

VLA Utilization Report December 1993

Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AB693	Bastian, T. Nitta, N. Hudson, H. Gary, D. Kiplinger, A.	NRAO-Soc Lockheed Cambridge Caltech Colorado	Solar flare imaging with high time resolution	1.3, 2, 3.6, 6	5	8.0
AC308	Condon, J. Cotton, W. Perley, R.	NRAO-CV NRAO-CV NRAO-Soc	All sky survey	20	2-7,11-14, 17-20,26,27	187.5
AD313	Dickey, J.		Orbiting cores in the Hercules cluster	20 line	26	13.1
AD326	Dahlem, M. Dettmar, R. Hummell, E. Lehnert, M. Heckman, T.	STScI Edinburgh Caltech STScI	Radio continuum of edge-on spiral galaxies with H alpha emission in the halos	6	20, 24	16.0
AF256	Fomalont, E. Kellermann, K. Partridge, B. Windhorst, R.	NRAO-CV NRAO-CV Haverford Arizona State	The radio sky at MICRO-JY levels	3.6	2, 7, 9, 12, 14, 17	44
AG382	Goss, W. Schwarz, U. Dubner, G. Winkler, F.	NRAO-Socorro Groningen/Kapteyn Buenos Aires Middlebury	Search for HI associated with Cas A	20 line	18	2.0
AG398	Green, D. Cowan, J.	NRAO Cambridge Oklahoma	A search for young galactic SNRs	3.6	22, 23, 26, 31	14.0
AH492	Hjellming, R. Gehrz, R. Sequist, E. Taylor, A.	NRAO-Soc Minnesota Toronto Calgary	Image and light curve evolution of the novae Puppis 1991 & Cygni 1992	1.3, 2, 3.6, 6, 20	14, 24	4.0
AH500	Higdon, J. Chigo, F.	NRAO-soc NRAO-GB	HI observations at NGC2793	20 line	16	6.0
AK331	Kobulnicky, C. Dickey, J. Conti, P.	Minnesota Minnesota Colorado	Spectral index mapping of Wolf-Rayet galaxies	2	20, 22	5.0
AK339	Koo, B. Ho, P.	Seoul National U. Cfa	Ammonia line observations of protostellar object IRAS 19550+3248	1.3 line	19	10.0
AK340	Kenny, H. Taylor, A. Sequist, E.	CMC Kingston Calgary Toronto	Outburst flux measurements of the stellar jet source, CH Cygni	2, 6, 20	24	1.0
AK358	Kulkarni, S. Vasisht, G. Frail, D.	Caltech Caltech NRAO-Socorro	Monitoring SGR 1806-20 = SNR 10.0-0.3	3.6, 6, 20	6, 13, 23	4.7
AM402	Marcha, M. Browne, I. Laing, R.	Manchester Manchester RGO Cambridge	Polarization structure and flow speed in low luminosity jets	6	12	2.0
AM431	Martin-Pintado, J. Gaumem, R. Johnston, K.	Yebes Obs. NRL NRL	The physical properties of the molecular outflow in CrI 618	1.3 line	10	10.0
A0117	Olling, R. Rupen, M. van Gorkom, J.	Columbia NRAO-Soc Columbia	The edge-on dwarf galaxy NGC 5023	20 line	13	4.0
AP264	Puche, D. Westpfahl, D.	Cfa NMIMT	High resolution HI study of IZW18	20 line	21	3.0
AP270	Pedlar, A. Kukula, M. Mundell, C. Meaburn, J. Baum, S.	Manchester Manchester Manchester Manchester STScI	Neutral hydrogen in NGC 5033 & NGC 4051	20 line	6	6.0
AR295	Rawlings, S. Saunders, R. Cotter, G. Lacy, M. Baldwin, J.	Oxford U. Cambridge Cambridge Oxford U. Cambridge	Giant radiogalaxies at high redshift	3.6, 6	22	18.5
AR296	Knapp, J. Rupen, M.	Princeton NRAO-Soc	The velocity dispersion of the HI in face-on galaxies	20 line	22	6.5
AS333	Sramek, R. Weiler, K. van der Hulst, J. Panagia, N.	NRAO-Soc NRL Groningen/Kapteyn STScI	Statistical properties of radio supernovae	2, 6	5, 19, 20	5.5
AS515	Schimnovich, D. van Gorkom, J.	Columbia Columbia	HI observations of shell galaxies	20 line	10, 29, 30	10.6
AS517	Strauss, M. Szomoru, A. van Gorkom, J.	Princeton Groningen/Kapteyn Columbia	HI observations of galaxies in the Bootes void	20 line	29, 30	30.1

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AU055	Uson, J. Goss, J.	NRAO-Soc NRAO-Soc	Observations of 3He in the galactic HII regions W3 and W43	3.6 line	3, 4, 10 11, 18	46.0
AV206	van Moorsel, G. Oosterloo, I.	NRAO-Soc Bologna	HI observations of two compact groups of galaxies	20 line	9	7.0
AW346	Wilcots, E. Miller, B. Hodge, P.	NRAO-Soc Washington Washington	NGC 2537 and Ho I	6	2	4.0
AW350	Wills, B. Shastri, P.	Texas Calif., Berkley	Core variability in lobe-dominated quasars	3.6	24	1.5
AW358	Westpfahl, D. Puche, D.	NMIMT CfA	High resolution HI mapping of NGC 3938	20 line	11	4.0
AW362	White, S.	Maryland	The stellar activity cycle on active stars	3.6, 6, 20	1, 18, 21	5.3
AY055	Yun, M. McIntyre, V.	Caltech CfA	Galaxy-scale gaseous collisions and ring galaxies	20 line	23	3.9
	Staff	NRAO				53.5
						53.5

Average downtime: 3.5%

The array was scheduled for

Astronomical Programs: 501.9 hours (67.3% of the time)

Scheduled: 110.9 hours (14.9% of time)

Maintenance: 96.3 hours (12.9% of time)

Total Scheduled: 709.1 hours (95.1%)

The array was in the D configuration from

December 1 through December 31

Total number of astronomical programs: 33

There were no independent proposals sharing simultaneous observing time for the period.

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Progrm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA161	Adler, D. Wakker, B. Westpfahl, D.	NRAO-Soc Illinois NMIMT	ISM in NGC 628	20	26	5.0
AA163	Adler, D. Wakker, B. Westpfahl, D.	NRAO-Soc Illinois NMIMT	Star formation, spiral structure, and HI in NGC 628	20 line	13	4.0
AA165	Anantharamaiah, K. Zhao, J. Goss, W. Viallefond, F. van Gorkom, J.	Raman Institute Cfa NRAO-Soc Meudon Columbia	Galaxies detected in recombination lines	1.3, 2	20	4.0
AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Illinois	Monitoring 0957+561 A,B	3.6	12	2.0
AB633	Burns, J. Perley, R. Gisler, G.	NMSU NRAO-Soc LANL	Imaging the cluster radio halo in Abell 2255	20, 90	14	6.0
AB686	Braun, R. Walterbos, R. Henning, T.	NFRA NMSU UNM	The periphery of Abell 1383	20 line	11, 13	12.0
AB693	Bastian, T. Nitta, N. Hudson, H. Gary, D. Kiplinger, A.	NRAO-Soc Lockheed Cambridge Caltech Colorado	Solar flare imaging with high time resolution	1.3, 2, 3.6, 6	26, 28	16.0
AC308	Condon, J. Cotton, W. Perley, R.	NRAO-CV NRAO-CV NRAO-Soc	All sky survey	20	1,2,6,9,11, 14,15,16,18, 22,27,28,29	143.0
AC330	Clegg, A. Johnston, K.	NRL NRL	Short time scale variability of interstellar OH masers	20 line w/GZ010	8, 15, 20	15
AC366	Cox, A. Sparke, L. van Moorsel, G.	Wisconsin Wisconsin NRAO-Soc	Radio continuum emission in polar-ring galaxies	6	4, 26	3.0
AD324	De Pree, C. Goss, W. Mehring, D.	North Carolina NRAO-Soc Illinois	H92alpha and H66alpha radio recombination line obs of W49	1.3, 3.6 line	13	10.0
ADHOC1	Burke, B.		ADHOC		6, 22	3.1
ADHOC2	Kesteven, M.	NRAO-Socorro	ADHOC		10	2.3
ADHOC3	Ivjsen,		ADHOC		19	1.0
ADHOC4	Frail, D.	NRAO-Socorro	ADHOC		21	1.0
ADHOC5	White,		ADHOC		21	3.0
ADHOC6	Condon, J.	NRAO-Socorro	ADHOC		24	1.2
AF251	Felli, M. Tofani, G. Goldsmith, P. Olmi, L.	Arcetri, Italy Arcetri, Italy NAIC NAIC	IR cluster in Cepheus B-S155 interface	2, 3.6	1	2.0
AF256	Fomalont, E. Kellermann, K. Partridge, B. Windhorst, R.	NRAO-CV NRAO-CV Haverford Arizona State	The radio sky at MICRO-JY levels	3.6	2,9,16,18,24	36.5
AF258	Florkowski, D. Johnston, K. de Vegt, C.	USNO NRL Hamberger Sternwarte	Reference sources near radio stars	6 w/GZ010	20	1.5
AK343	Kobulnicky, C. Dickey, J. Conti, P.	Minnesota Minnesota Colorado	HI spectral mapping of Wolf-Rayet galaxies	20 line w/GZ010	16, 20	12.0
AK358	Kulkarni, S. Vasisht, G. Frail, D.	Caltech Caltech NRAO-Soc	Monitoring SGR 1806-20 = SNR 10.0-0.3	3.6, 6, 20	1, 5, 7, 18, 26, 29	7.6
AL294	Leone, F. Trigilio, C. Umaña, G.	Catania, Italy Noto, Italy Noto, Italy	Testing the proposed models for radio emission from CP stars	1.3, 2, 6, 20	13	3.0
AL295	Lim, J.	Caltech	dM4e flare star MR Persei	3.6, 6	6	4.5
AM416	Mundy, L. McMullin, J.	Maryland Maryland	Puzzling spectral index of emission from YSO NGC 1333 IRS 4A	1.3 w/move/op, AdHoc	5,10	4.5
AM419	Mirabel, I. Duc, P. Brinks, E.	CNRS, France CNRS, France NRAO-Soc	HI in the merger arp 105	20 line	8	7.0
AM423	Mundy, L. Grossman, A. White, S.	Maryland Maryland Maryland	T Tauri star RY Tau	1.3, 2, 3.6, 6	20	2.8
AM424	Moore, E. Gottesman, S.	Boston Florida	HI observations of the barred spiral galaxy NGC3319	20 line	15	3.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AN062	Nordgren, T. Chengalur, J. Salpeter, E. Terzian, Y.	Cornell Cornell Cornell Cornell	HI morphology and orbital kinematics of galaxy pairs	20 line	4, 5	15.0
A0117	Olling, R. Rupen, M. van Gorkom, J.	Columbia NRAO-Soc Columbia	The edge-on dwarf galaxy NGC 5023	20 line	1	4.0
AP274	Pantoja, C. Altschuler, D. Eder, J.	Oklahoma NAIC NAIC	21cm spectroscopy of an optically obscured galaxy	20 line	27	2.1
AP275	Phookun, B. Mundy, L.	Maryland Maryland	D-array observations of NGC3162, an interacting one-armed spiral	20 line	27	5.0
AR294	Riley, J. Alexander, P. Pooley, G. Scheuer, P. Laing, R.	MRAO Cambridge MRAO Cambridge MRAO Cambridge MRAO Cambridge RGO Cambridge	A study of FR II radio galaxies of intermediate power	3.6	26, 29	3.6
AR296	Rupen, M. Knapp, J. Gunn, J. Olling, R. van Gorkom, J.	NRAO-Soc Princeton Princeton Columbia Columbia	The velocity dispersion of the HI in face-on galaxies	20 line	7, 8	20.0
AR304	Rudolph, A. de Geus, E. Brand, J. Wouterloot, J.	NASA/Ames Maryland Arcetri, Italy Cologne	Outer galaxy massive star forming clouds	3.6	3	6.0
AS333	Sramek, R. Weiler, K. van der Hulst, J. Panagia, N.	NRAO-Soc NRL Groningen/Kapteyn STScI	Statistical properties of radio supernovae	2, 6	1, 12, 19, 28	7.5
AS510	Swain, M. Bridle, A. Baum, S.	Rochester NRAO-CV STScI	Additional 8GHz imaging of radio galaxy 3C353	3.6	15	2.0
AT154	Thorsett, S. Taylor, J. McKinnon, M. Hankins, T. Stinebring, D.	Caltech Princeton NMIMT NMIMT Oberlin	Timing fast pulsars at the VLA	6, 20, 90	12	11.0
AU055	Uson, J. Goss, W.	NRAO-Soc NRAO-Soc	Observations of 3He in the galactic HII region W43	3.6 line	27	9.0
AW343	Westpfahl, D. Puche, D.	NMIMT CfA	Is dark matter absent from the smallest dwarf galaxies?	20 line	26	3.0
AW350	Wills, B. Shastri, P.	Texas Calif.-Berkeley	Core variability in lobe-dominated quasars	3.6	14, 20	3.0
AW355	Wood, D. Strom, K. Strom, S.	NRAO-Soc Massachusetts Massachusetts	HI Photodissociation regions in L1641	20 line	10	5.0
AW370	White, S. Gary, D. Kundu, M.	Maryland Caltech Maryland	Large-scale features in the sun's atmosphere	6, 20, 90	6, 7	22.0
AZ065	van Zee, L. Broeils, A. Haynes, M. Salzer, J.	Cornell Cornell Cornell Wesleyan	HI mapping of extreme M(H)/L Galaxies	20 line	1	11.0
BP008	Porcas, R. Garrett, M. Wilkinson, P. Walsh, D.	MPIfr, Bonn NRAL NRAL NRAL	0957+561A,B:A direct test for 10 6 solr mass black holes	3.6 Phased array VLBI	21	8.0
GL009	Lestrade, J. Phillips, R. Jones, D. Preston, R.	JPL/Meudon Haystack JPL JPL	Astrometric observatons of stars to tie in HIPPARCOS	3.6 Phased array VLBI	21	16.2
GM015	Marcaide, J. Elosegui, P. Alberdi, A. Guirado, J. Ratner, M. Shapiro, I.I.	Valencia (Spain) CfA IAP, Granada IAP, Granada CfA CfA	Absolute kinematics of radio source components: 0716+71	3.6 Phased array VLBI	19	12.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
GMO17	Marcaide, J. Ros, E. Alberdi, A. Guirado, J. Rius, A. Shapiro, P. Whitney, A. Perez, E. Krichbaum, A. Schilizzi, G. Elosegui, P. Mantovani, F. Rogers, A.E.E. Witzel, A. Davis, R. de Bruyn, G. Diamond, P. Jones, D. Preston, R. Trigilio, C. Zensus, J.	Valencia Spain Valencia Spain IAA Granada IAA Granada IAA Granada Cfa Haystack Canarias, Spain MPIfR NFRA Cfa IdR, Italy Haystack MPIfR Manchester NFRA NRAO-Soc JPL JPL IdR, Italy NRAO-Soc	SN1993J: Distance to M81	3.6 Phased array VLBI	22	14.4
GR004	Rupen, M. Bartel, N. Conway, J. Beasley, A. Sramek, R.	NRAO-SOC Cfa NRAO-Soc NRAO-Soc NRAO-Soc	1993J in M81	2,3,6,6,4 Phased Array VLBI	4	19.0
GZ010	Zensus, J. Leppanen, K. Unwin, S Wehrle, A.	NRAO-Soc NRAO-Soc Caltech JPL/IPAC	Evoluton of the parsec-scale structure of 3C345	3.6 Single 19 antenna VLBI w/AK343, AC330, AF258	20	12.3
	Staff	NRAO	Maintenance Move/Operations Operations Software Standard field General tests Holiday			51.4 2.0 39.9 37.4 6.0 48.2 25.8

Average downtime: 4.3%

The array was scheduled for

Astronomical Programs: 512.3 hours (71.0% of the time)
 Scheduled: 95.1 hours (13.2 % of time)
 Maintenance: 88.8 hours (12.3% of time)
 Total Scheduled: 696.2 hours (96.4 %)

The array was: D configuration November 1 through November 30

Total number of astronomical programs: 46

The following independent proposals shared simultaneous observing time
 (15.9 hours total simultaneous observing):

Projects	Hours
AC330/GZ010	5.0
AF258/GZ010	1.3
AK343/GZ010	6.0
AM416/ADHOC	1.6
AM416	2.0
/Move/Op	

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA158	Abada-Simon, M. Lecacheux, A. Dulk, G. Bastian, T. Bookbinder, J.	Paris Obs Paris Obs Colorado NRAO-Soc CFA	Variations of AE Aquarii at cm, mm, and submm Wavelengths	1.3, 2, 3.6, 6	17, 18	10.0
AB682	Beasley, A. Bastian, T. Ball, L. Wu, K.	NRAO-Soc NRAO-Soc Sydney Sydney	A Survey of Magnetic Cataclysmic Variables	3.6	4, 14, 25	6.5
AB688	Bosma, A. Freeman, K. Athanassoula, E.	Marseille Obs Mt. Stromlo Marseille Obs	Low Surface Brightness Giant Spiral Galaxies	20 line	7, 16	12.5
AB690	Broeils, A. Giovannelli, R. Haynes, M.	Cornell Cornell Cornell	Invisible Galaxies in a Low Latitude Field	20 line	27	6.0
AC308	Condon, J. Cotton, W. Perley, R.	NRAO-CV NRAO-CV NRAO-Socorro	All Sky Survey	20	1-24 w/move/op	268.9
AC348	Westpfahl, D. Carilli, C. Tongue, T. Holdaway, M. Zhao, J. Rupen, M.	NMIMT NRAO-Socorro NMIMT NRAO-Soc CFA NRAO-Soc	Polarimetry of Barred Spiral NGC1365	6, 20	2	4.0
AC363	Curiel, S. Rodríguez, L. Eiroa, C. Canto, J.	Smithsonian Mexico/UNAM Madrid Obs Mexico/UNAM	Radio Continuum Emission Associated with YSO's	3.6	24	2.0
AD304	Dahlem, M.	STScI	Star-Forming Regions in the Inner Disk of NGC 1792	20	24	2.0
AF245	Frail, D. Kulkarni, S. Yusef-Zadeh, F.	NRAO-Socorro Caltech Northwestern	Determining the Proper Motions of Non-Thermal Cometary Nebulae	3.6	2	4.0
AF256	Fomalont, E. Kellermann, K. Partridge, B. Windhorst, R.	NRAO-CV NRAO-CV Haverford Arizona State	The Radio Sky at MICRO-JY Levels	3.6	30, 31	14.0
AG393	Guedel, M. Schmitt, J. Benz, A. Elias, N.	Colorado-JILA MPE Garching ETH Zurich USNO	HD 129333: An Analog of the Infant Sun	3.6,6,20	7-12,14,15	11.3
AH493	Holdaway, M. Carilli, C. Rupen, M. Kollgaard, R.	NRAO-Soc NRAO-Soc NRAO-Soc Penn State	Cen A	90	24	5.0
AH496	Hollis, J. Van Buren, D. Vogel, S.	NASA-GSFC Caltech Maryland	Probing the Large-Scale Dynamical Features of PN Abell 35	6	2	6.0
AH497	Hartmann, L. Rodríguez, L. Anglada, G.	CFA Mexico/UNAM Barcelona	Radio Continuum from New FU Orionis Stars	3.6	22, 31	4.0
AI049	Ishizuki, S. Ishii, T.	Tohoku U. Tohoku U.	Star Formation in Starburst and Hotspot Galaxies	20	27	3.0
AJ232	Jackson, J. Kraemer, K.	Boston Boston	NH3 in the NGC6334 Molecular Cloud Complex	1.3 line	15,16,19,21	23.9
AK327	Kaufman, M. Brinks, E. Elmegreen, B. Elmegreen, D. Struck-Marcell, C.	Ohio State NRAO-Soc IBM Vassar Iowa State	Ocular & Caustic Galaxies Undergoing Close Tidal Encounters	20 line	30, 31	8.0
AK340	Kenny, H. Taylor, A. Sequist, E.	CMC, Kingston Calgary Toronto	Outburst Flux Measurements of the Stellar Jet Source, CH Cygni	2, 6, 20	7	1.0
AK343	Kobulnicky, C. Dickey, J. Conti, P.	Minnesota Minnesota Colorado	HI Spectral Mapping of Wolf-Rayet Galaxies	20 line	12	7.0
AL302	Lis, D. Menten, K. Carlstrom, J. Zylka, R.	Caltech CFA Caltech MPIfR	Search for Compact HII Regions and H2O Masers in the GC Dust Ridge	1.3 line	10	5.0
AL304	Levine, D. Taylor, G. Morris, M. Schulman, E.	UCLA/IPAC Caltech UCLA Michigan	Search for H2O Masers Toward the Galactic Center	1.3 line	4, 8, 9	15.1

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AL305	Lim, J. White, S.	Caltech Maryland	Search for Radio Emission from Precataclysmic Binaries	3.6	1	10.0
AL309	Lang, K. Willson, R. Kile, J.	Tuffs Tufts Tufts	VLA-Yohkoh SXT Observations of Dynamic Structures on the Sun	20, 90	19, 21	6.3
AM426	McMahon, P. van Gorkom, J. Richter, O. Ferguson, H.	MIT Columbia STScI Cambridge	A Complete Volume Limited HI Survey of the Hydra I Cluster	20 line	8,9,10,14,15 ,17	30.0
AM428	Mirabel, F. Rodriguez, L.	CNRS, France Mexico/UNAM	Central Source and Jets in GRS 1758-258	6	3, 24	6.0
AP255	Puche, D. Westpfahl, D.	CfA NMIMT	HI Mapping of Grand Design Spirals M51 & M83	20 line	23	3.0
AP276	Pedlar, A. Mundell, C.	Manchester Manchester	Continuum & HI Observations of NGC3281	20 line	5	6.5
AR291	Roberts, D. Crutcher, R. Troland, T. Goss, W.	Illinois Illinois Kentucky NRAO-Soc	HI Zeeman Observations of W3	20 line	30	8.0
AR297	Roberts, D. Crutcher, R. Troland, T.	Illinois Illinois Kentucky	VLA HI Zeeman Observations of NGC 6334 & M17	20 line	22, 23	12.0
AS333	Sramek, R. Weiler, K. van der Hulst, J. Panagia, N.	NRAO-Soc NRL Kapteyn/Groningen STScI	Statistical Properties of Radio Supernovae	2, 6	4, 10, 17, 25	8.0
AS503	Strom, R. Johnston, H. Verbunt, F. Aschenbach, B.	NFRA Utrecht Utrecht MPE, Munich	An X-Ray Knot Associated with the Vela SNR	6, 20	24	4.5
AS515	Schiminovich, D. van Gorkom, J.	Columbia Columbia	HI Observations of Shell Galaxies	20 line	11	4.0
AS518	Stocke, J. Carilli, C. Urry, M. Donahue, M. Shull, J.	Colorado NRAO-Soc STScI DTM/Carnegie Colorado	HI Imaging of a Low Redshift LY Alpha Forest Cloud	20 line	1	9.0
AS520	Saunders, W. Rowan-Robinson, M. Maddox, S. Pedlar, A. Smoker, J.	Oxford U. Queen Mary Cambridge Manchester Manchester	IRAS Galaxies Behind the Milky Way	6	2, 3-w/tests	6.0
AY060	Yusef-Zadeh, F. Roberts, D. Zhao, J.H. Goss, M.	Northwestern Illinois CfA NRAO-Soc	RRL Measurements of Non-Circular Moving Gas at the Galactic Center		11	5.0
AZ063	Zijlstra, A. Pottasch, S.	ESO Groningen/Kapteyn	Resolving the Optical-Radio Flux Discrepancy of Planetary Nebulae	3.6, 6	1	2.5
BG020	Gwinn, C. Greenhill, L. Antonucci, R. Barvainis, R.	Calif., Santa Barbar CfA Calif., Santa Barbar Haystack	Weighing a Hidden Seyfert Nucleus - NGC 1068	1.3 Phased array VLBI	25	8.0
BT007	Thakkar, D. Pearson, T. Readhead, A. Vermeulen, R.	Caltech CalTech Caltech Caltech	Nuclei of Low-Luminosity Radio Galaxies	6.18 Phased array VLBI	28	24.1

Average downtime: 3.9%

The array was scheduled for

Astronomical Programs: 567.7 hours (76.0% of the time)
Scheduled: 93.5 hours (12.5 % of time)
Maintenance: 85.9 hours (11.5% of time)
Total Scheduled: 747.1 hours (100.0 %)

The array was: DnC configuration October 1 to October 26
D configuration October 26 to October 31

Total number of astronomical programs: 38

The following independent proposals shared simultaneous observing time
(10.7 hours total simultaneous observing):

Projects	Hours
AC308/move/op	4.1
AC308/move/op	2.9
AS520/tests	1.9
baseline/tests	1.8

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA123	Andre, P.		Monitoring the Circular Polarization from the Magnetic Star S1 in the p OPH Cloud		22	0.5
AA164	Andre, P. Bontemps, S. Russell, S. Wootten, H. Ward-Thompson, D. Saraceno, P. Knee, L. Nordh, L. Cernicharo, J.	CNRS, France CNRS, France SCP, Dublin NRAO-CV Cambridge IAS, Frascati Chalmers, Onsala Stockholm Obs Yebebs Obs	Youngest low-mass protostars	3.6	21, 22,23,26,27, 30 w/G10, GL13	24.0
AB682	Beasley, A. Bastian, T. Ball, L. Wu, K.	NRAO-Soc NRAO-Soc Sydney Sydney	A survey of magnetic cataclysmic variables	3.6	4, 16, 17	6.5
AB687	Benaglia, P. Goss, W. Schwarz, U. Kalberla, P.	NRAO/LaPlata Arg NRAO-Soc Groningen/Kapteyn MPIR, Bonn	HI absorption distance to Tycho's SNR (3C10)	20 line	20 w/GL013	6.0
AB689	Barvainis, R. Lonsdale, C. Antonucci, R.	Haystack Haystack Calif., Santa Barbar	Radio Sources in Radio-Quiet quasars	20,6,3.6,2	4,8	24.8
AB691	Brown, A. Dempsey, R. Linsky, J. Guedel, M. Stewart, R.	Colorado STScI Colorado Colorado/JILA Sydney	Chromospheric spectroscopy of the RS CVN binary HR1099	3.6, 6, 20 Subarray	13,14,15,16, 17 w/GM14,GM18, GJ6	47.0
AC308	Condon, J. Cotton, W. Perley, R.	NRAO-CV NRAO-CV NRAO-Soc	All sky survey	20	7,19,21,23, 26,27,29 w/GL13,GZ10	79.3
AC361	Claussen, M. Goss, W. Beasley, A. Cram, L. Green, A.	NRAO-Soc NRAO-Soc NRAO-Soc Sydney Sydney	H γ 2alpha recombination line in Sagittarius E	3.6 line	16	6.1
AC364	Claussen, M. Wilking, B.	NRAO-Soc Missouri	Search for water masers in the Bipolar outflow source L1551	1.3 line	3	7.0
AD316	Dubner, G. Giacani, E. Goss, W. Winkler, F.	Buenos Aires Buenos Aires NRAO-Soc Middlebury College	4 small-diameter galactic SNRs	6	11 w/GZ10	4.0
AD325	Drake, S. Linsky, J. Simon, T. Stewart, R. Slee, B.	NASA/GFSC Colorado Hawaii Sydney Sydney	Survey of unconfirmed Parks stellar detections	3.6, 6	30	1.5
ADHOC1	Lestrade, J-F		ADHOC1		10,13	1.4
ADHOC2	Rush, B.		ADHOC2		14,20	1.3
ADHOC3	Lonsdale, C.		ADHOC3		25	0.8
ADHOC4	Bastian, T.		ADHOC4		28,30	6.9
AF249	Frail, D. Whiteoak, J. Goss, W.	NRAO-Soc Sydney NRAO-Soc	Radio imaging around young pulsars	20, 90	14	4.0
AG393	Guedel, M. Schmitt, J. Benz, A. Elias, N.	Colorado/JILA MPE, Garching ETH, Zurich USNO	Rotational modulation in HD 129333, an analog of the infant sun w/move/op, GZ10,GL13	3.6,6,20	1-4,6,9-11, 14-17,19-21, 28 w/move/op, GZ10,GL13	21.9
AG399	Goss, W. Wood, D. Benaglia, P.	NRAO-Soc NRAO-Soc IAR, Argentina	Recombination line observation of the Sickle and Pistol	3.6 line	25, 27	8.5
AH492	Hjellming, R. Gehrz, R. Sequist, E. Taylor, A.	NRAO-Soc Minnesota Toronto Calgary	Image and light curve evolution of the novae Puppis 1991 & Cygni 1992	1.3, 2, 3.6, 6, 20	4,15,28,29	7.5
AI049	Ishizuki, S. Ishii, T.	Tohoku U. Tohoku U.	Star formation in starburst and hotspot galaxies	20	14	2.5
AK346	Kulkarni, S. Frail, D. Kassim, N. Murakami, T.	Caltech NRAO-Soc NRL ISAS, Japan	Radio counterparts of soft gamma ray bursters	20, 90	13	6.9
AL150	Lestrade, J.		Statistical Properties of RSCVn stars		6,24	2.0

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Progrm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS333	Sramek, R. Weiler, K. van Dyk, S. Panagia, N.	NRAO-Soc NRL NASA Ames STScI	Statistical properties of radio supernovae	2, 6	11,18,19,26 w/G210	6.5
AS511	Seaquist, E. Iverson, R.	Toronto Toronto	Symbiotic behavior among OH/IR color mimics	3.6	3	15.0
AS515	Schimminovich, D. van Gorkom, J.	Columbia Columbia	HI observations of shell galaxies	20 line	21 w/G210	5.0
AS516	Shaver, P. Wall, J. Kellermann, K.	ESO Cambridge NRAO-CV	Accurate positions of unidentified flat-spectrum parkes sources		9,10,27	2.8
AS518	Stoche, J. Carilli, C. Urry, M. Donahue, M. Shull, J.	Colorado NRAO-Soc DTM/Carnegie Colorado	HI imaging of a low redshift LY alpha fores cloud	20 line	30	5.0
AT143	Sevenster, M. Habing, H. Blommaert, J. Dejonghe, H. Rich, M.	Leiden Leiden Leiden Utrecht Columbia	OH/IR stars: 1612 MHz survey of galactic plane	20 line	1, 2, 9	17.1
AT154	Thorsett, S. Taylor, J. McKinnon, M. Hankins, T. Stinebring, D.	Caltech Princeton NMIMT NMIMT Oberlin College	Timing fast pulsars at the VLA	20, 90	6	11.0
AY059	Yusef-Zadeh, F. Mehring, D.	Northwestern Chicago	A search for weak H2O masers at the galactic centre	1.3 line	19	3.0
AZ063	Zijlstra, A. Pottasch, S.	ESO Garching Groningen/Kapteyn	Resolving the optical-radio flux discrepancy of planetary nebulae	3.6, 6	25, 30	6.0
BG011	Greenhill, L. Moran, J. Reid, M. Argon, A.	CfA CfA CfA CfA	Refining the water maser proper motions in M33/IC 133	1.3 phased array VLBI	20, 22	31.3
BM010	Molnar, L. Mutel, R.	Iowa Iowa	Interstellar scattering in Cygnus X	6 phased array VLBI	5	13.9
BR017	Ratner, M. Bartel, N. Lebach, D. Lestrade, J. Shapiro, I.	CfA CfA CfA JPL CfA	Astrometry of HR 5110 for the NASA/Stanford gravity probe-B	6 phased array VLBI	13	6.1
BZ008	Zhang, Y. Marscher, A.	Boston Boston	The gamma bright quasar PKS 0528+134	3.6 phased array VLBI	24	16.0
GC013	Campbell, R. Corey, B. Shapiro, I. Falco, E.	CfA Haystack CfA CfA	Gravitationally lensed images of 0957+561	6 phased array VLBI	10	16.3
GG021	Giovannini, G. Cotton, W. Feretti, L. Venturi, T. Lara, L.	Bologna NRAO-CV Bologna Bologna IAP, Granada	3 low luminosity (FR-I) radiogalaxies	6 phased array VLBI	11 w/G210	19.0
GJ006	Junor, B. Biretta, J.	STScI	Evolution of M87 nuclear jet on light-month scales	1.3 phased array VLBI	17 w/AB691	15.0
GL009	Lestrade, J. Phillips, R. Jones, D. Preston, R.	Meudon Haystack JPL JPL	Astrometric observations of stars to tie in HIPPARCOS	3.6 phased array VLBI	24	15.3
GL013	Leppanen, K. Valtaoja, E. Schilizzi, R. Pilbratt, G.	NRAO-Soc Finland NFRA ESTEC	Sample of 15 AGN	1.3 single antenna VLBI	19,21 w/AC308, AB687,AG393, tests AA164, baselines	35.5
GM014	Massi, M. Paredes, J. Estalella, R. Diego, F.	Arcetri, Italy Barcelona Barcelona Arcetri, Italy	Radio periodic star LSI +61 303	6 phased array VLBI	8, 12 w/AB691	24.3
GM017	Marcaide, J. Ros, E. Alberdi, A. Guirado, J. Rius, A.	IAP, Valencia IAP, Valencia IAA, Granada IAA, Granada IAA, Granada	SN1993J: Distance to M81	1.3	18, 25 phased array VLBI	24.9

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
GM018	Massi, M. Drago, F. Paredes, J. Estalella, R.	Arcetri, Italy Firenze Barcelona Barcelona	Core-halo structure in UX Arietis	6	10, 13, 14 phased array VLBI w/AB691	19.5
GR004	Rupen, M. Altunin, V. Bartel, N. Jones, D. Conway, J. Beasley, A. Popelar, J. Sramek, R. Romney, J. Bietenholz, M. Weiler, K. van Dyk, S. Graham, D. Panagia, N. Cannon, W. Davis, R. Rius, A. Titus, M. Venturi, T.	NRAO-Soc JPL CfA JPL NRAO-Soc NRAO-Soc Ottawa NRAO-Soc NRAO-Soc York U. NRL NRL MPIfR STSci ICS NRAL DSN Haystack IAR	1993J in M81	1.3,6 single antenna VLBI	18	18.4
GZ010	Zensus, J. Leppanen, K. Unwin, S. Wehrle, A.	NRAO-Soc NRAO-Soc CalTech JPL	Evolution of the parsec-scale structure of 3C345	1.3, 6 antenna VLBI single	11, 21 w/tests, baselines, AS333,AG393, AD316,GG21	24.0
	Staff	NRAO	Maintenance Move/Operations Operations Software General Test			55.8 35.8 47.8 16.2 26.4

The average downtime was 5.7%

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569.9 hours (76.4% of time) for astronomical programs

88.9 hours (11.9 % of time) for sched.

87.3 hours (11.7% of time) for maintenance

Total 746.1 hours (100.0 %) scheduled

The array was in the C configuration from August 1 to August 30

DnC configuration from August 30 to September 13

Total number of astronomical programs was 68

The following independent proposals shared simultaneous observing time (49.9 hours total simultaneous observing):

Projects	Hours
AB626/tests	1.5
AC347/tests	2.7
AF227/tests	4.2
AG394/move/op	14.1
AL292/tests	3.0
AL298/tests	5.2
AR294/move/op	6.0
AS333/move/op	0.5
AS479/move/op	1.0
AS509/move/op	2.3
AW346/move/op	5.0
Software/move/op	3.7
Software/tests	0.7

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA160	Anderson, M. Ekers, R. Danziger, I. White, G.	Sydney ATNF Epping ESO Sydney	Radio ID content in selected regions of ROSAT all sky X-ray survey	6	14	8.0
AA163	Adler, D. Wakker, B. Westpfahl, D.	NRAO-SOC Illinois NMIMT	Star formation, spiral structure, and HI in NGC 628	20 line	1	8.0
AB414	Becker, R. White, R.	Calif. Davis STScI	Monitoring radio stars HD193793 and P Cygni	2, 6	16	1.5
AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Illinois	Monitoring 0957+561 A,B		26	2.0
AB626	Beck, S. Ho, P. Turner, J.	Tel Aviv U. CfA Calif., L.A.	NGC 5253	2	12	1.5
AB677	Borkowski, K. White, S. Harrington, J.	Maryland Maryland Maryland	Radio emission from the hydrogen-deficient planetary nebula Abell 30	3.6	15	8.0
AB679	Berkhuijsen, E. Beck, R. Hummel, E.	MPIfR, Bonn MPIfR, Bonn Royal Obs	Structure of the magnetic field in the central region of M31.	20	25, 29	25.0
AB680	Brouillet, N. Baudry, A.	Bordeaux Obs Bordeaux Obs	Mapping the H2O masers in M82	1.3 line	29	10.0
AB682	Beasley, A. Bastian, T. Ball, L. Wu, K.	NRAO-SOC NRAO-SOC Sydney Sydney	Survey of Cataclysmic Variables	3.6	29	3.5
AC308	CONDON, JJ Condon, JJ CONDON, JJ CONDON, JJ	NRAO-CV NRAO-CV NRAO-CV NRAO-CV	Sky Maps	20	30	2.1
AC345	Condon, J. Helou, G. Sanders, D. Soifer, B.	NRAO-CV IPAC, Pasadena Hawaii Caltech	The extended IRAS bright galaxy sample	20	1	12.0
AC347	Cordes, J. Lundgren, S. Romani, R.	Cornell Cornell Stanford	A ram-pressure driven pulsar nebula	3.6	9 w/tests	4.0
AC356	Claussen, M.	NRAO-Soc	Survey of 25 GHz methanol maser emission	1.3,3.6,6 line	6, 7	7.0
AC362	Claussen, M.	NRAO-Soc.	Search for HzO Maser Emission in Shocked Gas Toward the Supernova Remnant IC 443		31	6.0
AC371	Chernin, L. Masson, C.	CfA CfA	Water maser in L1448	K	7	1.0
AD290	Drake, S. White, N. Florkowski, D. Linsky, J.	USRA-GFSC NASA-GSFC USNO Colorado/JILA	ROSAT/VLA observations of 4 Algol binaries	3.6, 20	1	2.0
AD314	Doyle, L. Vikramsingh, R.	NASA-Ames NASA-Ames	Stellar mass loss in young sun-type stars	1.3, 2, 3.6, 6, 20	9, 13, 18 20 w/tests	10.0
AD315	Duric, N. Goss, W. Viallefond, F. Lacey, C. Gordon, S.	New Mexico NRAO-SOC Meudon New Mexico CFA	Survey of SNRs in 9 nearby galaxies	6 line	13	6.0
AD321	de Pater, I. Grossman, A.	Calif.-Berkeley Maryland	Jupiter's South Equatorial Belt	2	13	6.0
AD325	Drake, S. Linsky, J. Simon, T. Stewart, R. Slee, B.	NASA/GFSC Colorado Hawaii ATNF/Sydney ATNF/Sydney	Survey of unconfirmed Parks stellar detections		11, 20	6.8
AE093	Engels, D.	Hamburg Germany	Double QSO HE1104-1805	6	16	1.0
AF227	Fey, A. Gaume, R. Claussen, M. Nedoluha, G. Johnston, K.	NRL NRL NRAO-SOC NRL NRL	"Cometary" HII regions	2	12 w/tests	5.0
AG326	Giovannini, G. Feretti, L. Venturi, T. Wehrle, A.	IdR, Bologna IdR, Bologna IdR, Bologna IPAC	Radio Galaxy 3C338	3.6	29	1
AG394	Guedel, M.	JILA/Colorado	An X-ray flux limited sample of main-sequence f stars	w/move/op	30	16.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AG401	Gaume, R.	NRL	Outburst in NGC 2024 IRS 2	1.3, 2, 3.6, 6	12	2.0
AK328	Kliem, B. Krueger, A. Mazets, E. Aschwanden, M.	AI/Potsdam AI/Potsdam IPTI/Russia Maryland	Fine structures in impulsive solar bursts	20, 90	16, 20, 26	12.0
AK331	Kobulnicky, C. Dickey, J. Conti, P.	Minnesota Minnesota Colorado	Spectral index mapping of Wolf-Rayet galaxies	3.6, 6	1, 3	7.0
AK333	Kraemer, K. Jackson, J.	Boston Boston	High resolution ammonia observations in W49	3.6, 6	17	12.0
AK337	Kim, K.	Chungnam U.	Six cluster halo sources	20, 90	16	8.0
AK338	Kenny, H. Taylor, A.	CMC/Kingston Calgary	CH Cygni outburst		19	1.5
AL292	Langston, G.	NRAO-CV	Gravitational lens MG1654+1346	3.6, 6	9	2.0
AL293	Lang, K. Willson, R. Kile, J. Bogod, V. Gelfreikh, G.	Tufts Tufts Tufts Pulkovo Obs Pulkovo Obs	Nonthermal sources in solar active regions	2, 3.6, 6, 20, 90	19, 22	10.5
AL298	Leone, F. Trigilio, C. Umana, G.	Catania IR/Italy IR/Italy	Monitoring magnetic chemically peculiar stars		5 w/tests	7.0
AM402	Marcha, M. Browne, I. Laing, R.	Manchester Manchester Cambridge	Polarization structure and flow speed in low luminosity jets	6, 20	2	10.5
AM406	Moriarty-Schieven, Rogers, C. Dewdney, P.	DRAO Penticton DRAO Penticton DRAO Penticton	HI in the NGC 7023 photodissociation region	20 line	4	3.0
AM412	Muhleman, D. Grossman, A. Butler, B. Slade, M.	Caltech Maryland Caltech JPL	Determination of Titans spin with radar	3.6 line	4-7, 11-15	66.6
AM413	Marcha, M. Browne, I. Patnaik, A. Wrobel, J.	Manchester Manchester Manchester NRAO-SOC	Structure of flat spectrum radio galaxies	20	15, 20	8.5
AM415	Mirabel, F. Rodriguez, L.	CNRS, France Mexico/UNAM	Proper motions and variability in the lobes of 1E1740.7-2942	6	23, 26, 27	12.0
AM418	McIntyre, V. Puche, D. Huchra, J.	CFA CFA CFA	Star formation & internal kinematics of irregular galaxies	20 line	9	10.5
AN061	Norris, R. Sramek, R.	Sydney NRAO-SOC	Extended emission of Arp 220	3.6	28	12.0
AO116	Oren, A. Wolfe, A.	Calif., San Diego Calif., San Diego	Faraday rotation survey of the halo of M31	6, 20	26, 27	24.0
AP264	Puche, D. Westpfahl, D.	CFA NMIMT	High resolution HI study of IZW18	20 line	27	8.0
AP265	Prieto, A. Freudling, W.	MPIPA/Munich ESP, Muenchen	HI in the Seyfert galaxy NGC 5252	20 line	2	8.0
AP266	Peng, Y. Vogel, S.	Maryland Maryland	W33A: A pre-outflow massive star forming core	1.3, 3.6, 6	15	6.0
AP270	O'Dea, C. Pedlar, A. Kukula, M. Mundell, C. Meaburn, J. Baum, S.	STScI Manchester Manchester Manchester Manchester STScI	Neutral hydrogen in NGC 5033 & NGC 4051	20 line	7, 8	24.4
AR268	Rodriguez, L. Curiel, S.	UNAM Mexico Cfa	Radio monitoring of the outburst in SVS13	3.6, 6	24	3.0
AR294	Riley, J. Alexander, P. Pooley, G. Scheuer, P. Laing, R.	Cambridge Cambridge Cambridge Cambridge Cambridge	A study of FR II radio galaxies of intermediate power	3.6	3 w/move/op	10.0
AR299	Rhee, G.	Nevada	Radio galaxies in high redshift clusters	6	28, 30	6.0
AS333	Sramek, R.	NRAO-Soc.	Statistical Properties of Radio Supernovae	w/move/op	3,6,10,12,17 23,26,31	12.3
AS479	Swain, M. Bridle, A. Baum, S.	Rochester NRAO-CV STScI	3C353	3.6	1 w/move/op	1.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS484	Salter, C. Junor, B. Bignell, C. Saikia, D.	NAIC NRAO-SOC NRAO-SOC TIFR	Optically-thick planetary nebulae	6	22	1.5
AS491	Sokolov, K.	IRA/Ukraine	Sample of extended extragalactic radio sources	20, 90	20, 21	20.0
AS508	Stoche, J. Perlman, E.	Colorado Colorado	Unusual clustering of radio sources near the globular cluster M10	3.6, 6, 20	22	3.0
AS509	Saunders, W. Rowan-Robinson, M. Maddox, S. Pedlar, A. Smoker, J.	Oxford U. Queen Mary Oxford U. Manchester Manchester	IRAS galaxy candidates behind the Milky Way	20	14, 19, 23 w/move/op	9.5
AT143	te Lintel Hekkert, P	Mt. Stromio Observat	MHz survey of the galactic plane	18	31	7.0
AT146	Torrelles, J. Rodriguez, L. Ho, P. Canto, J.	IAP, Granada Mexico/UNAM Cfa Mexico/UNAM	Protoplanetary disk associated with Cepheus A-HW2	1.3 line	10, 19	20.0
AV206	van Moorsel, G. Oosterloo, T.	NRAO-SOC Bologna	HI observations of two compact groups of galaxies	20 line	19	5.0
AW230	Wrobel, J. Unger, S.	NRAO-SOC Cambridge	International monitoring of the Seyfert NGC 5548		15, 31	2.0
AW340	Womble, D. Dickey, J. Kazes, I. Carilli, C.	Calif., San Diego Minnesota Paris Obs NRAO-SOC	Quasar galaxy pair 0248+430	20 line	23	12.0
AW343	Westpfahl, D. Puche, D.	NMIMT Cfa	Is dark matter absent from the smallest dwarf galaxies?	20 line	12	5.0
AW346	Wilcots, E. Miller, B. Hodge, P.	NRAO-SOC Washington Washington	NGC 2537 and Ho I	6, 20	6 w/move/op	9.5
AW352	Wennmacher, L. Stark, R. Dickey, J.	Bonn U. Leiden Minnesota	A very compact, high density interstellar cloud	20 line	1	4.0
AW355	Wood, D. Strom, K. Strom, S.	NRAO-SOC Massachusetts Massachusetts	HI Photodissociation regions in L1641	line	14	8.0
AW358	Westpfahl, D. Puche, D.	NMIMT Cfa	High resolution HI mapping of NGC 3938	20 line	22	8.0
AW359	Wilcots, E. Hodge, P. Miller, B.	NRAO-SOC Washington Washington	High resolution HI study of IC 10	20 line	17	8.0
AW360	Wilcots, E. Hodge, P. Miller, B.	NRAO-SOC Washington Washington	High resolution continuum study of IC 10	3.6, 6, 20	8	6.0
AW361	White, S. Aschwanden, M.	Maryland Maryland	The magnetic field configuration in the solar corona	20, 90	5, 8, 17	12.5
AZ062	Zhou, S. Evans, N. Mundy, L.	Illinois Texas Maryland	Probing the protostellar disk in NGC 2071	1.3 line	10	10.0
	Staff	NRAO	Maintenance Move/Operations Operations Software Standard Field			46.0 32.6 31.9 43.5 6.0 31.5

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AS509/move/op	2.3
AW346/move/op	5.0
Software/move/op	3.7
Software/tests	0.7

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA161	Adler, D. Wakker, B. Westpfahl, D.	NRAO-SOC Illinois NMIMT	ISM in NGC 628	20	27	12.0
AB414	Becker, R. White, R.	Calif.-Davis STScI	Monitoring radio stars HD193793 and P Cygni	2, 6	10	2.0
AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Brandies	Monitoring 0957+561AB	6	25	2.0
AB678	Broeils, A. Haynes, M. Baumgardt, K.	Cornell Cornell Cornell	HI study of the internal kinematics of Sa galaxies	20 line	10, 12	16.0
AC355	Chengalur, J. Lu, N.	Cornell IPAC, Pasadena	NGC 5403: A spiral galaxy with an unusual warped HI disk	20 line	22	5.5
AC359	Chambers, K.	Hawaii	Molecular gas in high redshift radio galaxies	1.3 line	17, 18	24.0
AD HOC	Frail, D.	NRAO-Soc.			7, 21	4.4
AD311	Dwarakanath, K. Owen, F.	NRAO-SOC NRAO-SOC	Radio emission from blue galaxies	20	29	7.5
AD314	Doyle, L. Vikramsingh, R.	NASA-Ames NASA-Ames	Stellar mass loss in young sun-type stars	1.3, 2, 3.6, 6, 20	1, 12	6.5
AD320	Drake, S. Bookbinder, J. Linsky, J.	USRA-GFSC CfA Colorado	A survey of the 'non-magnetic' CP stars	3.6	11, 21	6.5
ADHOC	Perley, R.				6	0.3
AE091	Escalante, V. Gomez, Y. Rodriguez, L.	Mexico/UNAM Mexico/UNAM Mexico/UNAM	Atomic hydrogen in selected planetary nebulae w/tests	20 line	15 w/tests	10.0
AF241	Feretti, L. Andernach, H. Giovannini, G. Perley, R.	Bologna Canarias Spain Bologna NRAO-SOC	Jets in 3C31 & 3C449	3.6, 6	27	6.5
AG382	Goss, W. Schwarz, U. Dubner, G. Winkler, F.	NRAO-SOC Groningen/Kapteyn Buenos Aires Middlebury	Search for HI associated with Cas A	20 line	30	4.6
AG384	Grossman, A. Muhleman, D.	Maryland Caltech	Saturn's atmosphere w/tests	1.3, 2	2 w/tests	17.5
AH437	Hewitt, J. Turner, E. Chen, G. Angelus, A.	MIT Princeton MIT MIT	Monitoring the "Einstein Ring" gravitation lens MG1131+0456	6	15	2.5
AH489	Habbal, S. Esser, R. Karovska, M. Gonzalez, R.	CfA CfA CfA CfA	Study of the source region of the solar wind	2, 3.6, 6, 20	22, 23	17.5
AH492	Hjellming, R. Gehrz, R. Seaquist, E. Taylor, A.	NRAO-SOC Minnesota Toronto Calgary	Image and light curve evolution of the novae Puppis 1991 & Cygni 1992	1.3, 2, 3.6, 6, 20	26, 27	4.0
A1045	Impey, C. Bothun, C. van Gorkom, J.	Arizona Oregon Columbia	HI from gas-rich low surface brightness galaxies	20 line	24, 25	33.0
A1047	Impey, C. Foltz, C. Hooper, E.	Arizona MMTO Arizona	The radio properties of optically selected QSOs	3.6	24	6.2
AK319	Katz-Stone, D. Rudnick, L.	Minnesota Minnesota	Three frequency mapping of FR 1 radiogalaxy 3C449	6, 20	24	13.0
AK327	Kaufman, M. Brinks, E. Elmegreen, B. Elmegreen, D. Struck-Marcell, C.	Ohio State NRAO-Socorro IBM Vassar Iowa State	Ocular & caustic galaxies undergoing close tidal encounters	20 line	11, 16	24.0
AK332	Kassim, N. Burns, J. O. Perley, R. Erickson, W. Dwarakanath, K. Taylor, G.	NRL NEW MEXICO NRAO-SOC Maryland NRAO-SOC CalTech	Observations of extended radio sources at 74 MHz	90	8, 9, 10	16.0
AK336	Kruger, A. Hilderbrandt, J. Kliem, B. Gopalswamy, N. Kundu, M.	Potsdam Germany Potsdam Germany Potsdam Germany Maryland Maryland	Magnetic fine structure of solar active regions	2, 3.6, 6	8, 11, 13	12.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AL294	Leone, F. Trigilio, C. Umana, G.	Catania Bologna Bologna	Testing the proposed models for radio emission from CP stars	1.3, 2, 6, 20	6	3.5
AL296	Lehnert, M. Armus, L.	IGPP Caltech	The radio halo of NGC 660 - evidence for supernova-driven winds	6, 20	6	3.0
AL299	Li, J. Sequist, E.	Toronto Toronto	A warped disk or a counter-rotating outer HI ring in NGC7625	20 line	3	10.0
AM397	Molnar, L. Niermann, S. Kniffen, D. Mattox, J.	Iowa Iowa Hampden-Sydney NASA/GSFC	Radio counterparts of EGRET gamma ray point sources	3.6	9	3.0
AM410	Moore, E. Gottesman, S.	Boston Florida	Barred spiral galaxies NGC 1530 & NGC 3319	20 line	2	8.0
AM411	Moshir, M. Aldering, G. Condon, J.	IPAC Minnesota NRAO-CV	Very faint IRAS galaxies and microjy radio sources w/tests	20	1 w/tests	7.5
A0103	O'Donoghue, A. Eilek, J. Owen, F.	St. Lawrence NMIMT NRAO-SOC	Spectral index observations of 3C 465.	90	13	3.0
AP253	Puche, D. Westpfahl, D. Carignan, C.	CfA NMIMT Montreal	Incipient spiral structure in UGC 2259	20 line	16	5.5
AP257	Palmer, P.				14	0.7
AP265	Prfteto, A. Freudling, W.	MPIfEP, Garching Space Tel. European	HI in the Seyfert galaxy NGC 5252	20 line	23, 26	16.1
AR279	Roettiger, K. Burns, J. Loken, C. Owen, F.	New Mexico State New Mexico State New Mexico State NRAO-SOC	Steep spectrum radio sources in rich clusters	20	15	10.0
AR295	Rawlings, S. Saunders, R. Cotter, G. Lacy, M. Baldwin, J.	Oxford U. Cambridge Cambridge Oxford U. Cambridge	Giant radiogalaxies at high redshift	20	9	16.0
AS333	Sramek, R. Weiler, K. van der Hulst, J. Panagia, N.	NRAO-SOC NRL Groningen/Kapteyn STScI	Statistical properties of radio supernovae	2, 6	18, 30, 8, 13, 1	9.1
AS478	Benaglia, P. Subrahmanyan, R. Goss, W.	NRAO-SOC TIFR/India NRAO-SOC	Electron temperatures in HII regions w/tests	90	2, 7 w/tests	12.0
AS479	Swain, M. Bridle, A. Baum, S.	NRAO-CV NRAO-CV STScI	3C353	3.6	31	3.5
AS491	Sokolov, K.	IRA Kharkov	Sample of extended extragalactic radio sources	20, 90	2, 17	5.5
AS504	Skinner, C. Barlow, M. Sylvester, R.	IGPP U. College London U. College London	Radio survey of M-supergiants in Perseus and Cassiopeia	3.6, 6	7, 11, 17, 14	8.5
AS506	Simpson, C. Gottesman, S.	Florida Florida	HI observations of low-mass dwarf galaxies	20 line	5, 6	17.0
AT145	Thorsett, S. Taylor, J. McKinnon, M. Hankins, T. Stinebring, D.	Caltech Princeton NMIMT NMIMT Oberlin	Timing fast pulsars	6, 20, 90	19	11.1
AT149	Thuan, T. Condon, J. Dennefeld, M. Boller, T.	Virginia NRAO-CV Paris MPIfEP/Garching	ROSAT/IRAS galaxies	6, 20	6	5.0
AV199	van Langevelde, H. Habing, H. Diamond, P. Winnberg, A.	Sterrewacht Sterrewacht NRAO-SOC Chalmers, Onsala	Water masers in galactic center OH/IR stars	1.3 line	6, 8, 10	21.0
AV206	van Moorsel, G. Oosterloo, T.	NRAO-SOC Bologna Italy	HI observations of two compact groups of galaxies	20 line	1	10.5
AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO Cambridge	International monitoring of the Seyfert NGC 5548	3.6	17, 27	2.5
AW326	Westpfahl, D. Adler, D.	NMIMT NRAO-SOC	Interarm HI in M81	20 line	3, 4	28.0
AW350	Wills, B. Shastri, P.	Texas California	Core variability in lobe-dominated quasars	3.6	3, 14, 19	4.0
AW351	Williams, B.	Delaware	HI synthesis of three compact groups	20 line	17, 22	24.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW353	Wang, Q. Li, Z. Begelman, M. Zhao, J.	Colorado/JILA Colorado/JILA Colorado/JILA NRAO-SOC	Radio observation of the X-ray-emitting trail of PSR 1929+10	20	18	11.0
AW356	Wannier, P. Anderson, B. Moriarty-Schieven, G	JPL JPL DRAO	The HI environment of the molecular cloud L1457	20 line	29	12.0
AW357	Wilson, T. Gaume, R. Johnston, K.	MPifr Bonn NRL NRL	The heating source of the Orion-KL nebula	1.3 line	30	7.0
AW361	White, S. Aschwanden, M.	Maryland Maryland	The magnetic field configuration in the solar corona	20, 90	19, 24	7.9
AW362	White, S.	Maryland	The stellar activity cycle on active stars	3.6, 6, 20	5	2.0
AY052	Yang, H. Skillman, E.	Minnesota Minnesota	Evolution of an SNR in giant HII region	3.6	6	3.0
AY053	Yin, Q. Heeschen, D.	NRAO-CV NRAO-CV	Supernova activity in Mkn 297	2, 3.6, 6, 20	27	5.0
AY055	Yun, M. McIntyre, V.	CalTech Cfa	Galaxy-scale gaseous collisions and ring galaxies	20 line	12	9.0
AY056	Yun, M. Bryant, P. Scoville, N.	CalTech CalTech Caltech	Atomic gas in and around ultraluminous IRAS galaxies	20 line	13	10.1
BB020	Briggs, F. Taramopoulos, A.	Pittsburgh Pittsburgh	Infalling, absorption line gas	20 line	30	27.0
ZSTUDS	Summer Students,	NRAO	Student Projects	Phased Array VLBI	19, 23	3.3

The average downtime was 3.6%

The array was scheduled for

592.4 hours (79.4% of time) for astronomical programs

84.2 hours (11.3 % of time) for tests/calibration

69.5 hours (9.3 % of time) for maintenance

Total 746.1 hours (100.0 %) scheduled

The array was in the C configuration from July 1 to July 31

Total number of astronomical programs was 61

The following independent proposals shared simultaneous observing time
(17.0 hours total simultaneous observing):

Projects	Hours
AE91/tests	4.2
AG384/tests	2.1
AM411/tests	2.0
AS478/tests	5.3
AS479/move/op	3.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA123	Andre, Philippe Feigelson, Eric Leous, Jim Montmerle, Thierry	NRAO-TUC Pennsylvania Pennsylvania Saclay/France	Monitoring the Circular Polarization from the Magnetic Star S1		6	2.7
AB414	Becker, R. White, R.	Calif., Davis STSci	Monitoring radio stars HD193793 and P Cygni	2, 6	8	1.5
AB676	Baum, S. O'Dea, C. Gallimore, J.	STSci STSci Maryland	Superwinds in edge-on Seyferts	6 w/GW10	12	15.5
AC348	Carilli, C. Westpfahl, D. Tongue, T. Holdaway, M. Zhao, J. Rupen, M.	NRAO-SOC NMIMT NMIMT NRAO-SOC NRAO-SOC NRAO-SOC	Polarimetry of barred spiral NGC1365	6, 20, 90	3	5.0
AC354	Clancy, T. Grossman, A. Muhleman, D.	Colorado Maryland Caltech	MaAg seasonal variations of Mars water vapor	1.3 line	27	10.0
AC357	Cox, A. Sparke, L. van Moorsel, G. Sackett, P.	Wisconsin Wisconsin NRAO-SOC Princeton	High-resolution neutral hydrogen observations of polar-ring galaxies	20 line w/GW10	13, 16	25.0
AD279	Dickel, J. Mufson, S. Wood, C.	Illinois Indiana Indiana	High resolution polarimetry of the SNR Kesteven 69	6 w/GW10, move/op	12, 17	12.0
AD304	Dahlem, M.	STSci	Star-forming regions in the inner disk of NGC 1792	20	4	5.1
AD308	DePree, C. Rupen, M. Carilli, C.	North Carolina NRAO-SOC NRAO-SOC	Search for synchrotron halos of edge-on galaxies	90 w/GW10	16	15.0
AD313	Dickey, J.	Minnesota	Orbiting cores in the Hercules cluster	20 line	20, 24, 25	36.0
AD314	Doyle, L. Vikramsingh, R.	NASA/Ames NASA/Ames	Stellar mass loss in young sun-type stars	1.3, 2, 3.5, 6, 20 w/GW10, GG17	6, 12, 22, 26	12.5
AD316	Dubner, G. Giacani, E. Goss, W. Winkler, F.	IAFE, Buenos Aires IAFE, Buenos Aires NRAO-SOC Middlebury	4 small-diameter galactic SNRs	20, 90	3	4.0
AD320	Drake, S. Bookbinder, J. Linsky, J.	NASA/GSFC Cfa Colorado	A survey of the 'non-magnetic' CP stars	3.6	4, 24	7.4
AD321	de Pater, J. Grossman, A.	Calif., Berkeley Maryland	Jupiter - south equatorial belt activity	2 w/GJ005	1	6.5
ADHOC	Lestrade, J.		ADHOC		8	1.0
AE092	Eder, J.	Arecibo	HI in the gas-rich SO galaxy NGC 252	20 line	28	6.9
AF249	Frail, D. Whiteoak, J. Goss, W.	NRAO-SOC Sydney NRAO-SOC	Radio imaging around young pulsars	20, 90	1	6.5
AF250	Fruchter, A. Thorsett, S.	Calif., Berkeley Caltech	Timing observations of the eclipsing pulsar PSR B1718-19	20	7	8.0
AG363	Greenhill, L.	Cfa	Continuum emission associated with the IC10 water megamaser	1.3	4	1.0
AG378	Gwinn, C. McKinnon, M. Desai, K.	Calif, Santa Barbara NRAO-GB Calif, Santa Barbara	Scatter broadening of pulses from young pulsars	20, 90 HTRP	23	8.4
AG383	Goss, W. Slysh, V. Frail, D.	NRAO-SOC IKI, Moscow NRAO-SOC	OH(1720 MHz) near the SNR W28	18 line w/GW10	14	3.0
AH437	Hewitt, J. Turner, E. Chen, G. Angelus, A.	MIT Princeton MIT MIT	Monitoring the "Einstein Ring" gravitation lens MG1131+0456	3.5, 6 w/GW10	13	2.0
AH488	Henning, P. Mulchaey, J. Davis, D. Keel, W. Condon, J.	NFRA Maryland NASA/GSFC Alabama NRAO-CV	Galaxy-intragroup medium interactions as revealed by HI	20 line	29	13.0
AH491	Hutchings, J. Eales, S. Myers, S. Gower, A.	DAO Toronto Caltech Victoria	X-ray luminous clusters at redshift 0.2 to 0.4	6, 20	26	24.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AH492	Hjellming, R. Gehrz, R. Sequist, E. Taylor, A.	NRAO-SOC Minnesota Toronto Calgary	Image and light curve evolution of the novae Puppis 1991 & Cygni 1992	1.3, 2, 3.6, 6, 20 w/GW10	11, 19	4.0
AI046	Irwin, J.	Queens	HI observations of the edge-on galaxy NGC 3044	20 line	19	12.0
AI047	Impey, C. Foltz, C. Hooper, E.	Arizona MMT Arizona	The radio properties of optically selected QSOs	3.5	3, 25	5.0
AK338	Kenny, H. Taylor, A.	Canadian Military Calgary	Monitoring CH Cygni outburst	2, 6, 20 w/GW10	17	1.0
AL297	Lacy, M. Rawlings, S. Warner, P.	Oxford Oxford Cambridge	Search for cluster halo sources at high redshift	3.6, 20	28	11.0
AL301	Lim, J. Biegging, J.	Caltech Arizona	Survey for nonthermal radio emission from OB & Wolf-Rayet stars	3, 6, 20	1	4.5
AL302	Lis, D. Menten, K. Carlstrom, J. Zylka, R.	Caltech CfA Caltech MPIfR, Bonn	Search for compact HII regions and H2O masers in the GC dust ridge	3.6 line w/GG17	5	5.0
AL303	Lehto, H. Andernach, H. Aragon-Salamanca, A. Bower, R.	Turku IAC, Tenerife Durham MPIfE, Garching	X-ray detected gravitational lens	3.6 w/GW10, move/op	9	1.5
AM409	Minter, A. Spangler, S.	Iowa Iowa	Faraday Rotation Measurements to study plasma turbulence in the ISM	20 w/GG17	1, 5, 6	24.0
AM414	Megeath, S. Wilson, T.	MPIfR, Bonn MPIfR, Bonn	Dense, young clusters in S184 and DR22	2, 6, 20	20	5.0
AM416	Mundy, L. McMullin, J.	Maryland Maryland	Puzzling spectral index of emission from a YSO	1.3 w/Tests	18	2.5
AM417	Marshall, J. Lasenby, A. Yusef-Zadeh, F.	Cambridge Cambridge Northwestern	High velocity gas in the galactic centre	20 line	2	10.5
AO117	Olling, R. Rupen, M. van Gorkom, J.	Columbia NRAO-SOC Columbia	The edge-on dwarf galaxy NGC 5023	20 line	18, 21	16.0
AP238	Palmer, P. Gonatas, D.	Chicago Pennsylvania	Recombination lines in Mon R2	3.6, 6, 20 line	20, 24	18.0
AP268	Phillips, R. Lonsdale, C.	Haystack Haystack	Rotational modulation of emission from HDE 283572	3.5, 6, 18 w/GJ05, GZ10, GG17, GW10	1,3,4-6,9-11	20.2
AR296	Rupen, M. Knapp, J. Gunn, J. Olling, R. van Gorkom, J.	NRAO-SOC Princeton Princeton Columbia Columbia	The velocity dispersion of the HI in face-on galaxies	20 line w/GC12	14, 15	48.0
AS333	Sramek, R. Weiler, K. Van Dyk, S. Panagia, N.	NRAO-SOC NRL NRL STScI	Statistical properties of radio supernovae	2, 6 w/GW10, Move/op	3,10,11,18,2 5,30	18.6
AS450	Sahai, R. Claussen, M.	Chalmers, Onsala NRAO-SOC	Time variation of the enigmatic radio source in IRC+10216	1.3, 2, 3.6 w/GW10	9	5.0
AS500	Sparke, L. Cox, A. Sackett, P. Richter, O.	Wisconsin Wisconsin Princeton STScI	Polar-ring galaxy NGC 5122	20 line w/GZ10, GG17	4, 5	12.0
AS507	Sage, L. Spight, L. Higdon, J. Huchtmeier, W. Schultz, A.	Nevada Nevada NRAO-SOC MPIfR, Bonn STScI	Atomic gas and sequential star formation in Arp 147	20 line	21	9.0
AT143	te Lintel Hekkert, P. Habing, H. Blommaert, J. Dejonghe, H. Rich, M. Winnberg, A.	Mt. Stromlo Leiden Leiden Gent Columbia Onsala	OH/IR stars: 1612 MHz survey of galactic plane	18 line w/Move/op, GW10	8, 9, 10	24.1
AT151	Taylor, C. Brinks, E.	Minnesota NRAO-SOC	HII galaxy/companion systems at high resolution	20 line	19	8.0
AV205	van der Werf, P.	MPIfEP, Garching	Imaging of the starburst nucleus in M83	2	1	2.5
AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO	International monitoring of the Seyfert NGC 5548	3.5 w/Move/op, GW10	9, 30	2.0
AW312	Wilson, C. Skillman, E.	Maryland Minnesota	Atomic hydrogen clouds in the irregular galaxy NGC 6822	20 line w/GZ10	5	8.0

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Progrm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AW325	Waller, W. Westpfahl, D. Puche, D. Wilcots, E.	NASA/GSFC NMIMT CfA NRAO-SOC	HI morphology & kinematics of NGC 1569	20 line	29	8.0
AW361	White, S. Aschwanden, M.	Maryland Maryland	The magnetic field configuration in the solar corona	20, 90	26	4.0
AW362	White, S.	Maryland	The stellar activity cycle on active stars	3.6, 6, 20 w/Move/op	17	1.6
AW363	White, S.	Maryland	A field of extended sources surrounding a head-tail source in Lacertae	6, 20	18	4.0
GC012	Conway, J. Wilkinson, P. Unwin, S. Xu, W.	NRAO-SOC Manchester Caltech Caltech	Advance speeds in compact triples 0710+439 and 2352+495	6 Single Antenna VLBI w/AR296	14	5.0
GG017	Garrett, M. Polatidis, A. Patnaik, A.	Manchester Manchester Manchester	Flat spectrum radio sources > 500 mJy	1.3 Single Antenna VLBI w/AW312, AM409, AP268, AS541	4	42.3
GJ005	Junor, W. Biretta, J. Reid, M. Muxlow, T. Spencer, R.	NRAO-SOC STScI CfA Manchester Manchester	Spectral index imaging of M87 jet	18 Single Antenna VLBI w/AP268, AD321	1,7	13.2
GK008	Krichbaum, T. Standke, K. Steffen, W. Britzen, S. Witzel, A. Zensus, A.	MPIfR, Bonn MPIfR, Bonn MPIfR, Bonn MPIfR, Bonn MPIfR, Bonn NRAO-SOC	Motion along curved paths in the jet of 1803+78	1.3 Phased Array VLBI	7	12.4
GP012	Pauliny-Toth, I. Unwin, S. Wehrle, A. Zensus, A. Nicolson, G.	MPIfR, Bonn Caltech IPAC, Pasadena NRAO-SOC Hartebeesthoek USA	Monitoring of quasar 3C454.3	1.3 Phased Array VLBI	6	6.1
GV011	Vermeulen, R. Xu, W. Cohen, M. Pearson, T. Readhead, A. Taylor, G. Wilkinson, P. Polatidis, A.	Caltech Caltech Caltech Caltech Caltech Manchester Manchester	Snapshot survey of superluminal motion	6 Single Antenna VLBI w/AR296, AC357	14	48.0
GW010	Wilkinson, P. Henstock, D. Browne, I. Patnaik, A. Readhead, A. Taylor, G. Pearson, T. Vermeulen, R. Cohen, M.	Manchester Manchester Manchester Manchester Caltech Caltech Caltech Caltech Caltech	Snapshot survey of flat-spectrum sources	6 Single Antenna VLBI w/AD314, AD297, AC357, AH437,	9-14	121.7
GZ010	Zensus, J. Leppanen, K. Unwin, S. Wehrle, A.	NRAO-SOC NRAO-SOC Caltech IPAC, Pasadena	Evolution of the parsec-scale structure of 3C345	1.3, 6 Single Antenna VLBI w/AD308, AK338, AP268, AS500,	4, 16	23.3

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
MAH004	Marcaide, J. Alberdi, A. Guirado, J. Rius, A. Witzel, A. Krichbaum, T. Perez, E. Shapiro, I. Elosegui, P. Rogers, A. de Bruyn, G. Schilizzi, R. Baath, L. Booth, R. Davis, R. Diamond, P. Jones, D. Mantovani, F. Preston, R. Ronnang, B. Trigilio, C. Zensus, A.	Valencia CSIC, Granada CSIC, Granada CSIC, Granada MPIfR, Bonn MPIfR, Bonn IAP, Canarias CfA CfA Haystack NFRA NFRA Onsala Onsala Manchester NRAO-SOC JPL IdR, Italy JPL Onsala IdR, Italy NRAO-SOC	Supernova 1993 J	1.3 Phased Array VLBI	8	11.0
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Operations Software Testing		7, 8, 9, 10	44.5 50.9 27.2 46.9 23.7 33.0

The average downtime was 5.9%.

The array was scheduled for

568.3 hours (78.7 % of time) for astronomical programs

81.9 hours (11.3 % of time) for tests/calibration

71.8 hours (9.9 % of time) for maintenance

Total 722.0 hours (100.0 %) scheduled.

The array was in the CnB configuration from Jun 1 to Jun 7
C configuration from Jun 7 to Jun 30

Total number of astronomical programs was 60.

The following independent proposals shared simultaneous observing time (268.9 hours total simultaneous observing):

Projects	Hours	Projects	Hours
ab676/gw10	10.2	ab676/gw10	5.2
ac357/gw10	6.1	ac357/gw10	1.7
ac357/gw10	8.0	ac357/gw10	7.5
ad279/gw10	6.0	ad279/gw10	0.2
ad279/move/op	6.0	ad308/gw10	11.5
ad314/gg17	2.0	ad314/gw10	2.5
ad321/gj05	6.5	af249/gj05	4.0
ag383/gw10	2.9	ag383/gw10	0.1
ah437/gw10	2.0	ah492/gw10	2.0
ak338/gw10	1.0	al302/gg17	5.0
al303/gw10	0.9	al303/move/op	1.5
am409/gg17	8.0	am409/gg17	8.0
am416/tests	1.7	ap268	2.0
ap268/gg17	1.5	ap268/gg17	1.5
ap268/gj05	1.5	ap268/gw10	1.2
ap268/gw10	1.5	ap268/gw10	2.1
ap268/gw10	1.5	ap268/gw10	1.2
ap268/gw10	0.3	ap268/gw10	1.3
ap268/gz10	0.5	ar296/gw10	2.4
ar296/gw10	6.8	ar296/gw10	13.3
ar296/gw10	13.6	ar296/gw10	6.4
ar296/gw10	5.5	as333/gw10	4.0
as333/gw10	4.2	as333/gw10	2.0
as450/gw10	4.1	as500/gg17	6.0
as500/gz10	6.0	at143/gw10	4.6
at143/gw10	3.4	at143/gw10	0.6
at143/gw10	7.4	aw230/gw10	1.0
aw312/gg17	5.3	aw312/gz10	2.7
aw362/move/op	1.5	baselines/gw10	0.3
gw10/baselines	4.8	gw10/pointing	5.0
move/op/as333	1.8	move/op/gw10	5.0
move/op/gw10	2.5	move/op/gw10	4.3
tests/gg17	5.0	tests/gw10	4.0
tests/gw10	3.0	tests/gw10	1.5
tests/software	4.0		

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Prog#	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA123	Andre, P. Feigelson, E. Leous, J. Montmerle, T.	CNRS, France Penn State Penn State CNRS, France	Monitoring the polarization from the magnetic star S1 in the p-oph cloud		13	1.5
AA155	Athreya, R. Kapahi, V. Subrahmanya, C. van Breugel, W. McCarthy, P.	TIFR TIFR TIFR Lawrence Livermore Carnegie	High redshift radio galaxies from Molonglo 1 Jy sample	6 w/GD2	27, 29, 31	14.0
AB414	Becker, R. White, R.	Calif., Davis STScI	Monitoring radio stars HD193793 and P Cygni	2, 6	12	1.6
AB628	Becker, R. Helfand, D. White, R.	Calif., Davis Columbia STScI	Survey of the north galactic cap.	20	4, 10	21.1
AB681	Brown, A. Butler, J. Linsky, J. Guedel, M. Ambruster, C.	Colorado Armagh Obs Colorado Colorado Villanova	Flare stars Gl 867 A and B	3.6, 6, 20	16	8.0
AC331	Cordes, J. Hankins, T. Moffett, D. Romani, R.	Cornell NMIMT NMIMT Stanford	Polarization of two southern gamma-ray pulsars	6, 20	3, 6, 12, 13, 14	15.2
AC337	Clancy, T. Grossman, A. Muhleman, D.	Colorado Maryland Caltech	Mapping seasonal variations of Mars water vapor	1.3 line	7, 8	24.0
AC343	Carignan, C. Freeman, K.	Montreal Mt. Stromlo	HI kinematics of LSB spirals NGC24 & NGC45	20 line	25, 28	12.0
AC345	Condon, J. Helou, G. Sanders, D. Soifer, B.	NRAO-CV IPAC Hawaii Caltech	The extended IRAS bright galaxy sample	20	24	6.0
AC348	Carilli, C. Westpfahl, D. Tongue, T. Holdaway, M. Zhao, J. Rupen, M.	NRAO-SOC NMIMT NMIMT NRAO-SOC NRAO-SOC NRAO-SOC	Polarimetry of barred spiral NGC1365	6, 20, 90	31	5.0
AC349	Canilo, F. Arzoumanian, Z. Nice, D. Taylor, J.	Princeton Princeton Princeton Princeton	Search for a companion pulsar to PSR B2303+46	90	17	12.0
AD309	Dwarakanath, K. Bagri, D.	NRAO-SOC NRAO-SOC	Small scale polarization structure in the diffuse galactic emission	90	2	12.0
AD315	Duric, N. Goss, W. Viallefond, F. Lacey, C. Gordon, S.	New Mexico NRAO-SOC Meudon New Mexico Cfa	Survey of SNRs in 9 nearby galaxies	6 line	22	9.0
AD317	Dahlem, M. Bomans, D.	STScI Bonn	Peculiar gas kinematics in NGC 1792	20 line	23	6.0
ADHOC	Burke, B.	MIT	Adhoc		18	3.0
AF245	Frail, D. Kulkarni, S. Yusef-Zadeh, F.	NRAO-SOC Caltech Northwestern	Determining the proper motions of non-thermal cometary nebulae	3.6	23	5.0
AF247	Fruchter, A. Thorsett, S. Goss, W.	Calif., Berkeley Caltech NRAO-SOC	Survey for continuum radiation from two rich globular clusters	20 w/Test	24	7.5
AF250	Fruchter, A. Thorsett, S.	Calif., Berkeley Caltech	Timing observations of the eclipsing pulsar PSR B1718-19	20	19	8.4
AG340	Goss, W. Wood, D.	NRAO-SOC NRAO-SOC	Sickle (G0.18-0.04) and Pistol (G0.15-0.05)	3.6 line	23	8.0
AG344	Giovannini, G. Feretti, L. Boehringer, H. Schwarz, R.	CNR, Bologna CNR, Bologna MPIfEP, Garching MPIfEP, Garching	Cluster radio halo candidates	20, 90	6, 7	3.0
AH437	Hewitt, J. Turner, E. Chen, G. Angelus, A.	MIT Princeton MIT MIT	Monitoring the "Einstein Ring" gravitation lens MG1131+0456	3.5, 6	14	2.7
AH478	Hewitt, J. Ellithorpe, J. Moore, C. Turner, E.	MIT MIT MIT Princeton	Monitoring gravitational lens MG0414+0534	2	1, 3	2.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AH483	Hofner, P. Cesaroni, R. Churchwell, E. Kurtz, S. Walmsley, C.	Wisconsin Arcetri Wisconsin Wisconsin MPIfr, Bonn	Hot ammonia toward ultracompact HII regions	1.3 line	7, 8, 9	32.0
AH493	Holdaway, M. Carilli, C. Rupen, M. Kollgaard, R.	NRAO-SOC NRAO-SOC NRAO-SOC Penn State	Cen A	90	22	5.0
A1048	Iverson, R. Seaquist, E. Hughes, D. Bode, M. Schwarz, H. Bang, M.	Toronto Toronto Oxford John Moores ESO, Chile John Moores	Multi-frequency observations of symbiotic stars: the cm-mm continuum	1.3, 2, 3.6, 6, 20	15, 17	15.5
AK298	Kellermann, K. Sramek, R. Green, R. Schmidt, M. Shaffer, D.	NRAO-CV NRAO-SOC KPNO-NOAO Caltech NVI/GSFC	Measurement of radio structures of quasars in BQS sample	6	5	12.1
AK309	Kronberg, P. Glendenning, B. Sramek, R.	Toronto NRAO-CV NRAO-SOC	Monitoring SNR candidates in M82	1.3, 2	9	10.0
AK320	Kronberg, P.	Toronto	Further sample of highly redshifted quasars	3.6, 6	1	2.5
AK329	Kurtz, S. Churchwell, E. Hofner, P. Wood, D.	Wisconsin Wisconsin Wisconsin NRAO-SOC	The IRAS 18032-2032 complex - an absorption distance	1.3, 3.6, 20 line	26	5.0
AK335	Kapahi, V. Athreya, R. Subrahmanya, C. McCarthy, P. van Breugel, W.	TIFR TIFR TIFR Carnegie Lawrence Livermore	The Molonglo 1-Jy sample	6, 20 w/GD2	24, 27	6.0
AL150	Lestrade, J. Preston, R.	JPL/Meudon JPL	Statistical properties of RSCVn stars	6	13	2.5
AL280	Ludke, E. Conway, R. Garrington, S.	Manchester Manchester Manchester	Faraday rotation in sources with depolarization asymmetries	3.6	3, 4	6.5
AL285	Lang, K. Willson, R. Kile, J.	Tufts Tufts Tufts	Solar microbursts	20, 90	6, 8, 9	12.0
AM397	Molnar, L. Niermann, S. Kniffen, D. Mattox, J.	Iowa Iowa Hampden-Sydney NASA/GSFC	Radio counterparts of EGRET gamma ray point sources	3.5, 20	12	4.1
AM398	Masson, C.	Cfa	Distances to Planetary nebulae BD+30 3639 and NGC 6572	2, 6	2	12.0
AP250	Papadopoulos, P. Seaquist, E. Wrobel, J. Binette, L.	Toronto Toronto NRAO-SOC Toronto	Extended radio emission from radio quiet quasars	6	1	15.0
AP255	Puche, D. Westpfahl, D.	Cfa NMIMT	HI mapping of grand design spirals M51 & M83	20 line	25	5.0
AP267	Petrosian, A. Krishna, G.	Byurakan Obs TIFR	'Blue-compact-dwarf galaxies' from the Byurakan surveys	3.6, 6, 20	29	6.0
AP268	Phillips, R. Lonsdale, C.	Haystack Haystack	Rotational modulation of emission from HDE 283572	3.5, 6, 18	9-11, 13-16, 21-25, 27-29	31.9
AR268	Rodriguez, L. Curiel, S.	UNAM Mexico Cfa	Radio monitoring of the outburst in SVS13	3.6, 6	1	3.0
AR279	Roettiger, K. Burns, J. Loken, C. Owen, F.	New Mexico State New Mexico State New Mexico State NRAO-SOC	Steep spectrum radio sources in rich clusters	20, 90	4	7.0
AR297	Roberts, D. Crutcher, R. Troland, T.	Illinois Illinois Kentucky	VLA HI Zeeman observations of NGC 6334 & M17	20 line w/GD2	26, 27	16.0
AS333	Sramek, R. Weiler, K. van Dyk, S. Panagia, N.	NRAO-SOC NRL NRL STScI	Monitoring radio supernovae	2, 6	1-3, 6, 11, 13, 16, 19, 21, 25, 29	23.8
AS483	Smale, A. Corcoran, M. Drake, S.	NASA/GSFC NASA/GSFC NASA/GSFC	Cygnus X-3 & the Cyg OB2 association	2, 3.6, 6, 20	1, 5	10.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS501	Sequist, E. Iverson, R. Hughes, D. Evans, A.	Toronto Toronto Oxford Keele	An OH and H2O maser survey of symbiotic stars	1.3, 18 line	11, 13, 14	20.1
AS502	Schindler, S. van Gorkom, J.	Calif., Santa Cruz Columbia	The evolution of galaxy clusters	20, 90	23	2.5
AS503	Strom, R. Johnston, H. Verbunt, F. Aschenbach, B.	NFRA Utrecht Utrecht MPIFEP, Garching	An X-ray knot associated with the Vela SNR	20	22	4.5
AT145	Thorsett, S. Taylor, J. McKinnon, M. Hankins, T. Stinebring, D.	Caltech Princeton NRAO-GB NMIMT Oberlin	Timing fast pulsars	6, 18, 90	20	11.0
AT149	Thuan, T. Condon, J. Dennefeld, M. Boller, T.	Virginia NRAO-CV Paris MPIFEP, Garching	ROSAT/IRAS galaxies	6, 20	23	5.0
AU053	Umana, G. Trigilio, C. Hjellming, R. Catalano, S. Frasca, A.	CNR, Bologna CNR, Bologna NRAO-SOC Catania Catania	Radio survey of algol-type binary systems	6	3	2.0
AV205	van der Werf, P.	MPIFEP, Garching	Imaging of the starburst nucleus in M83	2	31	6.5
AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO	International monitoring of the Seyfert NGC 5548	3.5	13, 26	2.0
AW344	White, S. Lim, J.	Maryland Caltech	Nonthermal emission due to episodic mass loss from RS CVn binaries	20, 90 w/Tests	15, 20, 21	18.2
AW349	White, S.	Maryland	T Tauri Stars		21	6.1
BR002	Nan, R. Gabuzda, D. Kameno, S. Inoue, M.	Beijing Calgary Tokyo NRO	VLBI polarimetry of the high rotation measure source 3C119	3.6	10	4.0
BR018	Rupen, M. Conway, J. Sramek, R. Romney, J. Bartel, N. Weiler, K. van Dyk, S. Panagia, N.	NRAO-SOC NRAO-SOC NRAO-SOC NRAO-SOC York NRL NRL STSci	Imaging of SN 1993 J in M81	1.3, 2, 3.6 Phased Array VLBI	16	10.9
GA009	Alberdi, A. Marcaide, J. Pauliny-Toth, I. Cawthorne, T. Elosegui, P.	IAA, Granada Valencia MPIFR, Bonn Lancashire CfA	Absolute kinematics and polarization observations of 3C454.3	3.6	30 Phased Array VLBI	11.7
GD002	Davis, R. Muxlow, T. Unwin, S.	Manchester Manchester Caltech	3C273	18	27	15.4
GD004	Desai, K. Gwinn, C. Diamond, P.	Calif, Santa Barbara Calif, Santa Barbara NRAO-SOC	OH masers in W49N	18	28 Phased Array VLBI	6.5
GG020	Guirado, J. Marcaide, J. Elosegui, P. Alberdi, A.	IAA, Granada Valencia CfA IAA, Granada	Phase-referenced motion of a component in 4C39.25	3.6	30 Phased Array VLBI	12.0
GK010	Krichbaum, T. Britzen, S. Witzel, A. Muxlow, T. Schalinski, C. Matveyenko, L. Zensus, A.	MPIFR, Bonn MPIFR, Bonn MPIFR, Bonn Manchester IRAM Space Research Inst. NRAO-SOC	Bent jet of 1803+78	18	29 Phased Array VLBI	11.7
	Staff	NRAO	Baselines, Pointing, Delays Maintenance Move/Operations Software Testing			37.0 62.0 23.5 40.0 21.0

The average downtime was 4.3%.

The array was scheduled for
554.4 hours (74.3 % of time) for astronomical programs
105.5 hours (14.1 % of time) for tests/calibration
86.2 hours (11.6 % of time) for maintenance
Total 746.1 hours (100.0 %) scheduled.

The array was in the B configuration from May 1 to May 10
CnB configuration from May 10 to May 31

Total number of astronomical programs was 61.

The following independent proposals shared simultaneous observing time (29.2 hours total simultaneous observing):

Projects	Hours	Projects	Hours
aa155/gd2	2.0	ap268/gd2	1.5
ac331/move/op	3.3	ap268/move/op	2.0
af247/tests	4.1	ar297/gd2	5.9
ak335	2.0	as333/move/op	1.5
ap268/gd2	1.5	aw344/tests	2.9
		tests/gd2	2.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AA150	Alexander, P. Leahy, J. Eales, S. Rawlings, S. Allington-Smith, J.	Cambridge Manchester Toronto Oxford Durham	Survey of DRAGNs at high redshift	20	17	6.5
AA157	Afflerbach, A. Churchwell, E.	Wisconsin Wisconsin	H109alpha emission toward selected UC HII regions	6 line	11	6.0
AB414	Becker, R. White, R.	Calif., Davis STScI	Monitoring radio stars HD193793 and P Cygni	2, 6	4	1.5
AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Brandeis	Monitoring 0957+561 A,B	6	8	2.0
AB628	Becker, R. Helfand, D. White, R.	Calif., Davis Columbia STScI	Survey of the north galactic cap.	20	1, 4, 11, 12, 15, 16, 19-22, 27-29	117.0
AB633	Burns, J. Perley, R. Gisler, G.	New Mexico State NRAO-SOC Los Alamos	Imaging the cluster radio halo in Abell 2255	90	25	6.5
AB665	Brown, A. Bromage, G. Ambruster, C.	Colorado Rutherford Villanova	Monitoring HD197890 (Speedy Mic) during ROSat observation	3.6, 6, 20	8	6.0
AB669	Bookbinder, J. Guedel, M. Saar, S.	CfA Colorado CfA	M dwarfs during ROSat observations	2, 3.6, 6, 20	4	5.0
AB673	Baudry, A. Menten, K.	Bordeaux CfA	High excitation OH lines in W3(OH)	1.3 line	2	8.0
AC316	Carilli, C. Owen, F. Harris, D.	NRAO-SOC NRAO-SOC CfA	Polarimetric imaging of 2 high redshift radio galaxies	3.6, 6, 20	18	6.0
AC347	Cordes, J. Lundgren, S. Romani, R.	Cornell Cornell Stanford	A ram-pressure driven pulsar nebula	6, 20	1	8.0
AC351	Caganoff, S. Tsvetanov, Z.	Melbourne Johns Hopkins	Radio morphology & extended emission line region in Seyfert galaxies	6	8	3.1
AC360	Carlstrom, J. Phillips, T. Hills, R. Lay, O. Menten, K.	Caltech Caltech Cambridge Cambridge CfA	321 & 22 GHz water masers	1.3 line	1	1.5
AD298	Dwarakanath, K. Rupen, M.	NRAO-SOC NRAO-SOC	Steep-spectrum sources	3.6, 6, 20, 90	25	4.3
AD301	Drake, S. White, N. Linsky, J. Dempsey, R. Simon, T.	NASA/GSFC NASA/GSFC Colorado Colorado Hawaii	RS CVn binary stars in support of ROSAT observations	3.6, 20	15	5.5
AD306	Dwarakanath, K.	NRAO-SOC	Search for recombination lines from the warm ionized medium	90 line	3, 9, 19	18.0
ADHOC1	Rupen, M.	NRAO-SOC	Adhoc		6	0.5
ADHOC2	Sramek, R.	NRAO-SOC	Adhoc		7, 8, 13, 21	8.0
ADHOC3	Claussen, M.	NRAO-SOC	Adhoc		8	1.0
AF227	Fey, A. Gaume, R. Claussen, M. Nedoluha, G. Johnston, K.	NRL NRL NRAO-SOC NRL NRL	"Cometary" HII regions	6	18	8.0
AF241	Feretti, L. Andernach, H. Giovannini, G. Perley, R.	CNR, Bologna Canarias CNR, Bologna NRAO-SOC	Jets in 3C31 & 3C449	3.6, 6, 20	5	12.0
AG343	Giovannini, G. Feretti, L. Boehringer, H. Schwarz, R.	CNR, Bologna CNR, Bologna MPIfEP, Garching MPIfEP, Garching	Halo sources in A2255 and A2319	20, 90	16	3.0
AG372	Grossman, A. Muhleman, D.	Maryland Caltech	Saturn's atmosphere	3.5, 6	23, 24	18.0
AG379	Gopalswamy, N. Schmahl, E. Kundu, M. Sawant, H.	Maryland Maryland Maryland BSA-INPE	Radio microbursts	20, 90	19, 22, 25, 27	21.0
AH390	Hjellming, R. Gehrz, R. Taylor, A. Seagquist, E.	NRAO-SOC Minnesota Calgary Toronto	Monitoring radio novae.	3.6, 6, 20	3, 4	4.5

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AH478	Hewitt, J. Eliithorpe, J. Moore, C. Turner, E.	MIT MIT MIT Princeton	Monitoring gravitational lens MG0414+0534	2	1, 3, 5, 6, 11, 12, 15, 19, 20, 22, 24, 27, 29	13.7
AH481	Habbal, S. Esser, R. Karovska, M. Gonzalez, R.	CfA CfA CfA CfA	Source region of the solar wind - observations with SPARTAN 201.	3.6, 6, 20	10, 11, 12	24.5
AH482	Hughes, V. Ungerechts, H.	Queens Massachusetts	An anomalous galactic feature at l=80	3.6	10	2.0
AH485	Hankins, T. Moffett, D.	NMIMT NMIMT	Crab pulsar "giant pulses"	3.6, 6, 20	3, 4, 5, 8	14.6
AK319	Katz-Stone, D. Rudnick, L.	Minnesota Minnesota	Three frequency mapping of FR 1 radiogalaxy 3C449	20, 90 w/Move/Op	6	13.5
AK326	Kundu, M. Strong, K. Kane, S. Pick, M. Gopalswamy, N. White, S.	Maryland Lockheed Calif., Berkeley Meudon Maryland Maryland	Flaring bright points	20, 90	16	4.0
AL276	Laurent-Muehleisen, Kollgaard, R. Feigelson, E.	Penn State Penn State Penn State	Jet morphology of X-ray selected BL Lacertae objects	6, 20	4, 14	12.6
AL287	Lonsdale, C. Beichman, C. Van Buren, D. Smith, H. Soifer, B. Neugebauer, G. Wolstencroft, R.	Haystack IPAC IPAC Calif., San Diego Caltech Caltech Royal Obs	Protogalaxies in the IRAS faint source survey	20	3, 9, 15, 26	19.0
AL288	Langston, G.	NRAO-CV	Tracking variability of lens 2016+112	2, 6	17	2.5
AL289	Lazio, T. Cordes, J.	Cornell Cornell	Angular broadening in the galactic anticenter	6, 20	24	4.0
AM399	Mirabel, I. Rodriguez, L.	CNRS, France Mexico/UNAM	Monitoring 1E1740.7-2942 and GRS1758-258	6	27	3.0
AM402	Marcha, M. Browne, I. Laing, R.	Manchester Manchester RGO	Polarization structure and flow speed in low luminosity jets	20	9	7.0
A0113	Oren, A. Wolfe, A.	Calif., San Diego Calif., San Diego	Faraday rotation mapping of 3C196	2	3, 5	15.0
AP251	Pedlar, A. Axon, D. Baum, S. O'Dea, C. Unger, S.	Manchester Manchester STScI STScI RGO	HI in NGC 4151	20 line	23	12.0
AP256	Palmer, D. Schaefer, B. Cline, T. Hurley, K. Laros, J. Fishman, G. Kouveliotou, C.	NASA/GSFC NASA/GSFC NASA/GSFC Calif., Berkeley Los Alamos NASA/MSFC NASA/MSFC	Gamma ray burster radio counterparts - deep searches	3.5, 20	17, 29	6.0
AP258	Peng, Y. Vogel, S.	Maryland Maryland	A collapsing core in Sgr B2	1.3 line	2	6.0
AR278	Rodriguez, L. Canto, J. Raga, A. Noriega-Crespo, A. Reipurth, B.	Mexico/UNAM Mexico/UNAM Manchester Washington ESO	HH1-2 region	6	30	11.0
AR290	Rowan-Robinson, M. Lawrence, A. Oliver, S. McMahon, R.	Queen Mary Queen Mary Queen Mary Cambridge	Search for high redshift infrared galaxies	20	20	9.5
AS333	Sramek, R. Weiler, K. van Dyk, S. Panagia, N.	NRAO-SOC NRL Groningen/Kapteyn STScI	Statistical properties of radio supernovae	2, 6	1, 9, 10, 12, 13, 15, 18, 19, 22, 23-30	24.8
AS483	Smale, A. Corcoran, M. Drake, S.	NASA/GSFC NASA/GSFC NASA/GSFC	Cygnus X-3 & the Cyg OB2 association	2, 3.6, 6, 20	28, 29, 30	5.5
AS484	Salter, C. Junor, B. Bignell, C. Saikia, D.	NAIC NRAO-SOC NRAO-SOC TIFR	Optically-thick planetary nebulae	6	30	3.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
AS488	Sequist, E. Odegard, N.	Toronto GSC/GSFC	Synchrotron emitting wind in NGC 4194	6 w/Move/Op	6	2.5
AT134	Taylor, A. Dougherty, S.	Calgary Calgary	Monitoring of radio variable Be stars	3.6	18	3.0
AT149	Thuan, T. Condon, J. Dennefeld, M. Boller, T.	Virginia NRAO-CV Paris MPIfEP, Garching	ROSAT/IRAS galaxies	20	18, 25	16.1
AU053	Umana, G. Trigilio, C. Hjellming, R. Catalano, S. Frasca, A.	CNR, Bologna CNR, Bologna NRAO-SOC Catania Catania	Radio survey of algol-type binary systems		6, 26	6.0
AV193	van der Hucht, K. Williams, P. Spoelstra, T.	Utrecht Utrecht NFRA	Wolf-Rayet object WR125	2, 6, 20	21	1.0
AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO	International monitoring of the Seyfert NGC 5548	3.5	1, 11, 24	3.5
AW325	Waller, W. Westpfahl, D. Puche, D. Wilcots, E.	NASA/GSFC NMIMT CfA NRAO-SOC	HI morphology & kinematics of NGC 1569	20 line	16, 17	16.0
AW330	Wills, B. Shastri, P.	Texas Calif., Berkeley	Core variability in lobe dominated quasars	3.6	2	10.0
AY052	Yang, H. Skillman, E.	Minnesota Minnesota	Evolution of an SNR in giant HII region	3.6, 20	10	6.0
AY053	Yin, Q. Heeschen, D.	NRAO-CV NRAO-CV	Supernova activity in Mkn 297	2, 3.6, 6, 20	7	4.5
AZ060	Zhao, J. Goss, W.	NRAO-SOC NRAO-SOC	Galactic center transient at two years of age	3.5, 6, 20	1, 29	3.5
BM011	Moran, J. Rodriguez, L. Vazquez-Semademi, E.	CfA Mexico/UNAM Mexico/UNAM	NGC 6334B: scale of turbulent scatterers	1.3, 2, 3.6, 6	12, 17	8.0
BR018	Rupen, M. Conway, J. Sramek, R. Romney, J. Bartel, N. Weiler, K. van Dyk, S. Panagia, N.	NRAO-SOC NRAO-SOC NRAO-SOC NRAO-SOC York NRL NRL STScI	Imaging of SN 1993 J in M81	1.3, 2, 3.6	26	14.2
	Staff	NRAO	Operations Maintenance Move/Operations Software Testing			32.9 45.9 7.6 36.5 19.9

The average downtime was 2.5%.

The array was scheduled for
 584.5 hours (80.8 % of time) for astronomical programs
 56.6 hours (7.8 % of time) for tests/calibration
 82.5 hours (11.4 % of time) for maintenance
 Total 723.6 hours (100.0 %) scheduled.

The array was in the B configuration from April 1 to April 30

Total number of astronomical programs was 58.

The following independent proposals shared simultaneous observing time (7.6 hours total simultaneous observing):

Projects	Hours	Projects	Hours
ak319/move/op	4.3		
as333/move/op	0.8		
as488/move/op	2.5		

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AA123	Andre, P. Feigelson, E. Leous, J. Montmerle, T.	CNRS, France Penn State Penn State CNRS, France	Monitoring the polarization from the magnetic star S1 in the p-oph cloud		11	2.5
✓ AA149	Akujor, C. Booth, R. Garrington, S. Spencer, R. Ludke, E.	Chalmers, Onsala Chalmers, Onsala Manchester Manchester Manchester	Depolarisation in compact steep-spectrum sources	6	13	4.0
✓ AB414	Becker, R. White, R.	Lawrence Livermore STScI	Monitoring radio stars HD193793 and P Cygni	2, 6	9	2.0
✓ AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Brandeis	Monitoring 0957+561 A,B	6	20	2.0
✓ AB628	Becker, R. Helfand, D. White, R. Perley, R.	Lawrence Livermore Columbia STScI NRAO-SOC	Survey of the north galactic cap.	20	1, 7	11.1
✓ AB666	Browne, I. Baldwin, J. Netzer, H. Wills, B. Wills, D.	Manchester NOAO Tel Aviv Texas Texas	Structures for radio loud HST quasars	20 w/GB15,GZ10	5, 10	3.0
✓ AB669	Bookbinder, J. Guedel, M. Saar, S.	CfA Colorado CfA	M dwarfs	2, 3.6, 6, 20 line	17	4.9
✓ AC329	Cecil, G. DePree, C.	North Carolina North Carolina	Nuclear outflow in NGC 6951	6	19	4.0
✓ AC360	Carlstrom, J. Phillips, T. Hills, R. Lay, O. Menten, K.	Caltech Caltech Cambridge Cambridge CfA	Stellar 22GHz water masers at the time of 321MHz water maser observations	1.3 line	31	1.1
✓ AD252	de Pater, I.	Calif., Berkeley	Jupiter patrol.	20 w/BX1	19, 20	12.0
✓ AD294	David, L. Harris, D.	CfA CfA	NGC 5044 - Central dominant galaxy in a group with a cooling flow	6	15	3.0
✓ AD300	Drake, S. Linsky, J. Schmitt, J. Lim, J.	NASA/GSFC Colorado MPIFEP, Munich Caltech	Selected magnetic Bp stars	3.6 w/GX4	5	6.0
✓ AD305	Dwarakanath, K. van Gorkom, J. Owen, F.	NRAO-SOC Columbia NRAO-SOC	Neutral hydrogen in cooling flows of clusters of galaxies	20 line w/BD11	12, 13, 14, 25	32.5
ADHOC1	Junor, B.	NRAO-SOC	Adhoc		2	2.2
ADHOC2	Andre, P.	CNRS, France	Adhoc		6	0.5
ADHOC3	Andre, P.	CNRS, France	Adhoc		7	0.4
✓ AF226	Feigelson, E. Hertz, P. Kollgaard, R. Brinkmann, W. Voges, W.	Penn State NRL Penn State MPIFEP, Munich MPIFEP, Munich	Radio source contributors to the x-ray background	3.5, 6	23	3.0
✓ AF243	Foster, R. Tavani, M. Frail, D.	NRL Princeton NRAO-SOC	Search for pulsed emission from LSI +61 303	20 HTRP	5, 7, 9	4.5
✓ AF244	Frail, D. Cordes, J. Harrison, P.	NRAO-SOC Cornell Manchester	Search for pulsar wind nebulae	3.6 w/GZ10,BR7	9, 10, 14	16.0
✓ AG373	Guedel, M. Dempsey, R. Linsky, J.	Colorado Colorado Colorado	Flares on RS CVN's observed with the VLA & ROSAT: V772 Her	3.6, 6, 20 w/BR7	3	5.5
✓ AG381	Golub, L. Bastian, T. Koutchmy, S. Zirker, J.	CfA NRAO-SOC CNRS, France NOAO	Microwave, soft X-ray & optical fluctuations of coronal bright points	6, 20	23	8.0
✓ AG382	Goss, W. Schwarz, U. Dubner, G. Winkler, F.	NRAO-SOC Groningen/Kapteyn IAFE, Buenos Aires Middlebury	Search for HI associated with Cas A	20 line	30	8.0
✓ AH437	Hewitt, J. Turner, E. Chen, G. Angelus, A.	MIT Princeton MIT MIT	Monitoring the "Einstein Ring" gravitation lens MG1131+0456	3.5, 6 w/BX1	21	2.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AH478	Hewitt, J. Ellithorpe, J. Moore, C. Turner, E.	MIT MIT MIT Princeton	Monitoring gravitational lens MG0414+0534	2 w/GB15	5, 15, 18, 23, 30	5.7
✓ AH485	Hankins, T. Moffett, D.	NMIMT NMIMT	Crab pulsar "giant pulses"	3.6, 6, 20	26, 29	8.4
✓ AH486	Healy, K. Hankins, T.	NMIMT NMIMT	Pulsar radio halos	90 w/BX1	21	3.5
✓ AJ226	Junor, W. Saikia, D. Salter, C. Ghosh, T.	NRAO-SOC TIFR NAIC NFRA	0042+672 - A steep-spectrum Crab look-alike?	20	18	1.7
✓ AK307	Kronberg, P.	Toronto	3C 9 - a single-image gravitational lens	2, 3.6 w/GX4	5	4.0
✓ AK317	Kassim, N. Perley, R. Erickson, W. Dwarakanath, K. Taylor, G.	NRL NRAO-SOC Maryland NRAO-SOC Caltech	75 MHz imaging: the weaker sources	400 w/GW7	1	10.1
✓ AK320	Kronberg, P.	Toronto	Further sample of highly redshifted quasars	3.6, 6 w/GZ10	10, 28	4.0
✓ AK322	Kronberg, P. Perley, R. Dyer, C.	Toronto NRAO-SOC Toronto	Polarization symmetry-breaking in quasar jets	3.6 w/GW7	1	10.0
✓ AK326	Kundu, M. Strong, K. Kane, S. Pick, M. White, S. Gopalswamy, N.	Maryland Lockheed Calif., Berkeley Meudon Maryland Maryland	Flaring bright points	20, 90	20, 26	9.5
✓ AL150	Lestrade, J. Preston, R.	JPL/Meudon JPL	Statistical properties of RSCVn stars	6	8	0.7
✓ AL279	Lim, J. White, S. Phillips, R.	Caltech Maryland Haystack	A test for the evolution of stellar coronae.	2, 3.6, 6, 20	28	3.0
✓ AL283	Lozinskaya, T. Purton, C. Dewdney, P.	Sternberg, Moscow Hawaii DRAO	Stellar wind of WR142	2, 6 w/GW7	2	4.0
✓ AM364	Morganti, R. Parma, P. Fanti, R. de Ruiter, H. Capetti, A.	CNR, Bologna CNR, Bologna CNR, Bologna CNR, Bologna Torino	Polarization study of B2 radio galaxies	6	28, 31	18.0
✓ AM374	Mehring, D. Palmer, P. Goss, W. Yusef-Zadeh, F.	Chicago Chicago NRAO-SOC Northwestern	W51 - the ultracompact H II regions	1.3, 2, 3.6, 20	16	12.0
✓ AM389	McKinnon, M. Thorsett, S. Taylor, J.	NRAO-GB Caltech Princeton	Orbit determination and mass of PSR B1820-11	20 HTRP w/GW7	1, 2, 4	6.0
✓ AM392	Moore, C. Hewitt, J. Turner, E.	MIT MIT Princeton	Gravitational lensing in MG2120+1327	2, 6	18	2.0
✓ AM394	Mundy, L. McMullin, J. Blake, G. Sandell, G.	Maryland Maryland Caltech JCMT	NGC1333 IRAS 4: cm wavelength emission from dust?	3.6, 6	27	7.0
✓ AM399	Mirabel, I. Rodriguez, L.	CNRS, France UNAM Mexico	Monitoring 1E1740.7-2942 and GRS1758-258	6 w/GZ10	9, 10, 19, 30	12.0
✓ AM401	Minter, A. Spangler, S.	Iowa Iowa	Faraday rotation measurements to study plasma turbulence in the ISM	20 w/BD11	13	8.0
✓ AM404	Muhleman, D. Butler, B. Slade, M. Haldemann, A.	Caltech Caltech JPL Caltech	Venus radar map - Beta Regio	3.6 line w/GX4	4	12.0
✓ AP237	Phillips, J. Frail, D. Thorsett, S.	Caltech NRAO-SOC Caltech	Search for asteroids and planetesimals around pulsars	20 HTRP	9, 18	3.3
✓ AP259	Purcell, W. Yusef-Zadeh, F.	Northwestern Northwestern	Extended emission near pulsars PSR 1952+29 & PSR 1913+16	3.6, 20	18	3.5
✓ AP260	Pahre, M. Ho, P.	Caltech CfA	HII regions & hot molecular cloud cores in W51	1.3 line	27, 28	16.5

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Prog#	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AQ009	Quirrenbach, A. Edelson, R. Madejski, G. Witzel, A. Bregman, J.	NRL NASA/GSFC NASA/GSFC MPIFR, Bonn Michigan	Monitoring BL Lacertae objects OJ287 and Mkn 421	3.6, 6, 20 w/BX1	16-21	22.1
✓ AR284	Ridgway, S. Chambers, K. Stockton, A.	Hawaii Hawaii Hawaii	Nature of low radio luminosity z~1 quasars	6	16, 18	15.0
✓ AR300	Ratner, M. Bartel, N. Lestrade, J. Lebach, D. Shapiro, I.	CfA CfA JPL/Meudon CfA CfA	Reference sources near HR 5110	3.6 w/GZ10	9	2.5
✓ AS333	Sramek, R. Weiler, K. Van Dyk, J. Panagia, N.	NRAO-SOC NRL NRL STScI	Statistical properties of radio supernovae	2, 6 w/GZ10	12, 14, 30	9.5
✓ AS479	Swain, M. Bridle, A. Baum, S.	Rochester NRAO-CV STScI	3C353	3.6 w/BX1	22	10.5
✓ AS497	Saikia, D. Thomasson, P.	TIFR Manchester	Compact sources from the S4 survey	2	29, 31	6.5
✓ AT144	Taylor, G. Ge, J. Owen, F. Baum, S. O'Dea, C.	Caltech Brandeis NRAO-SOC STScI STScI	Faraday rotation in cooling flow clusters.	3.6	24, 27	8.1
✓ AT145	Thorsett, S. Taylor, J. McKinnon, M. Hankins, T. Stinebring, D.	Caltech Princeton NRAO-GB NMIMT Oberlin	Timing fast pulsars	6, 20, 90	15	10.0
✓ AT147	Thorsett, S. Kulkarni, S. Readhead, A. Thakkar, D. Vermeulen, R. Frail, D.	Caltech Caltech Caltech Caltech NRAO-SOC	Calibrators around three millisecond pulsars	3.6	23, 24	2.3
✓ AT148	Tongue, T. Carilli, C. Westpfahl, D. Puche, D.	NMIMT NRAO-SOC NMIMT CfA	Low frequency continuum of Homberg II	90	15	6.0
✓ AV193	van der Kucht, K. Williams, P. Spoelstra, T.	Utrecht Utrecht NFRA	Wolf-Rayet object WR125	2, 6, 20	20	1.0
✓ AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO	International monitoring of the Seyfert NGC 5548	3.5	15	1.0
✓ AW305	Wannier, P. Andersson, B. Moriarty-Schieven, G. Federman, S.	JPL JPL JPL Toledo	Warm OH around molecular clouds	20 line	21	14.0
✓ AW339	Wilson, A. Ulvestad, J.	STScI JPL	High resolution images of NGC 1068	1.3	14	8.0
✓ AW343	Westpfahl, D. Puche, D.	NMIMT CfA	The smallest dwarf galaxies.	20 line w/GX4, GB15, GZ10	4, 5, 9, 11	27.5
✓ AZ056	Zhao, J. Goss, W. Anantharamaiah, K.	NRAO-SOC NRAO-SOC Raman Institute	Radio recombination lines from starburst nuclei of nearby galaxies	3.6 line	22	14.0
✓ AZ060	Zhao, J. Goss, W.	NRAO-SOC NRAO-SOC	Flux variations of Sgr A* and the GCT.	1.3, 3.6 w/BD11	7, 13, 20	3.0
✓ BD011	Desai, K. Diamond, P. Gwinn, C.	Calif, Santa Barbara NRAO-SOC Calif, Santa Barbara	OH Masers in W49N	20 Single Antenna VLBI w/AD305, AZ60, AM401	13	12.0
✓ BL003	Lonsdale, C. Barvainis, R.	Haystack Haystack	Radio quiet QSOs	3.6 Phased Array VLBI	7	15.1
✓ BR007	Roberts, D. Wardle, J. Ochs, M. Brown, L. Moellenbrock, G.	Brandeis Brandeis Brandeis Connecticut Brandeis	Superluminal quasars 3C273 and 3C345	3.6, 6 Phased Array VLBI w/AG373	2, 3	38.8

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Program	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
BX001	Xu, W. Readhead, A. Pearson, T. Wilkinson, P. Polatidis, A.	Caltech Caltech Caltech Manchester Manchester	Candidate for the smallest gravitationally lensed system	2, 3.6 w/AQ9,AD252,AH486,AH437	19, 21	16.2
GB015	Bloom, S. Marscher, A. Gear, G.	Boston Boston Royal Obs	Strong millimeter sources	1.3, 3.6 Single Antenna VLBI w/AH478,AB666,AW343,ADHOC	5	12.2
GG018	Gabuzda, D. Wehrle, A.	Calgary IPAC	Structure of 3C279	3.6 Phased Array VLBI	8	19.5
GL009	Lestrade, J. Phillips, R. Jones, D. Preston, R.	JPL/Meudon Haystack JPL JPL	Astrometric observations of stars to tie in HIPPARCOS	3.6, 6 Phased Array VLBI w/GZ10	10	14.5
GP012	Pauliny-Toth, I. Unwin, S. Wehrle, A. Zensus, A. Nicolson, G.	MPIfr, Bonn Caltech IPAC NRAO-SOC Hartebeesthoek	Monitoring of quasar 3C454.3	1.3, 3.6 Phased Array VLBI	11	12.0
GW007	Wilkinson, P. Henstock, D. Browne, I. Patnaik, A. Vermeulen, R. Taylor, G. Pearson, T. Readhead, A. Cohen, M.	Manchester Manchester Manchester Manchester Caltech Caltech Caltech Caltech	Survey of flat spectrum sources	6 Single Antenna VLBI w/AK317,AK322,AL283,AM389	1, 2	24.6
GX004	Xu, W. Conway, J. Unwin, S. Readhead, A. Pearson, T. Wilkinson, P. Polatidis, A.	Caltech NRAO-SOC Caltech Caltech Caltech Manchester Manchester	Compact steep-spectrum double and triple sources	3.6 w/AK307,AD300,Software,AM404.	4, 5	27.2
GZ010	Zensus, J. Leppanen, K. Unwin, S. Wehrle, A.	NRAO-SOC NRAO-SOC Caltech IPAC	Evolution of the parsec-scale structure of 3C345	1.3, 3.6, 6 Single Antenna VLBI w/AW343,AR300,AB666,AF244...	9	13.5
UH002	Hewitt, J. Cappallo, R. Corey, B. Ellithorpe, J. Lestrade, J. Lonsdale, C. Niell, A. Phillips, R. Preston, R.	MIT Haystack Haystack MIT JPL/Meudon Haystack Haystack Haystack JPL	Astrometric observations of the dMe stars AD Leo, YZ CMi, and EV Lac	3.6 Phased Array VLBI	6, 7	16.6
UL004	Lebach, D. Bartel, N. Ratner, M. Shapiro, I.	CfA CfA CfA CfA	Stellar astrometry for the NASA/Stanford gravity probe-B	3.6 Phased Array VLBI	6	12.5
	Staff	NRAO	Operations Maintenance Software Standard Field Observation Testing		29	32.5 55.0 37.7 8.0 24.3

The average downtime was 2.6%.

The array was scheduled for
589.5 hours (79.0 % of time) for astronomical programs
64.8 hours (8.7 % of time) for tests/calibration
91.8 hours (12.3 % of time) for maintenance
Total 746.1 hours (100.0 %) scheduled.

The array was in the B configuration from March 1 to March 31

Total number of astronomical programs was 75.

The following independent proposals shared simultaneous observing time (111.2 hours total simultaneous observing):

Projects	Hours	Projects	Hours
ab666/gb15	1.5	ab666/gz10	1.5
ad252/bx1	6.0	ad300/gx4	0.7
ad300/gx4	5.3	ad305/bd11	7.8
af244/gz10	6.0	ag373/br7	5.5
ah437/bx1	2.0	ah478/gb15	1.0
ah486/bx1	2.8	ak307/gx4	1.2
ak317/gw7	10.1	ak320/gz10	1.0
ak322/gw7	2.5	ak322/gw7	7.5
al283/gw7	4.0	am389/gw7	0.5
am399/gz10	2.0	am401/bd11	3.2
am404/gx4	12.0	aq9/bx1	0.3
aq9/bx1	1.7	ar300/gz10	2.5
as479/bx1	3.3	aw343/gb15	9.5
aw343/gx4	6.0	aw343/gz10	0.5
az60/bd11	1.0	gl9/gz10	0.0
software/gx4	2.0		

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AA155	Athreya, R. Kapahi, V. Subrahmanya, C. van Breugel, W. McCarthy, P.	TIFR TIFR TIFR Lawrence Livermore Carnegie	High redshift radio galaxies from Molonglo 1 Jy sample	3.6, 20	14, 15	12.0
✓ AB414	Becker, R. White, R.	Calif., Davis STScI	Monitoring radio stars HD193793 and P Cygni	2, 6	5	1.5
✓ AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Brandeis	Monitoring 0957+561 A,B	6	4	2.0
✓ AB628	Becker, R. Helfand, D. White, R. Perley, R.	Calif., Davis Columbia STScI NRAO-SOC	Survey of the north galactic cap.	20	28	3.4
✓ AB671	Beasley, A. Bastian, T.	NRAO-SOC NRAO-SOC	Rotational modulation of O-B star microwave emission	3.6, 6	1, 6, 14, 20	8.8
✓ AC333	Cordova, F. Thompson, R.	Penn State Penn State	Ultrasoft X-ray emitting active galactic nuclei	6	7, 13	9.0
✓ AC337	Clancy, T. Grossman, A. Muhleman, D.	Colorado Maryland Caltech	Mapping seasonal variations of Mars water vapor	1.3 line	20, 21	24.0
✓ AC348	Carilli, C. Westpfahl, D. Tongue, T. Holdaway, M. Zhao, J. Rupen, M.	NRAO-SOC NMIMT NMIMT NRAO-SOC NRAO-SOC NRAO-SOC	Polarimetry of barred spiral NGC1365	20, 90	1, 2, 5	12.4
✓ AC351	Caganoff, S. Tsvetanov, Z.	Melbourne Johns Hopkins	Radio morphology & extended emission line region in Seyfert galaxies	6	1, 4	4.0
✓ AD297	Drake, S. Simon, T. Linsky, J. Dempsey, B. White, N.	NASA/GSFC Hawaii Colorado Colorado NASA/GSFC	Search for radio emission from X-ray selected RS CVn candidates	3.5 w/Tests, GW8	6, 11, 15, 18	26.5
✓ AD304	Dahlem, M.	STScI	Star-forming regions in the inner disk of NGC 1792	20	4, 6, 7	16.4
✓ AD305	Dwarakanath, K. van Gorkom, J. Owen, F.	NRAO-SOC Columbia NRAO-SOC	Neutral hydrogen in cooling flows of clusters of galaxies	20 line w/GZ10	11, 14, 15	18.5
✓ AD310	de Pater, I. Silva, A. Lissauer, J. Showalter, M. Graham, J.	Calif., Berkeley Calif., Berkeley SUNY NASA/Ames Calif., Berkeley	Saturn main ring system	1.3, 2, 3.6	11	9.0
ADHOC	Palmer, D.	NASA/GSFC	Adhoc		2	0.5
✓ AF245	Frail, D. Kulkarni, S. Yusef-Zadeh, F.	NRAO-SOC Caltech Northwestern	Determining the proper motions of non-thermal cometary nebulae	3.6	2	8.0
✓ AG371	Grossman, A. Muhleman, D.	Maryland Caltech	Polarized emission from Titan's surface	3.5 w/GZ10, GS7	19, 27	18.0
✓ AG374	Guedel, M. Schmitt, J.	Colorado MPIFEP, Munich	Alpha Cr8: A totally eclipsing radio binary?	3.6	5	12.0
✓ AH390	Hjellming, R. Gehrz, R. Taylor, A. Seagquist, E.	NRAO-SOC Minnesota Calgary Toronto	Monitoring radio novae.	3.6, 6, 20	1, 5	2.4
✓ AH437	Hewitt, J. Turner, E. Chen, G. Angelus, A.	MIT Princeton MIT MIT	Monitoring the "Einstein Ring" gravitation lens MG1131+0456	3.5, 6	13	2.0
✓ AH478	Hewitt, J. Ellithorpe, J. Moore, C. Turner, E.	MIT MIT MIT Princeton	Monitoring gravitational lens MG0414+0534	2 w/GW8, Move/Op	2, 5, 8, 11, 13, 14, 17, 19, 22, 26	11.5
✓ AK317	Kassim, N. Perley, R. Erickson, W. Dwarakanath, K. Taylor, G.	NRL NRAO-SOC Maryland NRAO-SOC Caltech	75 MHz imaging: the weaker sources	90 w/GZ10	26	3.0

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Prog#	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AK324	Kollgaard, R. Feigelson, E. Laurent-Muehleisen, Chester, M. Brinkmann, W. Hertz, P.	Penn State Penn State Penn State Penn State MPIfEP, Munich NRL	Optically quiet quasars	1.3, 2, 3.6, 6, 20	21	5.0
✓ AL252	Ledlow, M. Owen, F.	New Mexico NRAO-SOC	Radio galaxies in rich clusters	20	21	3.0
✓ AL287	Lonsdale, C. Beichman, C. Van Buren, D. Smith, H. Soifer, B. Neugebauer, G. Holstencroft, R.	IPAC, Pasadena IPAC, Pasadena IPAC, Pasadena Calif., San Diego Caltech Caltech Royal Obs	Protogalaxies in the IRAS faint source survey	20	2, 8	11.5
✓ AL292	Langston, G.	NRAO-CV	Gravitational lens MG1654+1346	2, 6, 20	21	4.0
✓ AM360	McMullin, J. Mundy, L.	Maryland Maryland	Survey of young stellar objects	1.3, 2, 3.5	24	1.5
✓ AM384	Mulchaey, J. Wilson, A.	Maryland STScI	Comparison of Seyfert I/Seyfert II emission in S0 and E hosts	3.6, 20	8, 9	9.0
✓ AM386	Mehring, D. Palmer, P. Goss, W.	Chicago Chicago NRAO-SOC	OH and H2O masers in Sgr D	20 line	14	3.0
✓ AM387	Mehring, D. Palmer, P. Goss, W.	Chicago Chicago NRAO-SOC	Sgr B2	6 line	7	8.0
✓ AM389	McKinnon, M. Thorsett, S. Taylor, J.	NRAO-GB Caltech Princeton	Orbit determination and mass of PSR B1820-11	20 HTRP	25	2.0
✓ AM396	Melia, F. Olszewski, E. Yusef-Zadeh, F.	Arizona Arizona Northwestern	Radio sources in three nearby dwarf spheroidal galaxies	3.6, 6, 20	24	6.0
✓ AM399	Mirabel, I. Rodriguez, L.	CNRS, France Mexico/UNAM	Monitoring 1E1740.7-2942 and GRS1758-258	6 w/GZ10, GS7	27, 28	6.0
✓ AM404	Muhleman, D. Butler, B. Slade, M. Haldemann, A.	Caltech Caltech JPL Caltech	Venus radar map - Beta Regio	3.6 line w/GS7	28	12.0
✓ AP255	Puche, D. Westpfahl, D.	CfA NMIMT	HI mapping of grand design spirals M51 & M83	20 line	1	8.0
✓ AP261	Palmer, P. Mehring, D. Yusef-Zadeh, F. Goss, W.	Chicago Chicago Northwestern NRAO-SOC	OH maser in the Sgr B1	20 line w/GZ10	15, 19	6.5
✓ AR287	Rigler, M. Lilly, S. Chambers, K.	Hawaii Toronto Hawaii	High redshift radio galaxies	6 w/GZ10	6, 27	10.5
✓ AR290	Rowan-Robinson, M. Lawrence, A. Oliver, S. McMahon, R.	Queen Mary Queen Mary Queen Mary Cambridge	Search for high redshift infrared galaxies	20 w/GZ10	3, 12, 13, 14, 16	17.8
✓ AR292	Roberts, D. Yusef-Zadeh, F. Goss, W.	Illinois Northwestern NRAO-SOC	H92alpha obs of high velocity gas in Sag A West	3.6 line w/Tests	12, 13	18.0
✓ AS333	Sramek, R. Weiler, K. van Dyk, S. Panagia, N.	NRAO-SOC NRL NRL STScI	Statistical properties of radio supernovae	2, 6	2, 5	5.5
✓ AS485	Schachter, J. Elvis, M. Stocke, J. Perlman, E.	CfA CfA Colorado Colorado	New, bright BL Lacs in the Einstein slew survey	6 w/Move/Op	22	7.0
✓ AS497	Saikia, D. Thomasson, P.	TIFR Manchester	Compact sources from the S4 survey	15 GHz	10	4.7
✓ AT134	Taylor, A. Dougherty, S.	Calgary Calgary	Monitoring of radio variable Be stars	3.6	15	3.0
✓ AT143	te Lintel Hekkert, P. Habing, H. Blommaert, J. Dejonghe, H. Rich, M. Winnberg, A. Sevenster, M.	Mt. Stromlo Leiden Leiden Gent Columbia Onsala Leiden	OH/IR stars: 1612 MHz survey of galactic plane	18 line	20	9.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AT144	Taylor, G. Ge, J. Owen, F. Baum, S. O'Dea, C.	Caltech Brandeis NRAO-SOC STSci STSci	Faraday rotation in cooling flow clusters.	3.6	7	4.5
✓ AV193	van der Hucht, K. Williams, P. Spoelstra, T.	Utrecht Utrecht NFRA	Wolf-Rayet object WR125	2, 6, 20	11	1.0
✓ AV204	van Breugel, W. Sutherland, W. Heckman, T. Lehnert, M.	Lawrence Livermore Calif., Berkeley Johns Hopkins Johns Hopkins	Southern quasar survey	20	12, 13, 16	10.6
✓ AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO	International monitoring of the Seyfert NGC 5548	3.5 w/GS7	4, 13, 28	5.0
✓ AW343	Westpfahl, D. Puche, D.	NMIMT CFA	Is dark matter absent from the smallest dwarf galaxies?	20 line w/GS7	27	8.5
✓ AW345	Wood, D.	NRAO-SOC	G5.89-0.39: A bipolar outflow of ionized gas?	1.3, 2, 3.6 line	8	3.0
✓ AW347	Wood, D. Kulkarni, S.	NRAO-SOC Caltech	Radio spectrum of G2.4+1.4	20, 90	4	8.0
✓ AW348	Wolszczan, A. Frail, D.	Penn State NRAO-SOC	Further astrometric obs of PSR 1257+12	20	5	10.0
✓ AZ060	Zhao, J. Goss, W.	NRAO-SOC NRAO-SOC	Galactic center transient at two years of age	6, 20	8	2.0
✓ BG011	Greenhill, L. Moran, J. Reid, M. Argon, A.	CFA CFA CFA CFA	Refining the water maser proper motions in M33/IC 133	1.3 Phased Array VLBI w/GW8	17, 18	32.0
✓ GG014	Gurvits, L. Schilizzi, R. Kellermann, K. Barthel, P. Pauliny-Toth, I. Kardashev, N. Popov, M.	NAIC NFRA NRAO-CV Groningen/Kapteyn MPIfR, Bonn Lebedev Lebedev	Quasars with $z > 3$	6 Phased Array VLBI	26	15.8
✓ GG015	Giovannini, G. Feretti, L. Venturi, T. Marcaide, S. Wehrle, A.	CNR, Bologna CNR, Bologna CNR, Bologna IdA, Spain IPAC, Pasadena	2 FR-1 radio galaxies: 3C31 and 3C264	6 Phased Array VLBI	25	20.7
✓ GK007	Kollgaard, R. Feigelson, E. Laurent-Muehleisen, Gabuzda, D.	Penn State Penn State Penn State Calgary	X-ray selected BL Lac objects	6 Phased Array VLBI	23	25.0
✓ GO001	O'Dea, C. Biretta, J.	STSci STSci	Archetype FR-1 NGC 1265	6 Phased Array VLBI	24	16.0
✓ GS007	Stanghellini, C. O'Dea, C. Baum, S. Fanti, R. Fanti, C. Dallacasa, D.	CNR, Bologna STSci STSci CNR, Bologna CNR, Bologna CNR, Bologna	GHz peaked spectrum radio sources	6 Single Antenna VLBI w/AG371, Tests, AW343, AM304...	27	24.6
✓ GW008	Wehrle, A. Unwin, S. Abraham, Z. Carrara, E. Urry, C. Madejski, G.	IPAC, Pasadena Caltech Sao Paulo Sao Paulo STSci NASA/GSFC	3C 279	1.3 Single Antenna VLBI w/AH478, Move/Op, AD297, BG11	17	9.7
✓ GZ010	Zensus, J. Leppanen, K. Unwin, S. Wehrle, A.	NRAO-SOC NRAO-SOC Caltech IPAC, Pasadena	Evolution of the parsec-scale structure of 3C345	1.3, 6 Single Antenna VLBI w/AR290, AD305, AP261	14, 26	21.6
	Staff	NRAO	Operations Maintenance Move/Operations Software Testing			50.9 48.3 19.1 21.8 14.2

The average downtime was 4.1%.

The array was scheduled for

527.2 hours (78.2 % of time) for astronomical programs

76.6 hours (11.4 % of time) for tests/calibration

70.1 hours (10.4 % of time) for maintenance

Total 673.9 hours (100.0 %) scheduled.

The array was in the BrA configuration from February 1 to February 18

B configuration from February 18 to February 28

Total number of astronomical programs was 60.

The following independent proposals shared simultaneous observing time (63.2 hours total simultaneous observing):

Projects	Hours	Projects	Hours
ad297/gw8	4.0	ad297/tests	1.2
ad305/gz10	6.0	ag371/gz7	5.2
ag371/gz10	3.8	ah478/gw8	0.5
ah478/move/op	1.5	ak317/gz10	1.0
am399	3.0	am399/gz10	3.0
am404/gz7	2.9	ap261/gz10	3.0
ar287/gz10	4.0	ar290/gz10	0.9
ar292/tests	1.1	as485/move/op	3.5
aw230/gz7	2.0	aw343/gz7	5.9
aw343/gz7	2.6	bg11/gw8	0.2
move/op/gw8	5.0	tests/gz7	3.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AB414	Becker, R. White, R.	Calif., Davis STScI	Monitoring radio stars HD193793 and P Cygni	2, 6 w/BX1	23	2.0
✓ AB456	Burke, B. Hewitt, J. Roberts, D.	MIT MIT Brandeis	Monitoring 0957+561 A,B	6	18	2.0
✓ AB612	Biretta, J. Owen, F.	STScI NRAO-SOC	Monitoring of proper motions in the M87 jet	2	10	12.0
✓ AB667	Burke, B. Becker, D. Conner, S. Avruch, M. Fletcher, A. Herold, L. Turner, E. Ekers, R. Wright, A.	MIT MIT MIT MIT MIT Princeton AT, Australia AT, Australia	MG VLA gravitational lens search	3.6	2, 7, 8	56.0
✓ AB671	Beasley, A. Bastian, T.	NRAO-SOC NRAO-SOC	Rotational modulation of O-B star microwave emission	3.6, 6	21, 24, 29	12.0
✓ AC341	Curiel, S. Rodriguez, L. Moran, J.	CfA Mexico/UNAM CfA	Radio monitoring of the Serpens radio jet	2, 3.6, 6	9	1.5
✓ AC349	Camilo, F. Arzoumanian, Z. Nice, D. Taylor, J.	Princeton Princeton Princeton Princeton	Search for a companion pulsar to PSR B2303+46	90	26	12.0
✓ AC350	Carilli, C. Wrobel, J.	NRAO-SOC NRAO-SOC	HI absorption towards MKN231	20 line	26	6.0
✓ AD298	Dwarakanath, K. Rupen, M.	NRAO-SOC NRAO-SOC	Steep-spectrum sources	3.6, 6, 20, 90	17	9.0
✓ AD299	Dey, A. van Breugel, W.	Calif., Berkeley Lawrence Livermore	3C258 - radiogalaxy with aligned radio and optical structures	3.6, 6, 20	15	4.5
✓ AD307	Diamond, P. Frail, D. van Langevelde, H. Cordes, J.	NRAO-SOC NRAO-SOC Leiden Cornell	The shape of the scattering disc of OH/IR stars at Galactic Center	20 line	30, 31	14.1
✓ AF217	Frail, D. Kulkarni, S. Thorsett, S.	NRAO-SOC Caltech Caltech	Young pulsar in G5.4-1.2	20 HTRP w/AV201	4, 18	5.0
✓ AF231	Frail, D. Vasisht, G. Kulkarni, S.	NRAO-SOC Caltech Caltech	Are PSR 1758-23 and SNR W28 physically associated?	3.6, 20	14, 24	8.4
✓ AF235	Foster, R. Backer, D.	NRL Calif., Berkeley	PSR 1951+32 in the CTB 80 supernova remnant	20	8	8.0
✓ AF238	Fiebig, D. Menten, K. Duschl, W. Tscharnuter, W.	Heidelberg CfA Heidelberg Heidelberg	Water maser outbursts in FU Orionis star RNO 1B	1.3 line	19	1.1
✓ AG357	Ge, J. Taylor, G. Owen, F.	Brandeis Caltech NRAO-SOC	Large Faraday rotations in cooling flow cluster A1795	2	2	8.0
✓ AG363	Greenhill, L.	CfA	Continuum emission associated with the IC10 water megamaser	1.3	3	1.0
✓ AG364	Grossman, A. Muhleman, D.	Maryland Caltech	Saturn's atmosphere	20	2	8.0
✓ AG375	Guedel, M. Elias, N. Lim, J.	Colorado USNO Caltech	Radio characteristics of selected PELA-like objects	2, 3.6, 6, 20	21, 22	18.0
✓ AG377	Guedel, M. Schmitt, J. Benz, A.	Colorado MPIEP, Garching ETH, Zurich	X-ray-flux-limited sample of G main-sequence stars	3.6 w/Move/Op	26, 28	15.0
✓ AH390	Hjellming, R. Gehrz, R. Taylor, A. Seagquist, E.	NRAO-SOC Minnesota Calgary Toronto	Monitoring radio novae.	3.6, 6, 20 w/BX1	15, 20, 31	5.7
✓ AH424	Han, X. Hjellming, R.	NMIMT NRAO-SOC	The radio remnant of the 1989 outburst of V404 Cyg.	3.6, 6	28	5.0
✓ AH437	Hewitt, J. Turner, E. Chen, G. Angelus, A.	MIT Princeton MIT MIT	Monitoring the "Einstein Ring" gravitation lens MG1131+0456	3.5, 6	15	2.0
✓ AH477	Hewitt, J. Katz, C. Turner, E.	MIT MIT Princeton	Gravitational lens MG0414+0534	1.3, 2, 3.6, 6, 20	14	8.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AH478	Hewitt, J. Ellithorpe, J. Moore, C. Turner, E.	MIT MIT MIT Princeton	Monitoring gravitational lens MG0414+0534	2	3, 5, 6, 11, 15, 18, 20, 23, 29, 31	9.4
✓ AH487	Higdon, J.	NRAO-SOC	Continuum emission from the Cartwheel ring galaxy	3.6	30, 31	12.0
✓ AJ221	Jacobson, A. Erickson, W. Mercier, C.	Los Alamos Maryland Paris	Geoplasma Dynamics	90	4, 13, 15, 16	6.3
✓ AJ222	Johnston, K. Claussen, M. Bowers, P.	NRL NRAO-SOC NRL	Water masers of 1K Tau	1.3 line	16	4.0
✓ AK307	Kronberg, P.	Toronto	3C 9 - a single-image gravitational lens	2, 3.6, 6	4	4.1
✓ AL150	Lestrade, J. Preston, R.	Meudon JPL	Statistical properties of RSCVn stars	6	11	0.4
✓ AL251	Langston, G.	NRAO-CV	Tracking variability of gravitational lens 2016+112	3.5, 6	7, 11	4.0
✓ AL252	Ledlow, M. Owen, F.	New Mexico NRAO-SOC	Radio galaxies in rich clusters	20	14, 19	12.0
✓ AL279	Lim, J. White, S. Phillips, R.	Caltech Maryland Haystack	Young, active late type binaries.	2, 3.6, 6, 20	29	2.5
✓ AM378	Migenes, V. Bowers, P. Cohen, R. Shepherd, M.	AT, Australia NRL Manchester Caltech	High resolution and sensitivity maps of OH maser shells	20 line	17	8.0
✓ AM379	Mirabel, F. Rodriguez, L.	CNRS, France Mexico/UNAM	Gamma ray sources 1E1740.7-2942 and GRS1758-258	6, 20 line	16	4.0
✓ AM382	Muhteman, D. Butler, B. Slade, M.	Caltech Caltech JPL	Radar imaging of Mars	3.6 line	11	9.5
✓ AM384	Mulchaey, J. Wilson, A.	STScI STScI	Comparison of Seyfert I/Seyfert II emission in S0 and E hosts	3.6, 20 w/BX1	16, 18	24.0
✓ AN058	Navarro, J. Kulkarni, S. Vasisht, G. Tanaka, Y. Nagase, F. Frail, D. Strom, R.	Caltech Caltech Caltech ISAS, Japan ISAS, Japan NRAO-SOC NFRA	Monitoring quiescent LMXBs	20	25	6.0
✓ AN059	Nonino, M. Fanti, C. Fanti, R.	Trieste Obs Bologna Bologna	Radio mapping of Markarian 315	6, 20	16	3.0
✓ AO111	Owen, F. Lavery, R. Henry, P.	NRAO-SOC DTM/Carnegie Hawaii	Gravitational lens candidate in an Abell cluster	2, 3.6	16	8.0
✓ AO114	O'Dea, C. Jackson, J.	STScI Boston	Search for molecular absorption in GPS radio sources	1.3, 2, 20 line	22	10.0
✓ AP243	Patnaik, A. Browne, I. King, L. Walsh, D. Wilkinson, P.	Manchester Manchester Manchester Manchester Manchester	Monitoring the smallest lens 0218+357	2, 3.6 w/BX1	3, 5, 11, 15, 18	4.7
✓ AP256	Palmer, D. Schaefer, B. Cline, T. Hurley, K. Laros, J. Fishman, G. Kouveliotou, C.	NASA/GSFC NASA/GSFC NASA/GSFC Calif., Berkeley Los Alamos NASA/MSFC NASA/MSFC	Gamma ray burster radio counterparts - deep searches	3.5 20	23, 24	21.0
✓ AR275	Rhee, G. Roland, J. Webb, J.	New Mexico State IAP, Paris New South Wales	High redshift radio galaxies	6, 20	9	16.0
✓ AR282	Rawlings, S. Lacy, M. Riley, J. Waldram, E. Warner, P.	Oxford Oxford Cambridge Cambridge Cambridge	~10mHz-peaked radio sources: a new population of high-redshift galaxies	3.6	12	12.0
✓ AR283	Reid, M. Menten, K.	CfA CfA	OH masers and the galactic magnetic field	20 line	10, 12	20.0
✓ AS333	Sramek, R. Weiler, K. Van Dyk, S. Panagia, N.	NRAO-SOC NRL NRL STScI	Statistical properties of radio supernovae	2, 6	23, 28	9.0

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Progm	Observer	Affiliation	Program Title	Bands cm	Observing Date	Sched Hours
✓ AS450	Sahai, R. Claussen, M.	JPL NRAO-SOC	Time variation of the enigmatic radio source in IRC+10216	1.3, 2, 3.6	25	5.0
✓ AS479	Swain, M. Bridle, A. Baum, S.	Rochester NRAO-CV STSci	3C353	3.6 w/BX1	19	10.0
✓ AS484	Salter, C. Junor, B. Bignell, C. Saikia, D.	Arecibo NRAO-SOC NRAO-SOC TIFR	Optically-thick planetary nebulae	90	17	2.0
✓ AS485	Schacter, J. Elvis, M. Stocke, J. Perlman, E.	Cfa Cfa Colorado Colorado	Discovering new, bright BL Lacs in the Einstein slew survey	6	26	6.0
✓ AS488	Seaquist, E. Odegard, N.	Toronto NASA/GSFC	Synchrotron emitting wind in NGC 4194	20 w/BX1	19	2.5
✓ AS490	Stocke, J. Perlman, E.	Colorado Colorado	The most highly core-dominated BL Lacs	20	3	14.0
✓ AS498	Surdes, J. Kellermann, K. Haubold, H. Kayser, R. Retty, M. Refsdal, S.	Liege NRAO-CV UN Hamburg Obs IAP, Paris Hamburg Obs	Clover-leaf gravitational lens H1413+117	2, 3.6	30	6.0
✓ AT134	Taylor, A. Dougherty, S.	Calgary Calgary	Monitoring of radio variable Be stars	3.6	24	3.0
✓ AT145	Thorsett, S. Taylor, J. McKinnon, M. Hankins, T. Stinebring, D.	Caltech Princeton NRAO-GB NMIMT Oberlin	Timing fast pulsars	6, 20, 90	15	10.9
✓ AV193	van der Hucht, K. Williams, P. Spoelstra, T.	Utrecht Royal Obs NFRA	Wolf-Rayet object WR125	2, 6, 20	16	1.0
✓ AV201	Vasisht, G. Kulkarni, S. Frail, D.	Caltech Caltech NRAO-SOC	Proper motion measurements of PSR 1800-21	20 w/AF217	18	2.0
✓ AV203	Van Dyk, S. Weiler, K. Sramek, R. Schlegel, E. Filippenko, A. Panagia, N.	NRL NRL NRAO-SOC NASA/GSFC Calif., Berkeley STSci	Search for Type IIpec Supernovae	6, 20 w/BX1	20	10.0
✓ AW230	Wrobel, J. Unger, S.	NRAO-SOC RGO	International monitoring of the Seyfert NGC 5548	3.6	9, 24	2.0
✓ AW330	Wills, B. Shastri, P.	Texas Calif., Berkeley	Core variability in lobe dominated quasars	3.6	6	10.0
✓ AW335	Wootten, A. Mangum, J.	NRAO-CV Texas	NGC 1333: dense gas accreting onto a binary protostar	1.3 line	16	1.1
✓ AW340	Womble, D. Dickey, J. Kazes, I. Carilli, C.	Calif., San Diego Minnesota Paris NRAO-SOC	Quasar galaxy pair 0248+430	20 line	10	8.0
✓ AW341	Womble, D. Carilli, C. Sargent, W. Yun, M.	Calif., San Diego NRAO-SOC Caltech Cfa	Search for HI absorption towards Q0959+6827	20 line	4	10.0
✓ AW349	White, S. Mundy, L. Grossman, A. Beasley, A.	Maryland Maryland Maryland NRAO-SOC	Mass loss in young stars	3.5 w/Move/Op	23, 25	13.5
✓ AZ060	Zhao, J. Goss, W.	NRAO-SOC NRAO-SOC	Galactic center transient at two years of age	3.6, 6, 20	9	2.0
✓ BX001	Xu, W. Readhead, A. Pearson, T. Wilkinson, P. Polatidis, A.	Caltech Caltech Caltech Manchester Manchester	Adhoc VLBS observations of a candidate for the smallest gravitationally lensed system	2, 3.6 Single Dish w/AM384, AP243, AH478, AB456...	18, 20	16.8
	Staff	NRAO	Operations Maintenance Move/Operations New Years Day Software Standard Field Observation Testing		1 1	46.0 47.5 39.1 21.0 32.1 6.0 21.5

The average downtime was 3.8%.

The array was scheduled for
535.9 hours (71.8 % of time) for astronomical programs
109.7 hours (14.7 % of time) for tests/calibration
79.6 hours (10.7 % of time) for maintenance
Total 725.1 hours (97.2 %) scheduled.

The array was in the B configuration from January 1 to January 21
BrA configuration from January 21 to January 31

Total number of astronomical programs was 66.

The following independent proposals shared simultaneous observing time (24.9 hours total simultaneous observing):

Projects	Hours	Projects	Hours
ab456/bx1	2.0	af217/av201	2.0
ag377/move/op	3.0	ah390/bx1	1.0
ah478/bx1	0.8	ah478/bx1	1.1
am384/bx1	1.0	ap243/bx1	0.7
as479/bx1	1.3	as488/bx1	2.5
av203/bx1	6.4	aw349/move/op	3.1