





# SCATSAT-1 Scatterometer Level-1B Data Quality Cycle wise Report

Report between 18-OCT-2019 To 19-OCT-2019

					Inner											
					Incidence Angle			Azimuth Angle			Range			X-Factor		
Sr No	Start Orbit	End Orbit	Dir.	Ver.	Min	Max	BadOcc(%)	Min	Max	BadOcc(%)	Min	Max	BadOcc(%)	Min	Max	BadOcc(%)
1	16193	16194	SN	1	48.769	49.406	0.0	0.003	282.302	2.001	1032.904	1076.376	0.0	-91.594	-89.991	0.0
2	16193	16194	SN	2	48.657	49.405	0.0	0.0	215.741	2.736	1032.928	1076.352	0.0	-92.574	-89.991	0.0
3	16193	16194	SN	1	48.657	49.406	0.0	0.0	282.302	2.736	1032.904	1076.376	0.0	-92.574	-89.991	0.0
4	16194	16195	SN	1	48.711	49.405	0.0	0.003	6.403	2.583	1032.12	1076.32	0.0	-91.719	-89.978	0.0
5	16194	16195	SN	1	48.711	49.405	0.0	0.003	6.403	2.423	1032.648	1076.32	0.0	-91.719	-89.978	0.0
6	16194	16195	NS	1	48.743	49.371	0.0	0.0	52.652	2.672	1039.928	1076.176	0.0	-91.704	-90.053	0.0
7	16194	16195	SN	1	48.711	49.405	0.0	0.003	6.403	2.585	1032.648	1076.32	0.0	-91.719	-89.978	0.0
8	16195	16196	SN	1	48.743	49.438	0.0	0.003	6.403	2.361	1032.232	1076.464	0.0	-91.786	-90.008	0.0
9	16195	16196	NS	2	48.743	49.371	0.0	0.003	210.314	2.533	1039.144	1076.352	0.0	-91.839	-90.015	0.0
10	16195	16196	SN	1	48.743	49.438	0.0	0.003	6.403	2.506	1032.232	1076.464	0.0	-91.786	-90.008	0.0
11	16195	16196	NS	1	48.743	49.371	0.0	0.003	210.314	2.533	1039.144	1076.352	0.0	-91.839	-90.015	0.0
12	16195	16196	SN	1	48.743	49.438	0.0	0.003	6.403	2.362	1032.088	1076.48	0.0	-91.786	-90.008	0.0
13	16196	16197	NS	1	48.699	49.37	0.0	0.0	123.983	2.739	1039.352	1076.232	0.0	-91.744	-90.073	0.0
14	16196	16197	SN	1	48.724	49.415	0.0	0.003	215.741	2.316	1031.88	1076.376	0.0	-91.704	-90.006	0.0
15	16196	16197	SN	2	48.724	49.415	0.0	0.003	215.741	2.545	1031.88	1076.376	0.0	-91.67	-90.006	0.0
16	16196	16197	SN	1	48.724	49.415	0.0	0.003	215.741	2.545	1031.88	1076.376	0.0	-91.67	-90.006	0.0
17	16196	16197	NS	1	48.746	49.37	0.0	0.0	123.983	2.744	1039.392	1076.232	0.0	-91.672	-90.073	0.0
18	16197	16198	SN	2	48.722	49.404	0.0	0.003	6.381	2.529	1031.896	1076.24	0.0	-91.73	-90.005	0.0
19	16197	16198	SN	1	48.723	49.404	0.0	0.003	6.381	2.529	1031.896	1076.24	0.0	-91.698	-90.005	0.0
20	16197	16198	SN	1	48.722	49.404	0.0	0.003	6.381	2.167	1031.896	1076.24	0.0	-91.725	-90.005	0.0
21	16197	16198	NS	1	48.719	49.395	0.0	0.0	28.606	2.727	1040.056	1076.096	0.0	-91.787	-90.037	0.0
22	16197	16198	NS	1	48.719	49.395	0.0	0.0	28.606	2.73	1040.056	1076.096	0.0	-91.787	-90.037	0.0
23	16198	16199	SN	1	48.708	49.403	0.0	0.003	6.386	1.97	1031.92	1076.136	0.0	-91.661	-90.006	0.0
24	16198	16199	SN	2	48.708	49.403	0.0	0.003	6.386	2.539	1031.92	1076.136	0.0	-91.73	-90.006	0.0
25	16198	16199	NS	1	48.684	49.405	0.0	0.003	11.956	2.606	1040.24	1075.984	0.0	-92.069	-90.06	0.0
26	16198	16199	NS	1	48.712	49.382	0.0	0.003	11.956	2.603	1040.24	1075.984	0.0	-92.253	-90.06	0.0
27	16198	16199	SN	1	48.708	49.403	0.0	0.003	6.386	2.54	1031.92	1076.136	0.0	-91.73	-90.006	0.0
28	16199	16200	SN	1	48.702	49.404	0.0	0.003	282.765	2.599	1032.432	1076.064	0.0	-91.57	-90.007	0.0
29	16199	16200	NS	2	48.685	49.384	0.0	0.003	42.049	2.551	1039.056	1075.912	0.0	-91.74	-90.068	0.0
30	16199	16200	SN	1	48.702	49.404	0.0	0.003	282.765	2.597	1032.08	1076.064	0.0	-91.704	-90.007	0.0
31	16199	16200	NS	1	48.686	49.383	0.0	0.003	267.555	2.553	1039.072	1075.904	0.0	-91.74	-90.068	0.0
32	16199	16200	SN	1	48.702	49.404	0.0	0.003	282.765	1.761	1032.432	1076.064	0.0	-91.57	-90.007	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	47.1	0.0	1025.0	-100.0
	Max	49.9	0.0	1095.7	-80.0

Normal     
  Deviations  
 Alarming     
  High Errors

33	16200	16201	SN	1	48.728	49.405	0.0	0.003	6.392	2.666	1033.096	1076.192	0.0	-91.681	-90.001	0.0
34	16200	16201	NS	1	48.694	49.408	0.0	0.003	266.788	2.629	1039.496	1076.024	0.0	-91.775	-90.067	0.0
35	16200	16201	SN	1	48.728	49.405	0.0	0.003	6.392	1.566	1033.096	1076.192	0.0	-91.681	-90.001	0.0
36	16200	16201	SN	1	48.724	49.405	0.0	0.003	6.392	2.664	1032.688	1076.192	0.0	-91.681	-90.001	0.0
37	16201	16202	SN	1	48.726	49.406	0.0	0.003	28.653	2.575	1033.072	1076.24	0.0	-91.554	-89.967	0.0
38	16201	16202	NS	1	48.697	49.371	0.0	0.003	12.778	2.594	1039.864	1076.04	0.0	-91.889	-90.044	0.0
39	16201	16202	NS	1	48.697	49.371	0.0	0.003	12.773	2.591	1039.728	1076.04	0.0	-91.889	-90.044	0.0
40	16201	16202	SN	2	48.726	49.406	0.0	0.003	28.653	2.575	1033.072	1076.24	0.0	-91.554	-89.967	0.0
41	16202	16203	NS	1	48.72	49.371	0.0	0.003	210.612	2.716	1039.016	1075.944	0.0	-91.576	-90.043	0.0
42	16202	16203	SN	1	48.721	49.406	0.0	0.003	281.419	2.56	1033.096	1076.16	0.0	-91.928	-90.013	0.0
43	16202	16203	NS	1	48.72	49.371	0.0	0.003	210.612	2.72	1039.008	1075.944	0.0	-91.633	-90.043	0.0
44	16203	16204	SN	2	48.718	49.416	0.0	0.003	215.94	2.627	1033.392	1076.064	0.0	-91.716	-89.987	0.0
45	16203	16204	NS	1	48.742	49.371	0.0	0.003	210.618	2.602	1039.064	1075.856	0.0	-91.693	-90.067	0.0
46	16203	16204	NS	1	48.742	49.371	0.0	0.003	210.618	2.6	1039.064	1075.864	0.0	-91.749	-90.067	0.0
47	16203	16204	SN	1	48.718	49.416	0.0	0.003	215.94	2.627	1033.392	1076.064	0.0	-91.716	-89.987	0.0
48	16204	16205	NS	2	48.69	49.37	0.0	0.003	18.332	2.655	1038.96	1075.912	0.0	-91.734	-90.066	0.0
49	16204	16205	NS	1	48.69	49.37	0.0	0.003	18.332	2.655	1038.96	1075.912	0.0	-91.734	-90.066	0.0
50	16204	16205	SN	1	48.732	49.407	0.0	0.003	6.386	2.603	1033.392	1076.12	0.0	-91.959	-89.993	0.0
51	16204	16205	NS	1	48.69	49.37	0.0	0.003	18.332	2.464	1038.96	1075.656	0.0	-91.833	-90.066	0.0
52	16204	16205	SN	1	48.732	49.407	0.0	0.003	6.386	2.616	1033.392	1076.12	0.0	-91.959	-89.993	0.0
53	16205	16206	NS	2	48.702	49.424	0.0	0.003	263.981	2.578	1039.12	1075.912	0.0	-91.692	-90.065	0.0
54	16205	16206	NS	1	48.702	49.424	0.0	0.003	263.981	2.579	1039.12	1075.904	0.0	-91.692	-90.065	0.0
55	16205	16206	SN	1	48.704	49.405	0.0	0.003	28.046	2.571	1033.456	1076.12	0.0	-91.678	-90.006	0.0
56	16205	16206	SN	2	48.704	49.405	0.0	0.003	28.046	2.571	1033.456	1076.12	0.0	-91.678	-90.006	0.0
57	16206	16207	NS	1	48.683	49.385	0.0	0.0	266.711	2.719	1039.376	1076.0	0.0	-91.664	-90.062	0.0
58	16206	16207	NS	1	48.683	49.385	0.0	0.0	266.711	1.652	1039.376	1073.544	0.0	-91.664	-90.062	0.0
59	16206	16207	SN	1	48.713	49.406	0.0	0.003	282.721	2.562	1032.368	1076.192	0.0	-91.819	-90.012	0.0
60	16206	16207	SN	1	48.721	49.407	0.0	0.003	215.929	2.559	1032.36	1076.2	0.0	-91.639	-90.012	0.0
61	16207	16208	SN	1	48.718	49.406	0.0	0.003	28.35	2.704	1033.64	1076.216	0.0	-91.694	-90.014	0.0
62	16207	16208	NS	1	48.743	49.434	0.0	0.003	206.961	2.549	1038.568	1076.016	0.0	-91.755	-90.046	0.0
63	16207	16208	NS	2	48.743	49.434	0.0	0.003	206.961	2.549	1038.568	1076.016	0.0	-91.755	-90.046	0.0
64	16207	16208	NS	1	48.743	49.434	0.0	0.003	206.961	1.544	1038.568	1071.44	0.0	-91.755	-90.046	0.0
65	16207	16208	SN	1	48.718	49.406	0.0	0.003	28.35	1.674	1033.64	1076.216	0.0	-91.709	-90.014	0.0
66	16208	16209	SN	1	48.661	49.433	0.0	0.003	6.386	2.738	1032.584	1076.008	0.0	-92.589	-89.964	0.0
67	16208	16209	SN	1	48.768	49.433	0.0	0.003	6.386	2.432	1032.584	1076.008	0.0	-91.712	-89.964	0.0
68	16208	16209	NS	1	48.744	49.37	0.0	0.003	18.222	2.713	1038.776	1075.832	0.0	-91.951	-90.046	0.0
69	16208	16209	SN	2	48.661	49.433	0.0	0.003	6.386	2.739	1032.584	1076.008	0.0	-92.589	-89.964	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	47.1	0.0	1025.0	-100.0
	Max	49.9	0.0	1095.7	-80.0

 Normal	 Deviations
 Alarming	 High Errors

70	16208	16209	NS	1	48.744	49.37	0.0	0.003	18.222	2.716	1038.776	1075.832	0.0	-91.951	-90.046	0.0
71	16209	16210	NS	1	48.744	49.37	0.0	0.003	264.306	2.49	1039.832	1076.024	0.0	-91.724	-90.038	0.0
72	16209	16210	SN	1	48.705	49.404	0.0	0.003	216.067	2.406	1033.424	1076.2	0.0	-92.235	-89.997	0.0
73	16209	16210	SN	1	48.705	49.404	0.0	0.003	216.067	2.54	1033.424	1076.2	0.0	-92.235	-89.997	0.0
74	16209	16210	NS	1	48.745	49.37	0.0	0.003	264.306	2.486	1039.84	1076.016	0.0	-91.644	-90.038	0.0
75	16209	16210	SN	1	48.705	49.404	0.0	0.003	216.067	2.393	1033.424	1076.2	0.0	-92.235	-89.997	0.0
76	16210	16211	SN	1	48.757	49.404	0.0	0.003	28.675	2.329	1033.24	1076.24	0.0	-91.719	-90.009	0.0
77	16210	16211	SN	1	48.757	49.404	0.0	0.003	28.675	2.496	1033.24	1076.24	0.0	-91.719	-90.009	0.0
78	16210	16211	SN	1	48.757	49.404	0.0	0.003	28.675	2.489	1033.24	1076.24	0.0	-91.719	-90.009	0.0
79	16210	16211	NS	1	48.705	49.37	0.0	0.0	267.218	2.649	1039.664	1076.104	0.0	-91.686	-90.043	0.0
80	16210	16211	NS	1	48.745	49.37	0.0	0.0	267.218	2.647	1039.888	1076.104	0.0	-91.698	-90.043	0.0
81	16211	16212	SN	1	48.724	49.403	0.0	0.003	34.041	2.548	1032.472	1076.088	0.0	-91.75	-89.992	0.0
82	16211	16212	NS	1	48.734	49.37	0.0	0.003	206.471	2.606	1039.368	1075.96	0.0	-91.743	-90.048	0.0
83	16211	16212	NS	2	48.734	49.37	0.0	0.003	206.471	2.608	1039.36	1075.96	0.0	-91.743	-90.048	0.0
84	16211	16212	SN	1	48.724	49.403	0.0	0.003	34.041	2.551	1032.08	1076.088	0.0	-91.637	-89.992	0.0
85	16212	16213	NS	2	48.684	49.37	0.0	0.003	263.948	2.672	1040.04	1075.88	0.0	-91.706	-90.063	0.0
86	16212	16213	SN	1	48.724	49.402	0.0	0.0	15.861	2.074	1032.424	1076.008	0.0	-91.649	-90.009	0.0
87	16212	16213	SN	1	48.712	49.416	0.0	0.0	15.861	2.52	1032.216	1076.008	0.0	-91.74	-90.009	0.0
88	16212	16213	SN	1	48.724	49.402	0.0	0.0	15.861	2.525	1032.424	1076.008	0.0	-91.649	-90.009	0.0
89	16212	16213	NS	1	48.684	49.37	0.0	0.003	41.415	2.673	1040.032	1075.88	0.0	-91.706	-90.063	0.0
90	16213	16214	SN	2	48.709	49.435	0.0	0.003	6.37	2.579	1032.36	1075.864	0.0	-91.712	-90.01	0.0
91	16213	16214	SN	1	48.709	49.435	0.0	0.003	6.37	2.385	1032.36	1075.864	0.0	-91.712	-90.01	0.0
92	16213	16214	NS	1	48.746	49.371	0.0	0.003	41.85	2.583	1039.976	1075.712	0.0	-91.709	-90.063	0.0
93	16213	16214	NS	1	48.746	49.371	0.0	0.003	41.71	2.581	1039.976	1075.712	0.0	-91.703	-90.063	0.0
94	16213	16214	SN	1	48.709	49.435	0.0	0.003	6.37	2.579	1032.36	1075.864	0.0	-91.712	-90.01	0.0
95	16214	16215	NS	1	48.688	49.396	0.0	0.0	267.169	2.701	1038.768	1075.736	0.0	-91.771	-90.065	0.0
96	16214	16215	NS	1	48.744	49.398	0.0	0.0	267.169	2.713	1038.752	1075.736	0.0	-91.771	-90.065	0.0
97	16214	16215	SN	1	48.728	49.444	0.0	0.003	6.375	2.652	1032.512	1075.888	0.0	-91.811	-89.987	0.0
98	16214	16215	SN	1	48.728	49.415	0.0	0.003	6.375	1.641	1032.52	1075.896	0.0	-91.78	-89.987	0.0
99	16214	16215	SN	1	48.728	49.415	0.0	0.003	6.375	2.655	1032.52	1075.896	0.0	-91.78	-89.987	0.0
100	16215	16216	SN	2	48.728	49.414	0.0	0.003	6.386	2.592	1033.416	1076.024	0.0	-91.749	-89.999	0.0
101	16215	16216	SN	1	48.728	49.414	0.0	0.003	6.386	1.538	1033.416	1076.024	0.0	-91.664	-89.999	0.0
102	16215	16216	NS	1	48.691	49.371	0.0	0.003	42.807	2.57	1039.616	1075.872	0.0	-91.724	-90.062	0.0
103	16215	16216	NS	1	48.711	49.384	0.0	0.003	43.092	2.584	1038.688	1075.864	0.0	-91.688	-90.062	0.0
104	16215	16216	SN	1	48.728	49.414	0.0	0.003	6.386	2.592	1033.416	1076.024	0.0	-91.749	-89.999	0.0
105	16216	16217	SN	1	48.734	49.405	0.0	0.003	6.392	2.531	1033.736	1076.024	0.0	-91.614	-89.986	0.0
106	16216	16217	NS	1	48.679	49.371	0.0	0.003	264.604	2.712	1039.328	1075.84	0.0	-92.34	-90.054	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	47.1	0.0	1025.0	-100.0
	Max	49.9	0.0	1095.7	-80.0

 Normal	 Deviations
 Alarming	 High Errors

107	16217	16218	NS	1	48.744	49.372	0.0	0.003	210.706	2.64	1039.8	1075.688	0.0	-91.637	-90.043	0.0
108	16217	16218	SN	1	48.743	49.405	0.0	0.003	280.956	2.572	1032.688	1075.872	0.0	-91.734	-90.014	0.0
109	16218	16219	SN	1	48.707	49.406	0.0	0.003	6.381	2.659	1033.664	1075.912	0.0	-91.955	-89.982	0.0
110	16218	16219	NS	1	48.744	49.372	0.0	0.0	267.191	2.748	1039.04	1075.76	0.0	-91.693	-90.065	0.0
111	16218	16219	NS	1	48.744	49.372	0.0	0.0	267.191	2.688	1039.04	1075.704	0.0	-91.693	-90.065	0.0
112	16219	16220	NS	1	48.677	49.379	0.0	0.003	13.203	2.185	1038.848	1075.16	0.0	-91.8	-90.063	0.0
113	16219	16220	SN	1	48.723	49.407	0.0	0.003	6.375	2.584	1033.656	1075.968	0.0	-91.704	-89.99	0.0
114	16219	16220	NS	1	48.678	49.37	0.0	0.003	13.203	2.55	1038.72	1075.792	0.0	-91.819	-90.063	0.0
115	16219	16220	NS	1	48.677	49.379	0.0	0.003	13.203	2.554	1038.848	1075.808	0.0	-91.754	-90.063	0.0
116	16219	16220	SN	2	48.723	49.407	0.0	0.003	6.375	2.584	1033.656	1075.968	0.0	-91.704	-89.99	0.0
117	16220	16221	NS	1	48.686	49.418	0.0	0.003	267.268	2.639	1038.4	1075.864	0.0	-91.708	-90.062	0.0
118	16220	16221	NS	1	48.682	49.418	0.0	0.003	267.268	2.641	1038.296	1075.88	0.0	-91.716	-90.062	0.0
119	16220	16221	SN	1	48.707	49.407	0.0	0.003	6.381	2.576	1032.632	1076.032	0.0	-91.671	-90.014	0.0
120	16220	16221	NS	1	48.682	49.418	0.0	0.003	267.268	1.749	1038.296	1073.808	0.0	-91.773	-90.062	0.0
121	16220	16221	SN	1	48.707	49.407	0.0	0.003	6.381	2.574	1032.632	1076.032	0.0	-92.141	-90.014	0.0
122	16221	16222	NS	1	48.69	49.385	0.0	0.0	142.32	2.642	1039.016	1075.944	0.0	-91.852	-90.06	0.0
123	16221	16222	SN	1	48.724	49.409	0.0	0.003	6.386	2.635	1032.96	1076.112	0.0	-91.737	-90.015	0.0
124	16221	16222	SN	1	48.724	49.409	0.0	0.003	6.386	2.632	1032.96	1076.112	0.0	-91.645	-90.015	0.0
125	16221	16222	SN	1	48.724	49.409	0.0	0.003	6.386	1.519	1032.96	1076.112	0.0	-91.645	-90.015	0.0
126	16221	16222	NS	1	48.69	49.385	0.0	0.0	142.32	1.6	1039.016	1072.488	0.0	-91.862	-90.06	0.0
127	16221	16222	NS	2	48.691	49.384	0.0	0.0	142.32	2.642	1038.36	1075.92	0.0	-92.177	-90.06	0.0
128	16222	16223	NS	1	48.712	49.431	0.0	0.003	41.674	2.718	1038.408	1075.752	0.0	-91.745	-90.06	0.0
129	16222	16223	NS	2	48.71	49.433	0.0	0.003	41.674	2.716	1038.384	1075.784	0.0	-91.745	-90.06	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	47.1	0.0	1025.0	-100.0
	Max	49.9	0.0	1095.7	-80.0

■ Normal      ■ Deviations  
■ Alarming      ■ High Errors

Inner																												
SNR																	Kp											
					Sea Aft			Sea Fore			Land Aft			Land Fore			Sea Aft			Sea Fore			Land Aft			Land Fore		
SrNo	Start Orbit	End Orbit	Dir.	Ver.	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)
1	16193	16194	SN	1	-34.767	24.011	0.026	-34.882	24.352	0.472	-7.396	28.321	7.677	-5.233	32.043	8.246	0.116	290.521	3.893	0.116	298.281	3.573	0.116	0.625	0.0	0.116	0.419	0.0
2	16193	16194	SN	2	-34.679	24.183	0.443	-34.882	25.431	2.08	-7.396	28.321	7.81	-5.232	32.043	8.246	0.116	284.618	3.685	0.116	298.281	3.612	0.116	0.625	0.0	0.116	0.419	0.0
3	16193	16194	SN	1	-34.767	24.183	0.443	-34.882	25.431	2.08	-7.396	28.321	7.812	-5.233	32.043	8.246	0.116	290.521	3.687	0.116	298.281	3.613	0.116	0.625	0.0	0.116	0.419	0.0
4	16194	16195	SN	1	-34.182	25.322	0.186	-34.636	25.323	1.345	-0.274	31.578	8.78	1.126	29.646	5.821	0.116	253.918	1.394	0.116	281.868	1.494	0.116	0.206	0.0	0.116	0.18	0.0
5	16194	16195	SN	1	-34.447	25.322	0.072	-33.036	25.323	1.344	-0.27	31.578	8.781	1.128	29.647	5.823	0.116	269.883	1.364	0.116	195.002	1.463	0.116	0.206	0.0	0.116	0.18	0.0
6	16194	16195	NS	1	-33.389	25.08	0.266	-31.597	25.267	0.033	-24.404	31.152	7.849	-18.137	34.276	19.055	0.116	211.488	1.31	0.116	140.074	1.28	0.116	26.796	0.015	0.116	6.398	0.011
7	16194	16195	SN	1	-34.447	25.322	0.187	-33.036	25.323	1.347	-0.27	31.578	8.781	1.128	29.647	5.823	0.116	269.883	1.396	0.116	195.002	1.498	0.116	0.206	0.0	0.116	0.18	0.0
8	16195	16196	SN	1	-34.181	23.909	0.105	-33.503	24.124	0.443	2.547	27.661	9.879	1.639	29.848	5.279	0.116	253.791	1.504	0.116	217.154	1.154	0.116	0.161	0.0	0.116	0.172	0.0
9	16195	16196	NS	2	-33.096	23.915	0.129	-33.735	21.893	0.0	-5.419	29.152	7.7	-7.167	29.744	14.954	0.116	197.766	1.316	0.116	229.102	1.226	0.116	0.433	0.0	0.116	0.598	0.0
10	16195	16196	SN	1	-34.181	23.908	0.177	-33.503	24.124	0.438	2.547	27.661	9.879	1.639	29.848	5.279	0.116	253.791	1.577	0.116	217.154	1.145	0.116	0.161	0.0	0.116	0.172	0.0
11	16195	16196	NS	1	-33.096	23.892	0.122	-33.735	21.887	0.0	-5.419	29.152	7.7	-7.167	29.744	14.954	0.116	197.766	1.326	0.116	229.102	1.219	0.116	0.433	0.0	0.116	0.598	0.0
12	16195	16196	SN	1	-34.617	23.909	0.105	-33.503	24.124	0.444	2.547	27.661	9.879	1.637	29.85	5.279	0.116	280.613	1.505	0.116	217.154	1.156	0.116	0.161	0.0	0.116	0.172	0.0
13	16196	16197	NS	1	-34.973	22.243	0.005	-34.295	23.931	0.005	-6.236	29.424	6.725	-4.088	29.516	13.076	0.116	304.636	3.343	0.116	260.63	3.125	0.116	0.502	0.0	0.116	0.345	0.0
14	16196	16197	SN	1	-33.811	22.146	0.001	-34.806	22.715	0.012	4.965	26.906	9.827	7.039	26.483	3.544	0.116	233.105	1.784	0.116	293.09	1.361	0.116	0.141	0.0	0.116	0.131	0.0
15	16196	16197	SN	2	-33.147	22.186	0.003	-34.53	22.69	0.016	4.994	26.906	9.796	7.039	26.483	3.566	0.116	200.076	1.75	0.116	275.078	1.336	0.116	0.141	0.0	0.116	0.131	0.0
16	16196	16197	SN	1	-33.147	22.186	0.003	-34.53	22.69	0.016	4.994	26.906	9.796	7.039	26.483	3.566	0.116	200.076	1.75	0.116	275.078	1.336	0.116	0.141	0.0	0.116	0.131	0.0
17	16196	16197	NS	1	-34.767	22.246	0.005	-34.73	23.931	0.005	-6.236	29.424	6.74	-4.085	29.516	13.065	0.116	290.493	3.336	0.116	288.025	3.13	0.116	0.502	0.0	0.116	0.345	0.0
18	16197	16198	SN	2	-34.829	21.923	0.0	-34.618	23.202	0.072	6.317	27.582	13.729	7.506	27.934	15.462	0.116	294.701	3.327	0.116	280.783	2.907	0.116	0.134	0.0	0.116	0.129	0.0
19	16197	16198	SN	1	-34.829	21.923	0.0	-34.618	23.202	0.072	6.317	27.582	13.73	7.506	27.934	15.464	0.116	294.701	3.327	0.116	280.783	2.907	0.116	0.134	0.0	0.116	0.129	0.0
20	16197	16198	SN	1	-34.829	21.627	0.0	-34.618	22.754	0.009	6.317	27.582	13.828	7.506	27.934	16.004	0.116	294.701	3.417	0.116	280.783	2.975	0.116	0.134	0.0	0.116	0.129	0.0
21	16197	16198	NS	1	-34.756	23.181	0.082	-34.578	23.832	0.164	-18.485	28.788	3.686	-20.476	31.485	8.304	0.116	289.791	5.623	0.116	278.129	5.805	0.116	6.926	0.006	0.116	10.9	0.005
22	16197	16198	NS	1	-34.756	23.181	0.082	-34.578	23.832	0.164	-18.485	28.788	3.68	-20.476	31.485	8.291	0.116	289.791	5.637	0.116	278.129	5.81	0.116	6.926	0.006	0.116	10.9	0.005
23	16198	16199	SN	1	-34.792	20.645	0.0	-34.755	21.18	0.0	5.848	27.427	14.016	8.521	27.964	15.123	0.116	292.112	4.109	0.116	289.651	3.437	0.116	0.136	0.0	0.116	0.126	0.0
24	16198	16199	SN	2	-34.792	22.265	0.002	-34.755	23.604	0.21	5.848	27.427	13.425	8.521	27.964	14.827	0.116	292.112	3.985	0.116	289.651	3.298	0.116	0.136	0.0	0.116	0.126	0.0
25	16198	16199	NS	1	-34.748	24.123	0.153	-34.917	23.174	0.193	-6.277	27.919	4.641	-6.067	29.014	9.48	0.116	289.271	7.106	0.116	300.751	6.822	0.116	0.506	0.0	0.116	0.486	0.0
26	16198	16199	NS	1	-34.563	24.123	0.153	-34.574	23.174	0.193	-6.276	27.919	4.64	-6.069	29.014	9.489	0.116	277.169	7.097	0.116	277.861	6.824	0.116	0.506	0.0	0.116	0.487	0.0
27	16198	16199	SN	1	-34.792	22.263	0.002	-34.755	23.604	0.21	5.848	27.427	13.425	8.521	27.964	14.826	0.116	292.112	3.985	0.116	289.651	3.298	0.116	0.136	0.0	0.116	0.126	0.0
28	16199	16200	SN	1	-34.608	22.005	0.001	-34.622	24.12	0.51	-9.802	28.535	9.032	-9.993	29.102	8.934	0.116	280.025	4.57	0.116	280.894	4.369	0.116	1.017	0.002	0.116	1.059	0.003
29	16199	16200	NS	2	-34.988	26.68	0.282	-34.8	27.142	0.39	-10.587	28.897	8.85	-12.102	30.66	13.579	0.116	305.677	5.427	0.116	292.654	4.975	0.116	1.201	0.004	0.116	1.663	0.009
30	16199	16200	SN	1	-34.844	22.008	0.001	-34.919	24.118	0.511	-9.815	28.538	9.021	-9.995	29.104	8.919	0.116	295.758	4.573	0.116	300.796	4.38	0.116	1.02	0.002	0.116	1.06	0.003
31	16199	16200	NS	1	-34.988	26.68	0.282	-34.85	27.142	0.389	-10.587	28.897	8.849	-12.103	30.66	13.577	0.116	305.677	5.425	0.116	296.194	4.976	0.116	1.201	0.004	0.116	1.663	0.009
32	16199	16200	SN	1	-34.608	20.99	0.0	-34.622	21.861	0.0	-9.802	28.535	9.531	-9.993	29.102	8.923	0.116	280.025	4.809	0.116	280.894	4.708	0.116	1.017	0.003	0.116	1.059	0.003
33	16200	16201	SN	1	-34.77	21.637	0.0	-34.857	24.287	1.115	-19.996	35.028	10.28	-16.047	32.583	11.409	0.116	290.754	3.777	0.116	296.558	3.228	0.116	9.772	0.003	0.116	3.989	0.003

Parameter Specifications	Parameters	SNR	Kp
	Min	-65.0	0.0
	Max	22.0	1.0

<span style="display:inline-block; width:15px; height:15px; background-color: #00FF00; border: 1px solid black;"></span> Normal	<span style="display:inline-block; width:15px; height:15px; background-color: #FFFF00; border: 1px solid black;"></span> Deviations
<span style="display:inline-block; width:15px; height:15px; background-color: #FFA500; border: 1px solid black;"></span> Alarming	<span style="display:inline-block; width:15px; height:15px; background-color: #FF0000; border: 1px solid black;"></span> High Errors







112	16219	16220	NS	1	-34.892	25.212	0.653	-34.936	23.598	0.31	0.675	28.555	16.805	-0.481	29.284	33.41	0.116	298.995	2.901	0.116	301.984	2.878	0.116	0.187	0.0	0.116	0.211	0.0
113	16219	16220	SN	1	-34.309	23.677	0.252	-34.772	24.472	1.673	-4.274	30.144	16.225	-4.701	30.393	18.093	0.116	261.413	2.56	0.116	290.806	2.635	0.116	0.356	0.0	0.116	0.382	0.0
114	16219	16220	NS	1	-34.806	25.212	0.652	-34.584	23.598	0.309	0.675	28.555	24.376	-0.481	29.288	36.062	0.116	293.062	2.894	0.116	278.518	2.9	0.116	0.187	0.0	0.116	0.211	0.0
115	16219	16220	NS	1	-34.892	25.212	0.653	-34.936	23.598	0.31	0.675	28.555	24.406	-0.481	29.288	36.064	0.116	298.995	2.901	0.116	301.984	2.879	0.116	0.187	0.0	0.116	0.211	0.0
116	16219	16220	SN	2	-34.309	23.677	0.252	-34.772	24.472	1.673	-4.274	30.144	16.225	-4.701	30.393	18.093	0.116	261.413	2.56	0.116	290.806	2.635	0.116	0.356	0.0	0.116	0.382	0.0
117	16220	16221	NS	1	-34.999	26.34	0.921	-34.762	27.064	0.337	3.326	28.295	25.27	4.632	28.906	35.025	0.116	306.476	5.966	0.116	290.212	5.568	0.116	0.153	0.0	0.116	0.143	0.0
118	16220	16221	NS	1	-34.787	26.34	0.923	-34.673	27.064	0.337	3.326	28.295	25.276	4.632	28.906	35.025	0.116	291.861	5.973	0.116	284.244	5.577	0.116	0.153	0.0	0.116	0.143	0.0
119	16220	16221	SN	1	-34.966	23.96	0.087	-34.85	25.068	1.212	-7.992	29.532	35.495	-10.886	30.06	43.537	0.116	304.202	4.86	0.116	296.1	4.549	0.116	0.703	0.0	0.116	1.28	0.004
120	16220	16221	NS	1	-34.931	26.34	0.922	-34.673	27.064	0.337	3.326	28.295	9.3	4.632	28.726	23.749	0.116	301.652	5.98	0.116	284.244	5.575	0.116	0.153	0.0	0.116	0.143	0.0
121	16220	16221	SN	1	-34.943	23.956	0.087	-34.85	25.068	1.21	-7.992	29.531	35.492	-10.886	30.06	43.534	0.116	302.546	4.859	0.116	296.1	4.548	0.116	0.703	0.0	0.116	1.28	0.004
122	16221	16222	NS	1	-34.812	27.899	0.754	-34.779	23.784	0.066	-10.244	32.82	17.363	-22.993	28.671	26.998	0.116	293.486	5.034	0.116	291.348	4.931	0.116	1.116	0.007	0.116	19.394	0.011
123	16221	16222	SN	1	-34.679	25.589	0.128	-34.67	26.194	1.222	3.396	29.246	29.345	4.736	29.803	33.382	0.116	284.713	3.25	0.116	284.049	2.717	0.116	0.152	0.0	0.116	0.142	0.0
124	16221	16222	SN	1	-34.946	25.589	0.128	-34.67	26.194	1.219	3.399	29.245	29.347	4.736	29.803	33.341	0.116	302.775	3.247	0.116	284.049	2.715	0.116	0.152	0.0	0.116	0.142	0.0
125	16221	16222	SN	1	-34.679	19.851	0.0	-34.67	20.286	0.0	3.421	29.248	26.398	4.716	29.802	31.463	0.116	284.713	3.232	0.116	284.049	2.903	0.116	0.152	0.0	0.116	0.142	0.0
126	16221	16222	NS	1	-34.812	27.899	0.765	-34.779	23.784	0.066	-10.244	32.82	2.266	-22.993	27.566	2.164	0.116	293.486	5.092	0.116	291.348	4.929	0.116	1.116	0.012	0.116	19.394	0.022
127	16221	16222	NS	2	-34.812	27.899	0.754	-34.843	23.788	0.066	-10.244	32.82	17.363	-22.996	28.671	26.997	0.116	293.486	5.034	0.116	295.668	4.93	0.116	1.116	0.007	0.116	19.406	0.011
128	16222	16223	NS	1	-34.623	24.983	0.479	-34.86	24.27	0.028	-5.971	28.948	10.494	-2.568	30.291	18.998	0.116	281.003	7.842	0.116	296.813	6.8	0.116	0.478	0.0	0.116	0.274	0.0
129	16222	16223	NS	2	-34.623	24.983	0.479	-34.882	24.27	0.028	-5.971	28.948	10.493	-2.566	30.291	18.994	0.116	281.003	7.841	0.116	298.246	6.799	0.116	0.478	0.0	0.116	0.274	0.0

Parameter Specifications	Parameters	SNR	Kp
	Min	-65.0	0.0
	Max	22.0	1.0

 Normal	 Deviations
 Alarming	 High Errors

					Outer											
					Incidence Angle			Azimuth Angle			Range			X-Factor		
Sr No	Start Orbit	End Orbit	Dir.	Ver.	Min	Max	BadOcc(%)	Min	Max	BadOcc(%)	Min	Max	BadOcc(%)	Min	Max	BadOcc(%)
1	16193	16194	SN	1	57.545	58.242	0.0	0.003	294.258	3.275	1210.736	1264.632	0.0	-92.995	-92.034	0.0
2	16193	16194	SN	2	57.547	58.24	0.0	0.0	296.547	4.061	1210.744	1264.6	0.0	-95.24	-92.034	0.0
3	16193	16194	SN	1	57.545	58.242	0.0	0.0	296.547	4.062	1210.736	1264.632	0.0	-95.24	-92.034	0.0
4	16194	16195	SN	1	57.541	58.274	0.0	0.0	292.527	3.87	1209.752	1264.568	0.001	-94.036	-92.024	0.0
5	16194	16195	SN	1	57.54	58.274	0.0	0.0	292.527	3.463	1209.816	1264.568	0.0	-93.106	-92.024	0.0
6	16194	16195	NS	1	57.528	58.186	0.0	0.0	293.343	3.852	1218.256	1264.152	0.0	-93.081	-92.098	0.0
7	16194	16195	SN	1	57.54	58.274	0.0	0.0	292.527	3.874	1209.816	1264.568	0.0	-94.036	-92.024	0.0
8	16195	16196	SN	1	57.521	58.24	0.0	0.0	299.994	3.308	1209.592	1264.72	0.001	-93.138	-92.054	0.0
9	16195	16196	NS	2	57.524	58.187	0.0	0.0	295.212	3.593	1218.168	1264.368	0.0	-93.106	-92.065	0.0
10	16195	16196	SN	1	57.521	58.24	0.0	0.0	299.994	3.697	1209.592	1264.72	0.001	-93.138	-92.054	0.0
11	16195	16196	NS	1	57.524	58.187	0.0	0.0	295.212	3.594	1218.168	1264.368	0.0	-93.106	-92.065	0.0
12	16195	16196	SN	1	57.52	58.24	0.0	0.003	299.961	3.31	1209.72	1264.752	0.001	-93.138	-92.054	0.0
13	16196	16197	NS	1	57.517	58.186	0.0	0.0	298.908	3.905	1218.232	1264.216	0.0	-93.786	-92.116	0.0
14	16196	16197	SN	1	57.516	58.24	0.0	0.0	296.315	3.322	1209.792	1264.616	0.001	-93.147	-92.053	0.0
15	16196	16197	SN	2	57.516	58.24	0.0	0.0	296.315	3.728	1209.792	1264.616	0.001	-93.147	-92.053	0.0
16	16196	16197	SN	1	57.516	58.24	0.0	0.0	296.315	3.728	1209.792	1264.616	0.001	-93.147	-92.053	0.0
17	16196	16197	NS	1	57.515	58.186	0.0	0.0	298.908	3.897	1218.184	1264.216	0.0	-93.786	-92.116	0.0
18	16197	16198	SN	2	57.513	58.239	0.0	0.0	298.406	3.769	1208.784	1264.424	0.006	-93.096	-92.052	0.0
19	16197	16198	SN	1	57.513	58.239	0.0	0.0	298.406	3.77	1208.784	1264.424	0.006	-93.096	-92.052	0.0
20	16197	16198	SN	1	57.513	58.239	0.0	0.0	293.718	3.289	1208.784	1264.424	0.006	-93.096	-92.052	0.0
21	16197	16198	NS	1	57.532	58.186	0.0	0.0	295.753	3.819	1219.128	1264.04	0.0	-93.143	-92.089	0.0
22	16197	16198	NS	1	57.532	58.186	0.0	0.0	295.753	3.808	1219.128	1264.04	0.0	-93.143	-92.089	0.0
23	16198	16199	SN	1	57.525	58.238	0.0	0.0	299.646	3.111	1209.704	1264.304	0.001	-93.016	-92.053	0.0
24	16198	16199	SN	2	57.525	58.238	0.0	0.0	299.646	3.715	1209.704	1264.304	0.001	-93.016	-92.053	0.0
25	16198	16199	NS	1	57.505	58.186	0.0	0.0	292.179	3.765	1218.76	1263.904	0.0	-93.086	-92.099	0.0
26	16198	16199	NS	1	57.495	58.186	0.0	0.0	292.179	3.762	1218.96	1263.904	0.0	-93.086	-92.099	0.0
27	16198	16199	SN	1	57.525	58.238	0.0	0.0	299.646	3.715	1209.704	1264.304	0.001	-93.016	-92.053	0.0
28	16199	16200	SN	1	57.529	58.239	0.0	0.0	297.606	3.824	1209.616	1264.224	0.002	-93.142	-92.044	0.0
29	16199	16200	NS	2	57.494	58.215	0.0	0.0	293.05	3.734	1218.184	1263.816	0.0	-93.119	-92.112	0.0
30	16199	16200	SN	1	57.521	58.239	0.0	0.0	297.606	3.821	1209.552	1264.224	0.001	-93.045	-92.044	0.0
31	16199	16200	NS	1	57.511	58.213	0.0	0.0	293.073	3.735	1218.208	1263.808	0.0	-93.331	-92.113	0.0
32	16199	16200	SN	1	57.529	58.239	0.0	0.0	291.749	2.941	1209.616	1264.224	0.002	-93.045	-92.044	0.0
33	16200	16201	SN	1	57.528	58.24	0.0	0.0	299.018	3.893	1210.232	1264.424	0.0	-93.051	-92.046	0.0
34	16200	16201	NS	1	57.498	58.201	0.0	0.0	294.865	3.666	1217.696	1263.96	0.0	-93.137	-92.112	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	57.3	0.0	1210.0	-100.0
	Max	58.9	0.0	1280.0	-80.0

 Normal	 Deviations
 Alarming	 High Errors

35	16200	16201	SN	1	57.528	58.24	0.0	0.0	299.018	2.646	1210.232	1264.424	0.0	-92.9	-92.046	0.0
36	16200	16201	SN	1	57.528	58.24	0.0	0.0	299.018	3.889	1210.232	1264.424	0.0	-92.9	-92.046	0.0
37	16201	16202	SN	1	57.523	58.241	0.0	0.0	296.161	3.807	1210.328	1264.472	0.0	-93.034	-92.014	0.0
38	16201	16202	NS	1	57.502	58.22	0.0	0.0	297.225	3.757	1218.048	1263.96	0.0	-93.216	-92.083	0.0
39	16201	16202	NS	1	57.502	58.219	0.0	0.0	297.231	3.757	1218.056	1263.968	0.0	-93.216	-92.083	0.0
40	16201	16202	SN	2	57.523	58.241	0.0	0.0	296.161	3.807	1210.328	1264.472	0.0	-93.034	-92.014	0.0
41	16202	16203	NS	1	57.531	58.224	0.0	0.0	296.481	3.92	1217.976	1263.84	0.0	-93.098	-92.085	0.0
42	16202	16203	SN	1	57.532	58.241	0.0	0.0	298.301	3.787	1209.96	1264.368	0.0	-93.02	-92.06	0.0
43	16202	16203	NS	1	57.531	58.186	0.0	0.0	296.475	3.924	1217.968	1263.832	0.0	-93.119	-92.085	0.0
44	16203	16204	SN	2	57.532	58.242	0.0	0.0	296.735	3.907	1210.84	1264.264	0.0	-93.095	-92.028	0.0
45	16203	16204	NS	1	57.532	58.186	0.0	0.0	298.334	3.729	1218.4	1263.728	0.0	-93.058	-92.112	0.0
46	16203	16204	NS	1	57.532	58.186	0.0	0.0	298.328	3.724	1218.4	1263.736	0.0	-93.042	-92.112	0.0
47	16203	16204	SN	1	57.532	58.242	0.0	0.0	296.735	3.907	1210.84	1264.264	0.0	-93.095	-92.028	0.0
48	16204	16205	NS	2	57.491	58.185	0.0	0.0	291.484	3.723	1218.016	1263.808	0.0	-93.156	-92.11	0.0
49	16204	16205	NS	1	57.491	58.185	0.0	0.0	291.484	3.723	1218.016	1263.808	0.0	-93.156	-92.11	0.0
50	16204	16205	SN	1	57.544	58.244	0.0	0.0	296.508	3.84	1210.824	1264.344	0.0	-93.311	-92.032	0.0
51	16204	16205	NS	1	57.491	58.185	0.0	0.0	290.756	3.262	1218.016	1263.376	0.0	-93.091	-92.11	0.0
52	16204	16205	SN	1	57.544	58.244	0.0	0.0	296.508	3.852	1210.824	1264.344	0.0	-93.311	-92.032	0.0
53	16205	16206	NS	2	57.494	58.183	0.0	0.0	292.891	3.741	1217.72	1263.8	0.0	-93.137	-92.109	0.0
54	16205	16206	NS	1	57.494	58.183	0.0	0.0	292.891	3.74	1217.72	1263.792	0.0	-93.137	-92.109	0.0
55	16205	16206	SN	1	57.52	58.24	0.0	0.0	299.117	3.772	1210.592	1264.344	0.0	-93.243	-92.054	0.0
56	16205	16206	SN	2	57.52	58.24	0.0	0.0	299.117	3.772	1210.592	1264.344	0.0	-93.243	-92.054	0.0
57	16206	16207	NS	1	57.491	58.188	0.0	0.0	295.632	3.799	1217.672	1263.912	0.0	-93.181	-92.107	0.0
58	16206	16207	NS	1	57.491	58.188	0.0	0.0	295.632	2.438	1217.672	1261.016	0.0	-93.118	-92.107	0.0
59	16206	16207	SN	1	57.521	58.242	0.0	0.0	296.845	3.745	1210.216	1264.44	0.0	-93.032	-92.059	0.0
60	16206	16207	SN	1	57.526	58.242	0.0	0.0	296.828	3.743	1210.464	1264.456	0.0	-93.13	-92.059	0.0
61	16207	16208	SN	1	57.542	58.245	0.0	0.0	293.988	3.955	1211.104	1264.472	0.0	-93.086	-92.061	0.0
62	16207	16208	NS	1	57.498	58.214	0.0	0.0	299.79	3.784	1217.384	1263.928	0.0	-93.09	-92.087	0.0
63	16207	16208	NS	2	57.498	58.214	0.0	0.0	299.79	3.784	1217.384	1263.928	0.0	-93.09	-92.087	0.0
64	16207	16208	NS	1	57.498	58.214	0.0	0.0	299.79	2.167	1217.384	1258.84	0.0	-93.09	-92.087	0.0
65	16207	16208	SN	1	57.542	58.245	0.0	0.0	293.988	2.881	1211.104	1264.472	0.0	-93.086	-92.061	0.0
66	16208	16209	SN	1	57.531	58.239	0.0	0.0	296.58	4.076	1210.496	1264.184	0.0	-93.608	-92.01	0.0
67	16208	16209	SN	1	57.531	58.239	0.0	0.003	292.824	3.612	1210.496	1264.184	0.0	-93.072	-92.01	0.0
68	16208	16209	NS	1	57.503	58.186	0.0	0.0	297.992	3.829	1217.744	1263.696	0.0	-93.173	-92.095	0.0
69	16208	16209	SN	2	57.531	58.239	0.0	0.003	296.608	4.078	1210.496	1264.184	0.0	-93.608	-92.01	0.0
70	16208	16209	NS	1	57.503	58.186	0.0	0.0	297.992	3.832	1217.744	1263.696	0.0	-93.173	-92.095	0.0
71	16209	16210	NS	1	57.528	58.186	0.0	0.0	290.889	3.582	1218.032	1263.944	0.0	-93.445	-92.079	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	57.3	0.0	1210.0	-100.0
	Max	58.9	0.0	1280.0	-80.0

 Normal	 Deviations
 Alarming	 High Errors

72	16209	16210	SN	1	57.522	58.24	0.0	0.0	295.168	3.426	1210.208	1264.44	0.0	-93.232	-92.044	0.0
73	16209	16210	SN	1	57.522	58.24	0.0	0.0	295.168	3.83	1210.208	1264.44	0.0	-93.232	-92.044	0.0
74	16209	16210	NS	1	57.529	58.185	0.0	0.0	290.8	3.583	1217.824	1263.928	0.0	-93.165	-92.08	0.0
75	16209	16210	SN	1	57.522	58.24	0.0	0.0	295.168	3.412	1210.208	1264.44	0.0	-93.232	-92.044	0.0
76	16210	16211	SN	1	57.549	58.25	0.0	0.0	295.058	3.328	1210.632	1264.456	0.0	-93.086	-92.056	0.0
77	16210	16211	SN	1	57.549	58.25	0.0	0.0	294.981	3.732	1210.632	1264.456	0.0	-93.086	-92.056	0.0
78	16210	16211	SN	1	57.549	58.25	0.0	0.0	294.981	3.718	1210.632	1264.456	0.0	-93.086	-92.056	0.0
79	16210	16211	NS	1	57.498	58.185	0.0	0.0	292.212	3.676	1218.728	1264.048	0.0	-93.109	-92.082	0.0
80	16210	16211	NS	1	57.501	58.185	0.0	0.0	292.212	3.679	1218.208	1264.048	0.0	-93.287	-92.082	0.0
81	16211	16212	SN	1	57.519	58.238	0.0	0.0	289.791	3.715	1209.792	1264.288	0.001	-93.129	-92.034	0.0
82	16211	16212	NS	1	57.501	58.185	0.0	0.0	292.913	3.72	1218.16	1263.856	0.0	-93.103	-92.087	0.0
83	16211	16212	NS	2	57.501	58.186	0.0	0.0	292.979	3.719	1218.144	1263.864	0.0	-93.103	-92.087	0.0
84	16211	16212	SN	1	57.52	58.238	0.0	0.0	289.791	3.718	1209.616	1264.288	0.001	-93.129	-92.034	0.0
85	16212	16213	NS	2	57.5	58.2	0.0	0.0	296.508	3.779	1218.872	1263.768	0.0	-93.072	-92.104	0.0
86	16212	16213	SN	1	57.526	58.266	0.0	0.0	295.284	3.17	1209.928	1264.184	0.001	-93.716	-92.056	0.0
87	16212	16213	SN	1	57.496	58.237	0.0	0.0	295.284	3.686	1208.64	1264.184	0.001	-93.716	-92.056	0.0
88	16212	16213	SN	1	57.526	58.266	0.0	0.0	295.284	3.694	1209.928	1264.184	0.001	-93.716	-92.056	0.0
89	16212	16213	NS	1	57.499	58.2	0.0	0.0	296.597	3.777	1218.864	1263.768	0.0	-93.072	-92.104	0.0
90	16213	16214	SN	2	57.525	58.238	0.0	0.003	298.792	3.789	1210.024	1264.0	0.0	-93.12	-92.057	0.0
91	16213	16214	SN	1	57.525	58.238	0.0	0.003	298.792	3.384	1210.024	1264.0	0.0	-93.12	-92.057	0.0
92	16213	16214	NS	1	57.51	58.213	0.0	0.003	293.326	3.773	1218.784	1263.552	0.0	-93.084	-92.107	0.0
93	16213	16214	NS	1	57.51	58.213	0.0	0.0	293.326	3.767	1218.784	1263.552	0.0	-93.092	-92.107	0.0
94	16213	16214	SN	1	57.525	58.238	0.0	0.0	298.792	3.787	1210.024	1264.0	0.0	-93.12	-92.057	0.0
95	16214	16215	NS	1	57.501	58.218	0.0	0.0	299.211	3.812	1217.704	1263.6	0.0	-93.241	-92.11	0.0
96	16214	16215	NS	1	57.508	58.226	0.0	0.0	299.211	3.827	1217.792	1263.6	0.0	-93.169	-92.11	0.0
97	16214	16215	SN	1	57.555	58.265	0.0	0.0	296.194	3.895	1210.368	1264.056	0.0	-93.122	-92.033	0.0
98	16214	16215	SN	1	57.555	58.238	0.0	0.0	291.269	2.82	1210.368	1264.072	0.0	-93.122	-92.033	0.0
99	16214	16215	SN	1	57.555	58.238	0.0	0.0	296.211	3.902	1210.368	1264.072	0.0	-93.122	-92.033	0.0
100	16215	16216	SN	2	57.548	58.24	0.0	0.0	294.319	3.792	1210.568	1264.248	0.0	-93.122	-92.032	0.0
101	16215	16216	SN	1	57.548	58.24	0.0	0.0	292.163	2.401	1210.568	1264.248	0.0	-93.122	-92.032	0.0
102	16215	16216	NS	1	57.502	58.19	0.0	0.0	291.523	3.717	1217.52	1263.768	0.0	-93.326	-92.106	0.0
103	16215	16216	NS	1	57.504	58.186	0.0	0.0	291.55	3.731	1217.68	1263.752	0.0	-93.092	-92.106	0.0
104	16215	16216	SN	1	57.548	58.24	0.0	0.0	294.319	3.792	1210.568	1264.248	0.0	-93.122	-92.032	0.0
105	16216	16217	SN	1	57.52	58.24	0.0	0.0	289.885	3.716	1210.84	1264.232	0.0	-93.041	-92.028	0.0
106	16216	16217	NS	1	57.504	58.186	0.0	0.0	291.159	3.903	1217.72	1263.728	0.0	-93.189	-92.071	0.0
107	16217	16218	NS	1	57.523	58.187	0.0	0.0	292.356	3.805	1218.488	1263.552	0.0	-93.078	-92.085	0.0
108	16217	16218	SN	1	57.538	58.24	0.0	0.0	297.319	3.824	1210.456	1264.064	0.0	-93.197	-92.06	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	57.3	0.0	1210.0	-100.0
	Max	58.9	0.0	1280.0	-80.0

 Normal	 Deviations
 Alarming	 High Errors

109	16218	16219	SN	1	57.523	58.241	0.0	0.0	293.718	3.91	1211.144	1264.12	0.0	-93.048	-92.028	0.0
110	16218	16219	NS	1	57.53	58.187	0.0	0.0	296.222	3.814	1218.072	1263.624	0.0	-93.268	-92.11	0.0
111	16218	16219	NS	1	57.53	58.187	0.0	0.0	296.222	3.587	1218.072	1263.536	0.0	-93.268	-92.11	0.0
112	16219	16220	NS	1	57.49	58.186	0.0	0.0	297.694	3.133	1217.368	1262.656	0.0	-93.624	-92.107	0.0
113	16219	16220	SN	1	57.526	58.257	0.0	0.0	298.058	3.816	1211.152	1264.232	0.0	-93.092	-92.039	0.0
114	16219	16220	NS	1	57.491	58.185	0.0	0.0	296.768	3.653	1217.632	1263.688	0.0	-93.471	-92.107	0.0
115	16219	16220	NS	1	57.49	58.186	0.0	0.0	297.694	3.656	1217.368	1263.704	0.0	-93.624	-92.107	0.0
116	16219	16220	SN	2	57.526	58.257	0.0	0.0	298.058	3.816	1211.152	1264.232	0.0	-93.092	-92.039	0.0
117	16220	16221	NS	1	57.495	58.217	0.0	0.0	289.764	3.726	1217.312	1263.784	0.0	-93.27	-92.106	0.0
118	16220	16221	NS	1	57.495	58.211	0.0	0.0	289.89	3.73	1217.256	1263.808	0.0	-93.418	-92.106	0.0
119	16220	16221	SN	1	57.522	58.243	0.0	0.0	298.648	3.746	1210.296	1264.272	0.0	-93.074	-92.061	0.0
120	16220	16221	NS	1	57.495	58.211	0.0	0.0	288.787	2.739	1217.256	1260.992	0.0	-93.418	-92.106	0.0
121	16220	16221	SN	1	57.522	58.243	0.0	0.0	298.648	3.742	1210.296	1264.272	0.0	-93.074	-92.061	0.0
122	16221	16222	NS	1	57.498	58.185	0.0	0.0	292.488	3.815	1217.12	1263.872	0.0	-93.186	-92.104	0.0
123	16221	16222	SN	1	57.538	58.244	0.0	0.0	295.428	3.835	1211.272	1264.352	0.0	-93.059	-92.062	0.0
124	16221	16222	SN	1	57.538	58.244	0.0	0.0	295.35	3.831	1211.272	1264.352	0.0	-93.055	-92.062	0.0
125	16221	16222	SN	1	57.538	58.244	0.0	0.0	288.556	2.567	1211.272	1264.352	0.0	-93.055	-92.062	0.0
126	16221	16222	NS	1	57.498	58.185	0.0	0.0	292.488	2.184	1217.12	1259.928	0.0	-93.141	-92.104	0.0
127	16221	16222	NS	2	57.5	58.184	0.0	0.0	292.482	3.813	1217.16	1263.84	0.0	-93.186	-92.105	0.0
128	16222	16223	NS	1	57.492	58.207	0.0	0.0	293.299	3.865	1217.304	1263.6	0.0	-93.075	-92.104	0.0
129	16222	16223	NS	2	57.49	58.209	0.0	0.0	293.326	3.863	1217.256	1263.648	0.0	-93.076	-92.104	0.0

Parameter Specifications	Parameters	Inc.Angle	Azi. Angle	Range	X-Factor
	Min	57.3	0.0	1210.0	-100.0
	Max	58.9	0.0	1280.0	-80.0

 Normal	 Deviations
 Alarming	 High Errors

Outer																												
SNR															Kp													
Sea Aft			Sea Fore			Land Aft			Land Fore			Sea Aft			Sea Fore			Land Aft			Land Fore							
SrNo	Start Orbit	End Orbit	Dir.	Ver.	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)	Min	Max	BadOcc (%)
1	16193	16194	SN	1	-33.48	17.427	0.0	-34.909	18.3	0.0	-29.801	22.586	0.009	-30.431	24.347	0.011	0.087	165.126	4.083	0.086	229.46	3.758	0.086	70.818	0.071	0.086	81.84	0.084
2	16193	16194	SN	2	-34.895	17.427	0.0	-34.756	18.286	0.0	-29.834	22.586	0.009	-30.431	24.347	0.011	0.087	228.68	3.943	0.086	221.464	3.683	0.086	71.352	0.071	0.086	81.84	0.084
3	16193	16194	SN	1	-34.564	17.427	0.0	-34.909	18.286	0.0	-29.801	22.586	0.009	-30.431	24.347	0.011	0.087	211.928	3.945	0.086	229.46	3.682	0.086	70.818	0.071	0.086	81.84	0.084
4	16194	16195	SN	1	-33.791	19.293	0.0	-34.598	18.919	0.0	-30.273	22.441	0.002	-29.702	22.067	0.002	0.086	177.326	1.386	0.086	213.589	1.457	0.086	78.939	0.173	0.086	69.219	0.203
5	16194	16195	SN	1	-34.314	19.293	0.0	-34.598	18.919	0.0	-31.475	22.441	0.002	-33.938	22.065	0.002	0.086	200.034	1.425	0.086	213.589	1.386	0.086	104.095	0.172	0.086	183.452	0.205
6	16194	16195	NS	1	-33.339	19.095	0.0	-34.707	19.749	0.0	-10.156	22.302	0.002	-2.939	24.378	0.048	0.086	159.836	0.941	0.086	218.94	0.9	0.086	0.833	0.0	0.086	0.217	0.0
7	16194	16195	SN	1	-34.314	19.293	0.0	-34.598	18.919	0.0	-31.475	22.441	0.002	-33.938	22.065	0.002	0.086	200.034	1.388	0.086	213.589	1.456	0.086	104.095	0.172	0.086	183.452	0.205
8	16195	16196	SN	1	-34.991	17.092	0.0	-34.131	18.242	0.0	1.236	22.082	0.009	1.222	22.026	0.004	0.087	233.795	1.314	0.086	191.81	1.419	0.086	0.132	0.0	0.086	0.133	0.0
9	16195	16196	NS	2	-34.532	17.474	0.0	-34.679	16.382	0.0	-10.1	21.931	0.0	-22.433	22.737	0.02	0.087	210.312	1.442	0.087	217.574	1.203	0.086	0.824	0.0	0.086	13.034	0.042
10	16195	16196	SN	1	-34.991	17.092	0.0	-34.131	18.242	0.0	1.236	22.082	0.009	1.222	22.026	0.004	0.087	233.795	1.362	0.086	191.81	1.4	0.086	0.132	0.0	0.086	0.133	0.0
11	16195	16196	NS	1	-34.532	17.478	0.0	-34.679	16.394	0.0	-10.1	21.931	0.0	-22.433	22.737	0.02	0.087	210.312	1.442	0.087	217.574	1.193	0.086	0.824	0.0	0.086	13.034	0.042
12	16195	16196	SN	1	-34.991	17.092	0.0	-34.496	18.242	0.0	1.236	22.082	0.009	1.222	22.026	0.004	0.087	233.795	1.316	0.086	208.628	1.423	0.086	0.132	0.0	0.086	0.133	0.0
13	16196	16197	NS	1	-34.386	17.277	0.0	-34.75	17.016	0.0	-34.181	22.186	0.002	-33.438	22.29	0.009	0.087	203.408	3.041	0.087	221.16	2.871	0.086	194.012	0.183	0.086	163.549	0.114
14	16196	16197	SN	1	-33.471	17.265	0.0	-34.943	17.819	0.0	0.511	21.705	0.0	1.021	21.471	0.0	0.087	164.732	1.346	0.086	231.244	1.069	0.086	0.142	0.0	0.086	0.135	0.0
15	16196	16197	SN	2	-34.385	17.805	0.0	-34.943	17.746	0.0	0.511	21.705	0.0	1.021	21.471	0.0	0.086	203.366	1.383	0.086	231.244	1.055	0.086	0.142	0.0	0.086	0.135	0.0
16	16196	16197	SN	1	-34.385	17.805	0.0	-34.943	17.746	0.0	0.511	21.705	0.0	1.021	21.471	0.0	0.086	203.366	1.383	0.086	231.244	1.055	0.086	0.142	0.0	0.086	0.135	0.0
17	16196	16197	NS	1	-34.651	17.279	0.0	-34.951	17.016	0.0	-33.714	22.2	0.002	-30.776	22.29	0.009	0.087	216.214	3.048	0.087	231.639	2.877	0.086	174.241	0.184	0.086	88.61	0.115
18	16197	16198	SN	2	-34.581	16.324	0.0	-34.854	17.85	0.0	0.97	21.666	0.0	2.126	22.176	0.01	0.087	212.725	2.978	0.086	226.518	2.637	0.086	0.136	0.0	0.086	0.123	0.0
19	16197	16198	SN	1	-34.634	16.324	0.0	-34.854	17.85	0.0	0.97	21.666	0.0	2.126	22.176	0.01	0.087	215.332	2.978	0.086	226.518	2.637	0.086	0.136	0.0	0.086	0.123	0.0
20	16197	16198	SN	1	-34.68	15.102	0.0	-34.854	16.391	0.0	0.97	21.666	0.0	2.126	22.176	0.011	0.087	217.617	3.022	0.087	226.518	2.693	0.086	0.136	0.0	0.086	0.123	0.0
21	16197	16198	NS	1	-34.752	17.0	0.0	-33.975	17.27	0.0	-19.192	22.568	0.011	-8.151	22.633	0.025	0.087	221.26	5.335	0.087	185.004	5.589	0.086	6.213	0.001	0.086	0.55	0.0
22	16197	16198	NS	1	-34.752	17.0	0.0	-34.032	17.27	0.0	-19.192	22.568	0.011	-8.151	22.633	0.025	0.087	221.26	5.347	0.087	187.494	5.595	0.086	6.213	0.001	0.086	0.55	0.0
23	16198	16199	SN	1	-34.366	14.944	0.0	-34.725	15.815	0.0	-0.334	21.616	0.0	1.988	21.841	0.0	0.087	202.497	3.89	0.087	219.874	3.708	0.086	0.155	0.0	0.086	0.124	0.0
24	16198	16199	SN	2	-34.366	15.77	0.0	-34.725	17.574	0.0	-0.334	21.616	0.0	1.988	21.841	0.0	0.087	202.497	3.788	0.087	219.874	3.572	0.086	0.155	0.0	0.086	0.124	0.0
25	16198	16199	NS	1	-34.796	17.006	0.0	-34.606	19.276	0.0	-19.435	21.646	0.0	-18.596	22.176	0.009	0.087	223.568	5.852	0.086	213.93	6.491	0.086	6.566	0.014	0.086	5.425	0.016
26	16198	16199	NS	1	-34.685	17.006	0.0	-34.909	19.276	0.0	-19.401	21.648	0.0	-18.556	22.176	0.009	0.087	217.916	5.849	0.086	229.452	6.513	0.086	6.516	0.014	0.086	5.375	0.016
27	16198	16199	SN	1	-34.366	15.77	0.0	-34.725	17.574	0.0	-0.334	21.616	0.0	1.988	21.841	0.0	0.087	202.497	3.788	0.087	219.874	3.572	0.086	0.155	0.0	0.086	0.124	0.0
28	16199	16200	SN	1	-34.504	15.382	0.0	-34.906	17.614	0.0	-6.444	22.928	0.082	0.707	23.037	0.165	0.087	208.998	4.383	0.087	229.288	4.168	0.086	0.394	0.0	0.086	0.139	0.0
29	16199	16200	NS	2	-34.309	20.903	0.0	-34.604	21.674	0.0	-25.796	21.996	0.0	-32.538	24.073	0.022	0.086	199.793	4.619	0.086	213.85	4.605	0.086	28.195	0.138	0.086	132.906	0.162
30	16199	16200	SN	1	-34.051	15.382	0.0	-34.807	17.614	0.0	-6.443	22.928	0.082	0.706	23.037	0.165	0.087	188.254	4.387	0.087	224.098	4.168	0.086	0.394	0.0	0.086	0.139	0.0
31	16199	16200	NS	1	-34.326	20.903	0.0	-34.603	21.674	0.0	-25.796	21.996	0.0	-32.553	24.073	0.022	0.086	200.602	4.619	0.086	213.811	4.604	0.086	28.195	0.138	0.086	133.37	0.162
32	16199	16200	SN	1	-34.504	13.399	0.0	-34.906	14.162	0.0	-6.444	22.928	0.088	0.707	23.037	0.165	0.088	208.998	4.559	0.088	229.288	4.476	0.086	0.394	0.0	0.086	0.139	0.0

Parameter Specifications	Parameters	SNR	Kp	Normal	Deviations	Alarming	High Errors
	Min	-65.0	0.0				
	Max	22.0	1.0				







107	16217	16218	NS	1	-34.676	22.105	0.001	-34.97	17.127	0.0	-3.971	22.583	0.008	-1.896	23.58	0.5	0.086	217.388	1.508	0.087	232.637	1.415	0.086	0.255	0.0	0.086	0.187	0.0
108	16217	16218	SN	1	-34.838	20.193	0.0	-34.222	20.323	0.0	-25.367	23.575	0.078	-30.285	22.955	0.088	0.086	225.72	2.591	0.086	195.864	2.33	0.086	25.553	0.164	0.086	79.153	0.164
109	16218	16219	SN	1	-34.963	19.595	0.0	-34.623	19.13	0.0	-34.345	22.905	0.065	-29.472	23.046	0.062	0.086	232.327	4.805	0.086	214.793	4.306	0.086	201.448	0.065	0.086	65.631	0.076
110	16218	16219	NS	1	-34.512	17.981	0.0	-33.778	19.486	0.0	-2.323	22.328	0.003	-1.226	23.309	0.435	0.086	209.384	1.082	0.086	176.868	1.043	0.086	0.199	0.0	0.086	0.172	0.0
111	16218	16219	NS	1	-34.512	17.981	0.0	-33.778	19.486	0.0	-2.323	22.328	0.004	-1.226	23.309	0.445	0.086	209.384	1.083	0.086	176.868	1.043	0.086	0.199	0.0	0.086	0.172	0.0
112	16219	16220	NS	1	-34.656	17.942	0.0	-34.515	17.502	0.0	-2.781	22.364	0.029	-7.113	23.382	0.518	0.086	216.381	2.507	0.087	209.515	2.483	0.086	0.212	0.0	0.086	0.448	0.0
113	16219	16220	SN	1	-34.803	17.35	0.0	-34.936	18.004	0.0	-18.746	22.924	0.072	-11.963	23.232	0.108	0.087	223.88	2.577	0.086	230.792	2.873	0.086	5.612	0.012	0.086	1.229	0.005
114	16219	16220	NS	1	-34.994	17.942	0.0	-34.895	17.502	0.0	-2.781	22.364	0.023	-7.113	23.38	0.428	0.086	233.979	2.5	0.087	229.274	2.485	0.086	0.212	0.0	0.086	0.448	0.0
115	16219	16220	NS	1	-34.656	17.942	0.0	-34.515	17.502	0.0	-2.781	22.364	0.023	-7.113	23.38	0.428	0.086	216.381	2.501	0.087	209.515	2.483	0.086	0.212	0.0	0.086	0.448	0.0
116	16219	16220	SN	2	-34.803	17.35	0.0	-34.936	18.004	0.0	-18.746	22.924	0.072	-11.963	23.232	0.108	0.087	223.88	2.577	0.086	230.792	2.873	0.086	5.612	0.012	0.086	1.229	0.005
117	16220	16221	NS	1	-34.761	18.063	0.0	-34.985	20.645	0.0	-1.952	22.311	0.033	-4.177	23.273	0.613	0.086	221.715	4.483	0.086	233.486	4.164	0.086	0.189	0.0	0.086	0.264	0.0
118	16220	16221	NS	1	-34.733	18.063	0.0	-34.383	20.645	0.0	-1.952	22.311	0.033	-4.177	23.273	0.613	0.086	220.297	4.481	0.086	203.297	4.167	0.086	0.189	0.0	0.086	0.264	0.0
119	16220	16221	SN	1	-34.818	17.885	0.0	-34.985	18.244	0.0	-25.431	22.732	0.173	-25.429	22.862	0.39	0.086	224.621	3.566	0.086	233.471	3.445	0.086	25.928	0.15	0.086	25.919	0.149
120	16220	16221	NS	1	-34.793	18.063	0.0	-34.928	20.645	0.0	-1.952	22.311	0.057	-4.177	23.278	0.863	0.086	223.357	4.486	0.086	230.444	4.168	0.086	0.189	0.0	0.086	0.264	0.0
121	16220	16221	SN	1	-34.818	17.887	0.0	-34.985	18.242	0.0	-25.431	22.732	0.173	-25.429	22.86	0.39	0.086	224.621	3.562	0.086	233.471	3.442	0.086	25.928	0.15	0.086	25.919	0.149
122	16221	16222	NS	1	-34.499	20.557	0.0	-34.898	16.522	0.0	-25.553	22.936	0.222	-18.636	23.292	0.541	0.086	208.759	4.587	0.087	228.882	4.801	0.086	26.668	0.014	0.086	5.475	0.008
123	16221	16222	SN	1	-34.951	17.316	0.0	-34.456	18.028	0.0	-0.959	22.611	0.052	1.411	23.185	0.58	0.087	231.661	2.894	0.086	206.661	2.508	0.086	0.166	0.0	0.086	0.13	0.0
124	16221	16222	SN	1	-34.951	17.317	0.0	-34.456	18.028	0.0	-0.959	22.611	0.052	1.41	23.185	0.58	0.087	231.661	2.887	0.086	206.661	2.507	0.086	0.166	0.0	0.086	0.13	0.0
125	16221	16222	SN	1	-34.951	12.799	0.0	-34.456	12.805	0.0	2.346	22.557	0.052	1.413	23.187	0.604	0.088	231.661	2.873	0.088	206.661	2.706	0.086	0.121	0.0	0.086	0.13	0.0
126	16221	16222	NS	1	-34.499	20.557	0.0	-34.898	16.522	0.0	-25.553	22.444	0.024	-18.636	20.855	0.0	0.086	208.759	4.667	0.087	228.882	4.806	0.086	26.668	0.024	0.086	5.475	0.016
127	16221	16222	NS	2	-34.499	20.557	0.0	-34.764	16.525	0.0	-25.544	22.936	0.222	-18.635	23.292	0.541	0.086	208.759	4.587	0.087	221.87	4.798	0.086	26.607	0.014	0.086	5.473	0.008
128	16222	16223	NS	1	-34.639	20.308	0.0	-34.968	19.854	0.0	-7.176	23.184	0.122	-2.478	23.852	0.253	0.086	215.551	6.554	0.086	232.592	6.178	0.086	0.454	0.0	0.086	0.203	0.0
129	16222	16223	NS	2	-34.601	20.308	0.0	-34.793	19.854	0.0	-7.159	23.184	0.122	-2.48	23.852	0.253	0.086	213.768	6.554	0.086	223.347	6.176	0.086	0.452	0.0	0.086	0.203	0.0

Parameter Specifications	Parameters	SNR	Kp
	Min	-65.0	0.0
	Max	22.0	1.0

 Normal	 Deviations
 Alarming	 High Errors