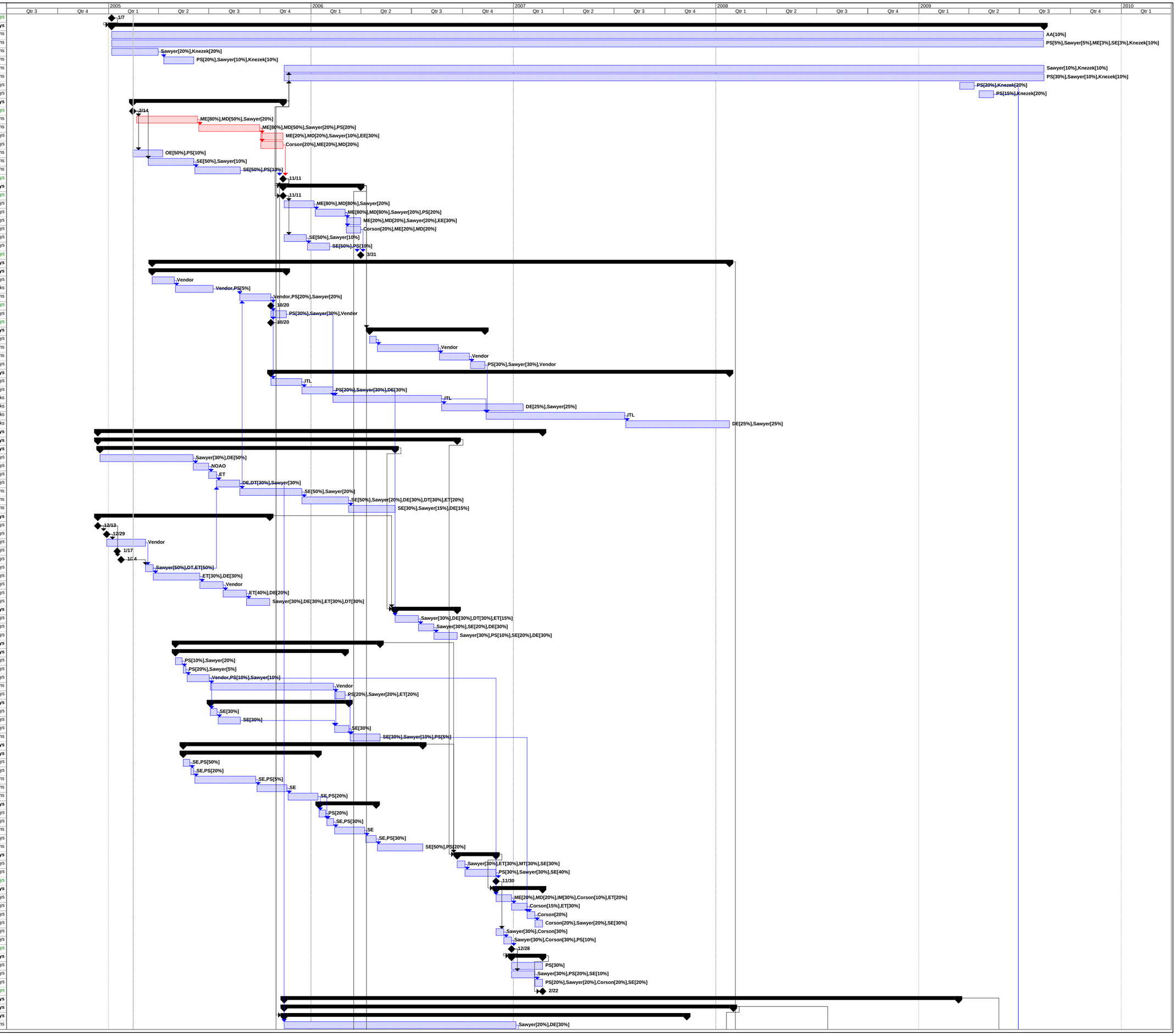
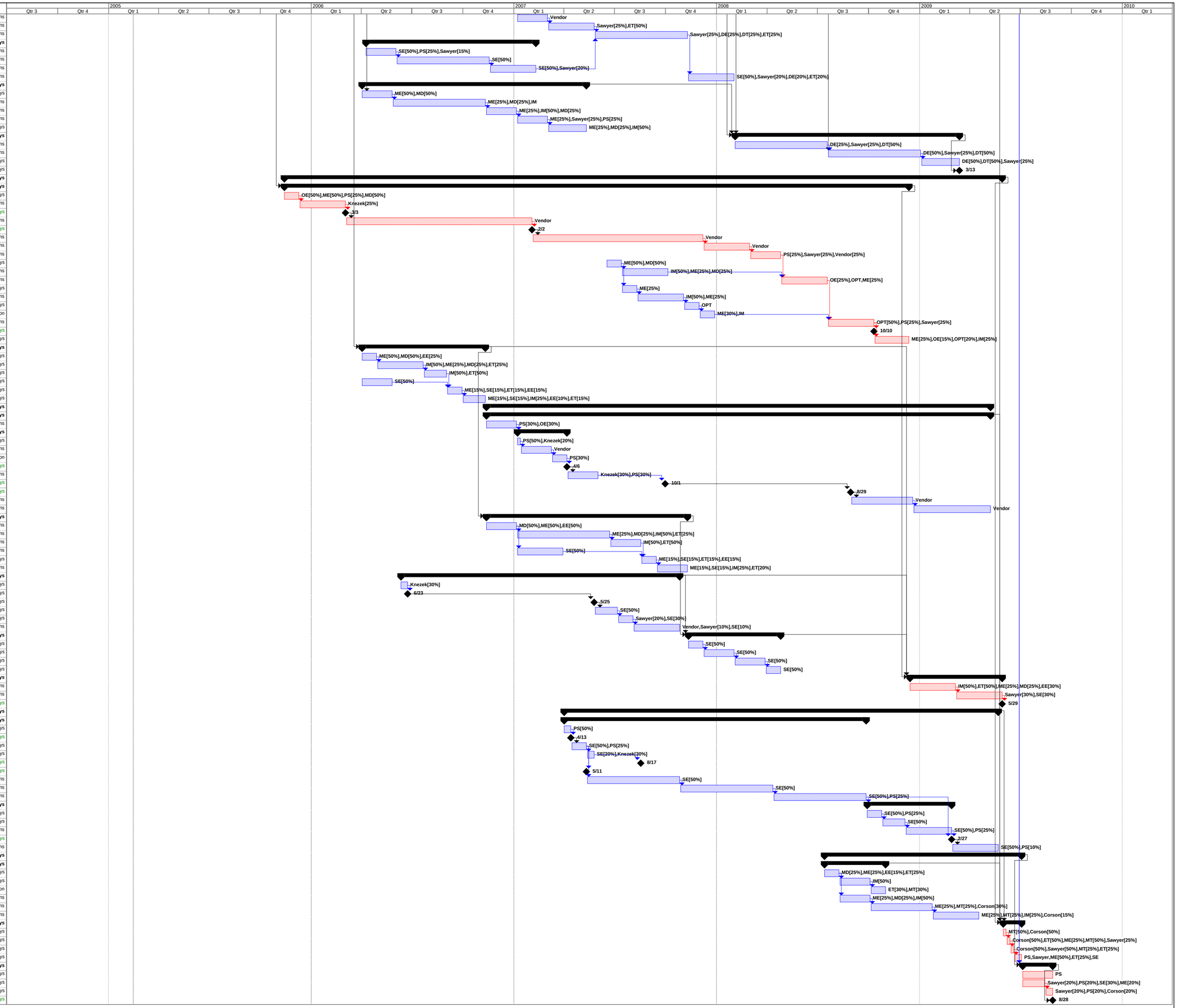
ID	Task Name	Duration
1	ODI CoDR	0 days
2	**Management**	**1201 days**
3	Adminitrative Tasks	60 mons
4	Meetings	60 mons
5	Develop Project Plan	3 mons
6	Define Performance Measures and Acceptance Crite	2 mons
7	Schedule and Tracking	49 mons
8	Project Oversight	49 mons
9	Commissioning Plan	20 days
10	Operations Plan	20 days
11	**Preliminary Design**	**195 days**
12	Start Preliminary Design	0 days
13	Instrument Support Package	4 mons
14	Camera	4 mons
15	Electronics and Cabling	30 days
16	Site Readiness	30 days
17	Optics Design (Critical Design Phase)	2 mons
18	Control Software	3 mons
19	Data Pipeline	3 mons
20	PDR (Optics CDR)	0 days
21	**Critical Design**	**100 days**
22	Start Critical Design	0 days
23	Instrument Support Package	40 days
24	Camera	40 days
25	Electronics and Cabling	20 days
26	Site Readiness	20 days
27	Control Software	30 days
28	Data Pipeline	30 days
29	CDR	0 days
30	**OTA Production**	**745 days**
31	**Lot 2**	**174 days**
32	Lot 2 Design	30 days
33	Lot 2 Fabrication	10 wks
34	Lot 2 Test and Evaluation	2 mons
35	Lot 2 QUOTA Device Selection	0 days
36	Lot 2 ODI Device Selection	20 days
37	OTA Device Demonstrated	0 days
38	**Lot 3**	**150 days**
39	Lot 3 Design	10 days
40	Lot 3 Fab	4 mons
41	Lot 3 Test and Evaluation	2 mons
42	Lot 3 Device Selection	20 days
43	**OTA Packaging**	**591 days**
44	QUOTA Processing (6 devices)	40 days
45	Charaterization	40 days
46	Backside Process Lot 2 (est. 28 devices)	28 wks
47	Charaterization of Lot 2 Devices	21 wks
48	Backside Process Lot 3 (est. 36 devices)	36 wks
49	Charaterization of Lot 3 Devices	27 wks
50	**QUOTA Imager**	**574 days**
51	**QUOTA Camera**	**464 days**
52	**Controller**	**380 days**
53	Development	120 days
54	Fabrication	20 days
55	Assembly	10 days
56	Test and OTA operation	30 days
57	Software Development	4 mons
58	Test	3 mons
59	Controller Contingency	3 mons
60	**Dewar**	**222 days**
61	Receive PanSTARRS Design	0 days
62	Contract Fabrication	0 days
63	Fabrication	50 days
64	Purchase Flex Circuits	0 days
65	Purchase CryoTiger/Fittings	0 days
66	Dewar Assembly and Test	10 days
67	Chip Mount / Flex Circuit Design	60 days
68	Chip mount / Flex Circuit Fabrication	30 days
69	Chip Mount / Flex Circuit Assembly	30 days
70	Dewar Contingency	30 days
71	**Final Assembly**	**80 days**
72	Install OTAs	30 days
73	Integration	20 days
74	Testing	30 days
75	**Filter/Shutter Assembly (FSA)**	**265 days**
76	**FSA Mechanism**	**220 days**
77	Contract	10 days
78	Procure 5" Filters	5 days
79	Design	30 days
80	Fabrication (5" design)	8 mons
81	Acceptance Testing	15 days
82	**FSA Software Control**	**180 days**
83	Design	10 days
84	Coding	30 days
85	Test	20 days
86	FSA Contingency	2 mons
87	**Data Pipeline**	**310 days**
88	**Data Handling System**	**175 days**
89	Design	10 days
90	Procure Equipment	5 days
91	Coding	4 mons
92	Integration	2 mons
93	Testing	2 mons
94	**Data Reduction**	**75 days**
95	Requirements	10 days
96	Design	10 days
97	Coding	2 mons
98	Testing	15 days
99	Data Pipeline Contingency	3 mons
100	**Lab Integration**	**50 days**
101	Component Integration	10 days
102	Lab Testing	40 days
103	QUOTA Functional Acceptance	0 days
104	**Site Integration**	**60 days**
105	Port Modifications	20 days
106	Electronics/Cabling	20 days
107	FSA Installation	10 days
108	FSA Test	10 days
109	QUOTA Camera Installation	10 days
110	QUOTA Camera Test	10 days
111	Engineering Acceptance	0 days
112	**Commissioning**	**40 days**
113	Scientific Evaluation	40 days
114	Documentation	30 days
115	Training	10 days
116	QUOTA Science Operations Begin	0 days
117	**ODI Camera**	**870 days**
118	**Controller**	**580 days**
119	**Hardware**	**520 days**
120	Development	15 mons



ID	Task Name	Duration
121	Fabrication	2 mons
122	Assembly	3 mons
123	Testing	6 mons
124	**Software**	**220 days**
125	Design	2 mons
126	Coding	6 mons
127	Testing	3 mons
128	Controller Contingency	3 mons
129	**Dewar**	**290 days**
130	Finalize Design	40 days
131	Fabrication	6 mons
132	Assembly	2 mons
133	Testing	2 mons
134	Dewar Contingency	50 days
135	**FPA Assembly**	**290 days**
136	Install OTAs	6 mons
137	Lab Testing	6 mons
138	FPA Contingency	50 days
139	ODI Camera Functional Acceptance	0 days
140	**Instrument Support Package (ISP)**	**925 days**
141	**Optics**	**805 days**
142	Finalize Optical Design	20 days
143	Contract Development / RFQ	3 mons
144	Optics Materials Ordered	0 days
145	Lens Blank Fabrication	12 mons
146	Optics Polishing Start	0 days
147	Polishing	11 mons
148	Coatings	3 mons
149	Test and Acceptance	2 mons
150	Cell Final Design	20 days
151	Cell Fabrication	3 mons
152	Install Optics in Cell	3 mons
153	Housing Design	20 days
154	Housing Fabrication	3 mons
155	Install Optics in Housing	20 days
156	Design and Build Test Fixtures	1 mon
157	Full-up Optics System Test	3 mons
158	Optics Acceptance	0 days
159	Optics Contingency	45 days
160	**ADC Mechanism**	**160 days**
161	Final Design	20 days
162	Fabrication	60 days
163	Assembly	30 days
164	Software	40 days
165	Test	20 days
166	ADC Mechanism Contingency	30 days
167	**Filter Assembly**	**650 days**
168	**Filters**	**650 days**
169	Specifications	2 mons
170	**Filter Sample Evaluation**	**65 days**
171	Contract for Sample Filters	5 days
172	Sample Fabrication	2 mons
173	Sample Evaluation	1 mon
174	Sample Evaluation Complete	0 days
175	Contract Development	2 mons
176	Filter Contract Issued	0 days
177	Filters Complete	0 days
178	Characterization	4 mons
179	Filter Contingency	5 mons
180	**Filter Mechanism**	**260 days**
181	Final Design	2 mons
182	Fabrication	6 mons
183	Assembly	2 mons
184	Software	3 mons
185	Test	20 days
186	Filter Mechanism Contingency	2 mons
187	**Shutter Assembly**	**360 days**
188	Contract Development	10 days
189	Contract Issued	0 days
190	Delivery	0 days
191	Software	30 days
192	Testing	20 days
193	Shutter Contingency	3 mons
194	**ISP Control Interface**	**120 days**
195	Design	20 days
196	Coding	40 days
197	Testing	40 days
198	ISP Control Contingency	20 days
199	**ISP integration**	**120 days**
200	Final Assembly	3 mons
201	Functional Testing	3 mons
202	ISP Functional Acceptance	0 days
203	**Data Pipeline**	**560 days**
204	**Data Handling System**	**390 days**
205	Pipeline Options Evaluation	10 days
206	Pipeline Selection Complete	0 days
207	Final Design	20 days
208	Procure Equipment	10 days
209	Equipment Received	0 days
210	Begin DHS Development	0 days
211	Coding	6 mons
212	Integration	6 mons
213	Testing	6 mons
214	**Data Reduction**	**110 days**
215	Final Design	20 days
216	Coding	30 days
217	Testing	3 mons
218	Pipeline Acceptance	0 days
219	ODI Pipeline Contingency	3 mons
220	**Site Integration**	**255 days**
221	**Cable Wrap**	**80 days**
222	Final Design	20 days
223	Fabrication	40 days
224	Installation/Cabling	1 mon
225	Transport/Handling Fixtures	2 mons
226	Rotator Upgrades	4 mons
227	Site Preparation Contingency	3 mons
228	**Installation**	**25 days**
229	Removal of IAS	5 days
230	Installation of ISP	5 days
231	Installation of Camera	5 days
232	Test and Evaluation	10 days
233	**ODI Commissioning**	**40 days**
234	Science Verification	40 days
235	Documentation	30 days
236	Training	10 days
237	ODI Begins Science Operations	0 days