









Activity ID	Activity Description	Dur (D)	%	Start	Finish	TF	2001																			
							MAY					JUN				JUL				AUG				SEP		
							30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10
<b>5.3.3 Ni-63 Sources</b>																										
ME3305	Procure Ni-63 Sources	83	100	12JAN00A	05MAY00A																					
<b>5.3.4 Sensor MCP's</b>																										
<b>5.3.4.1 ELS MCP's</b>																										
ME3500	Send out Chevron MCP Data Package for Qoutes	71	100	23AUG99A	17SEP99A																					
ME3510	Review ELS Chevron MCP Bids & Award PO	5	100	04OCT99A	11NOV99A																					
ME3505	Receive Qoutes for ELS Chevron MCP OV Select	0	100		18OCT99A																					
ME3515	Procure ELS Proto Chevron MCP's(+NRE)	105	100	01DEC99A	02MAY00A																					
ME3550	Procure ELS Flt. Chevron MCP (1st Set)	139	100	01DEC99A	02MAY00A																					
ME3551	Procure ELS Flt. Chev MCP (Set 2+1 Failed Set)	158	100	01DEC99A	14JUL00A																					
ME3555	Procure ELS Flt. Chevron MCP's (Sets 3-5)	212	100	01DEC99A	30NOV00A																					
ME3525	Perform ELS Proto MCP Measuremts & Characterize	5	100	02MAY00A	05MAY00A																					
ME3520	Receive ELS Proto Chevron MCP's (2 Mech Sets)	0	100		02MAY00A																					
ME3560	Perform ELS Flt. MCP Measuremts & Characterize	75*	100	15JUN00A	15SEP00A																					
<b>5.3.4.2 IMA MCP's</b>																										
ME3800	IRF Supplied IMA Proto MCP's Received	0	100		14FEB00A																					
ME3805	Perform IMA Proto MCP Measuremts & Characterize	10	100	10APR00A	03MAY00A																					
ME3850	IRF Supplied IMA Flt. MCP's & Samples Received	0	100		06JUL00A																					
ME3860	Perform IMA Flt. MCP Measuremts & Characterize	10	100	29AUG00A	31AUG00A																					
ME3851	Remaining IRF Supplied IMA Flt. MCP's Received	0	100		29AUG00A																					
<b>5.4 Mechanical Fabrication</b>																										
<b>5.4.1 ELS Mechanical Fabrication</b>																										
<b>5.4.1.1 ELS Structural Thermal Model (STM)</b>																										
<b>5.4.1.1.1 ELS STM Housing</b>																										
ME4010	Machine ELS STM Housing	9	100	07JUL00A	19JUL00A																					
ME4015	Plate & Finish ELS STM Housing	5	100	20JUL00A	26JUL00A																					
ME4020	Install Htr's into ELS STM Housing	3	100	22AUG00A	23AUG00A																					
ME4025	Test STM Housing w/Htr's	1	100	23AUG00A	23AUG00A																					
<b>5.4.1.2 ELS Prototype</b>																										
<b>5.4.1.2.1 ELS Housing</b>																										
ME4035	Machine ELS Proto Housing	10	100	12JAN00A	02FEB00A																					
ME4038	Plate & Finish ELS Proto Housing	5	100	31JAN00A	03FEB00A																					
<b>5.4.1.2.2 ELS Mechanical Details</b>																										
ME4040	Machine ELS Proto Mech Details	125	100	12JAN00A	19MAY00A																					
ME4042	Plate & Finish ELS Proto Mech Details	111	100	01FEB00A	19MAY00A																					
<b>5.4.1.2.3 ELS MCP Holder</b>																										
ME4044	Machine ELS Proto MCP Holder	19	100	15MAR00A	21APR00A																					
ME4046	Plate & Finish ELS Proto MCP Holder	3	100	21APR00A	25APR00A																					
ME4048	Fitcheck ELS Proto MCP Holder w/MCP Stack	2	100	03MAY00A	04MAY00A																					
ME4820	Fitcheck ELS Proto MCP Holder w/MCP Stack	1	100	28JUL00A	28JUL00A																					
<b>5.4.1.3 ELS Flight Unit (FU) / Flight Spare Unit (FSU)</b>																										
<b>5.4.1.3.1 ELS FU/FSU Housing</b>																										
ME4110A	Machine ELS FSU Housing	71*	100	26MAY00A	01SEP00A																					
ME4120A	Plate & Finish ELS FSU Housings	3	100	05SEP00A	07SEP00A																					
ME4142A	ELS FSU Housings UV Coating	3	100	11SEP00A	13SEP00A																					
ME4143A	ELS FSU IDP, Insul, & Top Hat UV Coating	3	100	11SEP00A	13SEP00A																					
ME4110B	ELS FU Housing Rough Machining	8*	100	21SEP00A	02NOV00A																					
ME4110B10	ELS FU Housing Fine Machining (Hyperfine)	51	100	03OCT00A	14DEC00A																					
ME4130C10	ELS FU DP & Insulator Fine Machining (Hyperfine)	48	100	06OCT00A	14DEC00A																					
ME4120B	Plate & Finish ELS FU Pieces @ SwRI	5	100	15DEC00A	21DEC00A																					















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<b>7.12 Post Launch Software Development</b>																								
<b>7.12.1 Post Launch - Cruise Phase</b>																								
<b>7.12.1.1 IDFS Updates</b>																								
SW1213	Update IDFS Creation Software (If Req'd)	140	0	02JUN03*	18DEC03	7																		
SW1210	Update IDFS Data Access Software	110	0	01JUL03*	05DEC03	16																		
SW1212	Update IDFS Data Server Software	80	0	04AUG03*	24NOV03	102																		
SW1216	Update IDFS Processing System (If Req'd)	140	0	01DEC03*	17JUN04	135																		
<b>7.12.1.2 Document Preparation &amp; Delivery to PDS</b>																								
SW1220	Define & Describe PDS Data Products	180	0	01JUL03*	17MAR04	130																		
SW1223	Implement Production & Validation Process	40	0	18MAR04	12MAY04	130																		
SW1226	PDS Peer Review & Approval Process	30	0	13MAY04	24JUN04	130																		
<b>7.12.1.3 APAF Operations</b>																								
SW1230	Update & Document APAF Operations Procedures	60	0	03MAR03*	23MAY03	269																		
SW1235	Operate APAF Production to Supp Inst. Check Out	160	0	02JUN03*	20JAN04	265																		
<b>7.12.2 Post Launch - Orbital Phase</b>																								
SW1250	Operate APAF Prod. (IDFS/PDS Data & NRT Disp)	146	0	08MAR04	30SEP04	265																		
SW1255	Science Software Support	146	0	08MAR04	30SEP04	265																		
SW1260	Software Maintenance	146	0	08MAR04	30SEP04	265																		
SW1252	Operate APAF Prod. (IDFS/PDS Data & NRT Disp)	314	0	01OCT04	30DEC05*	505																		
SW1256	Science Software Support (**)	554	0	01OCT04	11DEC06	265																		
SW1261	Software Maintenance	554	0	01OCT04	11DEC06	265																		
<b>7.13 Travel-Labor for Software Development</b>																								
SW1452	ASPERA Team Mtg's / TIM's @ Rome	3	100	04OCT99A	06OCT99A																			
SW1450	ASPERA Team Mtg's / TIM's @ Kiruna	17	100	07FEB00A	29FEB00A																			
SW1415	GSE Meetings (Finland/Italy)	150	100	01MAR00A	29SEP00A																			
SW1450C	ASPERA Team Mtg's / TIM's @ Kiruna	1,162*	29	01MAR00A	30SEP04	13																		
SW1455	ESA Science Working Group Meetings @ Nordvik	4	100	21APR00A	26APR00A																			
SW1412	ASPERA Data Archiving Working Group Mtg @	2	100	19JUN00A	20JUN00A																			
SW1455C	ESA Science Working Group Meetings @ Nordvik	1,032*	21	01SEP00A	30SEP04	0																		
SW1410	ASPERA I Critical Design Review	2	100	06SEP00A	07SEP00A																			
SW1470	Aspera-3 SWT/TIM Meeting	6	100	02MAR01A	09MAR01A																			
SW1480	MEX DAWG/SOWG/SWT	3	100	20JUN01A	22JUN01A																			
SW1460	Calibration @ Kiruna	60*	0	06JUL01*	28SEP01	0																		
SW1420	Instrument Quality Acceptance Review	2	0	18JUL01*	19JUL01	50																		
SW1430	Flight Acceptance Review	2	0	20NOV02*	21NOV02	4																		
SW1435	Final Data Archival Review	2	0	28JAN03*	29JAN03	2																		
SW1451	ASPERA Team Mtg's / TIM's @ Kiruna	595	0	01OCT04	09FEB07	13																		
SW1456	ESA Science Working Group Meetings @ Nordvik	606	0	01OCT04	26FEB07	2																		
SW1440	Instrument Check-Out Review	2	0	07DEC04*	08DEC04	10																		
<b>7.14 Computer &amp; Network Equipment</b>																								
SW1510	Development Computer PO Placement	20	100	25JAN00A	11FEB00A																			
SW1525	Computer Maintenance	1,919*	18	01MAR00A	28SEP07	62																		
SW1515	IDFS Production Computer & Archival System	20	0	03JUN02*	28JUN02	22																		
SW1520	Analysis Computer	22	0	01JUN04*	30JUN04	64																		
SW1530	Necessary Upgrades	64	0	01MAY06*	31JUL06	43																		
SW1505	Network Connection - SwRI & GSFC	0	0	31AUG07*	30AUG07	82																		

MEX DAWG/SOWG/SWT  
 Calibration @ Kiruna

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<b>8 Assembly, Integration &amp; Testing</b>																						
<b>8.1 ELS Instrument I&amp;T</b>																						
<b>8.1.1 ELS STM</b>																						
<b>8.1.1.1 ELS STM Unit Assembly</b>																						
STM0005	Fabricate ELS STM Pieces	15	100	12JUL00A	14JUL00A																	
STM0010	Assemble ELS STM	1	100	18AUG00A	23AUG00A																	
<b>8.1.1.2 ELS STM Testing</b>																						
STM0045	ELS STM Mass Properties Measuremts	11	100	23AUG00A	24AUG00A																	
STM0055	ELS STM Functional / Electrical Load Test	1	100	23AUG00A	23AUG00A																	
STM0070	ELS STM Bakeout	0	100	23AUG00A	24AUG00A																	
STM0050	ELS STM Metrology Report	1	100	24AUG00A	29AUG00A																	
STM0090	ELS STM Final Inspect / Cleaning / Bagging	11	100	24AUG00A	24AUG00A																	
<b>8.1.2 ELS Prototype Assembly &amp; Testing</b>																						
ELSP4020	ELS Proto Mechanical UV Coating	54	100	07FEB00A	24APR00A																	
ELSP4005	ELS Proto Assembly	55	100	20MAR00A	23JUN00A																	
ELSP4010	ELS Proto Bench Itrfc Test	3	100	30MAY00A	05JUN00A																	
ELSP4030	ELS Proto FEE Thermal Testing	3	100	19JUN00A	23JUN00A																	
ELSP4040	ELS Proto HVPS Thermal Test	3	100	19JUN00A	23JUN00A																	
ELSP4015	ELS Proto Characterization in Vacuum	5	100	26JUN00A	28JUL00A																	
ELSP4050	ReIntegrate ELS Prototype (w/EM MCP's)	1	100	26JUN00A	26JUN00A																	
ELSP4060	ELS Proto Vacuum HV Testing	2	100	03JUL00A	05JUL00A																	
ELSP4070	ELS Proto End-2-End XTalk Chk	17	100	06JUL00A	28JUL00A																	
ELSP4055	ELS Prototype Vibration Test	2	100	11AUG00A	14AUG00A																	
ELSP4072	ELS Proto FEE Thermal Testing	3	100	21AUG00A	23AUG00A																	
ELSP4074	ELS Proto HVPS Thermal Test	3	100	21AUG00A	23AUG00A																	
ELSP4076	ReIntegrate ELS Prototype (w/EM MCP's)	1	100	24AUG00A	24AUG00A																	
ELSP5010	Receive ELS Prototype Unit from MSSL	0	100	11DEC00A																		
ELSP5020	ELS Prototype Testing @ SwRI	8	100	11DEC00A	20DEC00A																	
ELSP5030	Ship ELS Prototype Back to MSSL	7*	100	21DEC00A	03JAN01A																	
ELSP5040	ELS Prototype Verification Testing @ MSSL	9	100	04JAN01A	16JAN01A																	
<b>8.1.3 ELS Flight Unit (FU)</b>																						
<b>8.1.3.1 ELS FU Assembly</b>																						
ELSFU022	Assemble ELS FU HVPS/Amp/MCP	1	100	29SEP00A	29SEP00A																	
ELSFU032	Install FU SubAssy in Vacuum Chamber	2	100	30OCT00A	31OCT00A																	
ME4135D	ELS FU Assembly (Pre-UV Coat)	2	100	18DEC00A	19DEC00A																	
ME4135E	ELS FU Vacuum Testing (Pre-UV Coat)	6	100	19DEC00A	21DEC00A																	
ME4135F	Disassemble ELS FU for UV Coating @ MSSL	1	100	26DEC00A	26DEC00A																	
ELSFU002	ELS FU SubAssembly Bakeout	2	100	19JAN01A	22JAN01A																	
ELSFU215	Conduct ELS FU Anode Character Testing w/Ni63	5	100	23JAN01A	29JAN01A																	
ELSFU005	ELS FU Assembly	1	100	30JAN01A	30JAN01A																	
<b>8.1.3.2 ELS FU Testing &amp; Measurements</b>																						
<b>8.1.3.2.1 ELS FU Vacuum HV Testing</b>																						
ELSFU200	ELS FU Vacuum - HV Test Setup	2	100	02OCT00A	03OCT00A																	
ELSFU205	Conduct ELS FU Vac - HV Breakdown Testing	2	100	19JAN01A	22JAN01A																	
ELSFU220	ELS FU Vac/HV Breakdown Test Report	2	100	16FEB01A	19FEB01A																	
<b>8.1.3.2.2 ELS FU E2E &amp; Crosstalk Check</b>																						
ELSFU210	Conduct ELS FU HV Breakdown Test	3	100	13FEB01A	15FEB01A																	
<b>8.1.3.2.3 ELS FU Physical/Mass Properties Measurements</b>																						
ELSFU250	Conduct ELS FU Weight & CG Measurements	1	100	31JAN01A	31JAN01A																	
ELSFU255	Conduct ELS FU Physical Prop Measurements	1	100	31JAN01A	31JAN01A																	







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<b>A.1.2 ELS Flight Unit (FU)</b>																								
DEL0160	ELS FU Delivered	0	100		05MAR01A																			
DEL0170	ELS FU Re-Delivery	2	0	23JUL01	24JUL01	7																		
<b>A.1.3 ELS Flight Spare Unit (FSU)</b>																								
DEL0180	Prep ELS FSU for Shipment	1	100	05MAR01A	05MAR01A																			
DEL0190	ELS FSU Delivered In Place	0	100		05MAR01A																			
DEL0185	Ship ELS FSU to IRF/Kiruna	2	100	29MAR01A	30MAR01A																			
<b>A.1.4 IMA Flight Set (FS) Hardware</b>																								
DEL0105	Prep IMA Proto Hdwr for Shipment	1	100	24AUG00A	24AUG00A																			
DEL0115	Ship IMA Proto Hdwr to IRF/Kiruna	1	100	25AUG00A	25AUG00A																			
DEL0117	Prep ELS Proto Hdwr for Shipment	1	100	25AUG00A	25AUG00A																			
DEL0118	Ship ELS Proto Hdwr to IRF/Kiruna	1	100	28AUG00A	28AUG00A																			
DEL0210	Prep IMA FS Hdwr for Shipment	1	100	14DEC00A	14DEC00A																			
DEL0215	Ship IMA FS Hdwr to IRF/Kiruna	2	100	09JAN01A	10JAN01A																			
DEL0220	IMA FS Hdwr Delivered	0	100		10JAN01A																			
<b>A.1.5 IMA Flight Spare Set (FSS) Hardware</b>																								
DEL0250	Prep IMA FSS Hdwr for Shipment	1	100	14DEC00A	14DEC00A																			
DEL0255	Ship IMA FSS Hdwr to IRF/Kiruna	2	100	09JAN01A	10JAN01A																			
DEL0260	IMA FSS Hdwr Delivered	0	100		10JAN01A																			
<b>A.3 Data Deliverables</b>																								
DEL3005	ELS STM Data Package	5	100	15AUG00A	30AUG00A																			
DEL3015	IMA Fit. Hdwr Data Package	2	100	28NOV00A	15DEC00A																			
DEL3010	ELS FSU Data Package	5	100	05FEB01A	23FEB01A																			
DEL3020	ELS FU Data Package	1	100	20FEB01A	20FEB01A																			
<b>B Post Delivery SwRI Support</b>																								
<b>B.1 Instrument Calibration</b>																								
<b>B.1.1 ELS FU Calibration</b>																								
ELSFU425	ELS FU/FSU Anode Changeout	5	0	25JUL01	31JUL01	7																		
ELSFU415	Conduct ELS FU Calibration Testing	23	0	11MAY01A	07AUG01	2																		
ELSFU430	Deliver to ASPERA-3 Ai&T	1	0	08AUG01	08AUG01	2																		
<b>B.1.2 ELS FSU Calibration</b>																								
ELSFU415	Conduct ELS FSU Calibration Testing	0	0	06JUL01	05JUL01	36																		
ELSFU430	Deliver ELS FSU to ASPERA-3 Ai&T	0	0	06JUL01	05JUL01	36																		
<b>B.1.3 IMA Ai&amp;T / Calibration</b>																								
IMAF1205	IMA Calibration Support	60*	0	06JUL01	28SEP01	0																		
<b>B.2 ASPERA I&amp;T Support</b>																								
<b>B.2.1 Fit. Instrument Assembly</b>																								
ASP0100	Instrument Assembly & Bench Testing	10	0	09AUG01	22AUG01	2																		
<b>B.2.2 Functional Testing</b>																								
ASP0200	Instrument Functional Testing	10	0	23AUG01	05SEP01	2																		
<b>B.2.3 TV Testing</b>																								
ASP0300	Instrument TV Support	10	0	06SEP01	19SEP01	2																		
<b>B.2.4 Calibration</b>																								
ASP0400	Instrument Calibration Support	20	0	20SEP01	17OCT01	2																		
<b>B.2.5 ASPERA Reserve</b>																								
ASP0500	ASPERA-3 Reserve Contingency	20	0	18OCT01	14NOV01	2																		
<b>B.2.6 ASPERA-3 Delivery</b>																								
ASP0600	ASPERA-3 FM Delivery to ESA	0	0		14NOV01	2																		

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<b>C Education &amp; Public Outreach (EPO)</b>																										
EPO0210	EPO - SwRI / Lewis	103*	100	01OCT99A	29FEB00A																					
EPO0210C	EPO - SwRI / Lewis	172	100	01MAR00A	31OCT00A																					
EPO0220	EPO - SwRI / Mukherjee	1,265*	15	02OCT00A	30SEP05	0																				
EPO0230	EPO - SwRI / Student	1,325*	0	06JUL01*	29SEP06	0																				
EPO0240	EPO - SwRI / YES	760	0	01OCT01*	30SEP04	0																				