



ID	Task Mode	Task Name	Notes	Duration	Start	Finish	Predecessor	2014												2015											
								Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
38		Test E2E data quality		21 days	Mon 4/14/14	Sat 5/10/14	37																								
39		Pre-PAI testing		9 days	Mon 5/12/14	Thu 5/22/14	26FS+2 day																								
40		Hardware deliveries to OSF		44 days	Tue 4/8/14	Wed 6/4/14																									
41		Cables		10 days	Tue 4/8/14	Mon 4/21/14																									
42		Sum Data CC:PICs (LVDS)		10 days	Tue 4/8/14	Mon 4/21/14	1																								
43		Sum Data CC:CICs (LVDS)		10 days	Tue 4/8/14	Mon 4/21/14	42SS																								
44		PIC:OFL (Fibers)		10 days	Tue 4/8/14	Mon 4/21/14	42SS																								
45		Multi-Drop Ribbon/Extension		10 days	Tue 4/8/14	Mon 4/21/14	42SS																								
46		TE QCC : PICs (LVDS)		10 days	Tue 4/8/14	Mon 4/21/14	42SS																								
47		PIC Clock Cables (RG188)		10 days	Tue 4/8/14	Mon 4/21/14	42SS																								
48		Comm/Power PIC:Roach2 (Ribbon)		10 days	Tue 4/8/14	Mon 4/21/14	42SS																								
49		Deliver maser rack		10 days	Tue 4/15/14	Mon 4/28/14																									
50		Deliver maser to ALMA		7 days	Fri 5/2/14	Sat 5/10/14																									
51		Deliver 1-PPS to ALMA		10 days	Mon 4/21/14	Fri 5/2/14	6																								
52		Deliver final PICA to Chile		10 days	Thu 5/15/14	Wed 5/28/14																									
53		Deliver OFL to OSF		7 days	Fri 5/23/14	Sun 6/1/14	39																								
54		Deliver 2 recorders to OSF		10 days	Fri 5/23/14	Wed 6/4/14	27																								
55		Integration & Test (OSF & AOS)		68 days	Tue 4/22/14	Mon 7/21/14																									
56		Setup Test Network - Eng. Port		2.5 days	Tue 4/22/14	Thu 4/24/14																									
57		Install first PIC		2 days	Thu 4/24/14	Mon 4/28/14	56																								
58		Ethernet PICA to Eng. Port in correlator room		2 days	Mon 4/28/14	Wed 4/30/14	57																								
59		Integrate maser at AOS		10 days	Mon 5/12/14	Fri 5/23/14	50																								
60		Cables		5 days	Tue 4/22/14	Mon 4/28/14																									
61		Sum Data CC:PICs (LVDS)		5 days	Tue 4/22/14	Mon 4/28/14	42																								
62		Sum Data CC:CICs (LVDS)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
63		PIC:OFL (Fibers)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
64		Multi-Drop Ribbon/Extension		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
65		Maser/GPS : 1-PPS Dist. (BNC)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
66		Maser/GPS/PIC 1-PPS dist:PICs (LVDS)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
67		Ethernet CAT5E PICs:Sw:Eng.Port		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
68		TE QCC : PICs (LVDS)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
69		PIC Clock Cables (RG188)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
70		Comm/Power PIC:Roach2 (Ribbon)		5 days	Tue 4/22/14	Mon 4/28/14	61SS																								
71		Install 1-PPS in Correlator		1 day	Mon 5/5/14	Mon 5/5/14	51																								
72		C167 uP Code Integration	LTA, PIC, & SCC micro	8 days	Thu 5/15/14	Mon 5/26/14																									
73		FPGA Code Integration		2 days	Tue 5/27/14	Wed 5/28/14	72																								

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									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
74			OFL Install		1 day	Mon 6/2/14	Mon 6/2/14	53																					
75			Pre-PAS testing		7 days	Mon 6/9/14	Mon 6/16/14	28,53																					
76			Install PICA, etc. in AOS		10 days	Tue 6/17/14	Mon 6/30/14	75,53,52																					
77			Pre-AcRv testing		6 days	Mon 7/14/14	Mon 7/21/14	30																					
78			PIC Manuals (post-AcRv)		50.25 days	Tue 7/22/14	Tue 9/30/14																						
79			PIC Description		6.25 days	Tue 7/22/14	Wed 7/30/14	31																					
80			Operator's Manual		5 days	Wed 7/30/14	Wed 8/6/14	79																					
81			Maintenance Manual		12.5 days	Wed 8/6/14	Fri 8/22/14	80																					
82			1-PPS Manual		12.5 days	Fri 8/22/14	Wed 9/10/14	81																					
83			Other		14 days	Wed 9/10/14	Tue 9/30/14	82																					
84			Software Verification		243 days	Mon 3/31/14	Fri 2/27/15																						
85			Release 10.8		23 days	Mon 3/31/14	Wed 4/30/14																						
86			Release 2014.2		22 days	Fri 6/13/14	Fri 7/11/14																						
87			Release support trip		9 days	Tue 7/1/14	Fri 7/11/14																						
88			Release 2014.4		30 days	Mon 9/15/14	Fri 10/24/14																						
89			Release 2014.6		30 days	Mon 11/17/14	Fri 12/26/14																						
90			Post-Observation Enhancements		90 days	Mon 10/27/14	Fri 2/27/15	88																					
91			Commissioning & Sci. Validation		323 days	Wed 1/15/14	Tue 4/7/15																						
92			CSV OA: Phasing loop closure (calibrators)	Done	10 edays	Wed 1/15/14	Sat 1/25/14																						
93			CSV OB: Commensal Calibrator observations (engineering time)	Will need R10.8	72 days	Thu 5/1/14	Tue 8/5/14	85																					
94			CSV OE: Maser test	After maser install. Needs 1 hr daytime (engineering)	1 day	Tue 5/27/14	Tue 5/27/14	59FS+1 day																					
95			Start of Cycle 2	Likely CSV interruption	0 days	Sun 6/1/14	Sun 6/1/14																						
96			CSVOC: Polarization w/ Beacon (deleted)	Not mentioned by Stuartt	0 days	Tue 8/5/14	Tue 8/5/14	93																					
97			CSV OD: Polarization w/ sources (t0+4)	Needs AcRv. Need 4 hrs (night). Could defer to Stage 2.	5 days	Wed 8/6/14	Tue 8/12/14	93,31																					
98			CSV 1A: Stepped scans w/ closure phase (ALMA only)	Needs 3 hrs (night)	5 days	Wed 8/6/14	Tue 8/12/14	93,31																					
99			CSV 1B: "Single dish" spectroscopy	Could be engineering time.	5 days	Wed 8/6/14	Tue 8/12/14	93,31																					
100			CDS 1C: Inter-quadrant fringe test		5 days	Wed 8/6/14	Tue 8/12/14	93,31																					

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									Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep			
101			CSV Blocked out		66 days	Mon 9/1/14	Mon 12/1/14																									
102			CSV 1D-0: Single dish to OSF VLBI	Could be engineering time.	5 days	Wed 1/7/15	Tue 1/13/15																									
103			CSV 1D-1: Phased ALMA to OSF VLBI (Fringe test)	Could be engineering time.	5 days	Wed 1/7/15	Tue 1/13/15	102SS																								
104			CSV 1E: Phased ALMA to OSF VLBI (stepped scans)	Could be engineering time.	5 days	Wed 1/7/15	Tue 1/13/15	102SS																								
105			CSV 1F: Phased ALMA to APEX VLBI (fringe test)	Optional, but tests linear-to-circular	5 days	Wed 1/7/15	Tue 1/13/15	102SS																								
106			EHT Campaign 2015		10 days	Mon 3/16/15	Fri 3/27/15																									
107			CSV 2B: Band 6 VLBI with network		5 days	Wed 4/1/15	Tue 4/7/15																									
108			Haystack Correlator Upgrade		67 days	Tue 4/1/14	Fri 6/27/14																									
109			Plan Haystack upgrade		18 days	Tue 4/1/14	Thu 4/24/14																									
110			Order Haystack Correlator hardware		7 days	Fri 4/25/14	Mon 5/5/14	109																								
111			Receive correlator hardware		0 days	Wed 6/25/14	Wed 6/25/14	110FS+40 d																								
112			Upgrade Haystack Correlator		35 days	Tue 5/6/14	Wed 6/18/14	110																								
113			Test Haystack Correlator		7 days	Thu 6/19/14	Fri 6/27/14	112																								
114			Post-test ROACH-2 modifications		17 days	Tue 8/5/14	Wed 8/27/14																									
115			DAC output		1 day	Tue 8/5/14	Tue 8/5/14	31FS+10 da																								
116			10 GbE addr modification	Low priority	15 days	Wed 8/6/14	Tue 8/26/14	115																								
117			Regression tests		1 day	Wed 8/27/14	Wed 8/27/14	116																								
118			Personnel travel		97 days	Tue 4/1/14	Mon 8/11/14																									
119			Geoff in Socorro		4 days	Tue 4/1/14	Fri 4/4/14																									
120			Geoff in Charlottesville		2 days	Mon 4/7/14	Tue 4/8/14	119																								
121			Geoff in Charlottesville		5 days	Mon 4/14/14	Fri 4/18/14																									
122			Geoff on vacation		10 edays	Fri 8/1/14	Mon 8/11/14																									
123			Rich on vacation		8 days	Wed 4/23/14	Fri 5/2/14																									
124			Alejandro in Charlottesville		5 days	Mon 5/5/14	Fri 5/9/14																									
125			Alejandro in Socorro		10 days	Sat 5/10/14	Thu 5/22/14	124																								
126			Ongoing Documentation		20 days	Tue 4/8/14	Mon 5/5/14																									
127			System BOM Clean-up		20 days	Tue 4/8/14	Mon 5/5/14																									
128			ICD Updates		20 days	Tue 4/8/14	Mon 5/5/14																									

