Deep imaging of z~6 QSOs	20	7	3.0
AC750	Clarke, T.E. Lane, W. Sarazin, C. Kassim, N.E.	Virginia NRL Virginia NRL	FRIs in high and low density environments	90, 400	22	12.0
AC755	Cheung, C.C. Wardle, J. Lee, N.	Brandeis Brandeis Brandeis University	Search for jets from high-z, flat-spectrum radio sources	6, 20	3, 6, 22, 24	4.5
AC759	Cohen, A.S. Israel, F. Kassim, N.E.	NRL Leiden NRL	Spectral flattening in the spiral galaxy NGC 891	400	16	9.0
AC761	Chatterjee, S. Brisken, W. Goss, M. Benson, J. Arzoumanian, Z. Lazio, T.J.W. Cordes, J. Vlemmings, W.H.T. Thorsett, S. Lyne, A. Kramer, M.	Cornell NRAO-Socorro NRAO-Socorro NRAO-Socorro NASA-GSFC NRL Cornell Cornell Calif.-Santa Cruz Jodrell Bank Jodrell Bank	Calibrator search for pulsar astrometry with the VLBA or HSA	3.6, 20	12	3.0
AD487	Dahlem, M. Brogan, C. Breitschwerdt, D.	CSIRO-Narrabri Hawaii-IFA MPE	Spectral indices in the halo of NGC 891	90	12, 13, 14	19.5
AD498	DeLaney, T. Rudnick, L. Sankrit, R. Blair, W. Petre, R. Harrus, I.	Minnesota Minnesota John Hopkins Univ. Johns Hopkins NASA-GSFC NASA-GSFC	Proper motions within Kepler's supernova remnant	6, 20	17, 18, 19	21.0
AF414	Frail, D. Soderberg, A.M. Kulkarni, S.	NRAO-Socorro Caltech Caltech	Continued monitoring of the bright GRB 030329	3.6, 6, 20	9, 23	5.5
AG675	Gurwell, M. Butler, B.	CfA NRAO-Socorro	Brightness temperature of Titan before and during Huygens descent	0.7, 1.3	9	11.0
AG688	Gal-Yam, A.	Caltech	SN04D2jz-a new high-redshift type Ic supernova from the Canada-France-Hawaii	3.5	23	1.0
AH855	Hardcastle, M.H. Kraft, R. Worrall, D.	Bristol CfA Bristol	Proper motion and variability in the jet of Cen A	3.6 PT Link	14	3.5
AH856	Hofstadter, M. Butler, B.	JPL NRAO-Socorro	Seasonal variations and depth probing of the atmosphere of Uranus	2, 6, 20	3, 4, 5	24.0
AH862	Harris, D. Junor, W. Cheung, C.C.	CfA Los Alamos Brandeis	Monitoring knot HST-1 in the M87 jet	1.3, 2, 3.6	31	8.0

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AI113	Deguchi, S. Diamond, P. Imai, H. Miyazaki, A. Nakashima, J.	Nobeyama Jodrell Bank Kagoshima Nobeyama Illinois	Central object and the circumstellar envelope of the AGB star W43A having a highly collimated jet of molecular gas	.7	6	5.0
AI116	Ivison, R.J. Webb, T. Yee, H. Hoekstra, H. Gladders, M.	ROE Leiden Toronto Univ. of Toronto Carnegie Obs.	Deep imaging of two strong-lensing clusters	20	7, 17, 18, 19	20.0
AJ314	Johnson, K.	Wisconsin	Structure and spectra of starburst galaxy Henize 2-10	1.3, 2, 3.6, 6 PT Link	8, 11, 13, 14, 15, 19	34.5
AK583	Kenney, J. vanGorkom, J. Vollmer, B.	Yale Columbia MPE-Bonn	HI in highly-inclined ram pressure stripped spirals in the Virgo Cluster	20	29	1.0
AK585	Karovska, M. Matthews, L.D.	CfA NRAO-CV	Monitoring of maser line and continuum flux densities of Mira	0.7, 1.3, 3.6, 20	7	2.5
AK596	Kulkarni, S. Cenko, S. Fox, D. Frail, D. Gal-Yam, A. Harrison, F. Moon, D-S. Soderberg, A.	Caltech Caltech Caltech NRAO-Socorro Caltech Caltech Caltech Caltech	Bridge proposal for rapid followup of GRBs	20	18	.75
AL627	Landt, H. Bignall, H. Padovani, P. Perلمان, E.	CfA JIVE ESO Maryland-Baltimore	A sample of faint BL Lacertae objects	20	4	3.5
AL637	Laing, R. Hardcastle, M.H. Bridle, A.	ESO-Garching Bristol NRAO-CV	Deep polarimetry of the jets in the FRI radio galaxy 3C 296	3.6	12, 13	12.0
AM803	Marti, J. Combi, J.	U. Jaen U. Jaen	Spectrum and variability of gamma-ray source IGR J18027-1455	3.6, 6, 20	4, 9	4.0
AO185	Orru, E. Feretti, L. Giovannini, G. Govoni, F. Lane, W. Kassim, N.E. Murgia, M. Perley, R.	Cagliari Bologna Bologna Bologna NRL NRL Bologna NRAO-Socorro	Spectral indices of giant radio galaxies	90, 400	15	12.5
AP478	Pedlar, A. Muxlow, T. Beswick, R. Argo, M. Wills, K.A.	Jodrell Bank Jodrell Bank Jodrell Bank Manchester Sheffield	Monitoring radio SNe and SNRs in nearby starbursts	2, 3.6, 6, 20	2	4.0
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20	...	13.0
AR558	Ribo, M. Mirabel, I.F. Casares, J. Combi, J.A.	Barcelona Saclay IAC Universidad de Jaen	A new microquasar candidate	ToO	14	1.0
AS796	Soderberg, A. Frail, D. Kulkarni, S.	Caltech NRAO-Socorro Caltech	Supernova/Gamma ray burst connection	1.3,3.5,6, 20	15,17,20,22, 26	3.5
AS800	Sjouwerman, L. Messineo, M. Habing, H. Honma, M. Imai, H.	NRAO-Socorro Leiden Leiden NAOJ-Mizusawa Kagoshima U.	Monitoring circumstellar SiO masers near Sgr A*	0.7 line	22	2.0

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AS801	Schinnerer, E. Carilli, C. Scoville, N.Z. Bertoldi, F. Blain, A.W. Bondi, M. Ciliegi, P. Impey, C. Koekemoer, A. LeFevre, O. Urry, C.M. Vettolani, P.	MPIA NRAO-Socorro Caltech MPIFR Caltech Bologna Bologna Arizona Mt. Stromlo Marseille Yale Univ. CNR-Bologna	COSMOS deep 1.4 GHz imaging survey	20	...	66.0
AS806	Schmitt, H.R. Anderson, J.M. Cid-Fernandes, R. Heckman, T. Gonzales-Delgado, R. Storchi-Bergmann, T.	NRAO-Socorro NMIMT UFSC Johns Hopkins IAA UFRGS	Continuum images of Palomar LLAGNs at 6cm and 3.5cm	3.6, 6	10, 11, 17, 18, 20	8.5
AS810	Schindler, S. Feretti, L. Ferrari, C. Gitti, M.	Univ. Innsbruck Bologna Cote d'Azur Univ. of Innsbruck	X-ray luminous galaxy cluster RBS797	6	22	8.0
AS811	Stocke, J. Reynolds, C.S. Lane, W. Kassim, N.E.	Colorado Maryland NRL NRL	3C 401 - a source with X-ray cavities	90, 400	31	8.0
AS813	Shinnaga, H. Moran, J. Young, K. Ho, P.T.P. Furuya, R.	CfA CfA CfA CfA Caltech	Spectropolarimetric imaging of SiO masers toward VY Canis Maj	0.7	23	4.0
AS814	Snellen, I.A.G. Best, P. Rigby, E.	Edinburgh Edinburgh Edinburgh	Structure of high-redshift FR I candidates	20 PT Link	20	7.5
AT300	Tao, A. Goss, M. Morris, M. Hong, X.-Y. Zhao, J.-H.	Shanghai Obs. NRAO-Socorro Calif.-Los Angeles Shanghai Obs. CfA	Proper motions of radio components near Sgr A*	1.3	23, 30	8.5
AT304	Turner, J. Naiman, J. Beck, S. Ho, P.T.P. Tsai, C-W.	Calif.-Los Angeles UCLA Tel Aviv University CfA UCLA	The super star cluster nebula in NGC 660	1.3	4, 23	5.5
AW638	Williams, P.M. Dougherty, S.	Edinburgh DRAO	Monitoring the nonthermal emission by WR 125	3.6, 6, 20	6	2.0
AW641	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S.D. Panagia, N. Marcaide, J.M. Lewin, W.H.G. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT NASA-GSFC AAO	Triggered observations of type II SNe	1.3, 2, 3.6, 6, 20, 90 TRIGGER	9, 15, 29	4.5
AY151	Yusef-Zadeh, F. Palmer, P. Hewitt, J.W.	Northwestern Chicago Northwestern	Search for 6cm OH maser emission from SNR maser regions	6 line	6	3.0
AZ154	Zapata, L.A. Rodriguez, L.F. Kurtz, S. O'Dell, C.R. Ho, P.T.P.	CfA UNAM UNAM Vanderbilt CfA	Structure and spectra of sources in OMC1 South	0.7, 1.3	8, 30	3.0
BB191	Barvainis, R. Ulvestad, J.S. Birkinshaw, M. Lehar, J.	NSF NRAO-Socorro Bristol CfA	Radio-quiet quasars	6 Phased array VLBI	26	10.0
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	1.3 Phased array VLBI	29	7.07

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BH128	Hough, D.H. Aars, C.	Trinity Trinity	Faint nuclei 3CR FR II radio sources	3.6 Phased array VLBI	23	7.50
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	6, 20 Phased array VLBI	26	4.0
BK113	Kemball, A.J. Diamond, P.J.	Univ. Illinois Jodrell Bank	Monitoring SiO masers at 7mm and 3mm in two evolved stars	0.7 Single antenna VLBI	5, 30, 31	14.0
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 Phased array VLBI	11	12.0
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	3.6 Phased array VLBI	24	10.0
S50252	Kaaret, P. Corbel, S. Rupen, M.	Columbia CEA-Saclay NRAO-Socorro	Chandra/VLA monitoring of ULX source in NGC 5408	6	20	4.0
S60314	Garcia, M. Primini, F.A. Williams, B. Yuan, F. Murray, S.S. Kaaret, P. Kong, A. Sjouwerman, L.	CfA CfA CfA CfA Columbia CfA CfA NRAO-Socorro	Chandra/VLA observations of M31*	6	6, 27	24.0
S60607	Laurent-Muehleisen, Brinkmann, W. Thompson, R.J. Becker, R.	Calif.-Davis MPE Cambridge Calif.-Davis	Chandra/VLA observations of X-ray galaxies	4,6,20	20, 27	11.0
S60636	Fabbiano, G. Siemiginowska, A. Elvis, M. Baldi, A. Pellegrini, S. Greenhill, L.J.	CfA CfA CfA Bologna Bologna CfA	Chandra/VLA observations of nucleus of NGC 821	20	30	4.0
	Staff	NRAO	Baselines, Pointing, Delays Holiday shutdowns Maintenance Polarization Calibrator Monitoring Software General tests			43.0 40.5 76.17 14.0 42.25 7.27

The average downtime was 8.2%.

The array was scheduled for 94.5% (709.0 hours)
 526.31 hours (70.22% of time) for astronomical programs
 64.27 hours (8.50% of time) for tests/calibration
 118.42 hours (15.80% of time) for maintenance

Total 709.0 hours (100.0%) scheduled.

Array was in the A configuration from December 1 - 31

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AA297	Araya, E. Hofner, P. Goss, M. Kurtz, S. Olmi, L. Linz, H.	NMIMT NMIMT NRAO-Socorro UNAM CNR MPIA	H2CO 6cm masers discovered in Arecibo and GBT surveys	6 line	13	8.0
AB1135	Bally, J. Churchwell, E. Felli, M. Pedelty, J.A. Smith, N. Moeckel, N. Walawender, J.	Colorado Wisconsin Arcetri NASA-GSFC Colorado Univ. of Colorado Univ. of Colorado	Proper motions of young stars in the Orion nebula	0.7, 1.3, 2, 6	3, 5, 6	11.0
AB1137	Behar, E. Guedel, M.	Technion Paul Scherrer	Continuum from the pre-main sequence candidate mu Lep-B	3.6, 6	12	4.0
AB1140	Buckalew, B. Kobulnicky, H.	Wyoming Wyoming	Continuum search for young star clusters in NGC 450	6	3	1.5
AB1141	Boyce, E. Bowman, J. Bolton, A. Hewitt, J. Burles, S.	MIT MIT MIT MIT MIT	Candidate gravitational lenses from the SDSS	3.6	7, 9	10.5
AB1146	Brunthaler, A. Falcke, H. Reid, M. Greenhill, L.J. Henkel, C.	JIVE ASTRON CfA CfA MPIfR	Search for more water masers in M33	1.3 line	18	6.0
AB1150	Birzan, L. McNamara, B. Carilli, C. Rafferty, D. Nulsen, P. Wise, M.	Ohio U. Ohio U. NRAO-Socorro Ohio Univ. CfA MIT-CSR	Systems with X-ray cavities	20, 90 PT link	15, 21, 22, 23, 24	18.5
AC616	Colina, L. Alberdi, A. Torrelles, J.M. Panagia, N. Wilson, A.	IFCA IAA IEEC-Barcelona STScI Maryland	Search for new radio supernovae in NGC 7469	3.6	26	4.0
AC710	Cannon, J. vanZee, L. Skillman, E.	Minnesota Indiana Minnesota	HI imaging of low-metallicity galaxy I Zw 18	20 line	8, 9, 14, 17, 19, 27	45.5
AC743	Curiel, S. Canto, J. Rodriguez, L.F. D'Alessio, P. Torrelles, J.M. Trinidad, M.A. Loinard, L. Raga, A.	CfA/UNAM UNAM UNAM UNAM IEEC-Barcelona INAOE UNAM UNAM	Structural monitoring of the disks in the L1551 IRS5 system	0.7 PT link	20, 21	12.0
AC748	Cesaroni, R. Hofner, P. Walmsley, M. Kurtz, S. Churchwell, E. Olmi, L. Beltran, M. Araya, E.	Arcetri NMIMT Arcetri UNAM Wisconsin CNR Arcetri NMIMT	Ammonia(4,4) in two hot cores	1.3 line	1, 5, 12	24.0
AC749	Colina, L. Alberdi, A. Torrelles, J.M. Panagia, N. Wilson, A.	IFCA IAA IEEC-Barcelona STScI Maryland	Search for RSNe in highly luminous infrared galaxies	3.6	2, 5	9.0
AC753	Castangia, P. Roselt, B. Tarchi, A. Peck, A. Brunthaler, A. Henkel, C. Menten, K.	Cagliari MPIfR IRA-Bologna CfA JIVE MPIfR MPIfR	The water kilomaser in the starburst galaxy NGC 253	1.3 line	1	4.5
AC755	Cheung, C.C. Wardle, J. Lee, N.	Brandeis Brandeis Brandeis	Search for jets from high-z, flat-spectrum radio sources	6, 20	1	3.1

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AC762	Chatterjee, S. Briskin, W. Gaensler, B.M. Melatos, A. Lazio, T.J.W. Goss, M.	NRAO/Cornell NRAO-Socorro Cfa Univ. of Melbourne NRL NRAO-Socorro	The unpulsed emission from the double pulsar J0737-3039	3.6, 6, 20	28, 29, 30	9.0
AD502	Dougherty, S. Pittard, J. Williams, P.M.	DRAO Leeds Edinburgh	Monitoring colliding-wind binary WR146	0.7, 1.3, 2, 3.6, 6, 20 PT link	7	2.0
AD504	Demorest, P. Wang, T.G. Yu, Q. Backer, D.C. Lu, Y.	Calif.-Berkeley Science and Tech U. Calif.-Berkeley Calif.-Berkeley Calif., Berkeley	Galaxies with double narrow emission lines	1.3, 3.6, 6	11, 14, 21	11.0
AF414	Frail, D. Soderberg, A.M. Kulkarni, S.	NRAO-Socorro Caltech Caltech	Continued monitoring of the bright GRB 030329	3.6, 6, 20 TRIGGER	21	0.5
AF415	Furuya, R. Cesaroni, R. Shinnaga, H.	Caltech Arcetri Cfa	Continuum emission toward a cluster of high-mass protostars	6	18	7.0
AG671	Gaensler, B.M. Chatterjee, S. Camilo, F. vanderSwaluw, E. Stappers, B.W.	Cfa Cornell Columbia FOM Amsterdam	Proper motion of young pulsars and their bow shocks	20 PT link	8	8.5
AG673	Gelfand, J. Williams, B. Sjouerman, L. Lazio, T.J.W. Gaensler, B. Kong, A. Trudolyubov, S.	Cfa Cfa NRAO-Socorro NRL Cfa Cfa Calif., Riverside	Structures and spectral indices of M31 SNRs	20	12	5.0
AH847	Humphreys, E.M.L. Reid, M. Greenhill, L.J. Moran, J. Argon, A.	Onsala Cfa Cfa Cfa Cfa	Monitoring of water maser spectrum and jet continuum of NGC 4258	1.3, 3.6 line	24	2.5
AH856	Hofstadter, M. Butler, B.	JPL NRAO-Socorro	Seasonal variations and depth probing of the atmosphere of Uranus	2, 6, 20	14	8.0
AH858	Hardcastle, M.H. Harris, D. Worrall, D. Birkinshaw, M.	Bristol Cfa Bristol Bristol	Hotspots of FR II sources	1.3, 2	6	13.0
AH862	Harris, D. Junor, W. Cheung, C.C.	Cfa Los Alamos Brandeis	Monitoring knot HST-1 in the M87 jet	1.3, 2, 3.6	15	8.0
AJ313	Johnson, K. Plante, S.	Wisconsin Laval	Structure and spectra of low-metallicity starburst SBS0335-052	1.3, 2, 3.6, 6	29	6.5
AK586	Kurtz, S. Hofner, P. Araya, E.	UNAM NMIMT NMIMT	Continuum imaging of DR 21 (OH)	3.6	16	2.0
AK596	Kulkarni, S. Soderberg, A. Cenko, S. Frail, D. Harrison, F. Fox, D. Gal-Yam, A. Moon, D-S	Caltech Caltech Caltech NRAO-Socorro Caltech Caltech Tel Aviv University Caltech	GRBs prior to Swift checkout	... TRIGGER	2, 13, 29	1.5
AL627	Landt, H. Bignall, H. Padovani, P. Perlman, E.	Cfa JIVE ESO Maryland-Baltimore	A sample of faint BL Lacertae objects	20	2, 7	4.5
AL634	Lister, M. Kochanyczk, M.	Purdue Purdue	Deep imaging of the MOJAVE blazar sample	20	3, 8, 20, 20, 24	12.0
AL635	Lovell, A. Butler, B. Schloerb, P.	Agnes Scott College NRAO-Socorro Univ. Massachusetts	Resolving asteroids	0.7, 1.3, 3.6	2, 4	15.0

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AL639	Linz, H. Hofner, P. Araya, E. Stecklum, B. Henning, T. Kurtz, S. Rodriguez, L.F. Marti, J.	MPIA NMIMT NMIMT Thuringian Jena UNAM UNAM U. Jaen	Structure of the central source in HH80/81	0.7, 1.3, 3.6 PT link	7, 20	12.0
AM805	Mason, B.S. Lockman, F.J.	NRAO-GB NRAO-GB	Galactic hydrogen column density towards Abell 478	20 line	10, 11	10.0
AN123	Nagar, N. StorchiBergman, T. Eracleous, M. Strateva, I.	Groningen UFRGS Penn State Univ. Penn State Univ.	Imaging SDSS galaxies with double-peaked broad Halpha lines	6	16	2.5
AP478	Pedlar, A. Muxlow, T. Beswick, R. Argo, M. Wills, K.A.	Jodrell Bank Jodrell Bank Jodrell Bank Manchester Sheffield	Monitoring radio SNe and SNRs in nearby starbursts	2, 3.6, 6, 20	1	5.0
AP479	Perlman, E. Rector, T. Padovani, P. Landt, H. Stoeke, J.	Maryland-Baltimore Alaska ESO CfA Colorado	Radio quasars with synchrotron peaks in the UV or above	20	28	4.0
AP483	Paragi, Z. Kouveliotou, C. Garrett, M. Paczynski, B. Mazzali, P. Ramirez-Ruiz, E. Hillebrandt, W. Woolsey, S	JIVE NASA-MSFC JIVE Princeton INAF Univ. Cambridge MPA, Garching Calif., Santa Cruz	SN 2004aw at late times	6, 20 EXPLORE	13	2.0
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20	...	10.5
AR557	Robberto, M. Keto, E. Kamp, I.	STScI CfA STScI	HI absorption against Orion proplyds	20 line PT link	26	8.5
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	15, 22	4.0
AS801	Schinnerer, E. Carilli, C. Scoville, N.Z. Bertoldi, F. Blain, A.W. Bondi, M. Ciliegi, P. Impey, C. Koekemoer, A. Lefevre, O. Urry, C.M. Vettolani, P.	MPIA NRAO-Socorro Caltech MPIFR Caltech Bologna Bologna Arizona Mt. Stromlo Marseille Yale Univ. CNR-Bologna	COSMOS deep 1.4 GHz imaging survey	20	...	72.0
AS806	Schmitt, H.R. Anderson, J.M. Cid-Fernandes, R. Heckman, T. Gonzales-Delgado, R. Storchi-Bergmann, T.	NRAO-Socorro NMIMT UFSC Johns Hopkins IAA UFRGS	Continuum images of Palomar LLAGNs at 6cm and 3.5cm	3.6, 6	5, 18	3.5
AS812	Schinnerer, E. Rupen, M. Kennicutt, R. Mason, B.S.	MPIA NRAO-Socorro Arizona NRAO-GB	Deep imaging of M51 at 20cm	20	29	9.0
AS813	Shinnaga, H. Moran, J. Young, K. Ho, P.T.P. Furuya, R.	CfA CfA CfA CfA Caltech	Spectropolarimetric imaging of SiO masers toward VY Canis Maj	0.7	1, 2	8.0
AS815	Sarma, A. Claussen, M.	Eastern Kentucky NRAO-Socorro	Water masers near high-mass protostellar objects	1.3 line	14, 15, 16, 17	7.0
AS820	Stalder, B. Chambers, K.	IfA Hawaii	Imaging sources near bright natural guide stars	3.6	27	3.0

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AS825	Shirley, Y. Claussen, M.	NRAO-Socorro NRAO-Socorro	Spitzer core L1014	6, 20 EXPLORE	21	3.5
AT298	Tafoya, D. Rodriguez, L.F. Gomez, Y. Lopez, A.	UNAM UNAM UNAM UNAM	Structural changes in MWC 349 A	1.3, 2, 6	15	8.0
AT299	Terashima, Y. Ho, L. Ulvestad, J.S.	ISAS Carnegie Obs. NRAO-Socorro	Search for emission from ultra-low-luminosity AGNs	3.6	13, 16	10.0
AV277	Vlemmings, W.H.T. Menten, K. Reid, M.	Cornell MPIfR CfA	Astrometry of the water masers and continuum from VX Sgr	1.3	21	7.0
AW641	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S.D. Panagia, N. Marcaide, J.M. Lewin, W.H.G. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT NASA-GSFC AAD	Triggered observations of type II SNe	1.3, 2, 3.6, 6, 20, 90 TRIGGER	...	8.5
AY152	Yusef-Zadeh, F. Cotton, W.D. Bower, G.	Northwestern NRAO-CV Calif.-Berkeley	VLA+PT+VLBA study of Sgr A* at 6cm	6 PT link	19	7.0
AZ154	Zapata, L.A. Rodriguez, L.F. Kurtz, S. O'Dell, C.R. Ho, P.T.P.	CfA UNAM UNAM Vanderbilt CfA	Structure and spectra of sources in OMC1 South	0.7, 1.3	9, 16	17.0
BB190	Bietenholz, M.F. Bartel, N.	York U. York U.	SN 2001em	3.6 Phased array VLBI	22	12.5
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 Phased array VLBI	26	7.93
BK113	Kemball, A.J. Diamond, P.J.	Univ. Illinois Jodrell Bank	Monitoring SiO masers at 7mm and 3mm in two evolved stars	0.7 Single antenna VLBI	11, 14	8.0
BK114	Kondratko, P.T. Greenhill, L.J. Moran, J. Reid, M.	Harvard CfA CfA CfA	Imaging three NGC 4258-like water megamasers	1.3 Phased array VLBI	27, 28	30.0
BY018	Yusef-Zadeh, F. Cotton, W.D. Bower, G.	Northwestern NRAO-CV Calif.-Berkeley	VLA+PT+VLBA study of Sgr A* at 6cm	6 With VLA single antenna	19	7.33
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Polarization Calibrator Monitoring Thanksgiving Shutdown Software General tests			35.0 54.0 12.5 26.5 34.5 6.0

The average downtime was 3.6%.

The array was scheduled for 96.4% (706.86 hours)
 564.86 hours (77.02% of time) for astronomical programs
 38.50 hours (5.25% of time) for tests/calibration
 103.50 hours (14.12% of time) for maintenance
 26.50 hours (3.61% of time) for Holiday/Shutdown
 Total 738.75 hours (100.0%) scheduled.

Array was in the A configuration from October 1 - 31

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Prog#	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1131	Bash, F. Gebhardt, K. Goss, M. VandenBout, P.A.	Univ. of Texas Univ. of Texas NRAO-Socorro NRAO-CV	Deep imaging of the centers of globular clusters	3.6	14	8.0
AB1134	Bower, G. Backer, D.C. Lithwick, Y. Herrnstein, R. Goss, M. Falcke, H. Zhao, J.-H.	Calif.-Berkeley Calif.-Berkeley Calif., Berkeley Columbia NRAO-Socorro ASTRON CfA	Scattering size of Sgr A*	20 PT link	1, 4	12.0
AB1141	Boyce, E. Bowman, J. Bolton, A. Hewitt, J. Burlles, S.	MIT MIT MIT MIT MIT	Candidate gravitational lenses from the SDSS	3.6	7	2.0
AB1144	Brunthaler, A. Falcke, H. Reid, M. Greenhill, L.J. Henkel, C.	JIVE ASTRON CfA CfA MPIfR	Calibrator search near M33 and IC 10	0.7, 3.6	22	4.0
AB1167	Bower, G.	Calif., Berkeley	X-ray/Radio transient 2.5'' from Sgr A*	20,3.6,1.3 .0.7	8	1.5
AB1168	Bower, G. Backer, D. Falcke, H. Goss, M. Herrnstein, R. Lithwick, Y. Muno, M.	Calif., Berkeley Calif., Berkeley ASTON NRAO-Socorro Columbia Calif., Berkeley Calif., Los Angeles	X-ray/radio transient 2.5'' from Sgr A*	20,6,3.6,1 .3	18	2.0
AC740	Chandler, C. Low, F. Wilner, D. Claussen, M.	NRAO-Socorro Arizona CfA NRAO-Socorro	Debris disk around HD 98800	0.7, 3.6 PT link	17	4.5
AC741	Carilli, C. Bertoldi, F. Menten, K. Walter, F. Cox, P. Beelen, A. Omont, A. Fan, X. Strauss, M.	NRAO-Socorro MPIfR MPIfR MPIA IAP-Paris IAP-Paris IAP-Paris Arizona Princeton	Deep imaging of z~6 QSOs	20	29, 30	20.5
AC742	Clarke, T.E. Sarazin, C. Blanton, E.	Virginia Virginia Virginia	Structure of the cores of Abell 2597 and Abell 4059	6, 20, 90	3, 7	16.0
AC748	Cesaroni, R. Hofner, P. Walmsley, M. Kurtz, S. Churchwell, E. Olmí, L. Beltran, M. Araya, E.	Arcetri NMIMT Arcetri UNAM Wisconsin CNR Arcetri NMIMT	Ammonia(4,4) in two hot cores	1.3 line	15, 23	16.0
AC755	Cheung, C.C. Wardle, J. Lee, N.	Brandeis Brandeis Brandeis	Search for jets from high-z, flat-spectrum radio sources	6, 20	15, 16, 21, 23, 29, 31	15.5
AC757	Cross, N. White, R. Goto, T. Demarco, R.	Johns Hopkins Univ. STScI Johns Hopkins Univ. Johns Hopkins Univ.	AGN in three galaxy clusters at z~1	20	17, 21	18.5
AC763	Curiel, S.	CfA/UNAM	Structures within disks in young stellar systems	0.7 PT link	15, 17, 25, 27	24.0
AD502	Dougherty, S. Pittard, J. Williams, P.M.	DRAO Leeds Edinburgh	Monitoring colliding-wind binary WR146	0.7, 1.3, 2, 3.6, 6, 20	11	2.0
AF413	Franco-Hernandez, R. Rodriguez, L.F. Moran, J.	UNAM UNAM CfA	Time variability of NGC 7538 IRS1 and other UC HII regions	2, 3.6, 6	10	8.0
AF417	Fuchs, Y. Rupen, M.P. Dhawan, V.	CEA, Saclay NRAO-Socorro NRAO-Socorro	Simultaneous IR and Radio emission of GRS 1915+105	6, 3.6	1, 5	3.00

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AG670	Greene, J. Ho, L. Ulvestad, J.S.	CfA Carnegie Obs. NRAO-Socorro	AGNs with intermediate mass black holes	6	9	24.0
AG672	Gelfand, J. Gaensler, B.M. Lazio, T.J.W. Cohen, A.S. Kassim, N.E.	CfA CfA NRL NRL NRL	Sources with very steep spectra in the field of M31	20, 90	24, 28	10.0
AH824	Harper, G. Brown, A. Guinan, E. Brown, J.	Colorado Colorado Villanova Caltech	Evolution of Betelgeuse's extended atmosphere	0.7, 1.3, 2, 3.6, 6, 20	20, 29 PT link	23.0
AH858	Hardcastle, M.H. Harris, D. Worrall, D. Birkinshaw, M.	Bristol CfA Bristol Bristol	Hotspots of FR II sources	1.3, 2	9	3.5
AI113	Imai, H. Diamond, P.J. Deguchi, S. Nakashima, J. Miyazaki, A.	Kagoshima U. Jodrell Bank NAOJ-Nobeyama Illinois NAOJ-Nobeyama	SiO and continuum from AGB star W43A	0.7	5	5.0
AJ313	Johnson, K. Plante, S.	Wisconsin Laval	Structure and spectra of low-metallicity starburst SBS0335-052	1.3, 2, 3.6, 6 PT link	10, 11, 12, 13, 15	38.0
AJ315	Johnston, K. Boboltz, D. Claussen, M. Fey, A. Puatua, W. Zacharias, N.	USNO USNO NRAO-Socorro USNO USNO USNO	Radio star observations for a radio/optical frame tie	3.6 PT link	18	15.0
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	5, 18, 20, 27	6.5
AK585	Karovska, M. Matthews, L.D.	CfA NRAO-CV	Monitoring of maser line and continuum flux densities of Mira	0.7, 1.3, 3.6, 20	19	2.5
AL604	Laing, R. Parma, P. Bridle, A.H. Fanti, R.	ESO-Garching Bologna NRAO-CV Bologna	Depolarization asymmetry in extragalactic radio sources	20	23, 25	18.5
AL627	Landt, H. Bignall, H. Padovani, P. Perlman, E.	CfA JIVE ESO Maryland	A sample of faint BL Lacertae objects	20	1, 6	1.5
AL635	Lovell, A. Butler, B. Schloerb, P.	Agnes Scott College NRAO-Socorro Univ. Massachusetts	Resolving asteroids	0.7, 1.3, 3.6	31	2.0
AL636	Lim, J. Carilli, C. White, S.	Academia Sinica NRAO-Socorro Maryland	Imaging the atmospheres of red supergiant stars	0.7, 1.3, 2, 3.6, 6 PT link	17, 28	10.0
AM814	McNamara, B. Carilli, C. Nulsen, P. Birzan, L. Wise, M.	Ohio U. NRAO-Socorro CfA Ohio U. MIT-CSR	X-ray cavities in the z=0.22 cluster MS0735+7421	3.6, 20, 90 PT Link	17, 24	7.5
AN122	Nagar, N. Wilson, A. Falcke, H. Veilleux, S. Maiolino, R. Teng, S.	Groningen Maryland ASTRON Maryland Arcetri Maryland	Imaging ultraluminous infra-red galaxies	3.6	16, 18	12.0
AN123	Nagar, N. Storchi-Bergman, T. Eracleous, M. Strateva, I.	Groningen UFRGS, Brazil Penn State Univ. Penn State Univ.	Imaging SDSS galaxies with double-peaked broad H α lines	6	4, 11	12.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AP486	Patel, N. Curiel, S. Greenhill, L. Ho, P.T.P. Hunter, T. Moran, J.M. Sridharan, T. Torrelles, J.M. Zhang, Q.	CfA CfA CfA CfA CfA CfA IEEC CfA	Water masers in Cepheus-A HW2 and HW3	1.3	12	1.0
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20	...	13.5
AR552	Rodriguez, L.F. Reipurth, B.	UNAM Hawaii	Structure of two protostellar outflow sources	0.7	4, 5, 6, 8	14.0
AR554	Romani, R. Greenhill, L.J. Michelson, P.	Stanford Univ. CfA Stanford Univ.	Search for a kpc-scale jet in the high-z blazar Q0906+6930	3.6, 6, 20	7	2.0
AR555	Romani, R. Ulvestad, J.S. Michelson, P. Healy, S. Sadler, E. Greenhill, L.J.	Stanford Univ. NRAO-Socorro Stanford Univ. Stanford Univ. Sydney U. CfA	Southern survey for flat-spectrum blazars	3.6, 20	2, 9	22.5
AR558	Ribo, M. Mirabel, I.F. Casares, J. Combi, J.A.	Barcelona Saclay IAC Universidad de Jaen	A new microquasar candidate	20, 6, 3.6, 2 ToO	11	1.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	3, 14, 15, 17	5.0
AS800	Sjouerman, L. Messineo, M. Habing, H. Honma, M. Imai, H.	NRAO-Socorro Leiden Leiden NAOJ-Mizusawa Kagoshima U.	Monitoring circumstellar SiO masers near Sgr A*	0.7 line	11	2.0
AS801	Schinnerer, E. Carilli, C. Scoville, N.Z. Bertoldi, F. Blain, A.W. Bondi, M. Ciliegi, P. Impey, C. Koekemoer, A. LeFevre, O. Urry, C.M. Vettolani, P.	MPIA NRAO-Socorro Caltech MPIFR Caltech Bologna Bologna Arizona Mt. Stromlo Marseille Yale Univ. CNR-Bologna	COSMOS deep 1.4 GHz imaging survey	20	...	60.0
AS806	Schmitt, H.R. Anderson, J.M. Cid-Fernandes, R. Heckman, T. Gonzales-Delgado, R. Storchi-Bergmann, T.	NRAO-Socorro NMIMT UFSC Johns Hopkins IAA UFRGS	Continuum images of Palomar LLAGNs at 6cm and 3.5cm	3.6, 6	4, 23, 27, 28	7.0
AS812	Schinnerer, E. Rupen, M. Kennicutt, R. Mason, B.S.	MPIA NRAO-Socorro Arizona NRAO-GB	Deep imaging of M51 at 20cm	20	3, 7	18.0
AS815	Sarma, A. Claussen, M.	Eastern Kentucky NRAO-Socorro	Water masers near high-mass protostellar objects	1.3 line	4, 25, 31	7.0
AS819	Sjouerman, L. Garrett, M.A. Dickel, J.	NRAO-Socorro JIVE Illinois	Simultaneous EVN/VLA observations of M31*	6	27	6.5
AS821	Strasser, S.T. Dickey, J.	Minnesota Minnesota	OH absorption of background sources in the Galactic Plane	20 line	8	14.0
AS823	Sokoloski, J.L. Mioduszewski, A.J. Brocksopp, C. Rupen, M. Kaiser, C.R.	CfA NRAO-Socorro MSSL NRAO-Socorro Southampton	Imaging the jet in the symbiotic binary Z And	1.3, 3.6, 6	12	4.0
AT303	Tsai, C-W. Turner, J. Beck, S. Ho, P.T.P.	UCLA Calif.-Los Angeles Tel Aviv University CfA	HII regions in M82 and NGC 253	0.7, 1.3	26, 27	6.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AT304	Turner, J. Naiman, J. Beck, S. Ho, P.T.P. Tsai, C-W.	Calif.-Los Angeles Calif.-Los Angeles Tel Aviv University CfA Calif.-Los Angeles	The super star cluster nebula in NGC 660	1.3	6	4.0
AU100	Umana, G. Cerrigone, L. Trigilio, C.	Noto Catania Noto	Young planetary nebulae	0.7, 2, 3.6	22, 29	12.0
AU101	Umana, G. Buemi, C. Trigilio, C. Leto, P.	Noto Noto Noto Noto	Luminous blue variable IRAS 18576+0341	6, 20	12	3.5
AW641	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S.D. Panagia, N. Marcaide, J.M. Lewin, W.H.G. Pooley, D. Immmler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT NASA-GSFC AAO	Triggered observations of type II SNe	1.3, 2, 3.6, 6, 20, 90 TRIGGER	5	8.5
AX009	Xu, Y. Reid, M. Menten, K. Zheng, X. Moscadelli, L.	Shanghai Obs. CfA MPIFR Nanjing Cagliari	Astrometric calibrators for massive star forming regions	2	28	2.5
AY151	Yusef-Zadeh, F. Palmer, P. Hewitt, J.W.	Northwestern Chicago Northwestern	Search for 6cm OH maser emission from SNR maser regions	6 line	2	2.5
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 Y1 VLBI	15	12.15
GG060	Garrett, M.A. Campbell, B.	JIVE JIVE	Wide field 327 MHz observations of M81 and M82	90 Single antenna VLBI	23	8.5
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, 20	31 Phased array VLBI	11.5
S50174	Fabian, A. Sanders, J. Taylor, G. Allen, S.	Cambridge Univ. of Cambridge NRAO-Socorro Cambridge	Chandra/VLA observation of core of Centaurus cluster	90	24	4.5
S50662	Osten, R.A. Drake, S. Slee, O.B. Carter, B. Budding, E. Kay, H. Bembrick, C. Collier Cameron, A. Jardine, M. Donati, J-F. Petit, P. Maraden, S. Semel, M. Waite, I.	NRAO-CV USRA-GFSC ATNF Carter Obs. Carter Obs. University College Mt. Tarana Obs. Univ. St. Andrews Univ. St. Andrews Obs. Midi-Pyrenees Obs. Midi-Pyrenees Obs. Midi-Pyrenees Obs. Paris U. Southern Queensla	Chandra/VLA observations of binary CC Eridani	2, 3.6	1, 2	8.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
	Staff	NRAO	Baselines, Pointing, Delays			33.0
			Maintenance			62.0
			Polarization Calibrator Monitoring			15.0
			Software			34.5
			Student observation		22, 23	5.0
			General tests			6.0

The average downtime was 8.94%.

The array was scheduled for 100% (765.15 hours)
 614.65 hours (80.33% of time) for astronomical programs
 54.00 hours (7.06% of time) for tests/calibration
 96.50 hours (12.61% of time) for maintenance

Total 765.15 hours (100.0%) scheduled.

Array was in the A configuration from October 1 - 31

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1093	Blundell, K. Rawlings, S.	Oxford Oxford	High-z FRI quasars	20	18	11.5
AB1127	Bower, G. Yusef-Zadeh, F. Roberts, D.A. Falcke, H.	Calif.-Berkeley Northwestern Northwestern ASTRON	Coordinated XMM, VLT, Keck and VLA observations of Sgr A*	0.7, 1.3	1, 2, 3	12.0
AB1142	Bietenholz, M.F. Bartel, N. Rupen, M.	York U. York U. NRAO-Socorro	Continuum from Type II SNe more than 10 years old	1.3	4, 5	25.0
AB1146	Brunthaler, A. Falcke, H. Reid, M. Greenhill, L.J. Henkel, C.	JIVE ASTRON CfA CfA MPIfR	Search for more water masers in M33	1.3 line	11, 14	15.0
AB1151	Bartel, N. Bietenholz, M.F. Rupen, M.	York U. York U. NRAO-Socorro	Monitoring the SED of SN 1986J	...	23	6.0
AB1153	Brogan, C. Chandler, C. Shirley, Y.	Hawaii-1FA NRAO-Socorro NRAO-Socorro	Water masers toward W33A	1.3 line EXPLORE	17	2.0
AC742	Clarke, T.E. Sarazin, C. Blanton, E.	Virginia Virginia Virginia	Structure of the cores of Abell 2597 and Abell 4059	6, 20, 90 with PT	25, 26	10.0
AC752	Castangia, P. Tarchi, A. Henkel, C. Peck, A. Menten, K. Nagar, N. Moscadelli, L.	Cagliari IRA-Bologna MPIfR CfA MPIfR Groningen Cagliari	Water megamasers in the merger system Arp 299	1.3 line	19	12.0
AC761	Chatterjee, S. Brisken, W. Goss, M. Benson, J. Arzoumanian, Z. Lazio, T.J.W. Cordes, J. Vlemmings, W.H.T. Thorsett, S. Lyne, A. Kramer, M.	Cornell NRAO-Socorro NRAO-Socorro NRAO-Socorro NASA-GSFC NRL Cornell Cornell Calif.-Santa Cruz Jodrell Bank Jodrell Bank	Calibrator search for pulsar astrometry with the VLBA or HSA	3.6, 20	6, 10, 16, 16	21.5
AD500	DeLaney, T. Rudnick, L.	Minnesota Minnesota	Spectral-index imaging of Cassiopeia A	6, 20	24	18.0
AD502	Dougherty, S. Pittard, J. Williams, P.	DRAO Leedes Ifa, Edinburgh	WR146-the wind-collision spectrum and the O-star companion	0.7, 1.3, 2	21	.42
AF414	Frail, D. Soderberg, A.M. Kulkarni, S.	NRAO-Socorro Caltech Caltech	Continued monitoring of the bright GRB 030329	3.6, 6, 20 TRIGGER	3	4.0
AG669	Gawronski, M.P. Marecki, A. Kunert, M. Kus, A.	Torun Torun Torun Torun	Hybrid-morphology sources	20	20	3.5
AG674	Gonzalez, D. Terlevich, R. Terlevich, E. Schmitt, H.R.	Imperial College RGO INAOE NRAO-Socorro	Spectral indices of HII galaxies	3.6, 6	1, 7	20.0
AH847	Humphreys, E.M.L. Reid, M. Greenhill, L.J. Moran, J. Argon, A.	Onsala CfA CfA CfA CfA	Monitoring of water maser spectrum and jet continuum of NGC 4258	1.3, 3.6 line	25	3.5
AH861	Healy, K. Claussen, M. Hester, J.J. Snider, K. Desch, S.	Arizona State NRAO-Socorro Arizona State Arizona State Arizona State	Survey for water masers from low-mass stars near HII regions	1.3 line	...	53.5
A1113	Imai, H. Diamond, P.J. Deguchi, S. Nakashima, J. Miyazaki, A.	Kagoshima U. Jodrell Bank NAOJ-Nobeyama Illinois NAOJ-Nobeyama	SiO and continuum from AGB star W43A	0.7	18	5.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	... TRIGGER	4, 20	6.5
AK589	Kulkarni, S. Cameron, B. Frail, D.	Caltech Caltech NRAO-Socorro	Search for radio flares from SGR 1806-20 in outburst	3.6	5	2.0
AL627	Landt, H. Bignall, H. Padovani, P. Perlman, E.	CfA JIVE ESO Univ. of Maryland	A sample of faint BL Lacertae objects	20	29	5.50
AL634	Lister, M. Kochanyczk, M.	Purdue Purdue	Deep imaging of the MOJAVE blazar sample	20	19	5.0
AM793	Monnier, J.D. Greenhill, L.J. Tuthill, P.G. Danchi, W.	Michigan CfA Sydney U. NASA-GSFC	Continuum monitoring of colliding wind binary WR 112	3.6	20	1.5
AM806	Morganti, R. Oosterloo, T. Emonts, B. vanMoorsel, G. Tadhunter, C.N.	ASTRON ASTRON Kapteyn NRAO-Socorro Sheffield	Very broad HI absorption in radio galaxies	20 line with PT	23, 25	15.0
AM813	Mason, P.A. Gray, C.	NMSU U. Texas-El Paso	Monitoring the cataclysmic variable AR UMa	3.6	4	2.5
AO184	Osten, R. Hawley, S.L. Bastian, T. Reid, I.N.	NRAO-CV Washington-St. Louis NRAO-CV STScI	Continuum emission from nearby cool stars and brown dwarfs	3.6	1	1.6
AP480	Palmer, P. Goss, M.	Chicago NRAO-Socorro	Calibrator search toward W75	3.6 EXPLORE	15	2.0
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	15.5
AR550	Rodriguez, L.F. Loinard, L. D'Alessio, P.	UNAM UNAM UNAM	Search for protoplanetary disks around isolated Class 0 protostars	0.7	19, 20	30.0
AR553	Rodriguez, L.F. Marti, J. Trejo, A.	UNAM U. Jaen UNAM	Monitoring the ultra-luminous X-ray source in M33	3.6	26	2.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	1, 3, 9, 17, 24	5.5
AS801	Schinnerer, E. Carilli, C. Scoville, N.Z. Bertoldi, F. Blain, A.W. Bondi, M. Ciliegi, P. Impey, C. Koekemoer, A. LeFevre, O. Urry, C.M. Vettolani, P.	MPIA NRAO-Socorro Caltech MPIFR Caltech Bologna Bologna Arizona Mt. Stromlo Marseille Yale Univ. CNR-Bologna	COSMOS deep 1.4 GHz imaging survey	20	23, 24, 26, 30	24.0
AS806	Schmitt, H.R. Anderson, J.M. Cid-Fernandes, R. Heckman, T. Gonzales-Deigado, R. Storchi-Bergmann, T.	NRAO-Socorro NMIMT UFSC Johns Hopkins IAA UFRGS	Continuum images of Palomar LLAGNs at 6cm and 3.5cm	3.6, 6	5, 11, 12, 17	56.0
AS807	Sokoloski, J.L. Mioduszewski, A.J. Brocksopp, C. Rupen, M. Kaiser, C.R.	CfA NRAO-Socorro MSSL NRAO-Socorro Southampton	Monitoring of symbiotic binaries during outburst	2, 6, 20 TRIGGER	16	3.0
AS814	Snellen, I.A.G. Best, P. Rigby, E.	Edinburgh Edinburgh Edinburgh	Structure of high-redshift FR I candidates	20 with PT	26	6.0
AS815	Sarma, A. Claussen, M.	Eastern Kentucky NRAO-Socorro	Water masers near high-mass protostellar objects	1.3 line	21, 22, 30	6.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS821	Strasser, S.T. Dickey, J.	Minnesota Minnesota	OH absorption of background sources in the Galactic Plane	20 line	30	6.4
AW641	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S.D. Panagia, N. Marcaide, J.M. Lewin, W.H.G. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT NASA-GSFC AAO	Triggered observations of type II SNe	... TRIGGER	4, 20, 26	5.50
AW642	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S.D. Panagia, N. Marcaide, J.M. Lewin, W.H.G. Pooley, D. Immler, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT NASA-GSFC	Long term monitoring of radio supernovae	1.3, 2, 3.6, 6, 20, 90	9, 12	39.0
AW643	Wilcots, E. Walter, F.	Wisconsin MPIA	Structure and kinematics of HI in starburst IC 10	20 line	21, 23, 27	31.0
AX009	Xu, Y. Reid, M. Menten, K. Zheng, X. Moscadelli, L.	Nanjing CfA MPIfR Nanjing Cagliari	Astrometric calibrators for massive star forming regions	2	26, 27	6.5
BD099	Dallacasa, D. Orienti, M. Tinti, S. Stanghellini, C.	Bologna Bologna SISSA-Trieste IRA-Noto	Spectral imaging of two classes of CSOs	3.6, 6, 20 Single antenna VLBI	5	9.0
BT075	Tarchi, A. Brunthaler, A. Henkel, C. Menten, K. Moscadelli, L. Chiaberge, M.	IRA-Bologna JIVE MPIfR MPIfR Cagliari MPIfR	Water megamaser in an FR II galaxy, 3C 403	1.3 Phased array VLBI	4	4.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Polarization Calibrator Monitoring Software General tests			34.0 86.0 34.0 12.0 35.5 18.73

The average downtime was 7.92%.

The array was scheduled for 100.0% (738.75 hours)
 518.52 hours (70.19% of time) for astronomical programs
 64.73 hours (8.76% of time) for tests/calibration
 155.50 hours (21.05% of time) for maintenance
 Total 738.75 hours (100.0%) scheduled.

Array was in the DnA configuration from September 1-10

Array was in the A configuration from September 11-30

VLA Utilization Report August 2004

D. H.

Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1125	Batra, W. Wilson, T. Menten, K.	ESO, Garching MPIfR MPIfR	Ammonia towards the Orion Bar PDR	1.3 line	14, 20, 21	15.5
AB1127	Bower, G. Yusef-Zadeh, F. Roberts, D.A. Falcke, H.	Calif.-Berkeley Northwestern Northwestern ASTRON	Coordinated XMM, VLT, Keck and VLA observations of Sgr A*	0.7, 1.3	31	4.0
AC696	Clarke, T. Kempner, J.	Virginia Virginia	Radio halos in clusters of galaxies	20	19, 28	15.0
AC706	Clarke, T. Sarazin, C.	Virginia Virginia	Polarimetric and spectral-index study of cluster Abell 520	20	13	7.0
AC717	Chyzy, K. Bomans, D. Beck, R.	Jagiellonian Bochum MPIfR	Polarimetry of blue compact dwarf IC 10	20	14, 17	11.0
AC730	Clemens, M.S. Bressan, A. Prouton, O.R. Granato, G.L. Silva, L. Vega, O.	Padova Padova Padova Padova Trieste INAOE	Spectral energy distributions for compact ULIRGs	1.3	13, 15	10.5
AC736	Chung, A. vanGorkom, J. Bureau, M. Koribalski, B.	Columbia Columbia Columbia ATNF	Kinematic study of spirals with counter-rotating gas	20 line	7	5.0
AD500	DeLaney, T. Rudnick, L.	Minnesota Minnesota	Spectral-index imaging of Cassiopeia A	6, 20	13	7.5
AG661	Govoni, F. Markevitch, M. Murgia, M. Feretti, L. Giovannini, G.	Bologna CfA Bologna Bologna Bologna	Deep polarimetry of relaxed and un-relaxed clusters of galaxies	20	23	10.0
AG663	Gudel, M. Montmerle, T. Audard, M. Walter, R. Telleschi, A.	Paul Scherrer LAOG-Toulouse Columbia INTEGRAL Data Center PSI	Coordinated VLA-INTEGRAL study of the Algol system	2, 3.6, 6	1, 1, 2, 3	60.0
AG664	Gomez, J.F. deGregorio-Monsalvo, Kuiper, T. Torrelles, J.M. Anglada, G.	LAEFF LAEFF JPL IEEC-Barcelona IAA	Thermal CCS and water masers in protobinary system IRAS16293	1.3 line	2, 3, 6	11.5
AG665	Gomez, J.F. deGregorio-Monsalvo,	ESA-LAEFF LAEFF	Ammonia towards the bipolar outflow in AFGL 437	1.3 line	15	10.0
AH843	Hunter, D.	Lowell Obs.	HI imaging of outer parts of dwarf irregulars	20 line	21	10.0
AI114	Iverson, R.J. deBreuck, C. Papadopoulos, P.P. Neri, R. Greve, T.R.	ROE Leiden Leiden IRAM Edinburgh	Molecular gas distribution in a gas-rich merger at z=3.8	0.7, 1.3 line	12, 17, 19, 22	24.0
AJ311	Joncas, G. Boullanger, F. Falgarone, E. Lockman, F.J. Miville-Deschenes, M. Martin, P.G.	Laval CITA Ecole Normale Super NRAO-GB Inst. of Theoretical Toronto-CITA	Structure and kinematics of a cirrus cloud in Ursa Major	20 line	23, 26	24.0
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	1, 15	6.0
AK581	Kothes, R. Landecker, T. Wolleben, M.	DRAO DRAO MPIfR	Kinematic distances to seven SNR through HI absorption	20 line	4, 6	16.0
AL597	Laing, R.A. Bridle, A.H. Parma, P.	Oxford NRAO-CV Bologna	Spectrum of 3C31 from 74 to 8400 MHz	3.6, 6, 20	5	13.0
AL623	Lu, F. Lang, C. Wang, D.	Chinese Academy Univ. Iowa Massachusetts	Structure and spectrum of diffuse emission from SNR G54.1+0.3	3.6, 6, 20	7, 11, 14, 15	12.0
AM797	Menten, K. Alcoicea, J.	MPIfR OAN	Imaging peculiar ammonia emission around red giant stars	1.3 line	8	8.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AO184	Osten, R. Hawley, S.L. Bastian, T. Reid, I.N.	NRAO-CV Washington-St. Louis NRAO-CV STScI	Continuum emission from nearby cool stars and brown dwarfs	3.6	5, 9, 17, 23, 26	16.0
AP473	Pedelty, J.A. Mundy, L.	NASA-GSFC Maryland	Mapping the molecules in the low-mass protostar IRAS16293	0.7 line	1	6.5
AP475	Pillai, T. Wyrowski, F. Menten, K.	MPIfR MPIfR MPIfR	Ammonia emission toward massive dense cores with masers	1.3 line	22, 24	15.0
AR543	Ribo, M. Mirabel, I.F.	Barcelona Saclay	Counterpart to large-scale X-ray jet in LMXB 4U1755-338	6	13, 23, 25	4.5
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20	7, 7, 14, 21, 21	9.0
AR546	Roshi, D.A. Jeyakumar, S. Goss, M.	NRAO-GB NCRA-Pune NRAO-Socorro	Carbon recombination lines near UCHII region W48A	0.7 line	12, 17	11.0
AS791	Sakelliou, I. Giovannini, G. Feretti, L. Ponman, T.	Birmingham Bologna Bologna Birmingham	Imaging the candidate radio halo in Abell 399	20	17	2.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	7	5.5
AS798	Schinnerer, E. Boker, T.	NRAO-Socorro ESA	HI in late-type spiral galaxies	20 line	19	6.0
AS799	Seaquist, E. Muhle, S.	Toronto Toronto	Formaldehyde in starburst galaxy M82	2 line	8	13.5
AS805	Shirley, Y.L. Evans, N.	NRAO-Socorro Texas	Search for continuum emission from L1014-SMM1, a mid-IR source	3.6, 6	20	9.0
AT297	Tang, Y-W. Kuo, C-Y. Ho, P.T.P. Lim, J.	ASIAA ASIAA Cfa Academia Sinica	Imaging the extended HI envelope around the M51 group	20 line	14, 15	15.0
AV272	VanTrung, D. Lim, J.	ASIAA ASIAA	Cyanopolyynes in carbon-rich stellar envelopes	0.7, 1.3 line	16, 18, 21	16.5
AV276	Verdes-Montenegro, L. Espada, D. Bosma, A. Leon, S. Yun, M. Athanasoula, E. Sulentic, J.	IAA IAA Marseille IAA Massachusetts Marseille Alabama	HI asymmetries in well isolated galaxies	20 line	7	12.0
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardiff Bucknell U. Arizona	HI structures of nearby galaxies	20 line	26	2.0
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	1.3, 2, 3.6 TRIGGER	4	4.0
AW633	Walter, F. Brinks, E. Skillman, E.	NRAO-Socorro INAOE Minnesota	Blind search for HI clouds in the M81 group	20 line	4	3.0
AW635	Walter, F. Carilli, C. Bertoldi, F.	NRAO-Socorro NRAO-Socorro MPIfR	Search for HCN & HCO+ from QSO J1148+5251 at z=6.4	0.7	16, 20	20.0
AW636	Wilcots, E. Freeland, E. Stilp, A.	Wisconsin Wisconsin Wisconsin	HI content of groups of galaxies	20 line	9, 19, 22, 24	19.0
AZ151	Zhao, J.-H. Pegg, J. Lou, Y.-Q. Hong, X.-Y. An, T.	Cfa Cfa Tsinghua Univ. Shanghai Obs. Shanghai Obs.	Monitoring the flux density variations of Sgr A*	0.7, 1.3, 2	13	2.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
BD099	Dallacasa, D. Orienti, M. Tinti, S. Stanghellini, C.	Bologna Bologna SISSA-Trieste Noto	Spectral imaging of two classes of CSOs	3.6, 6, 20 Single antenna VLBI	12	9.0
S50238	Jonker, P.G. Fender, R. Dhawan, V. Rupen, M. Dubus, G.	CfA Amsterdam NRAO-Socorro NRAO-Socorro IAP	A Black Hole SXT returning to quiescence	TRIGGER	9	8.0
	Staff	NRAO	Baselines, Pointing, Delays Calibrator Flux Ratios Maintenance Polarization Calibrator Monitoring Software General tests			39.0 27.0 70.5 13.0 37.0 17.5

The average downtime was 4.92%.

The array was scheduled for 100.0% (752.02 hours)
 548.2 hours (72.87% of time) for astronomical programs
 96.5 hours (12.83% of time) for tests/calibration
 107.5 hours (14.3 % of time) for maintenance
 Total 752.2 hours (100.0%) scheduled.

Array was in the D configuration from August 1-29

The following independent proposals shared simultaneous observing time

Projects	Hours
BD99/AL623	46 min
BD99/A1114	2 hr/45 min.
BD99/Baselines	5 hr/30 min.

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1093	Blundell, K. Rawlings, S.	Oxford Oxford	High-z FRI quasars	20	29	3.0
AB1124	Brosius, J. White, S. Kuhn, J. Lin, H.	NASA-GSFC Maryland Hawaii Hawaii	Coordinated Solar coronal magnetography	2, 3.6, 6, 20	25, 29, 30	18.0
AB1126	Bastian, T. Benz, A.O. Solanki, S. Loukitcheva, M. White, S.	NRAO-CV ETH MPI, Lindau SPbS Maryland	Solar chromosphere at mm and cm wavelengths	0.7, 1.3, 2	3, 4	16.0
AB1127	Bower, G. Yusef-Zadeh, F. Roberts, D.A. Falcke, H.	Calif.-Berkeley Northwestern Northwestern ASTRON	Coordinated XMM, VLT, Keck and VLA observations of Sgr A*	0.7, 1.3	5, 6, 7, 23, 26	17.0
AC712	Croston, J. Hardcastle, M. Birkinshaw, M. Worrall, D.	Univ. Bristol Bristol Bristol Bristol	Structure of FR-I radio galaxy NGC 1044	20	18	1.0
AC723	Chung, A. Bureau, M. vanGorkom, J. Koribalski, B.	Columbia Columbia Columbia ATNF	HI kinematics of spirals with counter-rotating ionized gas	20 line	2	1.5
AC729	Cool, R. Dale, D. Bloom, S.D.	Univ. Arizona Univ. of Wyoming Hampden-Sydney	Spectral energy distributions of possible gamma-ray blazars	1.3, 2, 3.6, 6	1	5.0
AG639	Govoni, F. Markevitch, M. Feretti, L. Giovannini, G.	Bologna CfA Bologna Bologna	Radio halos in merging and non-merging galaxy clusters	20	3	2.0
AH844	Heesen, V. Krause, M. Beck, R. Dettmar, R.-J. Ehle, M.	Bochum MPIfR MPIfR Bochum ESA-LAEFF	Spectral indices and polarimetry of starburst NGC253	6	...	46.0
AH847	Humphreys, E.M.L. Reid, M. Greenhill, L.J. Moran, J. Argon, A.	CfA CfA CfA CfA CfA	Monitoring of water maser spectrum and jet continuum of NGC 4258	1.3, 3.6 line	23	3.0
AH848	Hieret, C. Menten, K. Schilke, P. Alcolea, J.	MPIfR MPIfR MPIfR OAN	Search for the NaOH molecule toward Sgr B2	1.3 line	18, 22	10.0
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	11, 15, 19	11.67
AK580	Kuo, C.Y. Tang, Y-W. Lim, J. Ho, P.T.P.	ASIAA ASIAA ASIAA CfA	HI imaging of Seyfert galaxies	20 line	2, 8	11.5
AK581	Kothes, R. Landecker, T. Wolleben, M.	DRAO DRAO MPIfR	Kinematic distances to seven SNR through HI absorption	20 line	25, 28, 30	16.0
AK588	Kong, A. Rupen, M. Sjouwerman, L.	CfA NRAO-Socorro NRAO-Socorro	VLA obs of an ultraluminous supersoft X-ray source in outburst	4,6	20	2.0
AL622	Lockman, F.J. Pidopryhora, Y. Liszt, H. Rupen, M.	NRAO-GB Ohio University NRAO-CV NRAO-Socorro	Physical properties of HI clouds in Galactic halo and disk	20 line	...	56.0
AL624	Lang, C. Goss, M. Johnson, K. Rodriguez, L.	Iowa NRAO-Socorro Madison UNAM	High frequency observations of compact sources in the Galactic Center Quintuplet Cluster	1.3, 7	30	4.0
AM790	Matthews, L. Bureau, M.	CfA Columbia	HI structure and kinematics of edge-on spiral UGC 10043	20 line	6	2.5
AM793	Monnier, J. Danchi, W. Greenhill, L. Tuthill, P.	CfA NASA CfA Sydney	Continuum monitoring of colliding wind binary WR 112	3.5	12	1.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AM794	Machalski, J. Jamrozny, M. Koziel, D.	Jagiellonian Bonn Univ. Jagiellonian	Mapping the radio lobes in giant radio galaxies	6	31	6.0
AM797	Menten, K. Alcolea, J.	MPIfR OAN	Imaging peculiar ammonia emission around red giant stars	1.3 line	20, 26	17.5
AM798	Matthews, L.D. Reid, M.	CfA CfA	Neutral hydrogen observations of AGB stars	20 line	1, 28	9.0
AM799	Montero-Castano, M. Herrnstein, R. Ho, P.T.P.	CfA Columbia CfA	HC3N imaging around Sgr A*	0.7 line	1	4.0
AM800	Miller, E. Bregman, J.N.	Michigan Michigan	HI mass of high velocity clouds in nearby spiral galaxies	20 line	11, 12, 16, 17, 25	50.0
AO184	Osten, R. Hawley, S.L. Bastian, T. Reid, I.N.	NRAO-CV Washington-St. Louis NRAO-CV STScI	Continuum emission from nearby cool stars and brown dwarfs	3.6	...	29.5
AP468	Pellizzoni, A. Mereghetti, S. Bignami, G. Caraveo, P. DeLuca, A. Mignani, R. Tur, A.	Milano Milan Pavia Milano Milano ESO CESR	Radio counterpart of the X-ray structure around Geminga pulsar	3.6, 6	24	6.0
AP471	Po-Jian, C. VanTrung, D. Lim, J.	ASIAA ASIAA ASIAA	Ammonia imaging of proto-planetary Egg Nebula	1.3 line	18	7.0
AP473	Pedelty, J.A. Mundy, L.	NASA-GSFC Maryland	Mapping the molecules in the low-mass protostar IRAS16293	0.7 line	3, 4, 15	19.5
AP476	Palau, A. Estalella, R. Beltran, M. Girart, J.M.	Barcelona Barcelona Arcetri IEEC-Barcelona	Continuum emission from embedded cluster candidates	1.3, 3.6	10, 12, 13	5.0
AR544	Reid, M.	CfA	Kinematics of H66alpha in cometary HII regions	1.3 line	20	9.0
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20	...	20.5
AS5023	Jonker, P. Dhawan, V. Dubus, G. Fender, R. Rupen, M.	Cambridge NRAO-Socorro Paris Cambridge NRAO-Socorro	Following a black hole candidate soft X-ray transient returning to quiescence	4	17,30	1.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	3, 26	4.97
AS800	Sjouwerman, L. Messineo, M. Habing, H. Honma, M. Imai, H.	NRAO-Socorro Leiden Leiden NAOJ-Mizusawa Kagoshima U.	Monitoring circumstellar SiO masers near Sgr A*	0.7 line	31	2.0
AS805	Shirley, Y.L. Evans, N.	NRAO-Socorro Texas	Search for continuum emission from L1014-SMM1, a mid-IR source	3.6, 6	1	7.6
AS807	Sokoloski, J. Brocksopp, C. Kaiser, C. Mioduszewski, A. Rupen, M.	CfA MSSL Southampton NRAO-Socorro NRAO-Socorro	Monitoring of symbiotic binaries during outburst	2,6,20	30	3.0
AS808	Shirley, Y.L. Young, K. Evans, N.	NRAO-Socorro Univ. Texas Texas	Completing a formaldehyde survey of pre-protostellar cores	6 line	23	10.0
AV272	VanTrung, D. Lim, J.	ASIAA ASIAA	Cyanopolyynes in carbon-rich stellar envelopes	0.7, 1.3 line	8, 11, 15	31.0
AV273	VanTrung, D. Lim, J.	ASIAA ASIAA	Cyanopolyynes in post-AGB circumstellar envelopes	0.7, 1.3 line	21, 31	20.0
AV276	Verdes-Montenegro, L. Espada, D. Bosma, A. Leon, S. Yun, M. Athanasoula, E. Sulentic, J.	IAA IAA Marseille IAA Massachusetts Marseille Alabama	HI asymmetries in well isolated galaxies	20 line	18, 19, 20, 24	39.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardif Bucknell U. Arizona	HI structures of nearby galaxies	20 line	2, 5, 9, 10	38.0
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	1.3, 2, 3.6 TRIGGER	1, 29	4.0
AW645	Walter, F. Carilli, C. Henkel, C. Ott, J. Staveley-Smith, L. Weiss, A.	NRAO-Socorro NRAO-Socorro MPIfR ATNF ATNF IRAM	Confirma tentative CO detection at z=10	1.3	1	2.5
AZ151	Zhao, J.-H. Pegg, J. Lou, Y.-Q. Hong, X.-Y. An, T.	CfA CfA Tsinghua Univ. Shanghai Obs. Shanghai Obs.	Monitoring the flux density variations of Sgr A*	0.7, 1.3, 2	14	2.0
BD098	Deacon, R. Chapman, J.M. Green, A.	Univ. of Sydney ATNF Sydney U.	Imaging OH masers in post-AGB stars	20 Single antenna VLBI	23, 25, 29	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	... Single antenna VLBI	12, 16	14.0
BM203	Marr, J. Taylor, G. Morris, A.	Union NRAO-Socorro Union College	Spectral study of CSO candidates 0026+346 and 1321+410	... Single antenna VLBI	3	24.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Polarization Calibrator Monitoring Software Students General tests		3, 4	54.83 54.5 14.5 36.0 6.0 32.0

The average downtime was 4.3%.

The array was scheduled for 100.0% (806.17 hours)
628.84 hours (78.0% of time) for astronomical programs
86.83 hours (10.8% of time) for tests/calibration
90.5 hours (11.2% of time) for maintenance
Total 806.17 hours (100.0%) scheduled.

Array was in the D configuration from July 1-31

The following independent proposals shared simultaneous observing time

Projects	Hours
BM203/AB1126	8.15
BM203/AS796	2.00
BM203/AP473	6.50
BM203/A0184	1.50
BM203/AH844	6.00
BD101/AM800	4.50
BD101/AS238	0.50
BD101/A0184	2.50
BD101/AH844	4.03
BD98/AH847	0.53
BD98/AB1127	1.00
BD98/AL622	7.50
BD98/AM800	3.40
BD98/AK581	5.63
BD98/AW624	1.32
BD98/BASELINES	4.00
BD98/AK575	1.00
BD98/POINTING	2.27

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1127	Bower, G. Yusef-Zadeh, F. Roberts, D.A. Falcke, H.	Calif.-Berkeley Northwestern Northwestern ASTRON	Coordinated XMM, VLT, Keck and VLA observations of Sgr A*	0.7, 1.3	...	16.5
AC696	Clarke, T. Kempner, J.	Virginia Virginia	Radio halos in clusters of galaxies	20	13	5.5
AC723	Chung, A. Bureau, M. vanGorkom, J. Koribalski, B.	Columbia Columbia Columbia ATNF	HI kinematics of spirals with counter-rotating ionized gas	20 line	11, 25	3.5
AC729	Cool, R. Dale, D. Bloom, S.D.	Univ. Arizona Univ. of Wyoming Hamden-Sydney	Spectral energy distributions of gamma-ray blazar candidates	1.3, 2, 3.6, 6	29	4.5
AC732	Choi, M. Kim, K-T. Evans, N. Wu, J.W.	KAO-TRAO Univ. Illinois Texas Texas	Ammonia kinematics in high-mass star-forming cores	1.3 line	20	7.0
AC733	Chen, Y.J. Zhang, Q. Wang, Y. Beuther, H. Sridharan, T.K. Hunter, T.R. Wu, Y. Ho, P.T.P. Zapata, L.A. Rodriguez, L.F.	Cfa Cfa Cfa Cfa Cfa Cfa Peking Cfa Cfa UNAM	Ammonia kinematics in massive protostellar candidates	1.3 line	14, 14, 21	21.5
AD490	Dyer, K. Owen, F.	NRAO-Socorro NRAO-Socorro	Spectral indices of Abell 13 at low frequencies	20	11	3.5
AD498	DeLaney, T. Rudnick, L. Sankrit, R. Blair, W. Petre, R. Harrus, I.	Minnesota Minnesota Johns Hopkins Johns Hopkins NASA-GSFC NASA-GSFC	Proper motions within Kepler's supernova remnant	6, 20	27	3.5
AF412	delaFuente, E. Kurtz, S. Hofner, P. Araya, E.	Guadalajara UNAM NMINT Puerto Rico	Ammonia and CS in the G12.21-0.10 hot molecular core	0.7, 1.3 line	7	5.5
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	2, 18	4.0
AK581	Kothes, R. Landecker, T. Wolleben, M.	DRAO DRAO MPIfr	Kinematic distances to seven SNR through HI absorption	20 line	1, 8, 11, 12, 13, 18	30.5
AL617	Law, C. Yusef-Zadeh, F. Cotton, W.D. Maddalena, R. Roberts, D.	Northwestern Northwestern NRAO-CV NRAO-GB Northwestern	The Galactic Center lobe	6	1, 1, 2, 3	29.5
AL622	Lockman, F.J. Pidopryhora, Y. Liszt, H. Rupen, M.	NRAO-GB Ohio University NRAO-CV NRAO-Socorro	Physical properties of HI clouds in Galactic halo and disk	20 line	28	8.0
AL624	Lang, C. Johnson, K. Goss, M. Rodriguez, L.F.	Univ. Iowa Wisconsin NRAO-Socorro UNAM	Compact sources in Quintuplet Cluster	0.7, 1.3	9	8.0
AL625	Lang, C. Figer, D. Najarro, F.	Univ. Iowa STScI CSIC	Structure and spectra of luminous blue variable stars	0.7, 1.3, 3.6	4	9.0
AM794	Machalski, J. Jamrozy, M. Koziel, D.	Jagiellonian Bonn Univ. Jagiellonian Univ.	Mapping the radio lobes in giant radio galaxies	6	29	8.0
AM795	Manthey, E. Huttmeister, S. Aalto, S.	Bochum Bochum Onsala	HI distribution in mergers with moderate FIR luminosity	20 line	22, 27	12.0
AM799	Montero-Castano, M. Herrnstein, R. Ho, P.T.P.	Cfa Columbia Cfa	HC3N imaging around Sgr A*	0.7 line	15, 16, 17	19.5

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Progn	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AM800	Miller, E. Bregman, J.N.	Michigan Michigan	HI mass of high velocity clouds in nearby spiral galaxies	20 line	3, 4, 6, 7	22.5
A0181	Olofsson, H. Schoier, F. Kerschbaum, F. Lindqvist, M. Wong, T.	Stockholm Obs. Stockholm Obs. Vienna Univ. Onsala Calif.-Berkeley	SiO emission from winds of O-rich AGB stars	0.7 line	22, 25	15.0
A0182	Omar, A. Dwarakanath, K.S.	Raman Inst. Raman Inst.	HI search around HI deficient galaxies in Eridanus group	20 line	5, 11, 12, 13	16.0
A0184	Osten, R. Hawley, S.L. Bastian, T. Reid, I.N.	NRAO-CV Washington NRAO-CV STScI	Continuum emission from nearby cool stars and brown dwarfs	3.6	...	47.0
AP474	Palau, A. Estalella, R. Anglada, G.	Barcelona Barcelona IAA	Ammonia and continuum toward IRAS00213	0.7, 1.3	24	10.0
AR536	Rudnick, L. Delain, K.	Minnesota Minnesota	Structures and spectral indices of WISH sources	20	7	10.0
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20	...	12.5
AR548	Rodriguez-Rico, C.A. Goss, M. Zhao, J.-H. Viallefond, F. Turner, J. Mohan, N.R. Gomez, Y.	UNAM/NRAO NRAO-Socorro CfA Paris Obs. Calif.-Los Angeles IAP-Paris UNAM	H53alpha study of supernebula in NGC5253	0.7 line	1, 10, 11, 12	15.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	10, 27, 28	12.5
AS805	Shirley, Y.L. Evans, N.	NRAO-Socorro Texas	Search for continuum emission from L1014-SMM1, a mid-IR source	3.6, 6	30	0.5
AS809	Sollins, P.K. Ho, P.T.P. Zhang, Q. Keto, E.	CfA CfA CfA CfA	Ammonia search toward two hot molecular cores	1.3 line	23	4.0
AT297	Tang, Y-W. Kuo, C-Y. Ho, P.T.P. Lim, J.	ASIAA ASIAA CfA Academia Sinica	Imaging the extended HI envelope around the M51 group	20 line	24	7.5
AV275	Verdes-Montenegro, L Yun, M. Ponman, T.	IAA Massachusetts Birmingham	Atomic gas distribution of very HI-deficient compact groups	20 line	3, 19, 21, 28, 28	33.5
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardiff Bucknell U. Arizona	HI structures of nearby galaxies	20 line	1, 3, 4, 5, 12	16.0
AW622	Walter, F. Carilli, C. Lo, K.Y. Bertoldi, F. Menten, K. Fan, X. Omont, A.	NRAO-Socorro NRAO-Socorro NRAO-CV MPIfr MPIfr Arizona IAP-Paris	Search for molecular gas in quasars at $z > 6$	0.7	4, 5, 14, 25, 29	22.5
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Inmler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	0.7, 1.3, 2, 3.6, 90 TRIGGER	5, 19	3.0
AW631	Weiss, A. Walter, F. Carilli, C.	Bonn Univ. NRAO-Socorro NRAO-Socorro	Search for water emission from $z=3.2$ QSO MG 0751+2716	0.7	19, 27	16.0
AW632	Westmeier, T. Bruns, C. Richter, P.	RAIUB Bonn Univ. IAEF	HI imaging of fragment of high-velocity cloud complex L	20 line	5, 13	12.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW633	Walter, F. Brinks, E. Skillman, E.	NRAO-Socorro Guanajuato Minnesota	Blind search for low-mass HI clouds in M81 group	20 line	19, 25, 27, 29	11.0
AW635	Walter, F. Carilli, C. Bertoldi, F.	NRAO-Socorro NRAO-Socorro MPIfR	Search for HCN & HCO+ from QSO J1148+5251 at z=6.4	0.7	20, 21, 26	30.0
AZ151	Zhao, J.-H. Pegg, J. Lou, Y.-Q. Hong, X.-Y. An, T.	Cfa Cfa Tsinghua Univ. Shanghai Obs. Shanghai Obs.	Monitoring the flux density variations of Sgr A*	0.7, 1.3, 2	25	2.0
BH119	Hardcastle, M. Worrall, D. Pearson, T.	Bristol Bristol Caltech	Proper motion and polarization of jet in CSS quasar 3C 48	20, 6, 3.6 Single antenna VLBI	25	12.0
BL121	Lang, C. Bower, G.	Univ. Iowa Calif.-Berkeley	Search for emission from colliding wind binaries in Arches cluster	3.6 Phased array VLBI	2322	5.0
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 Phased array VLBI	25	12.0
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, 20	6	12.5
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Software General tests			70.0 39.0 9.0 39.0 37.5

The average downtime was 4.9%.

The array was scheduled for 100.0% (731.53 hours)
 537.03 hours (73.41% of time) for astronomical programs
 116.5 hours (15.93% of time) for tests/calibration
 78.0 hours (10.66% of time) for maintenance
 Total 731.53 hours (100.0%) scheduled.

Array was in the DnC configuration from June 1-15

Array was in the D configuration from June 16-20

The following independent proposals shared simultaneous observing time

Projects	Hours
AZ151/BH119	0.43
A0184/BH119	4.0
AC723/BH119	2.0
A0181/BH119	5.0
AR545/BH119	0.1

2004
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Progn	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1093	Blundell, K. Rawlings, S.	Oxford Oxford	High-z FRI quasars	20	10	6.0
AB1114	Beltran, M. Cesaroni, R. Codella, C. Furuya, R. Testi, L.	Arcetri Arcetri CNR-Roma Arcetri Arcetri	Class I methanol masers toward high-mass YSOs in G24.78+0.08	0.7	1	3.5
AC682	Clarke, T. Kempner, J.	Virginia Virginia	Radio-X-ray power relation for cluster radio halos	90	8	6.0
AC696	Clarke, T. Kempner, J.	Virginia Virginia	Radio halos in clusters of galaxies	20	29	5.0
AC706	Clarke, T. Sarazin, C.	Virginia Virginia	Polarimetric and spectral-index study of cluster Abell 520	90	2	6.5
AC709	Chaves, T. Irwin, J.	NCRA NCRA	HI in four edge-on spiral galaxies	20 line	3, 7, 8, 9	40.5
AC711	Clarke, T. Sarazin, C. Blanton, E.	Virginia Virginia Virginia	Spectral-index study of cluster Abell 115	90	15	6.5
AC729	Cool, R. Dale, D. Bloom, S.D.	Univ. Arizona Univ. of Wyoming Hampden-Sydney	Spectral energy distributions of possible gamma-ray blazars	1.3, 2, 3.6, 6	20	4.0
AC736	Chung, A. vanGorkom, J. Bureau, M. Koribalski, B.	Columbia Columbia Columbia ATNF	Kinematic study of spirals with counter-rotating gas	20 line	31	5.0
AC739	Claussen, M. Marvel, Kevin Wilking, B. Wooten, H.A.	NRAO-Socorro AAS UMSL NRAO-CV	Confirmation and Position of a Weak Water maser (Target of Opportunity)	1.3	3	0.5
AD498	DeLaney, T. Rudnick, L. Sankrit, R. Blair, W. Petre, R. Harrus, I.	Minnesota Minnesota John Hopkins Johns Hopkins NASA-GSFC NASA-GSFC	Proper motions within Kepler's supernova remnant	6, 20	6, 8	9.0
AE151	Emonts, B. Morganti, R. vanderHulst, J. Oosterloo, T. Tadhunter, C. vanMoorseel, G.	Kapteyn ASTRON Kapteyn NFRA Sheffield NRAO-Socorro	HI observations of radio galaxies	20 line	4	4.0
AF405	Feretti, L. Orru, E. Brunetti, G. Giovannini, G. Girardi, M. Govoni, F.	Bologna IRA-Bologna Bologna Bologna Trieste Bologna	Spectral indices of radio halos in clusters A2219 and A2744	90	14	8.0
AG639	Govoni, F. Markevitch, M. Feretti, L. Giovannini, G.	Bologna Cfa Bologna Bologna	Radio halos in merging and non-merging galaxy clusters	20	5	3.0
AG658	Gaensler, B. Brogan, C. Kassim, N. Lazio, T.J. Gelfand, J.	Cfa Hawaii-IFA NRL NRL Cfa	90cm survey of the inner galaxy	90	9, 10	14.0
AH836	Hunter, D. Elmegreen, B. Brinks, E. Westpfahl, D. Nordgren, T. Wilcots, E. McIntyre, V. Ostlin, G.	Lowell Obs. IBM Guanajuato NMIMT Redlands U. Wisconsin Sydney U. Uppsala	HI observations of normal irregular galaxies: Sextans	20 line	14	5.5
AH847	Humphreys, E.M.L. Reid, M. Greenhill, L.J. Moran, J. Argon, A.	Onsala Cfa Cfa Cfa Cfa	Monitoring of water maser spectrum and jet continuum of NGC 4258	1.3, 3.6 line	21	3.0
AK563	Kenney, J. van Gorkom, J. Vollmer, B. Chung, A.	Yale University Columbia MPIfr Columbia	Virgo cluster, a Laboratory for studying galaxy evolution	20 line	4, 13	21.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	27, 31	5.5
AK578	Kannappan, S. Matthews, L. Bash, F.	Univ. of Texas NRAO-CV Univ. of Texas	HI imaging of SO disks and their environments	20 line	14, 16	17.0
AL617	Law, C. Yusef-Zadeh, F. Cotton, W.D. Maddalena, R. Roberts, D.	Northwestern Northwestern NRAO-CV NRAO-GB Northwestern	The Galactic Center lobe	6, 20	27, 31	4.0
AL620	Levy, L. Rose, J. vanGorkom, J.	UNC UNC Columbia	HI structure and kinematics of galaxies in Pegasus I cluster	20 line	1, 3, 6, 7, 17	37.0
AL625	Lang, C. Figer, D. Najarro, F.	Univ. Iowa STScI CSIC	Structure and spectra of luminous blue variable stars	0.7, 1.3, 3.6	29, 29, 30	20.5
AM788	Mundell, C. Wilson, A. Schinnerer, E. Wilcots, E. Ulvestad, J.	John Moores Maryland NRAO-Socorro Wisconsin NRAO-Socorro	HI imaging survey of Seyfert galaxies	20 line	2	7.0
AM790	Matthews, L. Bureau, M.	NRAO-CV Columbia	HI structure and kinematics of edge-on spiral UGC 10043	20 line	2, 6	16.5
AM793	Monnier, J.D. Greenhill, L.J. Tuthill, P.G. Danchi, W.	Michigan Cfa Sydney U. NASA-GSFC	Continuum monitoring of colliding wind binary WR 112	3.6	22	1.5
AM800	Miller, E. Bregman, J.N.	Michigan Michigan	HI mass of high velocity clouds in nearby spiral galaxies	20 line	29, 31	10.0
AO179	Osten, R.A. Hawley, S. Bastian, T.	NRAO-CV Washington-St. Louis NRAO-CV	Radio emission from nearby brown dwarfs	3.6	2, 3, 9, 13, 17	12.5
AO182	Omar, A. Dwarakanath, K.S.	Raman Inst. Raman Inst.	HI search around HI deficient galaxies in Eridanus group	20 line	30	4.0
AO184	Osten, R. Hawley, S.L. Bastian, T. Reid, I.N.	NRAO-CV Washington NRAO-CV STScI	Continuum emission from nearby cool stars and brown dwarfs	3.6	...	65.5
AR523	Rupen, M. Dhawan, V. Mioduszewski, A.J. Ribo, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Barcelona	X-ray binaries, transients and related sources	0.7, 1.3, 2, 3.6, 6, 20	3, 5, 10, 13, 14	8.0
AR535	Ribo, M. Mirabel, I.F. Rodriguez, J. Hannikainen, D.	Barcelona Saclay ISDC Switzerland Helsinki	VLA/INTEGRAL/RXTE monitoring of GRS1915+105	3.6, 20	13	4.0
AR536	Rudnick, L. Delain, K.	Minnesota Minnesota	Structures and spectral indices of WISH sources	20, 90	28, 29	9.5
AR545	Rupen, M. Mioduszewski, A.J. Dhawan, V.	NRAO-Socorro NRAO-Socorro NRAO-Socorro	Monitoring of X-ray binaries etc.	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	17, 19, 21, 26, 30	8.0
AR547	Roberts, M. Brogan, C.L.	Stanford Univ. Hawaii-IFA	90cm imaging of the x-ray discovered SNR G7.4-1.4	90	27	6.0
AR548	Rodriguez-Rico, C.A. Goss, M. Zhao, J.-H. Viallefond, F. Turner, J. Mohan, N.R. Gomez, Y.	UNAM NRAO-Socorro Cfa Paris Obs. Calif.-Los Angeles IAP-Paris UNAM	H53alpha study of supernebula in NGC5253	0.7 line	30	2.5
AR549	Rho, J. Goss, M. Green, A.	Caltech NRAO-Socorro Sydney U.	Candidate SNR discovered by Spitzer	6, 20 EXPLORE	23	7.0
AS787	Schinnerer, E. Mundell, C. Garcia-Burillo, S. Combes, F. Ulvestad, J.	NRAO-Socorro John Moores Obs. National Paris Obs. NRAO-Socorro	Further HI imaging of CO selected galaxies	20 line	10	11.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS791	Sakelliou, I. Giovannini, G. Feretti, L. Ponnan, T.	Birmingham Bologna Bologna Birmingham	Imaging the candidate radio halo in Abell 399	20	7	2.5
AS793	Schreyer, K. Linz, H. Hofner, P. Araya, E. Stecklum, B.	Jena Tautenburg NMIMT Puerto Rico Thuringian	Molecules and dust in disk candidate AFGL490	0.7 line	6, 9	7.5
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	1, 2, 12, 20, 29	7.0
AS800	Sjouwerman, L. Messineo, M. Habing, H. Honma, M. Imai, H.	NRAO-Socorro Leiden Leiden NAOJ Kagoshima	Monitoring circumstellar SiO masers near Sgr A*	0.7 line	26	2.0
AV272	VanTrung, D. Lim, J.	Academia Sinica Academia Sinica	Cyanopolyynes in carbon-rich stellar envelopes	0.7, 1.3 line	28, 30	7.5
AW618	Wilcots, E.M. Prescott, M.	Wisconsin Wisconsin	Dynamics of Magellanic spirals NGC 4618 & NGC 3664	20 line	15, 16	20.0
AW621	Walter, F. Skillman, E. Brinks, E.	NRAO-Socorro Minnesota Guajalato	HI observations of transition type dwarfs in M81 group	20 line	1, 1	11.6
AW622	Walter, F. Carilli, C. Lo, K.Y. Bertoldi, F. Menten, K. Fan, X. Omont, A.	NRAO-Socorro NRAO-Socorro NRAO-CV MPIfR MPIfR Arizona IAP-Paris	Search for molecular gas in quasars at $z > 6$	0.7	17, 18	10.0
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	0.7, 90 TRIGGER	1, 2, 2, 12	5.5
AY146	Yun, M. Scoville, N.	Massachusetts Caltech	Hydrogen recombination line in starburst+AGN systems	3.6 line	22	9.0
AZ143	Zhao, J.-H. Herrnstein, R.M. Goss, M. Bower, G. Pegg, J.	Cfa Columbia NRAO-Socorro Calif.-Berkeley Cfa	Monitoring quasi-periodic oscillations of SgrA*	0.7, 1.3, 2	16	2.0
AZ149	Zapata, L. Rodriguez, L. Ho, P.	Cfa UNAM Cfa	Radio spectra of massive protostars	1.3, 3.6	17	5.0
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	21	4.0
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 Phased array VLBI	18	12.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
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, 20 Phased array VLBI	25	12.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Polarization Calibrator Monitoring Software General tests			40.5 33.5 40.0 12.0 30.0 21.5

The average downtime was 4.8%.

The array was scheduled for 100.0% (744.0 hours)
 562.0 hours (75.54% of time) for astronomical programs
 118.5 hours (15.93% of time) for tests/calibration
 63.5 hours (8.53% of time) for maintenance
 Total 745.1 hours (100.0%) scheduled.

Array was in the C configuration from May 1 - 17

Array was being re-configured from May 18-28

Array was in the DnC configuration from May 29-31

The following independent proposals shared simultaneous observing time

Projects Hours

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1097	Bietenholz, M. Keohane, J.W. Chen, J. Massenburg, S.	York U. NASA-GSFC North Carolina North Carolina	Expansion of 3C58 supernova remnant	20	19	3.5
AB1112	Becker, R. Helfand, D. White, R. Giveon, U.	Calif.-Davis Columbia STScI Calif.-Davis	Completing a Milky Way survey at 5 GHz	6	17, 28	9.5
AB1115	Butler, B. Gurwell, M.A. Perley, R. Readhead, A.C.S.	NRAO-Socorro CfA NRAO-Socorro Caltech	Determining the effective bulk dielectric constant of Mars from 6cm to 7mm	0.7,1.3, 2,3.5,6	6,15	11.0
AC669	Castelletti, G. Brogan, C. Dubner, G. Kassim, N.	IAFE NRAO-Socorro IAFE NRL	Low frequency observations toward the W44	90, 400	15	4.0
AC681	Cannon, J.M. Skillman, E.D.	Minnesota Minnesota	Continuum emission in the low-metallicity galaxy I Zw 18	3.6	20	5.5
AC699	Cohen, A. Feretti, L. Kassim, N. Orru, E. Lazio, J. Lane, W.	NRL Bologna NRL Bologna NRL NRL	Cluster halos and relics from 74-MHz survey	20	12	4.0
AC718	Chyzy, K. Soida, M. Bomans, D. Beck, R.	Jagiellonian Jagiellonian Bochum MPIfR	Polarimetry of stripped Virgo Cluster spiral NGC 4569	20	6	8.0
AC723	Chung, A. Bureau, M. vanGorkom, J. Koribalski, B.	Columbia Columbia Columbia ATNF	HI kinematics of spirals with counter-rotating ionized gas	20 line	11, 16	9.0
AC724	Chambers, K.C. McGrath, E.	IfA IfA	Luminosity dependence of high redshift cut-off of the millijansky radio source population	3.5	2	2.25
AD485	Dolag, K. Govoni, F. Readhead, T. Schindler, S. Feretti, L.	Padova Bologna Caltech Univ. Innsbruck Bologna	Magnetic fields in clusters of galaxies	3.6	6, 11, 12, 16	19.5
AD497	Dalcanton, J. Rosolowsky, E. Tavarez, M. Hibbard, J.	Washington Calif.-Berkeley Univ. of Michigan NRAO-CV	HI structure and kinematics of edge-on late-type disk galaxies	20 line	2, 3, 4, 20	25.5
AE151	Emonts, B. Morganti, R. vanderHulst, J. Oosterloo, T. Tadhunter, C. vanMoorseel, G.	Kapteyn ASTRON Kapteyn NFRA Sheffield NRAO-Socorro	HI observations of radio galaxies	20 line	19, 23, 23, 24	34.0
AG632	Govoni, F. Murgia, M. Feretti, L. Giovannini, G. Dallacasa, D. Taylor, G.	Bologna Bologna Bologna Bologna NRAO-Socorro	Cluster magnetic fields via radio halos and RMs: A2255	20	18	14.0
AG639	Govoni, F. Markevitch, M. Feretti, L. Giovannini, G.	Bologna CfA Bologna Bologna	Radio halos in merging and non-merging galaxy clusters	20	15	1.0
AH841	Hibbard, J.	NRAO-CV	HI structure and kinematics in merging systems	20 line	21	8.0
AH842	Hofner, P. Linz, H. Araya, E. Kurtz, S.	NMINT Tautenburg Puerto Rico UNAM	Circumstellar emission from protostar IC1396N-VLA2	0.7, 1.3, 3.6	10	12.5
AJ309	Jetha, N. Hardcastle, M. Sakelliou, I.	Birmingham Bristol Birmingham	Structures of jets in wide angle tail radio sources	3.6	26	3.0
AJ312	Jimenez-Serra, I. Martin-Pintado, J. Chandler, C. dePree, C.G. Rodriguez-Franco, A.	CSIC OAN NRAO-Socorro Agnes Scott CSIC	Hot spot near Cep A HW2	0.7 EXPLORE	17	4.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AK563	Kenney, J. van Gorkom, J. Vollmer, B. Chung, A.	Yale University Columbia MPIfR Columbia	Virgo cluster, a Laboratory for studying galaxy evolution	20 line	1, 8, 15, 22, 29	50.5
AK573	Kulkarni, S. Berger, E. Frail, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech	Radio afterglows of GRBs: Progenitors and central engines	All	2	.25
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	12, 22	4.0
AL597	Laing, R.A. Bridle, A.H. Parma, P.	Oxford NRAO-CV Bologna	Spectrum of 3C31 from 74 to 8400 MHz	3.6, 6, 20	25	12.0
AL620	Levy, L. Rose, J. vanGorkom, J.	UNC UNC Columbia	HI structure and kinematics of galaxies in Pegasus I cluster	20 line	26, 27, 29, 30	32.0
AM766	Monnier, J.D. Greenhill, L.J. Tuthill, P.G. Danchi, W.C.	Michigan CfA Sydney U. NASA-GSFC	Monitoring colliding wind binary WR112	3.6	16	1.5
AM788	Mundell, C. Wilson, A. Schinnerer, E. Wilcots, E. Ulvestad, J.	John Moores Maryland NRAO-Socorro Wisconsin NRAO-Socorro	HI imaging survey of Seyfert galaxies	20 line	1, 10, 11	15.0
AM789	Morganti, R. vanGorkom, J. vanBreugel, W. Oosterloo, T.	ASTRON Columbia Lawrence Livermore NFRA	HI observations of Minkowski's object	20 line	2	7.0
AO179	Osten, R.A. Hawley, S. Bastian, T.	NRAO-CV Washington-St. Louis NRAO-CV	Radio emission from nearby brown dwarfs	3.6	5, 7, 9, 12	10.0
AP465	Pillai, T. Wyrowski, F. Thompson, M. Gibb, A.G. Hatchell, J. Beuther, H.	MPIfR MPIfR Kent Maryland MPIfR CfA	Water masers toward massive protostars	1.3 line	8	6.0
AR523	Rupen, M. Dhawan, V. Mioduszewski, A.J. Ribo, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Barcelona	X-ray binaries, transients and related sources	0.7, 1.3, 2, 3.6, 6, 20	...	14.5
AR538	Reipurth, B. Rodriguez, L.	Hawaii UNAM	Survey of multiple, low-mass protostellar systems	0.7	9	7.0
AR539	Reid, M. Menten, K. Xu, Y. Zheng, X.W. Moscadelli, L.	CfA MPIfR Shanghai Obs. Nanjing Cagliari	Parallaxes and proper motions of massive star forming regions	2, 6	2, 3	12.0
AS762	Sokoloski, J.L. Mioduszewski, A. Brocksopp, C. Rupen, M.	CfA NRAO-Socorro MSSL NRAO-Socorro	Monitoring symbiotic binaries during outburst	3.6, 6, 20	25	1.5
AS780	Schinnerer, E. Rupen, M. Kennicutt, R.	NRAO-Socorro NRAO-Socorro Arizona	Spectral-index study of M51 on 100-pc scale	3.6	4, 5	25.0
AS786	Scuderi, S. Markova, N. Puls, J. Stanghellini, C.	Catania Bulgary Sternwarte Noto	Spectra of thermal winds from O stars	0.7, 2, 3.6, 6	4	6.5
AS791	Sakelliou, I. Giovannini, G. Feretti, L. Ponman, T.	Birmingham Bologna Bologna Birmingham	Imaging the candidate radio halo in Abell 399	20	17	4.0
AS793	Schreyer, K. Linz, H. Hofner, P. Araya, E. Stecklum, B.	Jena Tautenburg NMIMT Puerto Rico Thuringian	Molecules and dust in disk candidate AFGL490	0.7 line	18	10.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	6, 15, 18, 27, 30	7.0
AU098	Umana, G. Buemi, C. Trigilio, C. Leto, P.	Noto Noto Noto Noto	Radio spectrum of LBV candidate IRAS 18576+0341	0.7, 1.3, 2, 3.6, 6, 20	18, 20, 22	14.0
AV265	Vogt, C. Clarke, T. Ensslin, T.	MPIA Virginia MPIA	Faraday rotation measure of extended radio sources	20	7, 9, 10	22.0
AV271	VandenBout, P. Carilli, C. Walter, F. Solomon, P. Bertoldi, F. Menten, K. Cox, P. Beelen, A.	NRAO-CV NRAO-Socorro NRAO-Socorro SUNY MPIFR MPIFR IAP-Paris IAP-Paris	Search for HCN in FIR luminous galaxies at z [~] 3	0.7, 1.3 line	16, 17, 28	31.0
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardif Bucknell U. Arizona	HI structures of nearby galaxies	20 line	25, 27	16.0
AW619	Wilcots, E.M. Sanders, W. Doane, N.	Wisconsin Wisconsin Wisconsin	Continuum and HI imaging of NGC 4395	6, 20	23, 24	20.0
AW621	Walter, F. Skillman, E. Brinks, E.	NRAO-Socorro Minnesota Guanajuato	HI observations of transition type dwarfs in M81 group	20 line	30	8.5
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	0.7, 90 TRIGGER	2, 15, 19, 20, 21	5.0
AZ143	Zhao, J.-H. Herrnstein, R.M. Goss, M. Bower, G. Pegg, J.	CfA Columbia NRAO-Socorro Calif.-Berkeley CfA	Monitoring quasi-periodic oscillations of SgrA*	0.7, 1.3, 2	21	2.5
AZ149	Zapata, L. Rodriguez, L. Ho, P.	UNAM UNAM CfA	Radio spectra of massive protostars	1.3, 3.6	1, 4	10.5
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 Single antenna VLBI	23	24.0
BK110	Kondratko, P.T. Greenhill, L. Lovell, J. Kuiper, T. Moran, J. Jauncey, D.	Harvard CfA ATNF JPL CfA ATNF	Imaging the nuclear H ₂ O maser in NGC 3393	1.3 line Phased array VLBI	26	7.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Polarization Calibrator Monitoring Software Standard Field Observation Student observation General tests			34.5 76.0 12.0 34.0 9.0 2.0 41.5

The average downtime was 5.9%.

The array was scheduled for 100.0% (745.1 hours)
559.1 hours (75.0% of time) for astronomical programs
110.0 hours (14.8% of time) for tests/calibration
76.0 hours (10.2% of time) for maintenance
Total 745.1 hours (100.0%) scheduled.

Array was in the C configuration from April 1 - 30

The following independent proposals shared simultaneous observing time

Projects	Hours
BH118/AE151	0.27
BH118/AW619	10.00
BH118/AR523	2.50
BH118/AE151	11.35

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA290	Andre, P. Onishi, Y. Belloche, A. Motte, F.	CEA-Saclay Nagoya University CEA-Saclay CEA-Saclay	Cold protostellar condensations	3.6	11	5.0
AB1112	Becker, R. Helfand, D. White, R. Giveon, U.	Calif.-Davis Columbia STScI Calif.-Davis	Completing a Milky Way survey at 5 GHz	6	13, 18	12.0
AB1117	Bergman, P. Kerschbaum, F. Olofsson, H.	Onsala Vienna Univ. Stockholm Obs.	Circumstellar envelopes of RV Boo and X Her	0.7 line	1, 24	18.5
AC666	Choi, M. Ho, P.T.P. Takakuwa, S.	KAO-TRAO CfA CfA	Density structure of the inner envelope of Class 0 protostars	0.7	27	1.0
AC705	Carilli, C. Walter, F. Bertoldi, F. Menten, K. Lewis, G. Cox, P. Beelen, A. Yun, M. Omont, A.	NRAO-Socorro NRAO-Socorro MPIfR MPIfR Sydney U. IAP-Paris IAP-Paris Massachusetts IAP-Paris	CO emission from most distant lensed quasar	0.7 line	4, 23, 28	22.0
AC707	Codella, C. Beltran, M. Cesaroni, R. Furuya, R. Testi, L.	CNR-Roma Arcetri Arcetri Arcetri Arcetri	Ammonia toward water masers in high-mass starforming regions	1.3	4	6.5
AC712	Croston, J. Hardcastle, M. Birkinshaw, M. Worrall, D.	Bristol Bristol Bristol Bristol	Structure of FR-I radio galaxy NGC 1044	20	19	3.0
AC713	Chen, Y. Zhang, Q.	CfA CfA	Ammonia toward high-mass starforming regions	1.3 line	15	4.0
AC714	Choi, M. Ho, P. Takakuwa, S.	KAO-TRAO CfA CfA	Structure of inner envelope of Class 0 protostars	0.7	2	4.0
AC715	Choi, M. Tatematsu, K.	KAO-TRAO NAOJ	SiO and ammonia in protostellar outflow NGC 1333 IRAS 4A	0.7, 1.3	1, 5	12.0
AC717	Chyzy, K. Bomans, D. Beck, R.	Jagiellonian Bochum MPIfR	Polarimetry of blue compact dwarf IC 10	20	27	6.0
AC724	Chambers, K. McGrath, E.	Hawaii Hawaii-IFA	Structure and spectra of FIRST sources	3.6	18, 20	6.0
AC738	Claussen, M. Wootten, A. Shirley, Y. Marvel, K.	NRAO-Socorro NRAO-CV NRAO-Socorro AAS	New nebula in Orion	1.3, 3.6, 6, 20 line ToO	4	2.5
AD487	Dahlem, M. Brogan, C. Breitschwerdt, D.	CSIRO-Narrabri Hawaii-IFA MPE	Spectral indices in the halo of NGC 891	90	12	3.0
AD494	Dallacasa, D. Stanghellini, C. Tinti, S.	Bologna Noto SISSA-Trieste	Spectra, polarization and structure of high-frequency peakers	0.7, 1.3, 2, 3.6, 6, 20	4, 12, 21	7.0
AD499	Drake, S. Bastian, T. Linsky, J. Osten, R. Wade, G.	USRA-GFSC NRAO-CV Colorado NRAO-CV RMCC	Coordinated polarimetry of MCP star 56 Tau	2, 3.6, 6, 20	1	0.6
AD500	Delaney, T. Rudnick, L.	Minnesota Minnesota	Spectral-index imaging of Cassiopeia A	6, 20	28	9.0
AE151	Emonts, B. Morganti, R. vanderHulst, J. Oosterloo, T. Tadhunter, C. vanMoorsel, G.	Kapteyn ASTRON Kapteyn NFRA Sheffield NRAO-Socorro	HI observations of radio galaxies	20 line	30	5.0
AF406	Feretti, L. Orru, E. Giovannini, G. Lane, W. Kassim, N. Perley, R.	Bologna Bologna Bologna NRL NRL NRAO-Socorro	Spectral indices of giant radio galaxies 3C35 and 3C326	90	21, 24	8.0
AG657	Goto, T.	John Hopkins Univ.	E+A galaxies uniformly selected from SDSS	20	11, 27	4.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AG668	Goss, M. Dubner, G. Giacani, E. Decourchelle, A. Cassam-Chenai, G.	NRAO-Socorro IAFE IAFE CEA-Saclay CEA-Saclay	OH masers toward SNR G347.3-0.5	20 line EXPLORE	11	2.0
AH811	Helfand, D.J. Becker, R.H. White, R.L. Warwick, R.	Columbia Calif.-Davis STScI Leicester	A multi-wavelength image of Milky Way	20	9, 12	12.0
AH837	Henning, P. Massey, P.	Univ. New Mexico Lowell Obs.	HI structure and kinematics in dwarf irregular HIZSS 3	20 line	20, 31	8.5
AJ309	Jetha, N. Hardcastle, M. Sakelliou, I.	Birmingham Bristol Birmingham	Structures of jets in wide angle tail radio sources	3.6	29	4.5
AK563	Kenney, J. van Gorkom, J. Vollmer, B.	Yale University Columbia MPIFR	Virgo cluster, a Laboratory for studying galaxy evolution	20 line	2, 9, 15, 25	40.0
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	5, 6, 19, 22, 29	8.5
AK576	Kellermann, K. Kelly, J. Fomalont, E. Shaver, P. Rosati, P.	NRAO-CV U. Virginia NRAO-CV ESO-Garching MPIE	Deep imaging of Chandra DFS, including HST UDF	20	29	6.0
AK577	Kurtz, S. Hofner, P. Araya, E. Cesaroni, R. Olmí, L. Linz, H.	UNAM NMIMT Puerto Rico Arcetri CNR Tautenburg	Kinematics of molecules in G31.41 hot core	0.7 line	22	4.0
AK578	Kannappan, S. Matthews, L. Bash, F.	Univ. of Texas NRAO-CV Univ. of Texas	HI imaging of SO disks and their environments	20 line	21	5.0
AL604	Laing, R. Parma, P. Bridle, A.H. Fanti, R.	Oxford Bologna NRAO-CV Bologna	Depolarization asymmetry in extragalactic radio sources	6	19, 20	7.0
AL613	Lim, J. Hirano, N. Ohashi, N. Takakuwa, S.	ASIAA ASIAA ASIAA CfA	Dust distribution in binary/multiple protostellar systems	0.7	11, 14, 25, 28	12.5
AL619	Lee, C.W. Gyulbudaghian, A. Anglada, G.	KAO Byurakan IAA	Continuum emission from optical/IR YSO candidates	3.6	27, 27	7.0
AL620	Levy, L. Rose, J. vanGorkom, J.	UNC UNC Columbia	HI structure and kinematics of galaxies in Pegasus I cluster	20 line	2	3.0
AM766	Monnier, J.D. Greenhill, L.J. Tuthill, P.G. Danchi, W.C.	Michigan CfA Sydney U. NASA-GSFC	Monitoring colliding wind binary WR112	3.6	20	1.0
AM786	Massi, F. Felli, M. Cesaroni, R.	Arcetri Arcetri Arcetri	Thermal radio jet in S235 A-B	1.3, 3.6, 6 line	7	7.0
AM788	Mundell, C. Wilson, A. Schinnerer, E. Wilcots, E. Ulvestad, J.	John Moores Maryland NRAO-Socorro Wisconsin NRAO-Socorro	HI imaging survey of Seyfert galaxies	20 line	31	3.0
AN119	Nakanishi, H. Sofue, Y. Onodera, S. Namba, T. Egusa, F. Kohno, K. Kuno, N. Sato, N.	Univ. Tokyo Univ. Tokyo Univ. Tokyo Univ. Tokyo Univ. Tokyo Univ. Tokyo NAOJ NAOJ	HI in Virgo cluster spirals with CO observations	20 line	20, 21, 22	24.0
AO179	Osten, R.A. Hawley, S. Bastian, T.	NRAO-CV Washington-St. Louis NRAO-CV	Radio emission from nearby brown dwarfs	3.6	6, 20, 29	11.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AP477	Perley, R. Vigotti, M. Benn, C. Mack, K.	NRAO-Socorro Bologna RGO-La Palma ASTRON	BAL QSS J1624+38 at z=3.4	2, 3.6 EXPLORE	24	1.0
AR523	Rupen, M. Dhawan, V. Mioduszewski, A.J. Ribo, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Barcelona	X-ray binaries, transients and related sources	0.7, 1.3, 2, 3.6, 6, 20	...	18.0
AR535	Ribo, M. Mirabel, I.F. Rodriguez, J. Hannikainen, D.	Barcelona Saclay ISDC Switzerland Helsinki	VLA/INTEGRAL/RXTE monitoring of GRS1915+105	3.6, 20	23	4.0
AR537	Rodriguez, L. Loinard, L. D'Alessio, P.	UNAM UNAM UNAM	Compact protoplanetary disks around Class 0 protostars	0.7	26	14.0
AR541	Roussel, H. Condon, J. Beck, R. Helou, G.	Saclay NRAO-CV MPIfR IPAC	Imaging candidate and confirmed nascent starbursts	3.6, 6, 20	13, 14	40.0
AR542	Roberts, D.A. Yusef-Zadeh, F. Bower, G. Goldwurm, A.	Northwestern Northwestern Calif.-Berkeley Service d'Astrophys.	Coordinated study of time variability of Sgr A*	0.7, 1.3, 3.6	28, 29, 30, 31	14.0
AS786	Scuderi, S. Markova, N. Puls, J. Stanghellini, C.	Catania Bulgary Sternwarte Noto	Spectra of thermal winds from O stars	0.7, 2, 3.6, 6	1, 8	11.5
AS787	Schinnerer, E. Mundell, C. Garcia-Burillo, S. Combes, F. Ulvestad, J.	NRAO-Socorro John Moores Obs. National Paris Obs. NRAO-Socorro	Further HI imaging of CO selected galaxies	20 line	5, 18, 19	21.0
AS788	Solomon, P. VandenBout, P. Carilli, C.	SUNY NRAO-CV NRAO-Socorro	HCN in SCUBA source SMM14011+02 at z=2.6	1.3 line	26, 27, 29	18.0
AS795	Sandell, G. Wright, M. Goss, M.	NASA-ARC Calif.-Berkeley NRAO-Socorro	Dust emission from accretion disk of protostar NGC 753B S	1.3	19	3.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	6, 24	2.0
AS797	Sewilo, M. Churchwell, E. Goss, W.M. Kurtz, S. Hofner, P.	Wisconsin Wisconsin NRAO-Socorro UNAM NMIMT	RRL spectroscopy of hypercompact HII regions	1.3, 2, 3.6 line	7, 8	14.0
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardiff Bucknell U. Arizona	HI structures of nearby galaxies	20 line	1, 3, 17	18.0
AW617	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J.M. Lewin, W. Pooley, D. Immler, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts	Long term monitoring of radio supernovae	1.3, 2, 3.6, 6, 20	23	2.0
AW620	Walter, F. Carilli, C. Lo, F. Menten, K. Cox, P. Fan, X. Omont, A. Strauss, M.	NRAO-Socorro NRAO-Socorro NRAO-CV MPIfR IAP-Paris Arizona IAP-Paris Princeton	Resolving CO disk in J1148+5251 at z=6.42	0.7 line	6, 7, 10, 11, 12	30.0

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Progrm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW622	Walter, F. Carilli, C. Lo, K.Y. Bertoldi, F. Menten, K. Fan, X. Omont, A.	NRAO-Socorro NRAO-Socorro NRAO-CV MPIFR MPIFR Arizona IAP-Paris	Search for molecular gas in quasars at $z > 6$	0.7	2, 5	15.0
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	0.7, 90 TRIGGER	12, 21	4.0
AW626	Wilkin, F. Loiuard, L.	UNAM UNAM	SiO in the NGC1333 IRAS 2A protostellar outflow	0.7 line	9, 22	8.5
AW628	Willson, R. Holman, G.	Tufts NASA-GSFC	Observations of Solar flares and microflares	3.6, 6	7, 9, 11, 13	16.0
AY149	Yusef-Zadeh, F. Wardle, M. Pound, M. Roberts, D. Cotton, W.D.	Northwestern Macquarie Maryland Northwestern NRAO-CV	Polarimetry of nonthermal features Sgr A-E and F	2, 3.6	19	4.0
AZ143	Zhao, J.-H. Herrnstein, R.M. Goss, M. Bower, G. Pegg, J.	CfA Columbia NRAO-Socorro Calif.-Berkeley CfA	Monitoring quasi-periodic oscillations of SgrA*	0.7, 1.3, 2	14	2.0
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 Single antenna VLBI	10	10.0
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 Phased array VLBI	6	12.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Polarization Calibrator Monitoring Software Student observations General tests		22, 31	37.5 71.5 12.5 34.5 2.5 28.5

The average downtime was 5.2%.

The array was scheduled for 100.0% (744.0 hours)
 572.0 hours (76.9% of time) for astronomical programs
 100.5 hours (13.5% of time) for tests/calibration
 71.5 hours (9.6% of time) for maintenance
 Total 744.0 hours (100.0%) scheduled.

Array was in the C configuration from March 1 - 31

The following independent proposals shared simultaneous observing time

Projects	Hours
BH116/AW605	4.9
BH116/AR523	2.0
BH116/AG668	2.0
BH116/AL613	1.13

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Progrm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA290	Andre, P. Onishi, T. Belloche, A. Motte, F.	CEA-Saclay Nagoya University CEA-Saclay CEA-Saclay	Cold protostellar condensations	3.6	12	2.5
AB1099	Brookes, M. Best, P. Rottgering, H. Peacock, J. Dunlop, J.	Edinburgh Edinburgh Leiden Edinburgh Edinburgh	Spectral indices of sources from EIS-NVSS survey	90	2, 3	12.5
AB1115	Butler, B. Perley, R. Gurwell, M. Readhead, T.	NRAO-Socorro NRAO-Socorro CfA Caltech	The effective bulk dielectric constant of Mars	3.6, 6	1, 23, 27, 28	24.5
AB1122	Birkinshaw, M. Worrall, D. Wilkes, B. Green, P.	Bristol Bristol CfA CfA	Radio counterparts to x-ray sources	3.6	16	15.0
AC682	Clarke, T. Kempner, J.	Virginia Virginia	Radio-X-ray power relation for cluster radio halos	90	13	3.5
AC702	Cannon, J.M. Skillman, E.D.	Minnesota Minnesota	Continuum emission in dwarf starburst galaxies: NGC 625	3.6, 6	7, 8	8.0
AC707	Codella, C. Beltran, M. Cesaroni, R. Furuya, R. Testi, L.	CNR-Roma Arcetri Arcetri Arcetri Arcetri	Ammonia toward water masers in high-mass starforming regions	1.3	22, 27, 28	18.5
AC713	Chen, Y. Zhang, Q.	CfA CfA	Ammonia toward high-mass starforming regions	1.3 line	12, 19	11.0
AC724	Chambers, K. McGrath, E.	Hawaii Hawaii	Structure and spectra of FIRST sources	3.6	3, 14, 16, 20, 26, 28	19.0
AD477	Dubner, G. Castelletti, G. Reynoso, E. Goss, M.	IAFE IAFE IAFE NRAO-Socorro	SNR Puppis A	20	4, 5, 7, 15	9.5
AD485	Dolag, K. Govoni, F. Schindler, S. Feretti, L.	Padova Bologna Univ. Innsbruck Bologna	Magnetic fields in clusters of galaxies	3.6	8	6.0
AD490	Dyer, K. Owen, F.	NRAO-Socorro NRAO-Socorro	Spectral indices of Abell 13 at low frequencies	20, 90	9	5.5
AD491	Demorest, P. Backer, D.	Calif.-Berkeley Calif.-Berkeley	Candidate X-shaped sources from FIRST and NVSS	20	9, 23	11.0
AD493	Dahlem, M. Ehle, M. Lisenfeld, U.	CSIRO-Narrabri ESA-LAEFF IAA	Structure of radio halo in edge-on galaxy NGC 4700	20	10, 11	11.5
AD497	Dalcanton, J. Rosolowsky, E. Tavarez, M. Hibbard, J.	Washington Calif.-Berkeley Univ. of Michigan NRAO-CV	HI structure and kinematics of edge-on late-type disk galaxies	20 line	1, 12	13.0
AD499	Drake, S. Bastian, T. Linsky, J. Osten, R. Wade, G.	USRA-GFSC NRAO-CV Colorado NRAO-CV RMCC	Coordinated radio, x-ray measurements of MCP star 56 Tau	2, 3.6, 6, 20	29	13.0
AF405	Feretti, L. Orru, E. Brunetti, G. Giovannini, G. Girardi, M. Govoni, F.	Bologna Bologna Bologna Bologna Trieste Bologna	Spectral indices of radio halos in clusters A2219 and A2744	90	6, 7, 12	9.5
AG657	Goto, T.	John Hopkins Univ.	E+A galaxies uniformly selected from SDSS	20	10	8.0
AG659	deGregorio, I. Gomez, J.F.	ESA-LAEFF IAA	Water masers in Bok globules	1.3 line	1, 3	4.5
AH811	Helfand, D.J. Becker, R.H. White, R.L. Warwick, R.	Columbia Calif.-Davis STScI Leicester	A multi-wavelength image of Milky Way	20	21	7.0
AH841	Hibbard, J.	NRAO-CV	HI structure and kinematics in merging systems	20 line	6, 13	13.5
AJ309	Jetha, N. Hardcastle, M. Sakelliou, I.	Birmingham Bristol Birmingham	Structures of jets in wide angle tail radio sources	3.6	23	4.0
AK560	Keto, E.	CfA	Continuing accretion in massive star formation	0.7, 1.3 line	14	9.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AK563	Kenney, J. van Gorkom, J. Vollmer, B.	Yale University Columbia MPIfR	Virgo cluster, a Laboratory for studying galaxy evolution	20 line	24	10.0
AK575	Kulkarni, S. Senko, S. Frail, D. Harrison, F. Fox, D. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech Caltech Caltech	Triggered observations of GRB afterglows	0.7, 1.3, 2, 3.6, 6, 20 TRIGGER	...	14.5
AK576	Kellermann, K. Kelly, J. Fomalont, E. Shaver, P. Rosati, P.	NRAO-CV U. Virginia NRAO-CV ESO-Garching MPIE	Deep imaging of Chandra DFS, including HST UDF	20	2, 3, 13, 14, 15, 16	36.0
AK579	Kondratko, P. Greenhill, L. Moran, J.	Harvard CfA CfA	Water maser emission in 5 distant AGN	1.3 line EXPLORE	13	1.0
AL613	Lim, J. Hirano, N. Ohashi, N. Takakuwa, S.	Academia Sinica ASIAA ASIAA CfA	Dust distribution in binary/multiple protostellar systems	0.7	1, 10	5.5
AM766	Monnier, J.D. Greenhill, L.J. Tuthill, P.G. Danchi, W.C.	Michigan CfA Sydney U. NASA	Monitoring colliding wind binary WR112	3.6	13	1.0
AM786	Massi, F. Felli, M. Cesaroni, R.	Arcetri Arcetri Arcetri	Thermal radio jet in S235 A-B	1.3, 3.6, 6 line	26	4.0
AM788	Mundell, C. Wilson, A. Schinnerer, E. Wilcots, E. Ulvestad, J.	John Moores Maryland NRAO-Socorro Wisconsin NRAO-Socorro	HI imaging survey of Seyfert galaxies	20 line	15	6.0
A0179	Osten, R.A. Hawley, S. Bastian, T.	NRAO-CV Washington-St. Louis NRAO-CV	Radio emission from nearby brown dwarfs	3.6	5, 9	13.5
AR523	Rupen, M. Dhawan, V. Mioduszewski, A.J. Ribo, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Barcelona	X-ray binaries, transients and related sources	0.7, 1.3, 2, 3.6, 6, 20	3, 10, 11, 17, 23, 24	12.0
AR536	Rudnick, L. Delain, K.	Minnesota Minnesota	Structures and spectral indices of WISH sources	90	1, 3	12.0
AR540	Ribo, M. Mirabel, I.	Barcelona Saclay	Jet in Galactic x-ray source 4U 1755-338	6, 20	9, 10	9.0
AS762	Sokoloski, J.L. Mioduszewski, A. Brockopp, C. Rupen, M.	CfA NRAO-Socorro MSSL NRAO-Socorro	Monitoring symbiotic binaries during outburst	3.6, 6, 20	7	2.0
AS786	Scuderi, S. Markova, N. Puls, J. Stanghellini, C.	Catania Bulgary Sternwarte Noto	Spectra of thermal winds from O stars	0.7, 2, 3.6, 6	8, 15, 20, 26	24.5
AS787	Schinnerer, E. Mundell, C. Garcia-Burillo, S. Combes, F. Ulvestad, J.	NRAO-Socorro John Moores Obs. National Paris Obs. NRAO-Socorro	Further HI imaging of CO selected galaxies	20 line	21	11.0
AS796	Soderberg, A. Kulkarni, S. Frail, D. Chevalier, R.	Caltech Caltech NRAO-Socorro Virginia	Triggering on further type Ibc SNe	1.3, 3.6, 6, 20 TRIGGER	7, 8, 24	5.5
AT296	Tarchi, A. Brunthaler, A. Menten, K.M.	IRA-Bologna MPIfR MPIfR	Phase reference sources for water megamaser in 3C 403	1.3 EXPLORE	5	1.5
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardif Bucknell U. Arizona	HI structures of nearby galaxies	20 line	3, 22	16.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW622	Walter, F. Carilli, C. Lo, K.Y. Bertoldi, F. Menten, K. Fan, X. Omont, A.	NRAO-Socorro NRAO-Socorro NRAO-CV MPIFR MPIFR Arizona IAP-Paris	Search for molecular gas in quasars at $z > 6$	0.7	23, 26, 26, 27, 28	43.0
AW624	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J. Lewin, W. Pooley, D. Immler, S. Ryder, S.	NRL Marquette Univ. NRAO-Socorro Caltech-IPAC STSci Valencia MIT MIT Massachusetts AAO	Triggered observations of type II SNe	0.7, 1.3, 2, 3.6, 90 TRIGGER	4, 7, 21	5.0
AW629	Willson, R.	Tufts	Observations of trans-equatorial loops on the Sun	20, 90	2, 22, 27	8.0
AY147	Yusef-Zadeh, F. Cotton, W. Law, C.	Northwestern NRAO-CV Northwestern	Continuum survey of Galactic center region	20	6, 7	16.0
AZ143	Zhao, J.-H. Herrnstein, R.M. Goss, M. Bower, G. Pegg, J.	CfA Columbia NRAO-Socorro Calif.-Berkeley CfA	Monitoring quasi-periodic oscillations of SgrA*	0.7, 1.3, 2	13	2.0
AZ148	Zijlstra, A. Kerber, F. vanHoof, P. Pollacco, D. Evans, A. Eyres, S.	Manchester ESO Queen's Belfast RGO Keele Central Lancashire	Radio evolution of Sakurai's object	3.6, 6	5	4.0
BB184	Braatz, J. Greenhill, L. Henkel, C. Moran, J. Wilson, A.	NRAO-GB CfA MPIFR CfA Maryland	Imaging nuclear H ₂ O masers in NGC 4388, NGC 5728 and NGC 6323	1.3	19	3.0
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	3.6, 6 Single antenna VLBI	12, 13	24.0
S50252	Kaaret, P. Corbel, S. Rupen, M.	Columbia CEA-Saclay NRAO-Socorro	Chandra/VLA monitoring of ULX source in NGC 5408	6	9	4.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Polarization Calibrator Monitoring Software Student observation General tests			34.0 62.0 10.0 13.0 27.0 3.5 43.5

The average downtime was 4.8%.

The array was scheduled for 100.0% (696.0 hours)
541.0 hours (77.7% of time) for astronomical programs
93.0 hours (13.4% of time) for tests/calibration
62.0 hours (8.9% of time) for maintenance
Total 696.0 hours (100.0%) scheduled.

Array was in the CnB configuration from February 1 through February 16

Array was being reconfigured from February 17 through February 20

Array was in the C configuration from February 21 through February 29

The following independent proposals shared simultaneous observing time

Projects	Hours
GM52/AD497	3.63
GM52/AK579	1.00
GM52/A2143	2.00
GM52/AM766	1.00
GM52/Software	1.74
GM52/AH841	4.14
GM52/AK560	5.12

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB1108	Berger, E. Kulkarni, S. Frail, D.A.	Caltech Caltech NRAO-Socorro	Gamma-ray burst host galaxies	20	9, 11	16.0
AB1115	Butler, B. Perley, R. Gurwell, M. Readhead, T.	NRAO-Socorro NRAO-Socorro CfA Caltech	The effective bulk dielectric constant of Mars	3.6, 6	31	6.0
AB1123	Briskin, W. Thorsett, S.	NRAO-Socorro Calif.-Santa Cruz	Calibrator search for merging binary pulsar	3.6, 20 EXPLORE	8, 13	2.0
AC681	Cannon, J.M. Skillman, E.D.	Minnesota Minnesota	Continuum emission in the low-metallicity galaxy I Zw 18	3.6, 20	19	9.0
AC696	Clarke, T. Kempner, J.	Virginia Virginia	Radio halos in clusters of galaxies	20	3	1.5
AC697	Cirasuolo, M. Magliocchetti, M. Celotti, A. Danese, L. Cristiani, S.	SISSA-Trieste SISSA-Trieste SISSA-Trieste SISSA-Trieste Padova	Highest-redshift complete quasar sample	20	10, 15, 16	25.0
AC719	Claussen, M. Healy, K. Hester, J.	NRAO-Socorro Arizona State Arizona State	VLBI calibrator search toward the Eagle Nebula	1.3, 3.6	27	1.9
AC728	Cheung, T. Wardle, J.	Brandeis Brandeis	Spectrum of X-ray "jet" in quasar GB 1508+5714	3.6, 6 EXPLORE	2	2.0
AC762	Carilli, C. Bertoldi, F. Menten, K. Walter, F. Cox, P. Omont, A. Fan, X. Strauss, M.	NRAO-Socorro MPIfR MPIfR NRAO-Socorro IAP-Paris IAP-Paris Arizona Princeton	Continuum from QSO J1048+4637 at z=6.23	20 EXPLORE	22, 23	8.0
AD491	Demorest, P. Backer, D.	Calif.-Berkeley Calif.-Berkeley	Candidate X-shaped sources from FIRST and NVSS	6, 20	2	4.0
AD494	Dallacasa, D. Stanghellini, C. Tinti, S.	Bologna Noto SISSA-Trieste	Spectra, polarization and structure of high-frequency peakers	0.7, 1.3, 2, 3.6, 6, 20	22, 26, 27, 28, 30	15.6
AD496	Decin, L. Blommaert, J. Groenewegen, M. Butler, B.	Katholieke Univ. Katholieke Univ. MPIA NRAO-Socorro	Observations of 5 normal late-type stars at 7mm	0.7	25	6.0
AF410	Fender, R. Gallo, E. Merloni, A. Rupen, M.	Amsterdam Amsterdam MPA-Garching NRAO-Socorro	Counterpart to ultraluminous x-ray source in NGC 4244	3.6	27	4.0
AG657	Goto, T.	Johns Hopkins	E+A galaxies uniformly selected from SDSS	20	24, 25, 29, 30	15.0
AH811	Helfand, D.J. Becker, R.H. White, R.L. Warwick, R.	Columbia Calif.-Davis STScI Leicester	A multi-wavelength image of Milky Way	20	10, 12, 15, 16, 17, 18	36.0
AH831	Hardcastle, M.J.	Bristol	Spectral index variations in microquasar GRS 1758-258	20	13	2.5
AH833	Hunter, T. Zhang, Q. Sridharan, T.K.	CfA CfA CfA	Locating the water masers in protocluster IRAS 18317-0757	1.3	8	1.5
AI111	Impey, C. Miller, L. Lopes, A.	Arizona Oxford Oxford	Potential new wide-separation gravitational lenses	3.6	13, 17	5.0
AJ299	Johnson, K. Plante, S.	Wisconsin Laval	Star cluster formation at low metallicities: SBS0335-052	1.3, 2	1, 3, 4, 5, 6	32.5
AK550	Kulkarni, S.R. Berger, E. Soderberg, A.M. Chevalier, R.A.	Caltech Caltech Caltech Virginia	Type Ibc supernovae	1.3, 3.6, 6, 20	13, 24, 26	6.5
AK573	Kulkarni, S. Berger, E. Frail, D.A. Soderberg, A.	Caltech Caltech NRAO-Socorro Caltech	Radio afterglows of GRBs	0.7, 1.3, 2, 3.6, 6, 20	4,7,11,15,21 ,23,25,26,31	10.1
AK579	Kondratko, P. Greenhill, L. Moran, J.	Harvard CfA CfA	Water maser emission in 5 distant AGN	1.3 line EXPLORE	22, 24, 26, 27	9.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AL609	Lang, C. Johnson, K. Goss, M. Rodriguez, L.F.	Univ. Iowa Wisconsin NRAO-Socorro UNAM	Stellar wind sources in Galactic center clusters	1.3, 3.6	22	4.0
AL617	Law, C. Yusef-Zadeh, F. Cotton, W.D. Maddalena, R. Roberts, D.	Northwestern Northwestern NRAO-CV NRAO-GB Northwestern	The Galactic Center lobe	6, 20	30, 31	11.0
AL618	Leone, F. Umana, G. Trigilio, C. Leto, P.	Catania Noto Noto Noto	Radio spectra of magnetic chemically peculiar stars	0.7, 1.3, 2, 6, 20	26, 26	13.5
AM766	Monnier, J.D. Greenhill, L.J. Tuthill, P.G. Danchi, W.C.	Michigan Cfa Sydney U. NASA-GSFC	Monitoring colliding wind binary WR112	3.6	26	1.5
AM772	Mack, K-H. Prieto, M.A. Brunetti, G.	ASTRON MPIA Bologna	Optically detected radio galaxy hot spots	3.6, 6, 20	16	4.0
AM777	Murgia, M. Parma, P. deRuiter, H. Mack, K-H. Fanti, R.	Bologna Bologna Bologna ASTRON Bologna	Spectral index imaging of fossil radio galaxies	3.6, 6, 20	4	2.0
AN107	Neff, S.G. Ulvestad, J.S.	NASA-GSFC NRAO-Socorro	High resolution imaging of the young merger NGC 3395/6	3.6, 6	10	10.0
AO175	Owen, F. Morrison, G. Lonsdale, C. Smith, G. Xu, K.	NRAO-Socorro IPAC Caltech-IPAC Calif.-San Diego Caltech-IPAC	Observations of the SWIRE deep field	20	12, 13	14.0
AO180	Osten, R.A. Bastian, T. Hawley, S.	NRAO-CV NRAO-CV Washington-St. Louis	Spectrum and polarization of brown dwarfs	3.6, 6, 20	24	12.0
AR523	Rupen, M. Dhawan, V. Mioduszewski, A.J. Ribo, M.	NRAO-Socorro NRAO-Socorro NRAO-Socorro Barcelona	X-ray binaries, transients and related sources	0.7, 1.3, 2, 3.6, 6, 20	3,4,6,7,11,1 3,18,22,26-2 8,31	16.0
AS762	Sokoloski, J.L. Mioduszewski, A. Brocksopp, C. Rupen, M.	Cfa NRAO-Socorro MSSL NRAO-Socorro	Monitoring symbiotic binaries during outburst	3.6, 6, 20	6	1.5
AS773	Suarez, O. Gomez, J.F.	ESA-LAEFF IAA	Continuum and H92a study of PN IRAS 17395-0841	3.6 line	11	1.5
AS777	Schinnerer, E. Goss, M. Turner, J. Johnson, K.	NRAO-Socorro NRAO-Socorro Calif.-Los Angeles Wisconsin	Star formation in central 300 pc of IC 342	3.6, 6	17	8.5
AS778	Stockdale, C. Maddox, L. Cowan, J. Pannuti, T. Prestwich, A. Kilgard, R.	NRL Oklahoma Oklahoma MIT Cfa Cfa	Spectral-index study of nearby spiral galaxies	6	15	4.0
AS780	Schinnerer, E. Rupen, M. Kennicutt, R.	NRAO-Socorro NRAO-Socorro Arizona	Spectral-index study of M51 on 100-pc scale	6, 20	1, 4, 8	8.5
AS782	Sewilo, M. Churchwell, E. Goss, M. Kurtz, S. Hofner, P.	Wisconsin Wisconsin NRAO-Socorro UNAM Puerto Rico	Broad radio recombination lines from hypercompact HII regions	0.7 line	19	6.0
AS784	Swaters, R. Verheijen, M. Bershady, M. Andersen, D.	Johns Hopkins Wisconsin Wisconsin MPIA	Kinematics of low surface brightness galaxy DDO 39	20 line	9, 12, 18	27.5
AU096	Ulvestad, J.S. Mathur, S. Fields, D.	NRAO-Socorro Ohio State Ohio State	Narrow-line Seyfert 1 galaxies selected from SDSS	3.6	19	2.0
AV269	VanTrung, D. Lim, J.	Academia Sinica Academia Sinica	Structure and spectral indices in Egg nebula	0.7, 1.3	3, 5	16.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW599	Whysong, D. Antonucci, R. Geller, R.	Calif.-Santa Barbara Calif.-Santa Barbara Calif.-Santa Barbara	Search for Thompson scattering in the intergalactic medium	20	4, 9	16.0
AW605	Walter, F. Brinks, E. de Blok, E. Thornley, M. Kennicutt, R.	NRAO-Socorro Guanajuato Univ. Cardiff Bucknell U. Arizona	HI structures of nearby galaxies	20 line	2, 5, 6, 6, 8	37.5
AW607	Winn, J. Rusin, D. Kochanek, C. Lovell, J. Fassnacht, C. Koopmans, L.	Cfa Cfa Cfa ATNF Calif.-Davis Caltech	Gravitational lens monitoring	3.6	2,8,12,13,19 ,22,27,29	7.0
AW608	Weiler, K.W. Stockdale, C. Sramek, R. Van Dyk, S.D. Panagia, N. Marcaide, J.M. Lewin, W.H.G. Pooley, D. Immler, S.	NRL NRL NRAO-Socorro IPAC STScI Valencia MIT MIT Massachusetts	ToO observations of supernovae	1.3, 2, 3.6, 6, 20, 90	14,21,26	3.6
AW616	Wang, J. Zhang, Q. Wang, Z.	Cfa Cfa Cfa	Atomic gas in galaxy-galaxy merger NGC 6090	20 line	4, 4	4.0
AW617	Weiler, K. Stockdale, C. Sramek, R. VanDyk, S. Panagia, N. Marcaide, J.M. Lewin, W. Pooley, D. Immler, S.	NRL NRL NRAO-Socorro Caltech-IPAC STScI Valencia MIT MIT Massachusetts	Long term monitoring of radio supernovae	1.3, 2, 3.6, 6, 20 w/BC138	28, 30	16.9
AW619	Wilcots, E.M. Sanders, W. Doane, N.	Wisconsin Wisconsin Wisconsin	Continuum and HI imaging of NGC 4395	20	8	9.0
AW620	Walter, F. Carilli, C. Lo, F. Menten, K. Cox, P. Fan, X. Omont, A. Strauss, M.	NRAO-Socorro NRAO-Socorro NRAO-CV MPIfR IAP-Paris Arizona IAP-Paris Princeton	Resolving CO disk in J1148+5251 at z=6.42	0.7 line	3,10,13,15-1 9	48.5
AY148	Young, L. Skillman, E.	NMINT Minnesota	HI structure and kinematics of the Phoenix dwarf galaxy	20 line	23, 24, 25	12.0
AZ143	Zhao, J.-H. Herrnstein, R.M. Goss, M. Bower, G. Pegg, J.	Cfa Cfa NRAO-Socorro Calif.-Berkeley Cfa	Monitoring quasi-periodic oscillations of SgrA*	0.7, 1.3, 2	25	2.0
BC138	Cheung, T. Taylor, G. Wardle, J.	Brandeis NRAO-Socorro Brandeis	Three lobe-dominated quasars with radio/optical hotspots	90 Single antenna VLBI w/baseline, AW617, AG657	29	9.9
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Polarization Calibrator Monitoring New Years Day Software General tests			58.4 43.4 20.1 10.5 16.4 26.0 26.1

The average downtime was 5.65%.

The array was scheduled for 97.8% (729.7 hours)
557.7 hours (74.8% of time) for astronomical programs
102.6 hours (13.7% of time) for tests/calibration
69.4 hours (9.3% of time) for maintenance
Total 729.7 hours (97.8%) scheduled.

Array was in the B configuration from January 1 through January 14

Array was in the CnB configuration from January 15 through January 31

The following independent proposals shared simultaneous observing time

Projects	Hours
AG657/BC138	3.0
AL617/BC138	1.2
AW617/BC138	1.9
Baseline/BC138	3.8