

### Integrated Project Schedule Holography-Outlined by IPT

Row	Activity ID	Activity Desc.	CD	Start	Finish	2005												2006												2007											
						Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	1	ALMA	3835d	01Oct01A	31Mar12																																				
2	1.04	Front End	3736d	01Oct01A	23Dec11																																				
3	1.04.4	ALMA Front End Schedule	3736d	01Oct01A	23Dec11																																				
4	1.04.4.05	Front End Management	3546d	09Apr02A	23Dec11																																				
5	1.04.4.05.65	ICD's Requiring Aproval	1030d	15Oct03A	09Aug06																																				
6	1.04.4.05.65.07	ICD 5 ANTE-Antenna & FEND-Holography Receiver Received Approval	1d	13Dec03A	13Dec03A																																				
7	1.04.4.75	FE Integration & Test Centre Activities	2728d	01Apr04A	19Sep11																																				
8	1.04.4.75.60	FE Support to System Integration	729d	03Oct05	01Oct07																																				
9	1.04.4.75.60.20	Holography System - Front End	200d	04Nov05	23May06																																				
10	1.04.4.75.60.20.20	FEND Holography System - Receive Updated Specification to Modify ATF Transmitter/Receiver	0	04Nov05	04Nov05	 04Nov2005 (Start) / 04Nov2005 (End)																																			
11	1.04.4.75.60.20.22	FEND Holography System - Develop Transmitter Electronics	128d	07Nov05	14Mar06	 07Nov2005 (Start) / 14Mar2006 (End)																																			
12	1.04.4.75.60.20.24	FEND Holography System - Develop Holography Receiver	156d	07Nov05	11Apr06	 07Nov2005 (Start) / 11Apr2006 (End)																																			
13	1.04.4.75.60.20.26	FEND Holography System - Integrate & Test in Charlottesville	28d	12Apr06	09May06	 12Apr2006 (Start) / 09May2006 (End)																																			
14	1.04.4.75.60.20.28	FEND Holography System - Ship to ATF	14d	10May06	23May06	 10May2006 (Start) / 23May2006 (End)																																			
15	1.04.4.75.60.20.30	FEND Holography System - Delivered to ATF	0	23May06	23May06	 23May2006 (Start) / 23May2006 (End)																																			
16	1.02	Site	3550d	15Jan02A	04Oct11																																				
17	1.02.1	1.02 Site Schedule	3550d	15Jan02A	04Oct11																																				
18	1.02.1.13	Operations Support Facility (OSF)	2168d	13Feb04A	20Jan10																																				
19	1.02.1.13.01	Technical Buildings - Phase I	1295d	13Feb04A	31Aug07																																				
20	1.02.1.13.01.01	OSF Tech Area Design - Phase I	798d	13Feb04A	21Apr06																																				
21	1.02.1.13.01.01.45	High Level Design for Holography Tower	59d	04Jul05A	31Aug05A	 04Jul2005 (Start) / 31Aug2005 (End)																																			
22	1.02.1.13.01.01.50	Components Developments for Holography Tower	234d	31Aug05A	21Apr06	 31Aug2005 (Start) / 21Apr2006 (End)																																			
23	1.02.1.13.01.02	OSF Tech Area Construction -Phase I	1202d	17May04A	31Aug07																																				
24	1.02.1.13.01.02.54	Holography Tower (Shipment of Components and Procurement for Tower Structure)	166d	07Nov05	21Apr06	 07Nov2005 (Start) / 21Apr2006 (End)																																			
25	1.02.1.13.01.02.56	Holography Tower Construction (Trenching and Tower)	166d	24Apr06	06Oct06	 24Apr2006 (Start) / 06Oct2006 (End)																																			
26	1.02.1.13.01.02.58	Holography Tower Ready for First Antenna	0	06Oct06	06Oct06	 06Oct2006 (Start) / 06Oct2006 (End)																																			
27	1.08	SE & I	3652d	01Apr02A	30Mar12																																				

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28	1.08.1	ALMA System Engineering & Integration	3652d	01Apr02A	30Mar12																																				
29	1.08.1.5	Antenna Evaluation & Prototype System Integration	2169d	01Apr02A	08Mar08																																				
30	1.08.1.5.6	Prototype System Integration EU & NA	1476d	23Feb04A	08Mar08																																				
31	1.08.1.5.6.22	PSI ATF (Stage Eight)	724d	17Jan06	11Jan08																																				
32	1.08.1.5.6.22.28	PSI ATF - Receive FEND Holography Electronics	0	23May06	23May06																																				
33	1.08.1.5.6.22.30	PSI ATF - Integrate & Test Holography Electronics	58d	24May06	20Jul06																																				
34	1.08.1.5.6.22.32	PSI ATF - Ship Holography Electronics to OSF	57d	21Jul06	15Sep06																																				
35	1.08.1.5.6.22.34	PSI ATF - Holography Electronics Delivered to OSF	0	15Sep06	15Sep06																																				
36	1.08.1.2	System Engineering	3111d	17Jun03A	22Dec11																																				
37	1.08.1.2.10	Requirements and ICDs	2206d	17Jun03A	30Jun09																																				
38	1.08.1.2.10.30	System Engineering ICD List	1150d	17Jun03A	09Aug06																																				
39	1.08.1.2.10.30.260	ICD 5 ANTE-Antenna & FEND-Holography Receiver CCB Approval	1d	13Dec03A	13Dec03A																																				
40	1.08.1.2.10.30.758	ICD 33 SE&I Holography Measure Equip & COMP-M/C CCB Approval	1d	29Jul04A	29Jul04A	CCB Approval																																			
41	1.08.1.2.10.30.760	ICD 33-B SE&I Holography Measure Equip & COMP-M/C ICD Submitted	0	15Nov05	15Nov05																																				
42	1.08.1.2.10.30.762	ICD 33-B SE&I Holography Measure Equip & COMP-M/C DAR Review	35d	16Nov05	20Dec05																																				
43	1.08.1.2.10.30.766	ICD 33-B SE&I Holography Measure Equip & COMP-M/C CCB Approval	0	20Dec05	20Dec05																																				
44	1.08.1.8	System AIV OSF/AOS	2738d	01Oct04A	30Mar12																																				
45	1.08.1.8.6	ALMA System Integration	2738d	01Oct04A	30Mar12																																				
46	1.08.1.8.6.18	AIV Initial Integration of Facilities and Rec. Components	2251d	31Oct05	30Dec11																																				
47	1.08.1.8.6.18.1	AIV Site Integration	851d	30Jan06	30May08																																				
48	1.08.1.8.6.18.1.2	AIV Site - OSF	331d	06Oct06	02Sep07																																				
49	1.08.1.8.6.18.1.2.36	OSF Holography Electronics & Tower - AIV Receive	0	06Oct06	06Oct06																																				
50	1.08.1.8.6.18.1.2.38	OSF Holography System - Reconfigure Software, Install,- AIV Test Functionality	20d	07Oct06	26Oct06																																				
51	1.08.1.8.6.18.1.2.40	OSF Holography System - AIV Complete	0	26Oct06	26Oct06																																				
52	1.08.1.8.6.18.4	AIV Receive Front End Components	1845d	15Sep06	04Oct11																																				
53	1.08.1.8.6.18.4.84	FEND Holography Equipment OSF - AIV Receive	0	15Sep06	15Sep06																																				



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80	1.09.9.2.80.1	Draft of Holography Requirements Document	93d	05Jul05A	05Oct05	Draft of Holography Requirements Document 																																			
81	1.09.9.2.80.2	Internal Review of Holography Requirements	8d	06Oct05	13Oct05	Internal Review of Holography Requirements 																																			
82	1.09.9.2.80.3	Release Front End to Develop Holography Electronics	0	13Oct05	13Oct05	Release Front End to Develop Holography Electronics 																																			
83	1.09.9.2.80.4	Holography Electronics Installed and Tested on OSF Tower	0	26Oct06	26Oct06													Holography Electronics Installed and Tested on OSF Tower 																							
84	1.09.9.2.80.5	Holography System Req'd 30 Day prior to ACC	30d	27Oct06	25Nov06													Holography System Req'd 30 Day prior to ACC 																							