

87-1A

Meteor 2-15

Upp: 5 Jan

900	87	1	A	87	5.11381628	.00000006	00000-0	00000	0	0	1
90	82.4758	150.7649	0012216	47.5631	304.6275	13.79461960					1
172900	87	1	A	87	15.81855542	.00000006	00000-0	00000	0	0	8
17290	82.4675	142.1812	0012590	210.2337	149.8098	13.83551283					146

87-2A

Kosmos 1817

17292U	87	2	A	87	9.58328601	- .00004948	34176-4	00000 0 0	1
17292	64.8678	333.6701	0132309	66.3342	295.0123	16.05666587			1
17292U	87	2	A	87	9.89475056	.00215847	34226-4	90493-4 0	3
17292	64.8484	332.5261	0130435	66.3336	295.2189	16.05691445			6
17292U	87	2	A	87	10.51751325	.00277399	33900-4	11276-3 0	5
17292	64.8528	330.2305	0129570	66.0689	295.6161	16.06122579			16
17292U	87	2	A	87	10.89104786	.00153726	34692-4	11276-3 0	7
17292	64.8524	328.8524	0069090	63.9465	295.5247	16.10223279			22
17292U	87	2	A	87	10.95338961	.00150847	12135-4	11276-3 0	8
17292	64.8513	328.6221	0068678	65.3900	295.3979	16.09871430			23
17292U	87	2	A	87	12.25767211	.00067648	00000-0	49271-4 0	11
17292	64.8546	323.7900	0067316	64.6331	295.5270	16.10266814			44
17292U	87	2	A	87	12.94089986	.00146658	34490-4	10832-3 0	12
17292	64.8534	321.2571	0066713	64.3020	296.4908	16.10484541			55

17292U	87	2	A	87	13.37556250	.00439906	12129-4	32349-3	0	14
17292	64.8531	319.6474	0063532	66.8876	293.9068	16.10629272				62
17292U	87	2	A	87	13.87222862	.00143835	35031-4	10458-3	0	15
17292	64.8545	317.8036	0066296	63.9764	296.4591	16.10760236				70
17292U	87	2	A	87	14.05855189	.00144628	34535-4	10458-3	0	16
17292	64.8568	317.1122	0066128	67.4226	293.4441	16.10847918				73
17292U	87	2	A	87	14.05855189	.00144628	34535-4	10458-3	0	17
17292	64.8568	317.1122	0066128	67.4226	293.4441	16.10847918				73
17292U	87	2	A	87	15.11386161	.00164405	34512-4	11680-3	0	18
17292	64.8543	313.1963	0064879	63.5506	297.2760	16.11197301				90
17292U	87	2	A	87	15.11386161	.00164405	34512-4	11680-3	0	19
17292	64.8543	313.1963	0064879	63.5506	297.2760	16.11197301				90
17292U	87	2	A	87	15.92069755	.00157627	34560-4	11066-3	0	20
17292	64.8536	310.1996	0064064	62.9616	297.8590	16.11477393				103
17292U	87	2	A	87	16.47919173	.00151892	35197-4	10561-3	0	21
17292	64.8520	308.1237	0063482	62.6470	298.2038	16.11700671				112
17292U	87	2	A	87	17.09963360	.00184810	34993-4	12557-3	0	23
17292	64.8528	305.8205	0063279	62.3959	298.3593	16.11949097				122
17292U	87	2	A	87	17.90598117	.06276151	35108-4	38584-2	0	25
17292	64.8273	302.9443	0061162	64.0216	296.1094	16.13172357				135

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Kosmos 1811

forts. 1

17292U	87	2	A	87	18.15381415	.00552451	34851-4	35930-3	0	26
17292	64.8547	301.8981	0062176	61.4899	297.1682	16.12428345	139			
17292U	87	2	A	87	18.89839131	.00162724	34809-4	10630-3	0	28
17292	64.8509	299.1281	0061765	61.1978	299.5807	16.12699617	2659			
17292U	87	2	A	87	19.33245080	.00134954	34337-4	87817-4	0	30
17292	64.8504	297.5143	0061378	61.2173	299.5642	16.12874776	158			
17292U	87	2	A	87	19.45645217	.00181298	35127-4	11667-3	0	31
17292	64.8507	297.0531	0061177	61.0413	299.6971	16.12930808	160			
17292U	87	2	A	87	19.82845529	.00211193	34718-4	13396-3	0	32
17292	64.8505	295.6680	0060894	60.7169	300.0347	16.13100627	166			
17292U	87	2	A	87	20.88224117	.00219230	35122-4	13498-3	0	33
17292	64.8514	291.7429	0060046	60.5834	300.1399	16.13580809	183			
17292U	87002	A	87021.25661709	.00197693	00000-0	00000-0	0	0034		
17292	064.8575	290.3562	0119043	077.5907	283.8466	16.0522269700177				
17292U	87002	A	87021.75497888	.00268825	00000-0	00000-0	0	0035		
17292	064.8542	288.5253	0118345	077.8050	283.6255	16.0550251300185				
17292U	87	2	A	87	21.87955461	.00227216	34475-4	13670-3	0	35
17292	64.8480	288.0698	0111135	77.0230	284.3493	16.05526892	187			

172920	87	2	A	87	22.03830702	.00235368	33995-4	13721-3	0	36
17292	64.8527	284.1742	0110177	76.7326	284.7174	16.06052345	204			
172920	87	2	A	87	23.80993942	.00239710	34124-4	13765-3	0	37
17292	64.8504	280.9591	0108691	76.1858	285.2165	16.06493561	218			
172920	87	2	A	87	24.80580337	.00244028	34512-4	13691-3	0	38
17292	64.8497	277.2863	0107353	75.8587	285.5124	16.07000265	234			
172920	87	2	A	87	25.11693812	.00254299	34510-4	14134-3	0	39
17292	64.8484	276.1364	0106960	75.7970	285.5213	16.07158286	251			
172920	87	2	A	87	26.73440957	.00242620	34427-4	12971-3	0	41
17292	64.8476	270.1622	0105061	75.1782	286.1065	16.07961632	277			
172920	87	2	A	87	26.98317872	.00332536	35382-4	12971-3	0	42
17292	64.8542	269.2341	0068821	79.1929	285.8823	16.17584403	281			
172920	87	2	A	87	27.41519535	.00383256	35434-4	15159-3	0	43
17292	64.8474	267.6128	0066452	78.0786	282.6446	16.17773573	288			
172920	87002	A	87028	65125586	.00360717	00000-0	00000-0	0	0	0044
17292	064.8400	262.9729	0072066	079.5648	281.3536	16.1865302200309				
172920	87	2	A	87	28.96014762	.00347376	35226-4	12899-3	0	44
17292	64.8481	261.8208	0063968	77.8383	282.9825	16.18858703	313			
172920	87	2	A	87	30.01005252	.00203866	34395-4	12089-3	0	47
17292	64.8510	257.8874	0101900	102.0173	251.6058	16.07399172	330			
172920	87	2	A	87	30.75790149	.00251483	34504-4	15549-3	0	48
17292	64.8483	255.1235	0099729	101.5729	259.5011	16.07691857	342			

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Kosmos 1811

forts.2

17292U	87	2	A	87	30.75790149	.00261483	34504-4	15549-3	0	49
17292	64.8483	255.1235	0099729	101.5729	259.5011	16.07691857	342			
17292U	87	2	A	87	31.93360906	.00334676	34586-4	19157-3	0	50
17292	64.8471	250.7532	0097679	101.0714	260.4575	16.08448851	361			
17292U	87	2	A	87	32.42907406	.00302343	34132-4	17066-3	0	51
17292	64.8470	248.6847	0096777	100.7259	260.4266	16.08784657	370			
17292U	87	2	A	87	33.30710002	.00180936	34670-4	10266-3	0	53
17292	64.8477	245.6963	0095463	99.9251	261.0345	16.09083732	383			
17292U	87	2	A	87	34.05289666	.00215445	34983-4	11966-3	0	54
17292	64.8480	242.9324	0094655	99.6588	261.6185	16.09421164	395			
17292U	87	2	A	87	41.95795487	.00351736	35242-4	15889-3	0	64
17292	64.8475	213.7674	0092480	123.7538	237.2805	16.12018118	522			
17292U	87	2	A	87	42.57824927	.00427502	35231-4	18693-3	0	65
17292	64.8454	211.4571	0091049	123.6229	237.5397	16.12597479	532			
17292U	87	2	A	87	42.88827467	.00441865	34621-4	19226-3	0	66
17292	64.8455	210.3051	0089674	122.0880	238.9185	16.12887258	537			
17292U	87	2	A	87	43.26026393	.00652588	35115-4	27759-3	0	67
17292	64.8449	208.9155	0088012	122.7998	238.3555	16.13384365	543			

172920	87	2	A	37	43.38419720	.00308291	34807-4	13142-3	0	69
17292	64.8481	208.4582	0088192	122.6312	238.2970	16.13420586				545
172920	87	2	A	37	43.75608559	.00196900	35043-4	83763-4	0	70
17292	64.8478	207.0695	0086919	122.5264	238.5166	16.13764164				551
172920	87	2	A	37	43.88001251	.00435428	35201-4	18110-3	0	71
17292	64.8472	206.6079	0086782	122.2577	238.7170	16.13883060				553

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Kosmas 1812

Lpp: 16 ja

17295U	87	3	A	87	14.43583028	.00000011	00000-0	00000	0	0	1
17295	82.5463	276.3500	0025915	289.2602	70.5516	14.74439690	0	0	0	0	0
17295U	87	3	A	87	34.05812955	.00000138	00000-0	19314-4	0	0	23
17295	82.5342	258.2845	0021014	219.3474	140.6145	14.73720317					290

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Kosmos 1813

Lapp: 15jan

17297U	87	4	A	87	15.52650350	-.00001630	11088-4	00000	0	0	1
17297	72.8227	288.8914	0123318	87.1964	273.9758	15.97285630					1
17297U	87	4	A	87	21.02469333	.00066783	00000-0	76592-3	0	0	9
17297	72.3149	275.6484	0044167	200.2194	159.5900	15.60540980					87
17297U	87	4	A	87	21.21703566	.00010322	00000-0	12041-3	0	0	10
17297	72.8153	275.1884	0044029	199.8898	160.0346	15.60528405					90
17297U	87	4	A	87	21.92221601	.00115356	00000-0	13169-2	0	0	11
17297	72.8153	273.4978	0043644	198.1472	161.7362	15.60528149					101
17297U	87	4	A	87	22.94786881	.00129740	00000-0	14792-2	0	0	12
17297	72.8139	271.0415	0043555	195.8604	163.5804	15.60523126					117
17297U	87	4	A	87	23.65310631	-.00153514	00000-0	-18409-2	0	0	13
17297	72.8185	269.3546	0043151	194.3560	165.3348	15.60449369					128
17297U	87	4	A	87	23.90960262	.00008595	00000-0	99999-4	0	0	14
17297	72.8174	268.7401	0043410	193.6249	166.4123	15.60494629					132

172970	87	4	A	87	24.87122054	.00008577	00000-0	99999-4	0	15
17297	72.8181	266.4376	0042970	191.3932	168.5287	15.60458899	147			
172970	87	4	A	87	25.64055624	.00008587	00000-0	99999-4	0	16
17297	72.8151	264.5959	0043325	189.6473	170.4360	15.60477916	159			
172970	87	4	A	87	26.85862010	.00008577	00000-0	99999-4	0	18
17297	72.8144	261.6790	0043362	186.4872	173.4482	15.60441084	178			
172970	87	4	A	87	27.75618987	.00008563	00000-0	99999-4	0	19
17297	72.8149	259.5311	0043164	184.6932	176.3790	15.60409497	192			
172970	87	4	A	87	28.91020168	.00008569	00000-0	99999-4	0	20
17297	72.8163	256.7724	0043147	182.0100	178.1696	15.60427146	210			
172970	87	4	A	87	29.55132453	.00008516	00000-0	99999-4	0	21
17297	72.8172	255.2356	0042665	180.5247	179.5888	15.60300915	220			
172970	87	4	A	87	29.74357466	.00008528	00000-0	99999-4	0	22
17297	72.8118	254.7703	0042663	180.0907	180.0403	15.60333262	223			
172970	87	4	A	87	30.15768884	-.000003107	00000-0	00000-0	0	24
17297	72.8700	252.9918	0146489	210.5872	278.3871	15.70636076	1			
172970	87	4	A	87	30.76952666	-.00442590	00000-0	-57780-2	0	25
17297	72.8147	252.3172	0040040	180.3176	178.9749	15.60098129	17			
172970	87	4	A	87	44.61960038	.00001334	00000-0	16369-4	0	29
17297	72.8135	219.1711	0041001	147.1802	213.2704	15.60257281	393			
172970	87	4	A	87	50.32568836	.00003929	00000-0	46801-4	0	32
17297	72.8151	205.5142	0040044	133.6720	225.0410	15.60311854	482			

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Kosmos 1813

font. 1

17297U	87	4	A	87	58.08383806	.00006194	00000-0	73078-4	0	38
17297	72.8159	186.9436	0040218	115.2244	245.2963	15.60392329	603			
297U	87	4	A	87	69.23901308	.00009526	00000-0	11250-3	0	40
297	72.8138	160.2417	0039627	88.0445	271.9506	15.60479793	777			

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Progress 27

Lipp: 16 Jan

17299U	87	5	A	87	16.30817871	-.00008284	57318-4	00000	0	0	1
17299	51.6147	216.2730	0060502	95.4033	264.6861	16.18799122					1
17299U	87	5	A	87	16.55522247	-.00008275	57156-4	00000	0	0	2
17299	51.6230	214.9139	0060535	96.3830	264.3570	16.18746482					5
17299U	87	5	A	87	16.74042983	.00386863	57423-4	14827-3	0	0	3
17299	51.6213	213.8918	0061084	97.0213	263.6382	16.18616727					8
17299U	87	5	A	87	16.98739031	.00205320	56996-4	83165-4	0		4
17299	51.6247	212.5356	0056976	98.2448	262.5736	16.18786642					12
17299U	87	5	A	87	17.48119562	.00048799	00000-0	83165-4	0	0	5
17299	51.6154	209.8374	0056091	193.3348	156.9422	15.98792017					20
17299U	87	5	A	87	17.92039485	.00079697	10735-4	14134-3	0		6
17299	51.6211	207.5102	0054612	195.6036	164.2641	15.98826999					27
17299U	87	5	A	87	18.86483050	.00021411	00000-0	10954-3	0		10
17299	51.6160	202.6611	0023104	342.4976	17.4674	15.80891009					5255

172990	87	5	A	87	18.86483050	.00021411	00000-0	10954-3	0	11
17299	51.6160	202.6511	0023104	342.4976	17.4674	15.80891009				42
172990	87	5	A	87	20.00265010	.00020788	00000-0	10954-3	0	12
17299	51.6094	196.7660	0021094	346.4683	11.2815	15.80335710				60
172990	87	5	A	87	21.07802986	.00020819	00000-0	10954-3	0	13
17299	51.6109	191.1838	0021432	349.8877	10.1538	15.80357673				77
172990	87	5	A	87	21.96329773	.00020853	00000-0	10954-3	0	14
17299	51.6128	186.5922	0021372	353.6719	6.4069	15.80394396				91
172990	87	5	A	87	28.80156853	.00016088	00000-0	10954-3	0	17
17299	51.6147	151.2337	0024823	318.3109	41.5313	15.74673343				199
172990	87	5	A	87	34.13226821	.00008883	00000-0	59905-4	0	22
17299	51.6024	123.8245	0026604	338.4133	21.5500	15.74769477				283
172990	87	5	A	87	42.12320208	.00005993	00000-0	46772-4	0	30
17299	51.6081	32.6572	0024289	338.6561	19.2627	15.71804306				409
172990	87	5	A	87	42.95508602	.00006006	00000-0	46772-4	0	31
17299	51.6174	79.4584	0022233	345.4116	14.9353	15.71920903				422
172990	87	5	A	87	44.03935260	.00005564	00000-0	43548-4	0	32
17299	51.6145	72.5946	0020807	350.5579	9.4871	15.71932874				440
172990	87	5	A	87	50.83781075	.00000846	00000-0	-38551-5	0	39
17299	51.6153	38.0703	0021255	16.7677	343.4219	15.72069634				546
172990	87	5	A	87	52.04558035	.00012339	00000-0	99999-4	0	40
17299	51.6112	31.8849	0017723	5.5808	352.0254	15.70019526				565

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Kosmos 1814

Lpp: 16/44

173030	87	6	A	87	21.44081247	-.00000012	00000-0	00000	0	0	1
17303	74.0606	265.8804	0027180	337.7510	22.2815	14.30401025					1
173030	87	6	A	87	22.00030428	.00089859	00000-0	33913-1	0		2
17303	74.0617	264.8629	0026565	336.3371	23.6639	14.30459265					9
173030	87	6	A	87	22.14017545	.00027994	00000-0	10677-1	0		3
17303	74.0585	264.6094	0026762	335.7534	24.2355	14.30446240					11
173030	87	6	A	87	22.55979907	.00004970	00000-0	19108-2	0		4
17303	74.0589	263.8471	0026835	335.6419	24.3487	14.30434432					17
173030	87	6	A	87	23.04936043	-.00000528	00000-0	-19755-3	0		5
17303	74.0591	262.9576	0026715	334.3982	25.5889	14.30426312					24

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Kormos 1815

Upp: 21 Jan

173260	87	7	A	87	22.34082386	-.00000286	00000-0	00000 0 0	1
17326	50.6583	160.4834	0148211	145.0449	215.9717	15.40877375			0
173260	87	7	A	87	22.40568605	-.00000282	00000-0	00000 0 0	2
17326	50.6611	160.1585	0150613	148.0302	212.5241	15.39489245			1
173260	87	7	A	87	32.45568060	.00005008	00000-0	87703-4 0	17
17326	50.6676	110.0254	0149871	187.9144	171.9446	15.39723236			156

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Molnira 3-31

Upp: 22 Jan

17328U	87	8	A	87	22.72260227	-.00000082	00000-0	99999-4	0	2
17328	62.8094	312.9810	7476699	279.9525	10.9066	1.95721272	0	0	0	0
17328U	87	8	A	87	31.41002051	.00000173	00000-0	99999-4	0	10
17328	62.8386	311.6368	7473402	280.0627	10.7681	1.95684475				17

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Kosmos 1816

Upp: 29, an

17359U	87	9	A	87	29.31942230	.00000006	00000-0	00000	0	0	1
17359	82.9206	249.7207	0038761	295.6917	64.0162	13.74647684					0
17359U	87	9	A	87	29.39221061	.00000006	00000-0	00000	0	0	2
17359	82.9211	249.6637	0031516	296.7535	62.7056	13.73207577					2
17359U	87	9	A	87	29.53800433	.00000006	00000-0	00000	0	0	3
17359	82.9217	249.5546	0031659	295.8892	63.9114	13.73221114					4

87-10 A

Kosmos 1817

Lpp: 30 jian
Ned: 31 jian

17365U	87	10	A	87	30.62652178	.00008420	58175-4	00000	0	0	1
17365	51.5969	277.0327	0016809	107.7981	254.7411	16.27471008					4
17365U	87	10	A	87	30.74895568	.05141321	58733-4	11547-2	0	0	2
17365	51.6019	276.3457	0014073	119.8493	240.3898	16.29117920					6
17365U	87	10	A	87	30.87158577	.06295374	58895-4	12204-2	0	0	3
17365	51.6049	275.6557	0013234	123.3050	237.0072	16.30688069					8
17365U	87	10	A	87	31.05510549	.06599213	59071-4	10085-2	0	0	2
17365	51.6044	274.6294	0010376	121.2449	238.0159	16.33178076					5
17365U	87	10	A	87	31.23868706	.13797660	59657-4	12622-2	0	0	3
17365	51.5978	273.6040	0009080	145.6071	215.3493	16.37907778					8
17365U	87	10	A	87	31.42116780	.36901817	60909-4	66897-3	0	0	5
17365	51.5994	272.5712	0002373	153.2921	197.0927	16.47612676					11

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Kosmos 1818

Upp: 1/26

17369U	87 11	A	87 33.24632130	- .00000045	00000-0	00000 0 0	3
17369	65.0168	158.3054	0008018	262.2118	98.1250	14.29573208	5
17369U	87 11	A	87 33.31621510	- .00000045	00000-0	00000 0 0	4
17369	65.0093	158.1048	0009602	274.2002	85.7373	14.29321293	6
17369U	87 11	A	87 33.80597211	- .00000045	00000-0	00000 0 0	5
17369	65.0119	156.7381	0009525	274.0556	86.0613	14.29559847	13
17369U	87 11	A	87 34.08577535	- .00000045	00000-0	00000 0 0	6
17369	65.0132	155.9554	0009769	272.4391	87.5737	14.29565888	17
17369U	87 11	A	87 34.50550953	- .00000046	00000-0	00000 0 0	7
17369	65.0102	154.7797	0009447	273.2377	86.7005	14.29546020	23
17369U	87 11	A	87 46.54079522	.00054444	00000-0	21268-1 0	32
17369	65.0143	121.2052	0008922	265.4728	94.4025	14.29115429	194
17369U	87 11	A	87 43.99008078	- .00000031	00000-0	53999-5 0	35
17369	65.0111	114.3744	0008928	266.4815	93.4344	14.29095507	229

17369U 87 11 A 87 67.32336726 .00000125 00000-0 66599-4 0 56
17369 65.0105 63.2187 0008973 269.9358 90.0448 14.29316027 491

87-12A

ASTRO-3

Lepp: 5/60

74800	87	12	A	37	36.86288373	.00000044	00000-0	00000	0	0	4
7480	31.7825	271.7921	0136805	73.9926	287.0963	14.86048342	10				
174800	87	12	A	87	38.54216149	.00002203	00000-0	19934-3	0	6	
17480	31.0814	261.3532	0137059	90.1322	270.9501	14.86050940	35				

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Soyuz TM-2

Lpp: 5 Feb

174820	87 13	A	87	37.82924272	.00010241	00000-0	22560-4 0	6
17482	51.6145	104.9889	0028076	229.2943	130.6298	15.97424754	15.	
174820	87 13	A	87	38.01590319	.00009807	00000-0	22560-4 0	7
17482	51.6148	103.9950	0031332	226.1609	133.3756	15.96511938	18	
174820	87 13	A	87	39.64337338	.00002704	00000-0	19847-4 0	8
17482	51.6173	95.4657	0025172	359.2927	304.4892	15.74739535	44	
174820	87 13	A	87	40.03405885	.00020991	00000-0	14069-3 0	9
17482	51.6156	93.4537	0026030	2.1184	357.9827	15.74752833	50	
174820	87 13	A	87	41.04939521	.00021416	00000-0	14317-3 0	11
17482	51.6144	88.2359	0026627	5.5560	354.5006	15.74777817	66	
174820	87 13	A	87	41.11286623	.00010500	00000-0	70335-4 0	12
17482	51.6141	87.9093	0025945	6.2338	353.8983	15.74770273	67	

174820	87 13	A	87 42.12819670	.00009365	00000-0	70335-4 0	13
17482	51.6154		82.6881 0025932	10.1161	347.8537	15.72199007	83
174820	87 13	A	87 42.95489047	.00009201	00000-0	70335-4 0	14
17482	51.6132		78.4546 0022218	346.3623	12.8721	15.71917695	96
174820	87 13	A	87 46.95008790	.00009956	00000-0	75712-4 0	24
17482	51.6119		57.9340 0021603	2.5817	357.5295	15.71997018	159
174820	87 13	A	87 48.93076906	.00009971	00000-0	75712-4 0	26
17482	51.6134		47.8398 0021289	9.7280	350.4788	15.72035446	190
174820	87 13	A	87 52.10949860	.00006622	00000-0	54894-4 0	29
17482	51.6088		31.5533 0016923	8.1478	351.9835	15.70428703	240
174820	87 13	A	87 58.02706939	.00006690	00000-0	54894-4 0	38
17482	51.6139		1.3135 0018639	29.3599	330.8679	15.70631905	333
174820	87 13	A	87 59.99941704	.00006708	00000-0	54894-4 0	40
17482	51.6117		351.2255 0017703	38.1617	322.0786	15.70711904	364
820	87 13	A	87 68.07868734	-.00008702	00000-0	-65358-4 0	52
82	51.6144		309.9046 0018360	70.4926	289.8011	15.70854343	491
820	87 13	A	87 68.90567540	.00029490	00000-0	25285-3 0	53
82	51.6162		305.6890 0011353	58.0455	299.5034	15.69066310	504

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Kosmos 1819

Lyp: 7 feb
Ned: 18 feb

174840	87 14	A 87	39.91307589	.00052929	00000-0	35240-4 0	7
17484	72.83375	295.3597	0034802	124.7355	235.6980	16.15343317	24
174840	87 14	A 87	40.53239558	.00065208	00000-0	43095-4 0	8
17484	72.8360	293.7545	0034608	122.9085	237.6322	16.15449226	34
174840	87 14	A 87	41.08972830	.00025288	00000-0	43095-4 0	9
17484	72.8493	292.3301	0091386	52.3081	294.7003	15.94803002	43
174840	87 14	A 87	41.97036123	.00013622	00000-0	23326-4 0	10
17484	72.8469	290.1158	0091368	50.2608	310.6454	15.94831534	57
174840	87 14	A 87	42.21128577	.00013153	00000-0	22474-4 0	11
17484	72.8471	287.7502	0091494	47.8653	313.0333	15.94857563	72
174840	87 14	A 87	43.91491895	.00022377	00000-0	49861-4 0	12
17484	72.8469	285.2242	0091004	45.4302	315.4405	15.94897354	88
174840	87 14	A 87	44.41671267	.00038203	00000-0	49861-4 0	13
17484	72.8462	283.2091	0056799	48.1478	316.3165	16.03398776	96

174840	87 14	A	37 44.97758706	.00080596	51941-5	10654-3 0	14
17484	72.8471	282.5319	0056147	47.1706	313.4182	16.03451122	105
174840	87 14	A	37 45.03818919	.00080421	49921-5	10507-3 0	15
17484	72.8436	279.8294	0057135	44.5099	315.7622	16.03514895	122
174840	87 14	A	37 46.21165236	.00080519	49791-5	10507-3 0	16
17484	72.8472	277.6063	0056935	42.3470	317.9701	16.03554555	136
174840	87 14	A	37 47.34839839	.00020003	00000-0	26013-4 0	17
17484	72.8467	276.4911	0056835	40.8568	319.6233	16.03549583	143
174840	87 14	A	37 47.90989608	.00022187	00000-0	28790-4 0	18
17484	72.8457	275.0639	0056766	39.9644	320.5746	16.03576371	152
174840	87 14	A	37 48.97043663	.00023200	00000-0	32627-4 0	19
17484	72.8458	272.3650	0056358	37.6881	322.8605	16.03634437	169

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Kosmos 1820

Upp: 14 feb
Ned: 6 mars

175230	87 16	A	87 45.40999078	-.00005092	35057-4	00000 0 0	1
17523	64.8328	306.9604	0054747	61.6561	299.0391	16.21263947	0
75230	87 16	A	87 45.53334566	-.00005181	35839-4	00000 0 0	2
7523	64.8334	306.4952	0054621	61.2397	299.4255	16.21410665	2
75230	87 16	A	87 46.95159933	.00261857	35327-4	83156-4 0	9
7523	64.8302	301.1432	0052763	61.2974	299.3535	16.22219476	26
75230	87 16	A	87 47.81453190	.00319565	35673-4	98447-4 0	12
7523	64.8258	297.8617	0050891	60.8567	299.8190	16.22762240	40
75230	87 16	A	87 48.12265791	.00277257	35534-4	83977-4 0	13
7523	64.8291	296.7248	0051405	60.4468	300.1977	16.22899424	45
5230	87 16	A	87 48.73879684	.00295149	35789-4	86087-4 0	15
523	64.8309	294.3961	0051367	59.8290	300.8007	16.23293641	55
5230	87 16	A	87 49.04080824	.00305744	35933-4	87503-4 0	16
523	64.8259	293.2251	0051235	58.9618	301.6655	16.23505005	60

7523U	87	16	A	87	49.97061770	.00289405	35693-4	80833-4	0	19
7523	64.8291	289.7274	00488669		59.7710	300.8295	16.24088663			75
7523U	87	16	A	87	51.87880384	.00469210	35950-4	11963-3	0	22
7523	64.8276	282.4936	0045754		58.7861	301.8149	16.25374117			106
7523U	87	16	A	87	52.55549382	.00437706	35919-4	10602-3	0	24
7523	64.8291	279.9281	0045395		57.5844	302.9715	16.25955070			117
7523U	87	16	A	87	52.86300837	.00430995	35897-4	10288-3	0	25
7523	64.8296	278.7605	0044639		57.9210	302.6355	16.26202454			122
7523U	87	16	A	87	58.14348615	.00562997	36358-4	87660-4	0	35
7523	64.8231	258.6335	0034651		54.3018	306.1279	16.31559525			208
7523U	87	16	A	87	59.91973408	.00844665	36515-4	10428-3	0	38
7523	64.8232	251.8237	0030254		53.3200	307.0868	16.34136996			237
7523U	87	16	A	87	60.04212295	.00815934	36837-4	98795-4	0	40
7523	64.8229	251.3537	0030113		52.9832	307.4099	16.34327819			239
7523U	87	16	A	87	61.03100911	.01472550	36955-4	90897-4	0	43
7523	64.8193	245.2532	0025295		51.8221	308.5193	16.37352953			245
7523U	87	16	A	87	62.91314305	.01477554	37276-4	69906-4	0	46
7523	64.8184	240.2746	0021287		48.1277	312.1730	16.40536248			286
7523U	87	16	A	87	63.09599458	.01535585	36769-4	68476-4	0	47
7523	64.8188	239.5702	0019681		48.7385	311.5557	16.41061044			289
7523U	87	16	A	87	63.09599347	.01436645	37493-4	63319-4	0	48
7523	64.8207	239.5660	0020157		48.8466	311.4387	16.41042982			289

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Kosmos 1820

font 5.7

17523U	87 16	A	87 63.33970148	.01730243	37498-4	65814-4	0	49
17523	64.8202	238.6210	0019026	48.0845	312.2524	16.41910616		293
17523U	87 16	A	87 63.70498347	.02302008	37527-4	66218-4	0	50
17523	64.8212	237.2004	0017811	48.2865	312.0129	16.43472626		299
17523U	87 16	A	87 64.31295878	.03258181	37659-4	58700-4	0	52
17523	64.8229	234.8294	0013598	45.4703	314.7635	16.46538483		309
17523U	87 16	A	87 64.37368697	.02852417	37995-4	48604-4	0	53
17523	64.8195	234.5924	0013270	44.2835	315.9402	16.46895172		310
17523U	87 16	A	87 64.55578499	.03807098	37746-4	52943-4	0	54
17523	64.8168	233.8804	0012073	45.2232	315.0096	16.48213627		313
17523U	87 16	A	87 64.73770703	.04613265	37951-4	50463-4	0	55
17523	64.8181	233.1614	0009257	44.5191	315.6992	16.49955313		316
17523U	87 16	A	87 64.85888217	.04891715	37816-4	44847-4	0	56
17523	64.8185	232.6883	0008187	36.9089	323.2716	16.51169355		318
17523U	87 16	A	87 65.22176106	.13385391	38731-4	50208-4	0	58
17523	64.3191	231.2550	0004496	26.8128	333.8424	16.57783514		324

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Kosmos 1821

7525U	87	17	A	87	50.00217708	.00000006	00000-0	00000	0	0	1
7525	82.9142	24.0772	0035640	282.2115	77.5061	13.72699477					5
7525U	87	17	A	87	58.01999208	.00000068	00000-0	67067-4	0	0	6
7525	82.9147	18.1368	0035807	259.1250	100.5874	13.72716206					116

87-18 A

MOS-1 (MOMO)

75270	87 18	A	87 50.38876950	- .00000017	00000-0	00000 0 0	2	
7527	99.0959		120.2405	0001524	4.0546	355.9393	13.95077214	4
75270	87 18	A	87 52.97084221	- .00000004	00000-0	00000-5 0	6	
7527	99.0984		122.7859	0000830	6.3712	353.7665	13.95016738	60
75270	87 18	A	87 52.72577692	- .00000015	00000-0	88637-0 0	13	
7527	99.0945		132.4072	0000655	256.9377	103.1675	13.94079059	176

17533U	87 19	A	87 51.97516615	.00228836	25830-4	27329-3 0	9
17533	72.8524	303.5145	0044024	75.2674	285.3681	16.06151594	25
17533U	87 19	A	87 52.53569926	.00043625	00000-0	51783-4 0	10
17533	72.8525	302.0827	0044089	73.3813	285.8760	16.06130010	34
17533U	87 19	A	87 52.90948299	.00120741	87712-5	14448-3 0	11
17533	72.8521	301.1270	0043915	73.1225	287.4742	16.06172073	40
17533U	87 19	A	87 58.07876637	.00065563	00000-0	75955-4 0	19
17533	72.8509	287.9140	0043286	59.5615	300.9944	16.06502883	123
17533U	87 19	A	87 59.63559774	.00030513	00000-0	35429-4 0	21
17533	72.8503	283.9324	0043462	55.1844	305.4656	16.06579733	148
17533U	87 19	A	87 60.00919662	.00055690	00000-0	64115-4 0	22
17533	72.8497	282.9777	0043324	54.7055	305.8337	16.06624901	154
17533U	87 19	A	87 61.93945692	.00032699	00000-0	37495-4 0	24
17533	72.8512	279.0401	0043700	49.9454	310.5422	16.06739826	185
17533U	87 19	A	87 62.99792734	.00023828	00000-0	27329-4 0	25
17533	72.8520	275.3327	0043638	46.9077	313.5392	16.06788635	202
17533U	87 19	A	87 63.99411528	.00054758	00000-0	62024-4 0	26
17533	72.8507	272.7828	0043377	44.1108	316.3967	16.06870311	218

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Kormos 1823

7535U	87 20	A	87 51.25987798	- .00000007	00000-0	00000 0 0	1
7535	73.6169	227.0364	0043957	278.6130	80.9522	12.43508487	0
7535U	87 20	A	87 51.42077413	- .00000007	00000-0	00000 0 0	2
7535	73.6104	226.7817	0027335	277.7129	80.6206	12.40918200	2
7535U	87 20	A	87 52.46004806	- .00000007	00000-0	00000 0 0	3
7535	73.6090	225.3811	0029366	279.1427	80.7185	12.40945668	15

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Kormos 1824

17559U	87 21	A	87 57.92670295	.00792224	27870-4	27136-3	0	4
17559	67.1493	343.7241	0134589	94.6418	266.8409	16.06726758		6
17559U	87 21	A	87 58.30020026	.00375126	27339-4	12743-3	0	5
17559	67.1503	342.4674	0133911	94.4167	267.2277	16.06995659		12
17559U	87 21	A	87 59.35799329	.00464441	28026-4	15240-3	0	7
17559	67.1495	338.8998	0130687	93.4118	268.4052	16.07962710		29
17559U	87 21	A	87 59.97986190	.00465091	28005-4	14920-3	0	8
17559	67.1494	336.7999	0128862	92.7786	268.8106	16.08546676		39
17559U	87 21	A	87 61.65785510	.00477617	28401-4	14178-3	0	11
17559	67.1475	331.1211	0124417	91.9215	270.5640	16.16170523		66
17559U	87 21	A	87 61.96840130	.01477322	28140-4	14311-3	0	12
17559	67.1553	339.0733	0122466	91.0081	270.5004	16.10467319		71
17559U	87 21	A	87 62.96178790	.00477766	28367-4	13495-3	0	13
17559	67.1477	326.7000	0120488	89.6546	271.8313	16.11422565		87

17559U	87 21	A	87 64.01661589	.00593258	28110-4	15715-3 0	14
17559	67.1492	323.1166	0117253	88.5161	273.3349	16.12643895	104
17559U	87 21	A	87 64.88456462	.00627873	28069-4	15908-3 0	15
17559	67.1433	320.1616	0113971	87.5787	273.8290	16.13700555	118
17559U	87 21	A	87 65.87583479	.00654962	28568-4	15580-3 0	16
17559	67.1449	316.7800	0110099	86.7371	274.6611	16.15036468	134
17559U	87 21	A	87 66.06160651	.00415737	27793-4	15580-3 0	17
17559	67.1439	316.1544	0128946	73.6253	282.4080	16.07045394	137
17559U	87 21	A	87 66.87146859	.00467077	27665-4	16987-3 0	18
17559	67.1437	313.4209	0126689	72.7556	288.8453	16.07801327	150
59U	87 21	A	87 67.86648639	.00469944	28044-4	16345-3 0	19
59	67.1425	310.0574	0124008	71.7348	289.7657	16.08751978	166
59U	87 21	A	87 68.92305947	.00468695	28276-4	15517-3 0	20
59	67.1427	306.4801	0121331	70.9467	290.5131	16.09763160	183
17559U	87 21	A	87 69.85477975	.00471997	28101-4	15049-3 0	21
17559	67.1433	303.3237	0118651	70.0054	291.4104	16.10655303	198
17559U	87 21	A	87 70.97216401	.00503737	28743-4	15174-3 0	22
17559	67.1443	299.5313	0115541	68.8814	292.7052	16.11807646	216
17559U	87 21	A	87 71.28235050	.00918095	28356-4	27025-3 0	24
17559	67.1431	298.4757	0114691	68.3857	292.9148	16.12158207	221
17559U	87 21	A	87 71.71652507	.00471597	28228-4	13726-3 0	25
17559	67.1433	297.0009	0113428	67.9481	293.0263	16.12552901	228

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Kosmos 1824 parts. 1

17559U	87 21	A	87 71.96466476	.00518849	28317-4	14943-3	0	26
17559	67.1468		296.1574 0112383	67.9285	293.4500	16.12850534	-	232
17559U	87 21	A	87 73.01844205	.00571139	28241-4	15432-3	0	27
17559	67.1455		292.5722 0108760	66.8685	294.3950	16.14150843		249
17559U	87 21	A	87 73.94758106	.00700884	28338-4	18054-3	0	28
17559	67.1412		289.4013 0104860	66.1208	295.2262	16.15342285	-	264
17559U	87 21	A	87 74.93785071	.00316796	28017-4	16963-3	0	29
17559	67.1406		286.0277 0125972	88.2874	265.5282	16.03979645		280
17559U	87 21	A	87 75.93673135	.00300293	27311-4	15589-3	0	31
17559	67.1398		282.6687 0124552	87.3480	274.2969	16.04595673		296
17559U	87 21	A	87 76.55996301	.01476161	27860-4	74724-3	0	32
17559	67.1395		280.5720 0123500	86.4472	275.0734	16.04959215		306
17559U	87 21	A	87 76.80917649	.00474971	27984-4	23897-3	0	33
17559	67.1397		279.7329 0122909	86.3677	274.9192	16.05201048		310
17559U	87 21	A	87 77.93049576	.00353825	27727-4	17356-3	0	39
17559	67.1395		275.9579 0120706	85.0960	276.1533	16.05928996		328
90	87 21	A	87 80.23189131	.00539233	28695-4	17563-3	0	51
9	67.1399		266.1811 0102369	93.0391	263.3019	16.13603751		365

17559U	87 21	A 87	80.91355309	.00550247	28387-4	17209-3 0	52
17559	67.1399	255.8519	0100450	92.5935	268.6963	16.14362340	376
17559U	87 21	A 87	81.84257993	.00642603	28788-4	19206-3 0	53
17559	67.1396	262.6854	0096132	91.7412	269.8993	16.15597091	391
17559U	87 21	A 87	81.90441409	.00631385	28682-4	18720-3 0	54
17559	67.1397	262.4790	0096223	91.5957	269.6209	16.15668487	392
17559U	87 21	A 87	82.64705793	.00594260	28348-4	16995-3 0	55
17559	67.1393	259.9402	0093084	90.5246	270.6890	16.16606018	404
17559U	87 21	A 87	82.83264791	.02382655	28211-4	63705-3 0	56
17559	67.1444	259.3059	0091839	91.0530	270.3367	16.17433246	407
17559U	87 21	A 87	82.89444120	.02013700	28352-4	52586-3 0	57
17559	67.1403	259.0925	0091974	91.4662	269.6888	16.17634622	408
17559U	87 21	A 87	82.95626846	.01945436	28662-4	50223-3 0	58
17559	67.1394	258.8799	0091370	91.3544	269.8049	16.17856622	409
17559U	87 21	A 87	83.07992169	.00647963	28301-4	16641-3 0	59
17559	67.1383	258.4581	0092072	91.6354	269.5392	16.17870977	411
17559U	87 21	A 87	85.91992867	.00898290	28396-4	18447-3 0	64
17559	67.1370	248.6959	0078090	87.6554	273.3551	16.22423184	457
17559U	87 21	A 87	86.84413073	.01162276	29142-4	21474-3 0	65
17559	67.1371	245.5039	0072248	86.7417	274.4365	16.24402018	472

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Kosmos 1824

parts. 2

17559U	87 21	A	87 86.84409105	.00984878	28970-4	18097-3	0	66
17559	67.1389		245.5077 0073248	86.7265	274.1795	16.24281234		472
17559U	87 21	A	87 86.84409987	.01174671	28731-4	21711-3	0	67
17559	67.1363		245.5047 0072212	86.7008	274.2960	16.24404217		472
17559U	87 21	A	87 87.02878197	.00502655	27884-4	21711-3	0	68
17559	67.1345		244.8723 0110210	118.4905	237.0156	16.09250209		475
17559U	87 21	A	87 88.83117619	.00469439	28097-4	19066-3	0	70
17559	67.1366		238.7642 0104507	116.7590	244.2741	16.10974493		504
17559U	87021	A	87090.07222556	.00427688	00000-0	00000-0	0	0071
17559	067.1386		234.5535 0088022	117.7503	243.2876	16.1591289100525		
17559U	87021	A	87090.38168087	.00540271	00000-0	0700-0	0	00721
17559	067.1336		233.4918 0088124	117.4088	243.6328	16.1621412000530		
17559U	87021	A	87090.38168087	.00540271	00000-0	00000-0	0	0073
17559	067.1336		233.4918 0088124	117.4088	243.6328	16.1621412000530		
17559U	87 21	A	87 92.91669092	.00625622	28523-4	18717-3	0	77
17559	67.1333		224.8007 0076126	115.8092	245.0971	16.19172715		570

590	87	21	A	87	94.39183107	.00709700	28372-4	18717-3	0	79
59	67.1323	213.0069	0065745	113.4320	247.0237	15.21626066				602
175590	87	21	A	87	95.20029487	.00736747	28843-4	18899-3	0	80
17559	67.1317	216.9453	0067721	113.2164	247.6512	16.22098176				607
590	87	21	A	87	95.57018540	.01021176	28453-4	24923-3	0	81
59	67.1327	215.0675	0066072	112.3638	248.1403	16.22840063				613
590	87	21	A	87	100.86172494	.00515476	28153-4	20991-3	0	89
59	67.1310	197.8203	0112816	132.8197	228.3099	16.09364084				698
75590	87	21	A	87	97.93797169	.00484260	28059-4	22116-3	0	85
7559	67.1300	207.6973	0123524	136.0235	225.3010	16.06104917				651
75590	87	21	A	87	98.87177747	.00682176	28280-4	29926-3	0	86
7559	67.1323	204.5465	0119231	135.1555	226.3487	16.07336058				666
75590	87	21	A	87	99.68044676	.00561855	27988-4	23936-3	0	87
7559	67.1314	201.3161	0116647	134.0592	226.9745	16.08153047				679
590	87	21	A	87	99.86702758	.00503992	28095-4	21423-3	0	88
59	67.1309	201.1860	0115923	133.8444	227.2107	16.08324827				682
590	87	21	A	87	101.48306825	.00597284	28116-4	24048-3	0	90
59	67.1321	195.7130	0109828	132.6623	228.4433	16.10041258				708
590	87	21	A	87	101.66941068	.01550970	28318-4	24048-3	0	91
59	67.1336	195.0824	0124236	132.9098	229.9065	16.14070700				711

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Kosmos 1824

font. 3

559U	87 21	A	87101.79304460	.01174927	28610-4	18411-3	0	92
559	67.1332	194.6586	0122843	132.7023	228.4277	16.14343502		713
590	87 21	A	87103.58741463	.01383787	28523-4	16203-3	0	96
59	67.1312	188.5203	0107694	130.7184	230.5656	16.18815443		742
590	87 21	A	87103.83446193	.01340018	28371-4	15054-3	0	97
559	67.1307	187.6705	0105623	130.3646	230.6669	16.19474304		746
590	87 21	A	87104.69837879	.01611463	28778-4	15724-3	0	99
559	67.1296	184.6933	0096880	129.5864	231.4565	16.22216369		760
590	87 21	A	87104.82166268	.01657966	29380-4	15817-3	0	100
559	67.1292	184.2682	0095536	129.4013	231.5695	16.22614124		762
590	87 21	A	87105.06418447	.00373777	28571-4	14061-3	0	101
559	67.1280	183.4274	0087212	149.3788	205.6168	16.14942105		766
590	87021	A	87105.62643415	.00650964	00000-0	00000-0	0	0102
559	67.1211	181.5216	0087532	147.2936	213.3934	16.1568967000776		
590	87 21	A	87105.87402681	.00621615	28722-4	22002-3	0	103
559	67.1260	180.6752	0084711	148.5741	212.0630	16.15971625		779

59U	87	21	A	87106.92577252	.00458027	28042-4	21001-3	0	104
59	67.1249	177.0780	0098501	135.4460	222.6837	16.10790071	796		
59U	87	21	A	87108.84996908	.00507555	28314-4	21310-3	0	106
59	67.1228	170.5373	0092887	133.4965	227.4137	16.12739648	827		
17559U	87	21	A	87109.84192215	.00545802	28456-4	21596-3	0	107
17559	67.1217	167.1581	0090389	132.8799	228.0224	16.13810737	343		
7559U	87	21	A	87111.57610188	.00594259	28645-4	21343-3	0	109
7559	67.1257	161.2384	0084192	132.0219	228.8365	16.15912579	871		

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GOES 7

17561U	87 22	A	87 58.87936189	.00000043	00000-0	99999-4 0	2
17561	0.5045	282.7064	1059451	221.0694	222.1307	0.98910104	3
7562U	87 22	B	87 58.29283550	.00005360	00000-0	99999-4 0	4
7562	21.7381	318.4044	2159342	167.5520	198.8222	11.16436868	3
17561U	87 22	A	87 59.79613113	-.00000077	00000-0	99999-4 0	3
17561	0.5052	205.4515	0725912	218.5778	225.1312	1.07156621	5
17561U	87 22	A	87109.63208568	-.00000221	00000-0	99999-4 0	13
17561	0.4345	279.1665	0005522	215.6417	225.2154	1.00277926	9
17563U	87 22	C	87110.48456863	.00001946	00000-0	11969-2 0	29
17563	17.8671	299.5793	7526273	212.4817	62.6774	1.96613859	104

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Progress 28

Ncd: 28mars

17564U	87 23	A	87 62.52192310	-	.00008330	57681-4	00000 0 0	1
17564	51.6346	338.7854	0052075	96.1517	264.4857	16.20021474	1	1
17564U	87 23	A	87 62.89203861	-	.00008184	56595-4	00000 0 0	2
17564	51.6306	336.7504	0057604	69.5947	287.0608	16.13911827	7	7
17564U	87 23	A	87 63.51191942	.	.00213890	56629-4	12764-3 0	3
17564	51.6341	333.3782	0056587	72.4256	288.6932	16.14225419	17	17
17564U	87 23	A	87 63.69756401	.	.00048009	71036-5	12764-3 0	4
17564	51.6337	332.3971	0061284	180.5460	167.9357	15.91487897	20	20
17564U	87 23	A	87 64.01354009	.	.00090750	92268-5	23441-3 0	5
17564	51.6343	330.7269	0061525	181.5073	178.5751	15.91534726	25	25
17564U	87 23	A	87 65.08088413	.	.00029658	00000-0	23441-3 0	6
17564	51.6107	325.2428	0017946	59.7052	256.0568	15.70898950	42	42

7564U	87	23	A	87	65.91573147	.00029559	00000-0	23441-3	0	7
7564	51.6153	320.9720	0018568	60.7776	299.4418	15.70808601	00000-0	23441-3	0	66
7564U	87	23	A	87	67.06085360	.00029720	00000-0	23441-3	0	8
7564	51.6082	315.1232	0019907	59.1745	301.2525	15.70895832	00000-0	23441-3	0	73
64U	87	23	A	87	67.95142635	.00006610	00000-0	53746-4	0	9
64	51.6129	310.5642	0018485	66.0664	294.0543	15.70865984	00000-0	53746-4	0	87
64U	87	23	A	87	68.96931307	.00006077	00000-0	53746-4	0	10
64	51.6126	305.3619	0011622	60.3270	296.9290	15.69042259	00000-0	53746-4	0	103

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Kormos 1825

17566U	87 24	A	87 62.81979132	.00000011	00000-0	00000 0 0	2
17566	82.5270		53.2727 0027626	267.9238	90.0153	14.74284544	0
17566U	87 24	A	87 62.95588521	.00000011	00000-0	00000 0 0	3
17566	82.5325		53.1722 0021983	275.0655	84.4136	14.73966298	2
17566U	87 24	A	87 63.15961607	.00000011	00000-0	00000 0 0	4
17566	82.5322		52.9848 0021913	273.6641	86.2159	14.73975959	5
17566U	87 24	A	87 63.97423753	.00000011	00000-0	00000 0 0	5
17566	82.5317		52.2331 0021714	271.5175	88.3997	14.73988055	17
17566U	87 24	A	87 65.06038465	.00000011	00000-0	00000 0 0	6
17566	82.5326		51.2324 0021829	267.9241	91.9478	14.73987834	36
17566U	87 24	A	87 66.96115748	.00010098	00000-0	15271-2 0	7
17566	82.5317		49.4809 0021801	261.6837	98.1996	14.73993321	64
6U	87 24	A	87 68.99769436	.00000101	00000-0	13727-4 0	9
6	82.5329		47.6050 0021813	254.1697	105.7021	14.73989623	94

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Kosmos 1826

Lopp: 11 mars

Ned: 25 mars

17577U	87 25	A	87	70.48844141	-	.00001643	11223-4	00000 0 0	1
17577	72.8747			329.6631	0136909	89.0126	272.7488	15.95961496	1
17577U	87 25	A	87	70.92722131		.00243058	11514-4	21753-3 0	2
17577	72.8724			328.5587	0136909	87.9501	273.7197	15.96010265	8
17577U	87 25	A	87	71.11829462		.00019071	00000-0	21753-3 0	3
17577	72.8775			328.1035	0045463	210.8816	148.9862	15.60860157	11
17577U	87 25	A	37	71.95150182		.00019002	00000-0	21752-3 0	4
17577	72.8744			326.1168	0044224	209.1993	150.5298	15.60837617	24
17577U	87 25	A	87	72.97702874		.00086964	00000-0	98580-3 0	5
17577	72.8745			323.6677	0043074	206.9941	152.7401	15.60831979	40
17577U	87 25	A	87	73.87434112		.00086909	00000-0	98580-3 0	6
17577	72.8744			321.5255	0043197	205.1339	154.4239	15.60809614	54
17577U	87 25	A	87	77.91252953		.00016181	00000-0	18086-3 0	11
17577	72.8744			311.8853	0042581	196.3556	163.4596	15.60745624	117

70	87	25	A	87	76.93512326	.00016067	00000-0	13599-3	0	22
7	72.8744	302.4373	0042477	193.4010	166.4830	15.60723359				133
70	87	25	A	87	79.89962579	.00016076	00000-0	13599-3	0	23
7	72.8743	307.1407	0042342	191.4154	168.5260	15.60706364				143
70	87	25	A	87	80.92523028	.00009597	00000-0	11167-3	0	24
7	72.8760	304.6925	0042523	188.7503	171.2339	15.60695215				164
7577U	87	25	A	87	81.88674255	.00010028	00000-0	11679-3	0	25
7577	72.8749	302.3974	0042220	186.6743	173.3383	15.60682232				179
7577U	87	25	A	87	82.97646158	.00010019	00000-0	11679-3	0	26
7577	72.8747	299.7959	0041970	184.3435	175.6850	15.60672728				196
7577U	87	25	A	87	84.00208742	.00010012	00000-0	11679-3	0	27
7577	72.8753	297.3474	0041770	182.1541	177.8786	15.60668934				212

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Kosmos 1827 - 1833

4pp: 13 mars

17582U	87 26	A	87 72.69381231	.00000004	00000-0	00000 0 0	2
17582	82.5803		35.3856 0032687	281.0961	78.3886	12.68499802	2
17582U	87 26	A	87102.68031379	.00000004	00000-0	00000 0 0	12
17582	82.5716		16.2072 0009677	324.5276	35.5171	12.64541988	381

87-27A

Kosmos 1833

4pp: 18 mars

90	87	27	A	87	78.97746742	.00070378	00000-0	37594-1	0	4
9		71.0125		346.2781	0002116	71.5749	288.3049	14.12591770		23
589	87	27	A	87	93.36270575	.00000145	00000-0	10001-3	0	14
589		71.0085		316.2275	0002492	36.1398	323.9892	14.12578355		226

87-28A

Raduga 20

Uip: 19mars

17611U	87 28	A	87	91.91084790	.00000133	00000-0	00000 0 0	10
17611	1.2793	241.7327	0005134	45.4381	314.4550	1.00240246		14
20	87 28	J	87	80.96409528	.16651532	61741-4	12697-3 0	15
2	51.0090	23.93501	0002784	236.9028	123.6283	16.52469794		46
17709U	87 28	E	87	109.58673185	.00029500	00000-0	20369-1 0	7
17709	47.3456	235.3512	7274597	8.1397	357.1025	2.26373098		75
17710U	87 28	F	87	109.97729807	.00002394	00000-0	63156-3 0	81
17710	47.2806	235.1013	7293512	8.4029	359.0017	2.26733794		76

87-29A

Palapa 5

4 pp: 20 mars fr. Cape Canaveral

06U	87	29	A	87	97.28267844	.00000079	00000-0	99999-4	0	3
06	0.	1233		305.	7211	0001450	192.8505	222.6738	0.99099827	17
17706U	87029		A	87039.	95367319	.00000000	00000-0	00000-0	0	0004
17706	000.0861			287.6937	0004577	025.6851	334.3444	01.00272174	00000	
7U	87	29	B	87	80.29295582	.00001668	00000-0	28449-5	0	2
7	26.8592			326.4965	0077356	210.9460	146.6828	15.90374912		5
17700U	87	29	C	87	91.45154141	.00020408	00000-0	23000-2	0	10
17708	24.7291			328.7290	7352253	180.6020	151.1645	2.21746525		27

87-30C

Kvant "service pod"

851U	87 30	C	87103.14358186	.12386287	00000-0	32777-1 0	1
851	51.5904	130.7905	0047459	54.4675	305.1518	15.73466480	6581
851U	87 30	C	87103.33414655	.00322100	00000-0	22651-2 0	3
851	51.6290	129.8000	0015832	241.6286	118.2845	15.72462599	6584
851U	87 30	C	87103.46125018	.00004082	00000-0	32092-4 0	4
851	51.6293	129.1505	0015916	240.5528	119.3433	15.72419087	6586
1735IU			87103.65191817	0.00004032		32092-4 0	5
1735I	51.6291	128.1723	0015319	241.0954	118.3416	15.72417462	6589
851U	87 30	C	87104.22381983	.00004128	00000-0	32092-4 0	6
851	51.6265	125.2400	0016361	243.3092	116.6189	15.72642766	6598
785IU			87104.85924999	0.00004131		32092-4 0	8
785I	51.6295	121.9858	0016656	244.5962	115.3358	15.72675538	6608
851U	87 30	C	87105.93942929	.00056186	00000-0	40519-3 0	10
851	51.6297	116.4457	0015650	252.2708	107.6523	15.72816291	6625

51U	87	30	C	87106.25712406	.00046323	00000-0	33483-3	0	11
51	51.6287	114.8152	0016860	248.9733	110.9461	15.72816621	6630		
51U	87	30	C	87106.51127446	.00043667	00000-0	31582-3	0	12
51	51.6293	113.5129	0016935	252.7298	107.1817	15.72830931	6634		
51U	87	30	C	87106.89250689	.00039563	00000-0	28881-3	0	13
51	51.6288	111.5583	0016287	256.6559	103.2648	15.72670623	267		
51U	87	30	C	87106.89250646	.00018406	00000-0	13628-3	0	14
51	51.6285	111.5598	0016155	254.4468	105.4880	15.72825094	267		
51U	87	30	C	87107.84553294	.00032501	00000-0	23599-3	0	16
51	51.6298	106.6720	0016296	257.2747	102.6432	15.72897716	282		
51U	87	30	C	87108.41733392	.00032064	00000-0	23258-3	0	17
51	51.6296	103.7392	0016197	259.0660	100.8524	15.72933345	291		
51U	87	30	C	87109.05267477	.00022113	00000-0	16207-3	0	18
51	51.6294	100.4823	0015785	261.8622	98.0522	15.72929320	301		
17851U	87	30	C	87109.43389912	-.00007123	00000-0	-48742-4	0	19
17851	51.6293	98.5289	0015949	263.2422	96.6763	15.72868124	307		
7851U				87109.43389984	0.00046943		33838-3	0	20
7851	51.6308	98.5297	0015824	264.6051	95.3208	15.72901440	307		
17851U	87	30	C	87109.62443810	.01117683	00000-0	70110-2	0	21
17851	51.6292	97.5539	0015488	265.7290	93.8192	15.72940174	310		

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Kvant "service pod" fonts. 1

7351U			87109.94399502	0.00000248			66599-5 0	22
7351	51.6538		95.9457	0047853	303.4500	55.7431	15.57546508	6688
17851U	87 30	C	87110.13655843	.00172629	00000-0	22290-2 0	23	
17851	51.6325		94.9703	0016599	266.5940	93.5642	15.57710047	6691
17851U	87 30	C	87110.32897232	.00173126	00000-0	22290-2 0	24	
17851	51.6318		94.0025	0017475	269.2842	90.6055	15.57768119	6694
17851U	87 30	C	87110.90636794	.00060018	00000-0	78917-3 0	25	
17851	51.6279		91.1102	0017100	273.0127	86.8905	15.57729487	330
7851U	87 30	C	87111.93277975	.00004740	00000-0	65577-4 0	27	
7851	51.6287		85.9651	0016980	273.0211	81.6108	15.57729938	346
7851U			87119.95159185	0.00007648			10660-3 0	36
7851	51.6299		45.7583	0016941	306.9807	52.9444	15.57867301	471
17851U	87 30	C	87120.91380561	.00006744	00000-0	91283-4 0	37	
17851	51.6312		40.9324	0016862	310.8297	49.1308	15.57884059	486
17851U	87 30	C	87121.94015161	.00008046	00000-0	11164-3 0	38	
17851	51.6313		35.7868	0016903	314.8924	45.0767	15.57902770	502

17851U	87 30	C	87122.90233886	.00008047	00000-0	11164-3 0	39
17851	51.6301		30.9622 0017130	318.9862	40.9705	15.57914943	517
17851U	87 30	C	87123.86452233	.00007321	00000-0	98651-4 0	40
17851	51.6306		26.1343 0016923	322.1717	37.8124	15.57930320	532
17851U	87 30	C	87124.82669385	.00007797	00000-0	10825-3 0	41
17851	51.6311		21.3098 0016913	325.9023	34.1038	15.57949000	347
17851U	87 30	C	87126.81514489	.00008471	00000-0	11683-3 0	43
17851	51.6307		11.3404 0017053	333.3491	26.6817	15.57985741	578
17851U	87030	C	87126.94343635	.00009126	00000-0	00000-0 0 0043	
17851	051.6306		010.6968 0017896	331.6914	028.3764	15.5798899700500	
17851U	87 30	C	87134.64015654	.00002734	00000-0	38743-4 0	52
17851	51.6296		332.0950 0017644	2.4235	357.6824	15.58140622	700
17851U	87 30	C	87137.91101834	.00010256	00000-0	13872-3 0	59
17851	51.6305		315.6863 0017576	14.8772	345.2481	15.58220988	751
17851U	87 30	C	87137.91101834	.00010256	00000-0	13872-3 0	61
17851	51.6305		315.6863 0017576	14.8772	345.2481	15.58220988	751
17851U	87 30	C	87150.86484253	.00012922	00000-0	17110-3 0	78
17851	51.6286		250.6847 0018004	61.1851	299.0847	15.58502578	953
17851U	87 30	C	87157.08444881	.00006911	00000-0	90964-4 0	87
17851	51.6277		219.4664 0018106	83.1818	277.1118	15.58590129	1050

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Kvant "Service Pod"

parts. 2

51U 87 30	C	87165.86820812	.00052633	00000-0	66760-3 0	96
51 51.6262		175.3737	0017800	113.8778	246.3705	15.58725813 1187
17851U 87 30	C	87188.81807187	.00003112	00000-0	42192-4 0	124
17851 51.6314		60.1209	0017178	199.8932	160.1402	15.59023602 1545
7851U 87 30	C	87199.84267627	.00010051	00000-0	13131-3 0	136
7851 51.6308		4.7373	0016862	242.7223	117.1514	15.59194152 1717
7851U 87 30	C	87245.84524525	.00014847	00000-0	18265-3 0	190
7851 51.6276		133.4256	0017175	60.0923	300.1849	15.60332004 2435
17851U 87 30	C	87251.48205791	.00017066	00000-0	20781-3 0	198
17851 51.6281		105.0610	0016887	80.2992	279.9697	15.60478231 2523
17851U 87 30	C	87261.85537182	.00017510	00000-0	21009-3 0	210
17851 51.6279		52.8257	0016506	117.1814	243.0733	15.60850332 2685
7851U 87 30	C	87262.87975899	.00014929	00000-0	17994-3 0	211
7851 51.6284		47.6666	0016390	120.5528	239.6795	15.60878359 2701
17851U 87 30	C	87265.88878885	.00051047	00000-0	59466-3 0	215
17851 51.6296		32.5102	0016109	131.8054	228.4851	15.61004939 2748
7851U 87 30	C	87267.04106756	.00051135	00000-0	59466-3 0	216
7851 51.6316		26.7052	0015914	136.0348	223.9482	15.61052589 2766

7851U	87	30	C	87273.76242287	.00016634	00000-0	19685-3	0	226
7851	51.6299	352.8319	0015735	159.8090	200.3661	15.61269686	2871		
51U	87	30	C	87280.86673751	.00012885	00000-0	15273-3	0	234
51	51.6289	317.0277	0014704	185.0424	175.1263	15.61495838	2982		
7851U	87	30	C	87305.62506073	.00036169	00000-0	39802-3	0	266
7851	51.6256	192.1008	0014454	278.6686	80.9277	15.62664922	3369		
7851U	87	30	C	87342.82184861	.00041750	00000-0	42524-3	0	322
7851	51.6285	3.9715	0016117	62.8422	297.3208	15.64532912	3951		
7851U	87	30	C	87348.88946791	.00019553	00000-0	20072-3	0	331
7851	51.6283	333.2377	0016373	83.1435	277.1422	15.64778943	4046		

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4. pp. 27 mars fr. Ba, Kvant
Frekvens: 247.500 MHz

17845 U 87030 A 87090.05843343 .00000000 00000-0 00000-0 0 0001
17845 051.5971 198.6323 0082875 088.2083 272.9125 16.1875139600001
17845 U 87030 A 87090.12050599 .00000000 00000-0 00000-0 0 0002
17845 051.6276 198.3206 0097388 090.7975 270.4904 16.1400414700002
17845 U 87030 A 87090.43002684 .00698584 00000-0 00000-0 0 0003
17845 051.6237 196.6347 0096960 092.0001 269.2825 16.1448627800007
17845 U 87030 A 87090.98693681 .00720427 00000-0 00000-0 0 0004
17845 051.6230 193.5799 0095763 094.0903 267.1708 16.1524926100010
17845 U 87030 A 87091.17284116 .00720427 00000-0 00000-0 0 0005
17845 051.6215 192.5873 0107647 090.1917 271.2135 16.1141719900019
17845 U 87030 A 87091.29686773 .00714396 00000-0 00000-0 0 0006
17845 051.6218 191.9121 0106889 091.2446 270.1518 16.1150063800021
17845 U 87 30 A 87 91.54489540 .00830452 56075-4 28186-3 0 6
17845 01.0229 190.5626 0106633 92.1442 269.3654 16.11937599 25

17845U	87030	A	87092.22905790	.00707473	00000-0	00000-0	0	0010
17845	051.6253		186.9011	0035781	184.8459	175.2872	15.8355610200036	
17845U	87030	A	87092.29217137	.00459861	00000-0	00000-0	0	0011
17845	051.6308		186.5813	0034457	185.7284	174.4000	15.8344993200037	
17845U			87 92.54458867	0.00062155			26741-3 0	11
17845	51.6271		185.2533	0034178	184.4356	175.5905	15.83493161	41
17845U			87 92.86013378	0.00062164			26741-3 0	12
17845	51.6249		183.6084	0033859	185.5475	174.4916	15.83514726	46
17845U	87 30	A	87 94.24834546	.02694795	00000-0	81848-2 0	0	14
17845	51.6227		176.3787	0032791	185.7589	174.3038	15.84953871	68
17845U	87 30	A	87 94.37442476	.00384687	00000-0	14995-2 0		15
17845	51.6272		176.7265	0032089	183.6880	176.1430	15.84726915	70
17845U	87 30	A	87 94.56363675	.00027237	00000-0	11337-3 0	0	16
17845	51.6283		174.7374	0031882	185.0802	174.9323	15.84718055	73
17845U	87 30	A	87 94.87894207	.00027251	00000-0	11337-3 0		17
17845	51.6281		173.0915	0031913	185.9458	174.1055	15.84729054	78
17845U	87 30	A	87 95.05812051	.00019001	00000-0	11337-3 0	0	18
17845	51.6278		172.1130	0048422	198.2777	160.3512	15.76273957	81
17845U	87 30	A	87 95.38533497	.00014328	00000-0	11337-3 0		20
17845	51.6254		170.4877	0013667	211.4013	142.9351	15.71533371	86

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845U	87	30	A	87	95.83198294	.00014573	00000-0	11517-3	0	21
845	51.6273	158.2029	0013961	201.4417	161.5647	15.71542414	6466			
17845U	87	30	A	87	96.91246721	.00009012	00000-0	70571-4	0	22
17845	51.6282	162.6717	0014149	205.0630	154.9685	15.71557475	6483			
17845U	87	30	A	87	97.92786735	.00011018	00000-0	85607-4	0	23
17845	51.6278	157.4666	0013965	209.2241	150.7962	15.71585052	6499			
17845U	87	30	A	87	98.88366411	.00011921	00000-0	92311-4	0	24
17845	51.6283	152.5643	0013914	213.3248	146.6860	15.71611139	6514			
845U	87	30	A	87100.47335899	.00012760	00000-0	97700-4	0	28	
845	51.6313	144.4608	0014500	233.4529	126.5110	15.71827529	166			
845U	87	30	A	87101.87206857	.00012777	00000-0	97700-4	0	31	
845	51.6336	137.2917	0014288	226.1503	134.8166	15.71857214	188			
845U	87	30	A	87103.84291060	.00012762	00000-0	97700-4	0	33	
845	51.6255	127.1987	0014558	232.3533	127.4020	15.71827879	210			
845U	87	30	A	87104.92375068	.00012751	00000-0	97700-4	0	34	
845	51.6255	121.0659	0010592	222.2985	137.7339	15.71877183	236			

845U	87 30	A	87107.14888542	.00012777	00000-0	97700-4 0	38
845	51.6228	110.2750	0014610	244.1175	115.8612	15.71855736	271
845U	87 30	A	87108.03892680	.00012799	00000-0	97700-4 0	40
845	51.6280	105.7117	0014294	248.9085	111.0387	15.71897898	285
845U	87 30	A	87108.99252488	.00012816	00000-0	97700-4 0	42
845	51.6228	100.8275	0014875	255.8501	104.0308	15.71920217	300
17845U	87 30	A	87111.09041804	.00012845	00000-0	97700-4 0	44
17845	51.6238	90.0817	0014849	258.1710	101.7665	15.71972581	333
7845U	87 30	A	87111.98040698	.00012859	00000-0	97700-4 0	46
7845	51.6278	85.5289	0014927	265.3265	94.5932	15.71990391	347
7845U	87 30	A	87113.06109314	.00012873	00000-0	97700-4 0	47
7845	51.6285	79.9976	0014850	269.5468	90.3635	15.72019053	364
17845U	87 30	A	87113.88749770	.00012979	00000-0	97700-4 0	48
17845	51.6296	75.7620	0016086	273.9063	86.0949	15.72185105	377
17845U	87 30	A	87115.85788733	.00012989	00000-0	97700-4 0	52
17845	51.6270	65.6724	0015083	288.2283	71.6169	15.72225090	408
17845U	87 30	A	87115.92146455	.00012838	00000-0	97700-4 0	53
17845	51.6261	65.3327	0015003	276.6192	83.1226	15.71956852	409
17845U	87 30	A	87117.19293363	.00012843	00000-0	97700-4 0	55
17845	51.6232	58.8395	0013868	285.0877	74.8687	15.71986483	429

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17845U	87 30	A	87120.81707971	.00012653	00000-0	97700-4 0	62
17845	51.6309		40.2960 0014508	309.2973	50.5887	15.71631795	486
17845U	87 30	A	87122.91536768	.00012696	00000-0	97700-4 0	64
17845	51.6318		29.5526 0016408	303.6773	56.2444	15.71671236	519
17845U	87 30	A	87123.61479049	.00012698	00000-0	97700-4 0	65
17845	51.6323		25.9811 0017031	309.6829	50.2636	15.71660012	530
17845U	87 30	A	87124.44138062	.00012713	00000-0	97700-4 0	66
17845	51.6295		21.7461 0016482	312.2256	47.8091	15.71707027	543
17845U	87 30	A	87137.85830739	.00035063	00000-0	26768-3 0	79
17845	51.6330		313.0903 0015741	1.3321	358.6680	15.71685217	754
17845U	87 30	A	87138.93921470	.00035117	00000-0	26768-3 0	80
17845	51.6280		307.5492 0015960	5.3167	354.6787	15.71718533	771

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Upp: 8 apr 71

17847U	87 31	A 87 98.28127558	-.00000148	00000-0	00000 0 0	1
17847	65.0398	288.2835	0023542	281.6230	78.2274 15.50875172	1
17847U	87 31	A 87 98.41024477	.06128170	00000-0	53517-1 0	2
17847	65.0409	287.6502	0023512	280.9950	79.1265 15.51386306	3
17847U	87 31	A 87 98.60344556	.00227142	00000-0	36431-2 0	3
17847	65.0386	287.1956	0010093	265.3767	94.2538 15.51981665	6
17847U	87 31	A 87 98.66125764	.00227525	00000-0	36431-2 0	4
17847	65.0414	286.3244	0010227	263.5380	96.4286 15.52026032	10
17847U	87 31	A 87104.53165051	.00020767	00000-0	34511-3 0	12
17847	6590380	267.1644	0009274	267.0736	92.8716 15.52070731	99
17847U	87 31	A 87108.84889754	.00000462	00000-0	99999-5 0	16
17847	65.0408	252.5813	0009178	269.7643	90.1588 15.52012112	166
17847U	87 31	A 87109.87991473	.00000461	00000-0	99999-5 0	17
17847	65.0400	249.0978	0009082	268.1928	91.7269 15.51991830	182

17847U	87	31	A	87120.76973694	.00026212	00000-0	43272-3 0	31
17847	65.0403	212.3079	0010079	267.1536	93.1101	15.52147231	351	
17847U	87	31	A	87145.83529420	.00043278	00000-0	71261-3 0	72
17847	65.0362	127.6233	0010038	275.5804	84.3448	15.52041723	740	
17847U	87	31	A	87147.96173095	.00080249	00000-0	13129-2 0	75
17847	65.0328	120.4392	0009946	277.3478	82.5168	15.52007177	773	
47U	87	31	A	87280.82932446	.00029643	00000-0	48973-3 0	274
47	65.0394	31.5318	0010608	282.6072	77.3357	15.52075801	2835	

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Kosmos 1835

Upp-9 apr'1

7849U	87 32	A	87 99.73327624	.00491684	34524-4	20078-3	0	3
7849	64.7559		43.1122 0129999	66.4425	295.0735	16.05913217		4
49U	87 32	A	87 00.85781210	.00350105	34317-4	14325-3	0	5
49	64.7568		47.6506 0129758	66.3339	295.1211	16.05981838		6
49U	87 32	A	87100.35593005	.00459404	34859-4	18463-3	0	6
49	64.7572		45.8070 0127950	66.4650	295.1665	16.06490327		14
49U	87 32	A	87100.60492662	.00530006	34615-4	21036-3	0	7
49	64.7574		44.8843 0127312	66.1908	295.4846	16.06748168		18
49U	87 32	A	87100.85383230	.00474543	34518-4	18650-3	0	8
49	64.7571		43.9650 0126643	66.2411	295.1698	16.06970322		22
49U	87 32	A	87101.84926664	.00434715	34704-4	16327-3	0	0
49	64.7552		40.2739 0124106	66.0300	295.4180	16.07934779		38
49U	87 32	A	87102.47110977	.00500587	34967-4	18337-3	0	10
49	64.7578		37.9658 0121810	66.2148	295.3871	16.08622651		48

849U	87	32	A	87102.84404269	.00513857	34986-4	18443-3	0	11
849	64.7578	36.5824	0120861	65.8434	295.5341	16.09008951	54		
849U	87	32	A	87103.83818688	.00541327	35018-4	18506-3	0	12
849	64.7587	32.8876	0117600	65.9064	295.6361	16.10123567	70		
849U	87	32	A	87104.89457618	.00608385	34656-4	19415-3	0	14
849	64.7610	28.9568	0114046	65.8928	295.4265	16.11477715	87		
849U	87	32	A	87105.20587320	.00598893	34833-4	18650-3	0	15
849	64.7580	27.5630	0112664	65.7327	295.6031	16.11984413	93		
849U	87	32	A	87105.83511315	.00624154	35011-4	18414-3	0	16
849	64.7585	25.2549	0110333	65.4047	295.8512	16.12748011	103		
849U	87	32	A	87106.07213020	.00413303	34405-4	18814-3	0	17
849	64.7550	24.5012	0130547	73.1298	280.1229	16.04840811	106		
849U	87	32	A	87108.87476627	.00453293	34663-4	18244-3	0	19
849	64.7566	14.1945	0123457	77.3459	284.2686	16.07368795	151		
17849U	87	32	A	87109.86994163	.00486100	34324-4	18594-3	0	20
17849	64.7566	10.5045	0120884	76.9707	284.7284	16.08378753	167		
17849U	87	32	A	87110.36725208	.00501862	34834-4	18816-3	0	21
17849	64.7564	8.6557	0118940	77.1059	284.5116	16.08958547	175		
17849U	87	32	A	87111.05076949	.00489923	35005-4	19950-3	0	23
17849	64.7586	6.1200	0123392	80.9013	279.6251	16.07256699	136		

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17849U	87 32	A	87113.78651017	.00478892	34973-4	17733-3 0	26
17849	64.7562	355.9629	0115092	79.9704	281.4890	16.09839840	230
17849U	87 32	A	87114.96639989	.00622040	35254-4	21694-3 0	27
17849	64.7569	351.5693	0111509	79.9130	281.6064	16.11107368	249
17849U	87 32	A	87115.09051458	.00589569	34757-4	20371-3 0	28
17849	64.7569	351.1065	0111288	79.8385	281.5218	16.11245183	251
17849U	87 32	A	87115.95918497	.00402122	33924-4	20371-3 0	29
17849	64.7558	347.8825	0123542	95.5903	264.0921	16.04972691	265
17849U	87 32	A	87116.02183330	.00375693	34348-4	20371-3 0	30
17849	64.7584	347.6328	0126722	95.2345	265.9360	16.03631390	266
17849U	87 32	A	87116.20898074	.00241972	34538-4	13486-3 0	31
17849	64.7538	346.9458	0130677	95.2948	265.5775	16.02639549	269
17849U	87 32	A	87120.86294270	.00556260	35359-4	17024-3 0	40
17849	64.7547	329.5955	0082113	105.8628	254.9968	16.17862442	344
17849U	87 32	A	87121.97519237	.00583731	35738-4	16528-3 0	41
17849	64.7554	325.4070	0078923	105.4552	255.7266	16.19189558	362

178490	87 32	A	87122.83957355	.00652308	35562-4	17472-3 0	42
17849	64.7539	322.1461	0075279	104.8929	256.3467	16.20354921	376
178490	87 32	A	87122.90124166	.00332103	34134-4	17472-3 0	43
17849	64.7576	321.9231	0122172	128.8203	223.2776	16.04858691	377
178490	87 32	A	87122.90124166	.00332103	34134-4	17472-3 0	44
17849	64.7576	321.9231	0122172	128.8203	223.2776	16.04858691	377
178490	87 32	A	87123.96193784	.00343620	34185-4	17472-3 0	45
17849	64.7541	318.0057	0120006	129.9708	231.3583	16.05639163	394
178490	87 32	A	87124.83373198	.00404934	34494-4	19850-3 0	46
17849	64.7558	314.7822	0118274	129.7308	231.5481	16.06343044	408
178490	87 32	A	87125.52958893	.00398583	34815-4	18951-3 0	48
17849	64.7535	311.0955	0115855	129.2331	231.9194	16.07135244	424
178490	87 32	A	87128.13051729	.00455104	34968-4	19769-3 0	52
17849	64.7511	302.5567	0109726	128.3036	232.8616	16.09240951	461
178490	87 32	A	87129.93172026	.00508895	34774-4	20473-3 0	54
17849	64.7534	295.8557	0104423	127.5203	233.5396	16.11027770	490
178490	87 32	A	87130.80054885	.00583198	35302-4	20473-3 0	55
17849	64.7419	292.6123	0086310	124.1539	238.2225	16.15722921	504
178490	87 32	A	87132.90302669	.00605924	35506-4	18603-3 0	60
17849	64.7512	284.7117	0079323	123.6187	236.9918	16.18307101	538

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178490	87 32	A	87134.01495114	.00626956	35881-4	18086-3	0	61
17849	64.7495	280.5198	0074700	122.8301	238.1240	16.19720300		556
178490	87 32	A	87134.94074283	.00792069	36073-4	21245-3	0	62
17849	64.7497	277.0214	0070501	122.7465	238.4221	16.21131458		571
178490	87 32	A	87135.80400189	.00845531	36361-4	21094-3	0	66
17849	64.7506	273.7544	0066433	122.3233	238.6020	16.22509318		585
178490	87 32	A	87136.35854457	.00198336	35856-4	48314-4	0	67
17849	64.7496	271.6542	0063934	122.0687	238.5735	16.23337242		594
178490	87 32	A	87136.60497679	.01009307	35753-4	23510-3	0	68
17849	64.7488	270.7161	0062296	122.1376	238.7180	16.23832386		598
178490	87 32	A	87136.78968416	.00613606	35810-4	23510-3	0	69
17849	64.7492	270.0182	0053858	106.9369	251.8652	16.19880752		601
178490	87 32	A	87136.91347932	.00465249	35739-4	17702-3	0	70
17849	64.7478	269.5512	0053888	106.7563	253.9341	16.19984820		603
178490	87 32	A	87137.90090809	.00500634	35972-4	17906-3	0	71
17849	64.7459	265.8234	0051554	106.0196	254.6513	16.20979939		619

17849U	87 32	A	87138.02429633	.00539974	36067-4	19322-3 0	74
17849	64.7443		265.3626 0050515	106.0765	254.6019	16.21102316	621
17849U	87 32	A	87138.70273630	.00361297	34333-4	19322-3 0	75
17849	64.7471		262.8008 0104396	112.0144	243.5598	16.08002079	632
17849U	87 32	A	87142.43207436	.00447930	35085-4	21892-3 0	80
17849	64.7440		248.9291 0094267	113.3773	247.6964	16.10797420	692
17849U	87 32	A	87142.92869236	.00454189	35023-4	21892-3 0	81
17849	64.7440		247.0783 0092834	113.2296	247.8274	16.11202400	700
17849U	87 32	A	87143.67337510	.00301920	34967-4	14181-3 0	82
17849	64.7467		244.3009 0091610	113.2329	247.6703	16.11764162	712
17849U	87 32	A	87143.73545369	.00451841	35356-4	20946-3 0	83
17849	64.7454		244.0700 0091538	113.0499	248.0155	16.11863438	713
17849U	87 32	A	87144.16970504	.00463479	33290-4	21283-3 0	84
17849	64.7440		242.4508 0090051	112.4966	248.5077	16.12224121	720
17849U	87 32	A	87144.35579739	.00390952	35133-4	17844-3 0	85
17849	64.7428		241.7541 0089878	112.6995	248.3402	16.12342639	723
17849U	87 32	A	87144.78993581	.00416084	35344-4	18445-3 0	86
17849	64.7440		240.1330 0089422	112.6659	248.4753	16.12734073	730
17849U	87 32	A	87145.40992805	.00615952	35222-4	27002-3 0	87
17849	64.7463		237.8161 0085833	112.4162	248.8784	16.13433384	740
17849U	87 32	A	87146.71096213	.00570126	35636-4	23279-3 0	88
17849	64.7461		232.9466 0082048	111.7945	249.2095	16.14861538	761

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17849U	87 32	A	87147.88708511	.00597715	35348-4	22791-3 0	89
17849	64.7457	223.5336	0077685	111.1941	249.7754	16.16327158	780
17849U	87 32	A	87148.87667838	.00715400	35460-4	25888-3 0	90
17849	64.7437	224.8142	0074028	110.7086	250.1809	16.17474618	796
17849U	87 32	A	87149.18578330	.00579303	34687-4	25888-3 0	91
17849	64.7516	223.6615	0087846	118.8054	240.2828	16.12880700	801
17849U	87 32	A	87149.86799806	.00598883	35168-4	25240-3 0	92
17849	64.7426	221.1040	0086951	118.4704	242.5406	16.13673092	812
17849U	87 32	A	87150.85921781	.00521983	35018-4	20919-3 0	93
17849	64.7444	217.3947	0084246	113.2701	242.3467	16.14696125	828
17849U	87 32	A	87152.83996718	.00556046	35358-4	20022-3 0	96
17849	64.7405	209.9599	0078595	117.7137	243.1758	16.16791540	860
17849U	87 32	A	87153.39655850	.00660970	35350-4	23212-3 0	97
17849	64.7403	207.3625	0076358	117.3660	243.4752	16.17414976	869
17849U	87 32	A	87153.95291961	.00542416	35878-4	18386-3 0	98
17849	64.7407	205.7741	0075195	116.8280	243.8700	16.17998555	878

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870U	87	33	A	87106.31903499	-.00005062	34899-4	00000	0	0	1
870U	84	3000		334.0311	0094266	68.8281	291.7228	16.1406	7642	1
870U	87	33	A	87106.50550204	.00384631	35151-4	16342-3	0	0	2
876	64	7905		333.3339	0083726	68.6380	292.4073	16.1419	0092	4
870U	87	33	A	87106.75337404	.00492021	35274-4	20665-3	0	0	3
870U	64	7253		332.4081	0032411	68.8510	292.1527	16.1444	1157	8
870U	87	33	A	87107.24883846	.00230147	94549-5	21060-3	0	0	5
876	64	7953		330.5561	0056777	58.6265	300.5185	16.0858	7501	16
870U	87	33	A	87107.37344106	.00138684	13520-4	21060-3	0	0	6
876	64	7965		330.0972	0039568	78.8790	279.8882	16.0272	1976	18
870U	87	33	A	87107.99770020	.00138116	13547-4	20809-3	0	0	7
876	64	7943		327.8875	0039288	79.9023	280.6110	16.0287	4834	28
870U	87	33	A	87108.87113333	.00122672	12036-4	18307-3	0	0	8
876	64	7944		324.5939	0039040	79.7046	280.7706	16.0308	0878	42

17876U	87 33	A	87113.92217772	.00119067	11947-4	16539-3 0	13
17876	64.7935	306.0033	0037374	77.1032	283.4209	16.04370906	123
17876U	87 33	A	87114.98177427	.00155484	16211-4	21199-3 0	14
17876	64.7950	302.0996	0036930	76.2764	284.2198	16.04636751	140
17876U	87 33	A	87115.97886272	.00129922	13879-4	17534-3 0	15
17876	64.7959	298.4248	0036491	76.0613	284.2788	16.04871230	156
17876U	87 33	A	87117.03816496	.00112854	11371-4	15073-3 0	17
17876	64.7938	294.5166	0036045	74.9777	285.4929	16.05108083	173
17876U	87 33	A	87117.47429794	.00107734	11026-4	14332-3 0	18
17876	64.7933	292.9107	0036017	74.7011	285.7775	16.05188095	180
17876U	87 33	A	87117.91040788	.00108039	11064-4	14290-3 0	19
17876	64.7935	291.3916	0035944	74.1190	286.3893	16.05283111	187
17876U	87 33	A	87120.90009013	.00124541	12963-4	15802-3 0	22
17876	64.7923	280.2655	0034868	72.8338	287.6230	16.05980627	235
17876U	87 33	A	87121.95862634	.00115902	12088-4	14500-3 0	23
17876	64.7938	276.3554	0034863	72.2116	288.1989	16.06219170	252
17876U	87 33	A	87122.89251293	.00148325	16022-4	18291-3 0	24
17876	64.7943	272.9070	0033525	71.2768	289.2790	16.06484857	267
17876U	87 33	A	87123.88843997	.00131393	14018-4	15987-3 0	25
17876	64.7940	269.2274	0033400	70.7675	289.5666	16.06730826	283

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7876U	87 33	A	87125.81766605	.00141733	15471-4	16723-3 0	28
7876	64.7933		262.0929 0032236	68.8514	291.6347	16.07272804	314
7876U	87033	A	87126.93755439	.00140077	17900-5	00000-0 0 0029	
7876	64.7968		257.9535 0037790	71.7994	288.7186	16.0758096600332	
7876U	87 33	A	87129.11441111	.00161263	18650-4	17910-3 0	31
7876	64.7927		249.8871 0030513	66.2277	294.3031	16.08293289	367
7876U	87 33	A	87129.98486675	.00158568	18097-4	17363-3 0	32
7876	64.7943		246.6014 0029794	65.5159	294.8549	16.08558004	381
7876U	87 33	A	87135.14251562	.00172862	21142-4	17087-3 0	40
7876	64.7925		227.5222 0027507	60.4682	300.0252	16.10229775	464
7876U	87 33	A	87135.88772512	.00192818	24813-4	18684-3 0	43
7876	64.7921		224.7527 0026980	60.2707	300.2290	16.10540238	476
7876U	87 33	A	87137.00526880	.00188206	24107-4	17802-3 0	44
7876	64.7915		220.5982 0026118	58.5178	301.7879	16.10953382	494
7876U	87 33	A	87137.50188637	.00141914	14932-4	17802-3 0	45
7876	64.7900		218.7495 0029837	97.7727	260.9497	16.06477913	502

17876U	87 33	A	87137.62668949	.00117390	11579-4	17802-3 0	46
17876	64.7917	218.2958	0049794	96.0675	262.5792	16.01879157	504
7876U	87 33	A	87138.06404610	.00116389	11549-4	17598-3 0	47
7876	64.7902	216.6906	0049431	95.7416	264.9120	16.01965782	511
17876U	87 33	A	87139.87425971	.00094930	96933-5	14208-3 0	51
17876	64.7917	210.0412	0048225	95.2376	265.3936	16.02306193	540
17876U	87 33	A	87142.93200108	.00118404	11938-4	17056-3 0	54
17876	64.7911	198.8069	0047425	93.6273	267.0318	16.02925871	589
17876U	87 33	A	87143.68064251	.00099858	10205-4	14331-3 0	55
17876	64.7901	196.0542	0047204	93.3260	267.2116	16.03055682	601
17876U	87 33	A	87144.55400812	.01187587	80719-3	16944-2 0	56
17876	64.7912	192.8413	0045206	94.2782	266.3985	16.03285905	615
7876U	87 33	A	87157.94302977	.00149324	16938-4	16970-3 0	74
7876	64.7903	143.4022	0035354	87.1703	273.4129	16.07608640	830
17876U	87 33	A	87158.81386733	.00161009	18697-4	17954-3 0	75
17876	64.7890	140.1796	0035086	86.6205	273.9599	16.07901256	844
17876U	87 33	A	87160.80383859	.00128308	14475-4	13896-3 0	77
17876	64.7884	132.6033	0034658	87.0762	273.4368	16.08426047	876
17876U	87 33	A	87161.92292178	.00124739	14123-4	13263-3 0	79
17876	64.7879	128.6556	0034757	86.8855	273.5586	16.08700696	894

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17876U	87 33	A	87167.82547269	.00089315	00000-0	82737-4 0	87
17876	64.7859	106.7453	0032928	85.9748	274.6007	16.10476996	989
17876U	87 33	A	87169.56388337	.00167469	21297-4	15274-3 0	89
17876	64.7877	100.2760	0032455	87.1890	273.4174	16.11078635	1017
17876U	87 33	A	87171.86002225	.00193475	81095-5	16615-3 0	92
17876	64.7887	91.7285	0031941	88.3060	272.1888	16.11955646	1054
17876U	87 33	A	87173.84480738	.00194293	83156-5	15827-3 0	96
17876	64.7890	84.3316	0031128	87.8746	272.5803	16.12766883	1086
17876U	87 33	A	87173.84480738	.00194293	83156-5	15827-3 0	95
17876	64.7890	84.3316	0031128	87.8746	272.5803	16.12766883	1086
17876U	87 33	A	87173.84480738	.00194293	83156-5	15827-3 0	96
17876	64.7890	84.3316	0031128	87.8746	272.5803	16.12766883	1086
17876U	87 33	A	87175.82804981	.00191847	86759-5	14877-3 0	99
17876	64.7902	76.9313	0030130	87.4661	273.0149	16.13536702	1118
17876U	87 33	A	87176.75824311	.00199785	88264-5	15115-3 0	100
17876	64.7897	73.4596	0029500	87.0317	273.4764	16.13920448	1133

17876U	87 33	A	87176.94412556	.00314170	89268-5	23464-3 0	101
17876	64.7956		72.7639 0029312	88.1964	272.2854	16.14051118	1136
17876U	87 33	A	87177.06803817	.00214390	28026-4	23464-3 0	102
17876	64.8679		72.6951 0028499	352.9233	4.8834	16.08603410	1138
17876U	87 33	A	87177.13059997	.00155490	15639-4	23464-3 0	103
17876	64.7894		72.0743 0040536	92.8668	266.7511	16.02721924	1139
17876U	87 33	A	87177.81710092	.00093352	91037-5	14095-3 0	105
17876	64.7885		69.5512 0040393	92.6675	267.8067	16.02853682	1150
17876U	87 33	A	87178.75296363	.00095085	93240-5	14217-3 0	106
17876	64.7887		66.1076 0039865	92.0670	268.5806	16.03052274	1165
17876U	87 33	A	87181.55982003	.00115954	11529-4	16622-3 0	109
17876	64.7871		55.7815 0040227	91.5013	269.2095	16.03645807	1210
17876U	87 33	A	87181.55982003	.00115954	11529-4	16622-3 0	110
17876	64.7871		55.7815 0040227	91.5013	269.2095	16.03645807	1210
17876U	87 33	A	87184.30340491	.00035957	00000-0	49999-4 0	116
17876	64.7983		45.6774 0038821	90.6700	269.9518	16.04054025	1254
17876U	87 33	A	87184.61512455	.00036138	00000-0	49999-4 0	117
17876	64.7875		44.5300 0039086	89.6429	270.9572	16.04112873	1259
17876U	87 33	A	87186.65916049	.00084202	89216-5	11578-3 0	121
17876	64.7882		36.2608 0038758	89.9854	270.3380	16.04531514	1295

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876U	87 33	A	87188.91575753	.00090876	96051-5	12205-3 0	123
876	64.7887		28.6818 0038235	88.8209	271.6943	16.04920221	1328
876U	87 33	A	87189.85040542	.00090995	95201-5	12134-3 0	124
876	64.7873		25.2334 0037561	88.3253	272.1874	16.05082835	1343
876U	87 33	A	87190.59805654	.00109167	11186-4	14395-3 0	125
876	64.7846		22.4739 0037192	86.9643	273.6383	16.06231766	1355
876U	87 33	A	87190.97184049	.00115350	11828-4	15104-3 0	126
876	64.7881		21.0945 0037004	87.7457	272.8362	16.05342949	1361
876U	87 33	A	87192.03078917	.00117125	12111-4	15104-3 0	127
876	64.7875		17.1856 0036896	87.4639	273.0394	16.05587208	1378
876U	87 33	A	87192.90275519	.00120937	12634-4	15420-3 0	128
876	64.7871		13.9065 0036505	86.9834	273.5241	16.05789225	1392
876U	87 33	A	87193.89914825	.00114965	12018-4	14472-3 0	129
876	64.7876		10.2880 0036329	86.6230	273.8588	16.06015115	1408
876U	87 33	A	87196.82532465	.00100735	10743-4	12326-3 0	132
876	64.7876		359.4752 0034885	84.8702	275.6407	16.06604795	1455
876U	87 33	A	87201.86512572	.00135512	14920-4	15229-3 0	139
876	64.7874		340.8241 0031422	81.2071	279.3331	16.08085428	1536

17876U	87 33	A	87202.79789113	.00160846	18616-4	17722-3 0	140
17876	64.7868	337.3686	0031035	81.2018	279.3098	16.08378815	1551
17876U	87 33	A	87202.79789113	.00160846	18616-4	17722-3 0	141
17876	64.7868	337.3686	0031035	81.2018	279.3098	16.08378815	1551
17876U	87 33	A	87203.91697370	.00163260	18981-4	17722-3 0	142
17876	64.7859	333.2180	0029504	79.9819	280.3407	16.08704965	1569
17876U	87 33	A	87204.04132642	.01630245	19759-2	18048-2 0	143
17876	64.7857	332.7545	0029441	79.8601	280.5820	16.08789862	1571
17876U	87 33	A	87204.53858698	.00198390	25103-4	21221-3 0	145
17876	64.7854	330.9094	0029195	80.4080	279.8320	16.08915305	1579
17876U	87 33	A	87204.84940082	.00164431	19320-4	17560-3 0	146
17876	64.7860	329.7586	0028763	79.2347	281.1774	16.09000428	1584
17876U	87 33	A	87208.88775865	.00180882	22509-4	17700-3 0	152
17876	64.7855	314.7639	0026988	76.7367	283.7272	16.10403350	1649
17876U	87 33	A	87209.94334647	.00203316	27031-4	19462-3 0	154
17876	64.7861	310.8401	0025446	74.9302	285.5261	16.10807297	1666
17876U	87 33	A	87210.93657004	.00236555	34530-4	21843-3 0	155
17876	64.7847	307.1428	0024624	73.7933	286.8870	16.11364890	1682
17876U	87 33	A	87212.92200744	.00253934	39657-4	22137-3 0	156
17876	64.7835	299.7468	0023692	70.6307	289.7686	16.12250099	1714

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876U	87 33	A	87213.60471166	.00253258	33484-4	37092-3 0	160
876	64.7804	297.2086	0036400	88.9598	270.6083	16.03459376	1725
7876U	87 33	A	87214.22851146	.00257274	34584-4	37092-3 0	161
7876	64.7848	294.9106	0036478	87.6253	272.8729	16.03705813	1735
7876U	87 33	A	87214.85205357	.00258429	34919-4	37092-3 0	162
7876	64.7802	292.6193	0034780	91.3735	268.9058	16.03903576	1745
7876U	87 33	A	87215.16383971	.00096557	95372-5	14002-3 0	163
7876	64.7828	291.4658	0035710	87.0116	273.2879	16.03863723	1760
7876U	87 33	A	87215.84974177	.00097311	95800-5	14002-3 0	164
7876	64.7832	288.9386	0035598	87.0030	273.4999	16.03993033	1761
7876U	87 33	A	87216.90960495	.00098518	97310-5	14002-3 0	165
7876	64.7836	285.0346	0035143	86.5749	274.0151	16.04222767	1778
7876U	87 33	A	87217.71999067	.00107970	10649-4	15164-3 0	167
7876	64.7827	282.0503	0034863	85.9814	274.6943	16.04406955	1791
7876U	87 33	A	87217.96932340	.00096089	95734-5	13482-3 0	166
7876	64.7828	281.1305	0034761	85.8509	274.8684	16.04463737	1795
7876U	87 33	A	87217.96932340	.00096089	95734-5	13482-3 0	168
7876	64.7828	281.1305	0034761	85.8509	274.8684	16.04463737	1795

17876U	87 33	A	87218.84186809	.00106609	10556-4	14793-3 0	169
17876	64.7839	277.9140	0034191	85.6085	274.9272	16.04652583	1809
17876U	87 33	A	87218.84186809	.00106609	10556-4	14793-3 0	170
17876	64.7839	277.9140	0034191	85.6085	274.9272	16.04652583	1809
17876U	87 33	A	87219.83896615	.00103969	10309-4	14273-3 0	171
17876	64.7835	274.2379	0033789	85.1171	275.3583	16.04859102	1825
17876U	87 33	A	87220.83594716	.00098474	98234-5	13402-3 0	172
17876	64.7823	270.5605	0033198	84.7981	275.6661	16.05054997	1841
17876U	87 33	A	87226.75270811	.00145068	15211-4	18111-3 0	178
17876	64.7802	248.7103	0030704	81.5640	279.0278	16.06488170	1936
17876U	87 33	A	87226.75270811	.00145068	15211-4	18111-3 0	173
17876	64.7802	248.7103	0030704	81.5640	279.0278	16.06488170	1936
17876U	87 33	A	87228.80662112	.00231507	30647-4	27770-3 0	181
17876	64.7806	241.1124	0029620	80.2245	280.2418	16.07108202	1969
17876U	87 33	A	87228.93107208	.00177328	20347-4	21290-3 0	182
17876	64.7805	240.6526	0029522	80.5586	279.8818	16.07139532	1971
17876U	87 33	A	87229.86441182	.00180275	21060-4	21290-3 0	183
17876	64.7807	237.1987	0029507	79.3654	281.0825	16.07395601	1986
17876U	87 33	A	87230.79756430	.00183965	21822-4	21290-3 0	184
17876	64.7853	233.7434	0030044	79.0723	281.2124	16.07669174	2001

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17876U	87 33	A	87231.91715910	.00186247	22102-4	21290-3	0	185
17876	64.7889		229.6029 0028145	78.1231	281.9936	16.07976945		2019
17876U	87 33	A	87235.89622781	.00150561	17082-4	16018-3	0	189
17876	64.7780		214.8415 0027600	77.4144	282.9998	16.09145484		2083
17876U	87 33	A	87237.88454196	.00265209	40599-4	26671-3	0	191
17876	64.7789		207.4587 0026803	76.3092	284.2202	16.09956345		2115
17876U	87 33	A	87239.93367196	.00233072	33497-4	21980-3	0	193
17876	64.7794		199.8376 0025528	75.8819	284.3091	16.11002786		2148
17876U	87 33	A	87240.98886068	.00239003	35208-4	21980-3	0	194
17876	64.7805		196.9092 0023993	76.8329	284.4850	16.11468674		2165
17876U	87 33	A	87241.86769686	.00219753	31243-4	19647-3	0	195
17876	64.7800		192.6752 0024748	74.4200	285.9013	16.11840672		2179
17876U	87 33	A	87242.97424877	.00218023	31088-4	18882-3	0	196
17876	64.7791		188.5122 0024230	74.8623	285.4398	16.12331601		2197
17876U	87 33	A	87243.16032751	.00167634	19208-4	18882-3	0	197
17876	64.7726		187.8195 0026102	114.8373	244.2099	16.08346404		2200
17876U	87 33	A	87243.22273885	.00134592	13549-4	18882-3	0	198
17876	64.7784		137.5903 0036691	87.2982	272.2810	16.04232496		2201

17876U	87 33	A	87244.03327420	.00317363	50962-4	43641-3	0	201
17876	64.7817	184.0021	0036079	86.6787	273.8671	16.04475354	2214	
17876U	87 33	A	87244.78111860	.00160735	17000-4	21904-3	0	202
17876	64.7777	181.8446	0036178	85.8294	274.3142	16.04697258	2226	
17876U	87 33	A	87245.84053853	.00160370	17190-4	21420-3	0	204
17876	64.7781	177.9377	0035984	85.6777	274.8339	16.05032739	2243	
17876U	87 33	A	87247.89638257	.00118625	12034-4	15479-3	0	207
17876	64.7799	170.3516	0035253	84.8245	275.5136	16.05519993	2276	
17876U	87 33	A	87248.83069009	.00108489	11179-4	14019-3	0	208
17876	64.7773	166.8992	0034732	84.7831	275.8080	16.05741623	2291	
17876U	87 33	A	87249.82710176	.00141216	14977-4	17826-3	0	209
17876	64.7795	163.2283	0034345	83.5949	277.1851	16.06069374	2307	
17876U	87 33	A	87253.87288238	.00158721	17588-4	18548-3	0	213
17876	64.7797	148.2587	0032726	82.4504	277.9962	16.07337701	2372	
17876U	87033	A	87258.97138402	.00209272	00000-0	00000-0	0	0219
17876	64.7799	129.3562	0035580	880.8407	279.6683	16.0949635902454		
17876U	87 33	A	87260.08971464	.00094381	00000-0	92123-4	0	220
17876	64.7773	125.1987	0028648	78.9277	281.9420	16.09985326	2472	
17876U	87 33	A	87260.89706374	.00216499	29558-4	21112-3	0	221
17876	64.7777	122.1987	0028509	78.3957	281.9853	16.10331405	2485	
17876U	87 33	A	87261.89059157	.00219813	30678-4	20881-3	0	222
17876	64.7771	118.5038	0027800	77.9196	282.4919	16.10763714	2501	

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17876U	87 33	A	87262.88384401	.00208666	28502-4	19342-3	0	223
17876	64.7786		114.8079 0027290	77.6368	282.6784	16.11164138		2517
17876U	87 33	A	87265.86206296	.00363318	75495-4	30740-3	0	227
17876	64.7740		103.7068 0025124	74.2450	285.9895	16.12566035		2565
17876U	87 33	A	87266.35817225	.00259536	41545-4	21695-3	0	228
17876	64.7746		101.8565 0024601	73.0132	287.2327	16.12798120		2573
17876U	87 33	A	87266.85422323	.00187575	21880-4	21695-3	0	229
17876	64.7785		100.0079 0017697	130.8152	228.1520	16.08330592		2581
17876U	87 33	A	87266.91662859	.00149321	14977-4	21695-3	0	230
17876	64.7746		99.7782 0036168	90.7582	268.5575	16.03683549		2582
17876U	87 33	A	87267.22863386	.00211943	25144-4	30674-3	0	231
17876	64.7733		98.6253 0036227	89.6176	270.8080	16.03687913		2587
17876U	87 33	A	87267.85220598	.00213816	25470-4	30634-3	0	232
17876	64.7773		96.3304 0035900	89.8735	270.5145	16.03871886		2597
17876U	87 33	A	87268.66273599	.00241476	31203-4	34117-3	0	234
17876	64.7757		93.3443 0035750	89.1611	271.0946	16.04091748		2610
17876U	87 33	A	87269.59782213	.00359866	64503-4	49776-3	0	235
17876	64.7755		89.8971 0035203	88.3141	272.0018	16.04440304		2625

17876U	87 33	A	87269.90947820	.00160099	16875-4	22125-3 0	237
17876	64.7766		88.7479 0035104	88.3803	272.0927	16.04556216	2630
7876U	87 33	A	87269.90947820	.00160099	16875-4	22125-3 0	236
7876	64.7766		88.7479 0035104	88.3803	272.0927	16.04556216	2630
17876U	87 33	A	87269.90947820	.00160099	16875-4	22125-3 0	236
17876	64.7766		88.7479 0035104	88.3803	272.0927	16.04556216	2630
7876U	87 33	A	87270.84430029	.00153416	16045-4	20883-3 0	239
7876	64.7766		85.3802 0034854	87.3835	273.0228	16.04824197	2645
7876U	87 33	A	87270.90663534	.00150461	15709-4	20472-3 0	240
7876	64.7763		85.0707 0034849	87.5817	272.9305	16.04835617	2646
7876U	87 33	A	87271.84129270	.00159496	17028-4	21375-3 0	241
7876	64.7767		81.6214 0034179	86.4092	274.0525	16.05114430	2661
7876U	87 33	A	87272.71349634	.00161978	17269-4	21375-3 0	242
7876	64.7761		78.4021 0033763	85.9099	274.5525	16.05382626	2675
7876U	87 33	A	87272.90038410	.00161054	17285-4	21163-3 0	243
7876	64.7760		77.7129 0033862	85.6782	274.8287	16.05445479	2678
7876U	87 33	A	87273.83467946	.00174774	19593-4	22520-3 0	244
7876	64.7748		74.2623 0033309	85.3639	275.1976	16.05780953	2693
7876U	87 33	A	87275.01781990	.00177543	20128-4	22287-3 0	245
7876	64.7740		69.8912 0032993	83.5671	276.9596	16.06208578	2712

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76U	87	33	A	87275.64039787	.00442332	99462-4	54611-3	0	246
76	64.7749	67.5859	0032444	83.4778	276.9034	16.06424553	2722		
17876U	87	33	A	87275.82716928	.00158529	17355-4	19667-3	0	247
17876	64.7739	66.8990	0032626	83.4437	276.9753	16.06440003	2725		
17876U	87	33	A	87276.82314180	.00159141	17524-4	19377-3	0	248
17876	64.7744	63.2158	0032300	82.4297	278.0231	16.06753701	2741		
17876U	87	33	A	87277.19658290	.00223176	28923-4	26798-3	0	249
17876	64.7747	61.8317	0031685	81.4303	279.1378	16.06958593	2747		
17876U	87	33	A	87277.81884910	.00212887	26938-4	25188-3	0	250
17876	64.7759	59.5303	0031359	81.2617	279.1680	16.07215255	2757		
17876U	87	33	A	87278.19218019	.00211815	26805-4	24798-3	0	251
17876	64.7749	58.1478	0031536	80.4875	279.9572	16.07367461	2763		
17876U	87	33	A	87278.81431181	.00215612	27576-4	24981-3	0	252
17876	64.7761	55.8423	0030803	79.7866	280.5444	16.07574324	2773		
76U	87	33	A	87278.87654413	.00223404	29138-4	25824-3	0	253
76	64.7750	55.6125	0030781	79.7579	280.7065	16.07605298	2774		
17876U	87	33	A	87278.87654413	.00223404	29138-4	25824-3	0	254
17876	64.7750	55.6125	0030781	79.7579	280.7065	16.07605298	2774		

876U	87	33	A	87279.87179916	.00220521	28816-4	25019-3	0	256
876	64.7744	51.2244	0030301	77.9867	282.4736	16.07928276	2790		
876U	87	33	A	87280.24495604	.00180756	21466-4	20391-3	0	257
876	64.7736	50.5425	0030260	77.7686	282.6385	16.08048162	2796		
876U	87	33	A	87280.86683543	.00224725	30068-4	24927-3	0	258
876	64.7750	48.2372	0029892	78.1836	282.2657	16.08300032	2806		
17876U	87	33	A	87282.91832971	.00211385	27781-4	22241-3	0	263
17876	64.7760	40.6259	0029513	75.1091	285.3440	16.09132622	2839		
17876U	87	33	A	87283.91258932	.00225190	31029-4	23005-3	0	264
17876	64.7760	36.9362	0029327	74.8118	285.6520	16.09579850	2855		
17876U	87	33	A	87284.03684711	.00338663	62959-4	34368-3	0	265
17876	64.7750	35.4738	0028972	73.2837	287.1673	16.09663600	2857		
17876U	87	33	A	87285.83808177	.00282228	46094-4	26983-3	0	268
17876	64.7760	29.7795	0028013	72.5115	287.9500	16.10625058	2886		
17876U	87	33	A	87286.58308023	.00321724	58363-4	30022-3	0	269
17876	64.7776	27.0059	0027454	71.2795	288.9811	16.11004422	2898		
17876U	87	33	A	87286.89347431	.00274042	44262-4	25361-3	0	270
17876	64.7751	25.8497	0027372	70.6075	289.7508	16.11147644	2903		
17876U	87	33	A	87287.14176060	.00251686	37386-4	25361-3	0	271
17876	64.7750	24.9242	0030042	78.3273	281.5090	16.09722760	2907		

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7876U	87 33	A	87287.45251132	.00256807	38883-4	25361-3 0	273
7876	64.7842		23.7802 0031651	84.5675	276.0804	16.09906214	2912
7876U	87 33	A	87287.57671906	.00257057	38958-4	25361-3 0	274
7876	64.7786		23.3138 0030895	84.5980	275.8785	16.09974364	2914
7876U	87 33	A	87288.01150709	.00175064	21628-4	17277-3 0	275
7876	64.7757		21.6939 0028877	80.5918	279.8664	16.10164007	2921
7876U	87033	A	87288.81881247	.00264302	00000-0	00000-0 0	0276
7876	064.7742		018.6884 0037298	083.6102	276.9211	16.1063751502935	
7876U	87 33	A	87288.94296419	.00291326	48937-4	27458-3 0	277
7876	64.7743		18.2281 0029337	79.6618	280.7262	16.10743773	2936
7876U	87 33	A	87289.87412573	.00281910	46633-4	25717-3 0	278
7876	64.7733		14.7626 0028867	79.2221	281.1264	16.11255599	2951
7876U	87 33	A	87290.86704880	.00386339	83813-4	33766-3 0	279
7876	64.7746		11.0624 0028269	77.3117	283.1149	16.11094254	2967
7876U	87 33	A	87291.67345084	.01727217	23852-2	15081-2 0	280
7876	64.7722		8.0594 0027989	80.2235	280.0870	16.12407025	2980
7876U	87 33	A	87291.85950203	.00213317	30454-4	18008-3 0	281
7876	64.7731		7.3623 0027768	76.3585	283.8541	16.12483670	2983

17876U	87 33	A	87292.60370964	.00270261	83031-5	22098-3 0	282
17876	64.7746		4.5872 0027685	76.0372	284.5236	16.12909321	2995
17876U	87 33	A	87292.85169219	.00272594	81813-5	22098-3 0	283
17876	64.7737		3.6611 0027481	75.4910	284.9248	16.13042193	2999
17876U	87 33	A	87293.47161747	.00190774	22922-4	22098-3 0	284
17876	64.7754		1.3487 0028548	122.7139	237.1378	16.07744943	3009
17876U	87 33	A	87293.59611568	.00144638	14238-4	22098-3 0	285
17876	64.7742		0.8892 0041802	92.1144	267.2855	16.02431034	3011
17876U	87 33	A	87293.84595529	.00034066	00000-0	51549-4 0	286
17876	64.7737		359.9694 0041519	91.7603	268.8396	16.02486347	3015
17876U	87 33	A	87294.53239139	.00158426	16054-4	23817-3 0	287
17876	64.7763		357.4456 0040796	91.7954	268.8821	16.02756583	3026
17876U	87 33	A	87295.96731791	.00123071	12033-4	18127-3 0	290
17876	64.7742		352.1656 0040575	90.5467	270.0350	16.03163327	3049
17876U	87 33	A	87296.84059234	.00126321	12374-4	18364-3 0	291
17876	64.7715		348.9491 0039852	89.9254	270.7388	16.03426062	3063
17876U	87 33	A	87297.83842902	.00156557	16237-4	22247-3 0	294
17876	64.7716		345.2760 0039881	89.4863	271.1917	16.03741887	3079
17876U	87 33	A	87298.83604778	.00198945	23108-4	27595-3 0	295
17876	64.7715		341.6000 0039500	88.8061	271.8339	16.04120094	3095

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876U	87 33	A	87299.58409031	.00202053	23693-4	27595-3 0	296
876	64.7732	338.8418	0039155	88.4745	272.0088	16.04390016	3107
876U	87 33	A	87299.89575862	.00171364	18590-4	23310-3 0	297
876	64.7713	337.6930	0039175	88.1196	272.4014	16.04477715	3112
876U	87 33	A	87300.89293631	.00194454	22561-4	25872-3 0	299
876	64.7712	334.0163	0038826	87.7122	272.8199	16.04835809	3128
876U	87 33	A	87302.83654720	.00183094	21905-4	23947-3 0	301
876	64.7701	326.6545	0037670	86.1212	274.3979	16.05627677	3160
876U	87 33	A	87304.94149739	.00210706	26353-4	25687-3 0	303
876	64.7694	319.0594	0036501	84.9934	275.5039	16.06376127	3193
876U	87 33	A	87305.81298927	.00191223	23032-4	22844-3 0	304
876	64.7693	315.8378	0036585	84.6685	275.7509	16.06698740	3207
876U	87 33	A	87312.90166433	.00243519	35819-4	23732-3 0	315
876	64.7680	289.5466	0033017	81.0208	279.3981	16.10007030	3321
876U	87 33	A	87313.83328005	.00251663	38182-4	23812-3 0	316
876	64.7677	286.0833	0032584	80.7180	279.7441	16.10469341	3336
876U	87 33	A	87314.88877189	.00286190	47993-4	26049-3 0	317
876	64.7687	282.1549	0031907	80.0207	280.5511	16.11071706	3353

17876U	87 33	A	87315.88177274	.00297131	51768-4	26049-3	0	318
17876	64.7686	278.4547	0031350	80.8803	279.5667	16.11651190	3369	
17876U	87 33	A	87316.87443034	.00309516	80916-5	26049-3	0	319
17876	64.7670	274.7542	0030839	80.4213	280.0192	16.12259060	3385	
17876U	87 33	A	87317.80470291	.00345097	83421-5	27924-3	0	320
17876	64.7680	271.2827	0029777	089702	281.5413	16.12887058	34009	
17876U	87 33	A	87317.86669775	.00202852	82547-5	16504-3	0	321
17876	64.7694	271.0524	0029556	79.2368	281.2146	16.12890612	3401	
17876U	87 33	A	87318.05270749	.00337772	84634-5	27056-3	0	322
17876	64.7676	270.3547	0029594	78.6681	281.8076	16.13041621	3404	
17876U	87 33	A	87318.17669765	.00235524	31926-4	27056-3	0	323
17876	64.7707	269.8968	0028177	123.5591	235.1850	16.07866402	3406	
17876U	87 33	A	87318.30137626	.00179512	19128-4	27056-3	0	324
17876	64.7669	269.4389	0040663	91.8021	266.4080	16.02705179	3408	
17876U	87 33	A	87318.86334083	.00165449	17163-4	24773-3	0	325
17876	64.7656	267.3697	0040166	91.2949	269.2143	16.02867184	3417	
17876U	87 33	A	87318.86334083	.00165449	17163-4	24773-3	0	326
17876	64.7656	267.3697	0040166	91.2949	269.2143	16.02867184	3417	
17876U	87 33	A	87319.79914796	.00158888	16340-4	23396-3	0	327
17876	64.7659	263.9246	0039851	90.7804	269.7733	16.03170159	3432	

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17876U	87 33	A	87320.67240437	.00154511	15778-4	22425-3 0	329
17876	64.7652	260.7091	0039575	90.4337	270.0810	16.03430541	3446
17876U	87 33	A	87321.91967749	.00125482	12411-4	17919-3 0	331
17876	64.7668	256.1149	0039113	89.8793	270.6216	16.03774075	3466
17876U	87 33	A	87322.85497726	.00134888	13561-4	18932-3 0	332
17876	64.7667	252.6690	0038897	89.2486	271.4157	16.04052185	3481
17876U	87 33	A	87323.91475234	.00158216	16726-4	21752-3 0	333
17876	64.7675	248.7600	0038278	88.6010	272.0672	16.04397170	3498
17876U	87 33	A	87324.84964013	.00081307	87513-5	11128-3 0	334
17876	64.7668	245.3134	0037715	88.5321	272.1255	16.04700526	3513
17876U	87 33	A	87324.84964013	.00081307	87513-5	11128-3 0	335
17876	64.7668	245.3134	0037715	88.5321	272.1255	16.04700526	3513
17876U	87 33	A	87325.47281361	.00155973	16599-4	20757-3 0	336
17876	64.7668	243.0110	0037595	88.6292	272.1848	16.04970026	3523
17876U	87 33	A	87325.90892409	.00184234	20931-4	24193-3 0	337
17876	64.7677	241.4034	0037722	88.2310	272.3413	16.05140001	3530
17876U	87 33	A	87326.84338036	.00167929	18600-4	21687-3 0	338
17876	64.7674	237.9522	0037249	87.7774	272.7038	16.05456918	3545

17876U	87	33	A	87327.90223319	.00205993	25156-4	25871-3	0	339
17876	64.7666	234.0416	0036775	87.5172	273.1830	16.05895517	3562		
17876U	87	33	A	87328.83621377	.00361743	67301-4	44059-3	0	340
17876	64.7664	230.5882	0036257	87.5549	273.1536	16.06358096	357		
17876U	87	33	A	87328.83621377	.00361743	67301-4	44059-3	0	341
17876	64.7664	230.5882	0036257	87.5549	273.1536	16.06358096	3577		
17876U	87	33	A	87329.76983567	.00202232	24969-4	24216-3	0	342
17876	64.7669	227.1328	0035160	86.1325	273.9630	16.06764905	3592		
17876U	87	33	A	87329.95662790	.00375619	72846-4	44399-3	0	343
17876	64.7648	226.4396	0035106	86.6934	273.8501	16.06906226	3595		
17876U	87	33	A	87329.95662790	.00375619	72846-4	44399-3	0	344
17876	64.7648	226.4396	0035106	86.6934	273.8501	16.06906226	3595		
17876U	87	33	A	87330.64110401	.00254194	36171-4	29597-3	0	345
17876	64.7627	223.9091	0035008	85.4935	274.6341	16.07175287	3606		
17876U	87	33	A	87330.89006234	.00229116	30629-4	26465-3	0	346
17876	64.7654	222.9884	0035325	86.0378	274.4608	16.07285972	3610		
17876U	87	33	A	87331.88545753	.00416549	90240-4	46720-3	0	347
17876	64.7642	219.2968	0034299	85.8078	274.6222	16.07766075	3626		
17876U	87	33	A	87331.88545753	.00416549	90240-4	46720-3	0	348
17876	64.7642	219.2968	0034299	85.8078	274.6222	16.07766075	3626		

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17876U	87 33	A	87332.38302474	.00241072	33941-4	26721-3 0	349
17876	64.7645	217.4542	0034445	84.9805	275.3128	16.07977740	3634
17876U	87 33	A	87332.94276228	.00298393	48854-4	32603-3 0	350
17876	64.7662	215.3802	0033541	85.0206	275.4390	16.08239751	3643
17876U	87 33	A	87333.37802202	.00096836	11035-4	10661-3 0	351
17876	64.7636	213.7634	0033029	85.2364	275.1718	16.08378743	3650
17876U	87 33	A	87333.93762609	.00218267	29183-4	23366-3 0	352
17876	64.7665	211.6868	0032873	84.5464	276.0981	16.08632561	3659
17876U	87 33	A	87334.99431621	.00199077	25632-4	20752-3 0	353
17876	64.7655	207.7652	0032935	83.7744	276.5829	16.09042272	3676
17876U	87 33	A	87335.86438694	.00212533	28439-4	21649-3 0	354
17876	64.7644	204.5358	0032329	83.4228	277.1193	16.09420815	3690
17876U	87 33	A	87336.29932086	.00297310	49798-4	29851-3 0	355
17876	64.7628	202.9189	0031899	81.9577	278.5563	16.09627853	3697

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Progress 29

Upp: 21 april

Ned: 11 maj

17878U	87 34	A	87111.68865355	.00798955	57692-0	27011-3 0	2
17878	51.6278		87.2717 0037614	90.6700	269.8648	19.22527060	1
17878U	87 34	A	87112.31151284	.00078008	13837-4	11985-3 0	4
17878	51.6347		83.9298 0104570	195.4195	164.4961	15.94048859	11
17878U	87 34	A	87112.75030588	.00031891	00000-0	11985-3 0	5
17878	51.6379		81.6142 0063448	196.6920	160.9048	15.84308925	18
17878U	87034	A	87112.81377752	.00078980	00000-0	00000-0 0 0005	
17878	051.6304		081.2911 0063544	198.4216	161.5153	15.8448185800019	
17878U	87 34	A	87115.98499148	.00013156	00000-0	99999-4 0	10
17878	51.6161		65.0033 0014808	274.4476	85.0495	15.71971183	69
17878U	87 34	A	87120.81707864	.00012981	00000-0	99999-4 0	15
17878	51.6376		40.2950 0016058	299.0346	60.8900	15.71634438	145

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Progress 29

Upp: 21 april

Ned: 11 maj

17878U	87 34	A	87111.68865355	.00790955	57692-4	27011-3 0	2
17878	51.6278		87.2717 0037614	90.6700	269.8648	10.22527660	1
17878U	87 34	A	87112.31151284	.00076008	13837-4	11985-3 0	4
17878	51.6347		83.9298 0104570	195.4195	164.4961	15.94048859	11
17878U	87 34	A	87112.75030588	.00031891	00000-0	11985-3 0	5
17878	51.6379		81.6142 0063448	196.6920	160.9048	15.84308923	18
17878U	87034	A	87112.81377752	.00078980	00000-0	00000-0 0 0005	
17878	051.6304		081.2911 0063544	198.4216	161.5153	15.8448185800019	
17878U	87 34	A	87115.98499148	.00013156	00000-0	99999-4 0	10
17878	51.6161		65.0033 0014868	274.4476	85.0495	15.71971183	69
17878U	87 34	A	87120.81707864	.00012981	00000-0	99999-4 0	15
17878	51.6376		40.2950 0016058	299.0346	60.8900	15.71634438	145

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Kosmos 1837

Upp: 22 april

Ured: 28 april

17880U	87 35	A	87113.85637082	.00091320	00000-0	73103-4 0	4
17880	82.3222		12.0906	0015667	118.2599	241.9862	16.13873996 24
17880U	87 35	A	87114.97240501	.00154451	10397-4	12406-3 0	5
17880	82.3232		10.7847	0016129	116.3814	243.6945	16.14011296 42
17880U	87 35	A	87115.96434966	.00057464	00000-0	45484-4 0	6
17880	82.3262		9.6246	0015942	112.1393	247.7461	16.14103417 58
17880U	87 35	A	87117.20429884	.00064663	00000-0	50493-4 0	8
17880	82.3213		8.1748	0016389	108.0715	252.2770	16.14263227 78
17880U	87 35	A	87117.82418076	.00049607	00000-0	38658-4 0	9
17880	82.3215		7.4502	0016513	105.9997	254.2779	16.14319704 88

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Kosmos 1838, 1839, 1840

17902U	87 36	A	87123.46995038	.00026278	-23009-5	51128-3 0	12
17902	64.8203		73.9178 5688595	296.6257	16.7986	4.61692911	22
17903U	87 36	B	87122.60208835	.00027328	-23791-5	54398-3 0	11
17903	64.8143		74.2989 5687921	296.6583	16.7477	4.61724187	35
17904U	87 36	C	87123.47273753	.00017983	-23577-5	36026-3 0	10
17904	64.8207		73.9243 5689310	296.6471	16.7190	4.61462061	23

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Kosmos 1841

Usp: 24 apr'71

Vod: 8 maj'

17907U	87 37	A	87114.75895326	.00000549	00000-0	00000-0-0	1
17907	62.8833		57.1484 0122159	110.9903	250.4664	15.90847051	1
17907U	87 37	A	87115.19889089	.00075214	91019-5	11820-3 0	3
17907	62.8362		55.4584 0122969	109.8258	251.6411	15.91146124	8
17907U	87 37	A	87115.51311143	.00057801	00000-0	88985-4 0	4
17907	62.8349		54.2394 0122430	109.7385	251.6798	15.91169153	13
17907U	87 37	A	87120.91652288	.00053658	00000-0	80788-4 0	9
17907	62.8354		33.2907 0120244	110.2949	251.0718	15.91880912	99
17907U	87 37	A	87121.92154366	.00064609	00000-0	96689-4 0	10
17907	62.8355		29.3921 0119764	110.5134	250.8688	15.92025570	115
17907U	87 37	A	87122.86367822	.00062061	00000-0	92765-4 0	11
17907	62.8350		25.7357 0119118	110.4766	250.9713	15.92159591	130
17907U	87 37	A	87125.31279047	.00063753	00000-0	94170-4 0	14
17907	62.8349		16.2280 0117810	110.6959	250.7182	15.92553737	169
17907U	87 37	A	87128.20072884	.00005938	00000-0	93887-5 0	17
17907	62.8355		5.0113 0116723	111.0067	250.3128	15.92945254	215

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Kosmos 1842

Upp: 27 april

7911U	87 38	A	87118.14390088	.00056116	00000-0	85477-2 0	4
7911	82.5044	240.2261	0022756	279.5527	80.4214	14.73453636	17
17911U	87 38	A	87120.92822948	.00000662	00000-0	99999-4 0	10
17911	82.5049	237.6543	0022709	269.2764	90.5841	14.73439009	58
17911U	87 38	A	87121.94687947	.00000331	00000-0	49297-4 0	11
17911	82.5058	236.7136	0022710	265.9329	93.9202	14.73438107	73

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Kosmos 1843

Upp: 5 maj

Ned: 19 maj

179400	87 39	A	87125.44241040	.000000321	00000-0	00000 0 0	1
17940	70.3674		44.4740 0062177	71.5660	288.8028	16.10230980	1
79400	87 39	A	87125.50460743	.00080881	00000-0	62726-4 0	2
7940	70.3558		44.2894 0062261	71.2219	289.5673	16.10213665	2
79400	87 39	A	87125.87734461	.01291296	64157-5	98577-3 0	3
7940	70.3540		43.1968 0062140	70.4366	290.3315	16.10402042	8
79400	87 39	A	87126.24993353	.00043712	00000-0	98577-3 0	4
7940	70.3713		42.1737 0050571	215.6421	102.0562	15.62236816	14
79400	87039	A	87127.08984284	.00015288	00000-0	00000-0 0 0005	
7940	070.3662		039.8878 0050147	214.2534	145.5867	15.6222769900028	
79400	87 39	A	87127.98628058	.00093705	00000-0	98577-3 0	7
7940	70.3687		37.4326 0050476	212.9305	146.8739	15.62240849	41
79400	87 39	A	87128.81864254	.00093663	00000-0	98577-3 0	8
7940	70.3680		35.1641 0050327	210.6427	148.8487	15.62240123	54

7940U	87	39	A	87128.94676306	.00061918	00000-0	65490-3	0	9
7940	70.	3094		34.8092	0050609	210.7772	149.0160	15.62211959	56
17940U	87	39	A	87129.07483203	.00068006	00000-0	71825-3	0	10
17940	70.	3719		34.4628	0050502	210.7757	149.0462	15.62229657	58
17940U	87	39	A	87129.77915707	.00067966	00000-0	71825-3	0	11
17940	70.	3695		32.5422	0050658	209.1583	150.4614	15.62205697	69
7940U	87	39	A	87129.77915707	.00067966	00000-0	71825-3	0	12
7940	70.	3695		32.5422	0050658	209.1583	150.4614	15.62205697	69
7940U	87	39	A	87130.86769607	.00067744	00000-0	71825-3	0	13
7940	70.	3719		29.5671	0049953	207.7780	151.6935	15.62168994	86
7940U	87	39	A	87132.91683442	.00009312	00000-0	99999-4	0	18
7940	70.	3713		23.9760	0049972	203.9827	155.8598	15.62181841	118
7940U	87	39	A	87134.26153429	.00009282	00000-0	99999-4	0	20
7940	70.	3720		20.3029	0049163	202.0328	157.6667	15.62161640	139
17940U	87	39	A	87135.02998415	.00009287	00000-0	99999-4	0	21
17940	70.	3765		18.2074	0049421	200.2709	159.6132	15.62149731	151
17940U	87	39	A	87135.09401921	.00009296	00000-0	99999-4	0	22
17940	70.	3727		18.0322	0049646	200.5074	159.3837	15.62155758	152
17940U	87	39	A	87135.09401921	.00009296	00000-0	99999-4	0	24
17940	70.	3727		18.0322	0049646	200.5074	159.3837	15.62155758	152

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17940U	87 39	A	87135.86243519	.00009277	00000-0	99999-4 0	25
17940	70.3718		15.9341 0049384	199.0531	160.7881	15.62123147	164
17940U	87 39	A	87135.11359492	.00009289	00000-0	99999-4 0	26
17940	70.3704		15.2356 0049535	198.7512	161.2152	15.62143597	168
17940U	87 39	A	87137.01507519	.00009286	00000-0	99999-4 0	27
17940	70.3715		12.7880 0049692	196.8642	163.0157	15.62130845	182
17940U	87 39	A	87138.03965154	.00009269	00000-0	99999-4 0	29
17940	70.3685		9.9864 0048994	195.4615	164.4543	15.62129094	198

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Upp: 11maj fr. Baikonur

7969U	87 40		87134.04700664	-.00000087	00000-0	99999-4	0	4
7969	0.3264		97.9349 0018095	241.3045	20.7213	1.02743557		3
7970U	87 40	B	87133.98811840	.09766362	61027-4	15820-3	0	9
7970	61.6199		86.2425 0007985	251.8513	108.7225	16.47673709		39
17969U	87 40	A	87136.98999056	-.00000057	00000-0	99999-4	0	10
17969	0.8368		97.3887 0026112	282.7556	339.9627	1.01437659		6
17969U	87 40	A	87138.96160031	-.00000012	00000-0	99999-4	0	11
17969	0.8398		97.3986 0026128	282.5628	340.1317	1.01434225		8

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7973U	87 41	A	87133.30145810	-.00000020	00000-0	00000 0 0	1
7973	70.9990		2.0974	0003840	114.5159	245.2144 14.12565365	1
7973U	87 41	A	87133.58479138	-.00000020	00000-0	00000 0 0	2
7973	71.0105		1.5141	0003029	70.2515	289.7100 14.12431983	5
7973U	87041	A	87133.65565911	.00000000	00000-0	00000-0 0 0003	
7973	071.0027		001.3634	0003185	087.1213	273.0699 14.1242663200010	
7973U	87 41	A	87134.08057425	.00005205	00000-0	28387-2 0	3
7973	71.0104		0.4763	0002952	76.5083	283.6370 14.12436903	12
7973U	87 41	A	87137.83408432	.00000237	00000-0	14964-3 0	8
7973	71.0104		352.6329	0002979	68.1511	291.9912 14.12433526	65

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Upp: 13 maj

Ned: 22 maj '87

17975U	87 42	A	87133.30771106	-.00000298	00000-0	00000 0 0	1
17975	70.3903		3.5157 0126231	67.0240	293.5216	15.93787867	1
17975U	87 42	A	87133.30771269	.00248593	55175-5	30388-3 0	2
17975	70.3901		3.5150 0126584	67.8144	293.6397	15.93816104	1
17975U	87 42	A	87133.62151076	.00248420	56118-5	30388-3 0	3
17975	70.3830		2.6184 0126279	67.2609	294.0865	15.93862174	6
17975U	87042	A	87133.68430156	.00000000	00000-0	00000-0 0 0003	3
17975	070.3877		002.4377 0127119	066.7746	294.7242	15.9380190100007	
17975U	87 42	A	87133.99807068	.00027472	00000-0	30388-3 0	4
17975	70.3875		1.6024 0052595	214.3898	121.6235	15.61148820	12
17975U	87 42	A	87134.00230064	.00026678	00000-0	30388-3 0	5
17975	70.3875		1.5711 0047193	210.8867	148.8937	15.60750926	12
17975U	87 42	A	87134.05040364	.00028443	00000-0	30388-3 0	6
17975	70.3990		1.3945 0049856	216.6653	143.4219	15.62191906	13

17975U	87 42	A	87135.02686602	.00027353	00000-0	29255-3 0	8
17975	70.3902	358.7745	0049850	214.3741	145.4579	15.62178384	28
17975U	87 42	A	87135.73121611	.00027324	00000-0	29255-3 0	12
17975	70.3859	356.8528	0049726	213.7212	145.9653	15.62158732	39
17975U	87 42	A	87137.01192765	.00027344	00000-0	29255-3 0	13
17975	70.3897	353.3602	0049827	211.2984	148.5255	15.62169911	59
17975U	87 42	A	87137.33209551	.00027279	00000-0	29255-3 0	14
17975	70.3875	352.4871	0049169	211.3221	148.4631	15.62153947	64
17975U	87 42	A	87137.46017180	.00058482	00000-0	62207-3 0	15
17975	70.3871	352.1385	0049433	210.8952	148.9296	15.62158129	66
17975U	87 42	A	87137.46017180	.00058482	00000-0	62207-3 0	16
17975	70.3871	352.1385	0049433	210.8952	148.9296	15.62158129	66
17975U	87 42	A	87138.10050164	.00019847	00000-0	21306-3 0	17
17975	70.3887	350.3901	0049973	209.3807	150.3438	15.62163187	76
17975U	87 42	A	87139.89349383	.00019797	00000-0	21305-3 0	21
17975	70.3873	345.5008	0049367	206.6491	153.0719	15.62142538	104
17975U	87 42	A	87142.96724681	.00019763	00000-0	21305-3 0	24
17975	70.3900	337.1170	0049172	201.4027	158.3240	15.62108843	132
17975U	87 42	A	87143.73571046	.00179919	00000-0	18903-2 0	25
17975	70.3883	335.0200	0048530	199.5153	160.2931	15.62133156	164
17975U	87 42	A	87144.11992900	.00179914	00000-0	18903-2 0	26
17975	70.3868	333.9709	0048517	199.4197	160.3580	15.62133453	170

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17975U	87 42	A	87144.69623852	.00179864	00000-0	18903-2 0	27
17975	70.3846	332.3985	0049037	197.6586	161.9395	15.62094949	179
17975U	87 42	A	87144.82437323	.00044682	00000-0	47809-3 0	28
17975	70.3874	332.0520	0049145	197.5587	162.3791	15.62090924	181
17975U	87 42	A	87145.72087344	.00044642	00000-0	47809-3 0	29
17975	70.3884	329.6053	0049259	196.1967	163.5457	15.62063642	195
17975U	87 42	A	87146.55337011	-.00028061	00000-0	-30207-3 0	30
17975	70.3877	327.3377	0048691	194.5389	165.1993	15.62037398	208

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LRP: 15.66 mag'

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Progress 30

17999U	87 44	A	87139.34506611	-.00008320	57568-4	00000 0 0	2
17999	51.6276	305.7045	0045930	96.3866	263.3367	16.21258064	3
17999U	87 44	A	87139.59398220	-.00000782	00000-0	00000 0 0	3
17999	51.6271	304.3546	0097197	179.0752	181.4344	15.97306553	8
17999U	87 44	A	87139.90672184	.00042452	00000-0	59134-4 0	4
17999	51.6324	302.7005	0094051	182.1257	177.9664	15.97369204	13
17999U	87 44	A	87140.28206409	.00018108	00000-0	71209-4 0	5
17999	51.6337	300.7164	0041350	181.7723	175.5233	15.85154200	19
17999U	87 44	A	87141.79550025	.00009132	00000-0	71209-4 0	7
17999	51.6124	292.9180	0017138	12.4022	319.5785	15.71579871	43

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Upp: 21 maj

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18004U	87 45	A	87141.37746848	.00000793	-54769-5	00000 0 0	2
18004	82.3506		21.0964	0077196	90.4452	270.5757 16.15184509	0
18004U	87 45	A	87141.56333244	.00000795	-53370-5	00000 0 0	3
18004	82.3509		20.8793	0080391	89.0190	271.6634 16.14675284	3
18004U	87 45	A	87141.87326862	.00000765	-53159-5	00000 0 0	5
18004	82.3497		20.5148	0107632	86.5997	273.2395 16.07711198	8
18004U	87 45	A	87141.99801686	.00000035	00000-0	00000 0 0	6
18004	82.3531		20.3787	0014249	223.8033	135.7392 15.79207281	10
18004U	87 45	A	87142.18819229	.00000034	00000-0	00000 0 0	7
18004	82.3509		20.1670	0011976	227.0412	132.9514 15.79217489	13
18004U	87 45	A	87143.70894260	-.00009931	00000-0	-55740-4 0	9
18004	82.3474		18.4811	0014224	219.7275	140.2507 15.79208952	37
18004U	87 45	A	87144.78612788	.00010640	00000-0	59025-4 0	11
18004	82.3474		17.2880	0014264	214.1856	145.6922 15.79208665	54

18004U	87 45	A	87146.75045276	.00009609	00000-0	53288-4 0	12
18004	82.3449	15.1101	0014441	207.0400	152.9962	15.79207949	85
18004U	87 45	A	87147.00391640	.00011517	00000-0	63789-4 0	13
18004	82.3481	14.8289	0014507	205.6120	154.4759	15.79240931	90
18004U	87 45	A	87147.95436426	.00011519	00000-0	63789-4 0	14
18004	82.3484	13.7774	0014490	201.1306	158.8870	15.79245651	105
18004U	87 45	A	87148.90482383	.00011536	00000-0	63789-4 0	15
18004	82.3528	12.7235	0014620	197.6369	162.4094	15.79275368	120
18004U	87 45	A	87149.85326218	.00003269	00000-0	17983-4 0	16
18004	82.3430	11.6684	0014341	194.1327	165.8293	15.79254435	135
18004U	87 45	A	87150.86909771	.00001656	00000-0	90084-5 0	17
18004	82.3474	10.5450	0014841	189.9503	170.1319	15.79254441	151
18004U	87 45	A	87151.81955175	.00039226	00000-0	-22048-3 0	20
18004	82.3467	9.4909	0015147	185.5863	174.5310	15.79237714	166
18004U	87 45	A	87152.38983608	.00008236	00000-0	45540-4 0	21
18004	82.3491	8.8579	0014748	185.1628	175.8637	15.79262176	175
18004U	87 45	A	87152.69672194	.00009048	00000-0	49999-4 0	22
18004	82.3493	8.2967	0015079	183.2346	176.8955	15.79270469	183
18004U	87 45	A	87153.97388144	.00001857	00000-0	10122-4 0	23
18004	82.3460	7.1024	0015153	177.8136	182.2077	15.79269247	200
18004U	87 45	A	87154.86097025	.00001304	00000-0	70456-5 0	25
18004	82.3465	6.1194	0015106	174.3756	185.7655	15.79270724	214

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18011U	87 46	A	87146.62238144	-	.00003999	27602-4	00000 0 0	1
18011	67.1539		75.1018 0133228		94.5641	267.0829	16.06178194	1
18011U	87 46	A	87146.80920777		.00809827	27793-4	27403-3 0	2
18011	67.1494		74.4758 0137082		93.3349	268.3597	16.06330429	4
18011U	87 46	A	87147.61838138		.00670350	00000-0	00000-0 0 0004	
18011	067.1514		071.7485 0138833		092.4478	269.2847	16.0743386500017	
18011U	87 46	A	87147.92944546		.00625798	28137-4	19898-3 0	5
18011	67.1503		70.6960 0132604		92.2480	269.4600	16.07846983	22
18011U	87 46	A	87148.05383944		.01056067	27927-4	33554-3 0	6
18011	67.1472		70.2728 0131281		92.5293	269.1307	16.08099359	24
18011U	87 46	A	87148.92434267		.00603323	28400-4	18217-3 0	8
18011	67.1502		67.3333 0129153		91.5912	269.9822	16.09033691	38
18011U	87 46	A	87150.84975379		.00591994	28370-4	15988-3 0	10
18011	67.1489		60.8137 0121594		89.3062	272.2227	16.11594207	69

180110	87 46	A	87150.84975379	.00591994	28370-4	15988-3 0	11
18011	67.1489		60.8137 0121594	89.3062	272.2227	16.11594207	69
180110	87 45	A	87151.22206839	.00699716	28339-4	18452-3 0	12
18011	67.1502		59.5462 0119716	89.3112	272.3314	16.12180090	75
180110	87 46	A	87151.84226248	.00653456	28410-4	16601-3 0	13
18011	67.1491		57.4393 0117232	88.3650	273.0552	16.13020783	85
180110	87 46	A	87151.84226248	.00653456	28410-4	16601-3 0	14
18011	67.1491		57.4393 0117232	88.3650	273.0552	16.13020783	85
180110	87 46	A	87152.58612230	.00763567	28378-4	18397-3 0	15
18011	67.1489		54.9051 0113538	87.9195	273.9204	16.14227884	97
180110	87 46	A	87152.70996288	.00564766	28071-4	13552-3 0	16
18011	67.1496		54.4836 0113189	87.8634	273.5311	16.14350858	99
180110	87 46	A	87152.83387203	.00731620	28333-4	17248-3 0	17
18011	67.1499		54.0608 0112782	87.7453	273.6964	16.14575138	101
180110	87 46	A	87154.01018852	.00393640	28070-4	17073-3 0	18
18011	67.1480		50.0510 0131908	67.8021	288.5732	16.04997933	120
180110	87 46	A	87154.88335445	.00453954	28153-4	19179-3 0	20
18011	67.1453		47.1125 0130034	66.8645	294.6195	16.05625316	134
180110	87 46	A	87156.12375411	.00476480	27910-4	19179-3 0	21
18011	67.1462		42.9154 01273429	65.7407	295.3238	16.06645427	154
180110	87 46	A	87157.06234746	.00410325	28391-4	16077-3 0	22
18011	67.1456		39.7687 0125087	64.7237	296.3535	16.07390418	109

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18011U	87 46	A	87157.87114418	.00498150	27892-4	18621-3 0	23
18011	67.1481		37.0363 0123119	63.8602	297.7704	16.08218615	182
11U	87 46	A	87161.90812651	.00488822	28271-4	15330-3 0	28
11	67.1469		23.3555 0110531	60.3526	301.0110	16.12409882	247
11U	87 46	A	87162.71429330	.00489699	28386-4	14852-3 0	29
11	67.1457		20.6116 0107713	59.6942	301.6826	16.13279133	260
11U	87 46	A	87162.90024108	.00567286	28417-4	17266-3 0	30
11	67.1434		19.9749 0106018	59.5379	301.7165	16.13561504	263
11U	87 46	A	87163.89164932	.00310245	27586-4	17266-3 0	31
11	67.1472		16.6090 0114612	78.9441	279.0352	16.05727661	279
11U	87 46	A	87164.51504949	.00306945	27714-4	16968-3 0	32
11	67.1431		14.5052 0112679	76.6854	284.7764	16.06167124	289
11U	87 46	A	87164.88863931	.00321378	27577-4	17604-3 0	33
11	67.1434		13.2441 0111916	76.8056	284.5827	16.06404793	295
11U	87 46	A	87165.82238960	.00341419	27611-4	18364-3 0	34
11	67.1415		10.0922 0109622	75.7301	285.6204	16.07026663	310

18011U	87 46	A	87167.49895039	.00492718	28544-4	14588-3 0	37
18011	67.1452		4.4101 0096230	88.6158	272.9593	16.15697964	337
18011U	87 46	A	87167.87027109	.00635180	28684-4	18448-3 0	38
18011	67.1460		3.1394 0094375	88.1708	273.1717	16.16213051	343
18011U	87 46	A	87167.87027109	.00635180	28684-4	18448-3 0	39
8011	67.1460		3.1394 0094375	88.1708	273.1717	16.16213051	343
8011U	87 46	A	87169.10732373	.00602328	28932-4	16271-3 0	40
8011	67.1427		358.9852 0090224	87.4759	273.3610	16.17682812	363
8011U	87 46	A	87169.84910696	.00692517	28655-4	17908-3 0	41
8011	67.1439		356.3634 0087232	86.7801	274.3683	16.18639187	375
8011U	87 46	A	87171.70129025	.00784965	28695-4	17568-3 0	43
8011	67.1426		349.9978 0079316	84.5491	276.3600	16.21419476	405
8011U	87 46	A	87171.63962265	.01144689	28432-4	25532-3 0	44
8011	67.1417		350.2099 0079777	85.5008	275.5280	16.21353262	404
18011U	87 46	A	87171.88633062	.00489175	28086-4	25532-3 0	45
18011	67.1479		349.3922 0109577	115.7534	237.0128	16.07331232	408
18011U	87 46	A	87171.88633062	.00489175	28086-4	25532-3 0	46
18011	67.1479		349.3922 0109577	115.7534	237.0128	16.07331232	408
18011U	87 46	A	87172.57214262	.00499010	27861-4	25532-3 0	47
18011	67.1431		347.0597 0108159	115.2440	245.7729	16.07812019	419

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8011U	87 46	A	87173.19295720	.00563077	28403-4	25532-3	0	49
8011	67.1420		344.9495	0087640	114.7442	246.2201	16.12813434	429
18011U	87 46	A	87173.87496807	.00347237	28362-4	15280-3	0	50
18011	67.1473		342.6324	0086941	114.4608	246.1811	16.13313446	440
8011U	87 46	A	87174.86672618	.00336193	28162-4	14218-3	0	51
8011	67.1434		339.2532	0084729	113.3675	247.6555	16.14098985	456
8011U	87 46	A	87175.85796612	.00392752	28400-4	15936-3	0	52
8011	67.1437		335.8764	0082836	112.1831	249.0113	16.14886239	472
18011U	87 46	A	87177.83873673	.00618312	28595-4	19393-3	0	57
18011	67.1414		329.1055	0075929	110.3531	251.0145	16.16888853	504
18011U	87 46	A	87178.82808237	.00550747	28291-4	19523-3	0	58
18011	67.1422		325.7197	0073032	109.6564	251.8266	16.17935061	620
18011U	87 46	A	87179.63160641	.00519801	28141-4	17639-3	0	59
18011	67.1413		322.9632	0070789	108.6076	252.1283	16.18744820	533
8011U	87 46	A	87179.75510317	.00381830	27969-4	17639-3	0	60
8011	67.1358		322.5587	0111514	118.6962	238.3742	16.08318753	535

8011U	87 46	A	87179.94238044	.00331121	28365-4	15464-3 0	61
8011	67.1404	321.9107	0110314	117.9646	243.2697	16.08447873	538
8011U	87 46	A	87180.62629910	.00491178	28199-4	22451-3 0	62
8011	67.1413	319.5975	0108351	117.2170	244.0831	16.09003252	549
8011U	87 46	A	87181.43418674	.00296514	27989-4	13486-3 0	63
8011	67.1392	316.8641	0106011	115.9180	244.9056	16.09550874	562
8011U	87 46	A	87181.55853289	.00395206	28121-4	17813-3 0	64
8011	67.1384	316.4428	0105597	116.1250	245.1191	16.09687977	564
11U	87 46	A	87181.93130400	.00386184	28451-4	17181-3 0	65
11	67.1395	315.1807	0104811	115.5537	245.6452	16.09977081	570
8011U	87 46	A	87182.92505118	.00369831	28349-4	16110-3 0	66
8011	67.1386	311.8122	0102072	115.0537	246.0759	16.10713610	586
8011U	87 46	A	87183.91835972	.00373733	28170-4	15711-3 0	68
8011	67.1393	308.4425	0099991	113.6839	247.4970	16.11472074	602
8011U	87 46	A	87184.91119034	.00326515	28505-4	13624-3 0	69
8011	67.1394	305.0666	0096353	112.9096	248.2853	16.12232258	618
8011U	87 46	A	87185.03525219	.00263179	27357-4	13624-3 0	70
8011	67.1394	304.6465	0121395	119.3303	239.2192	16.05256382	620
8011U	87 46	A	87186.84194026	.00338230	27722-4	16583-3 0	72
8011	67.1397	298.5652	0117833	117.6032	243.7853	16.06492577	649

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8011U	87 46	A	87188.83336601	.00335967	28092-4	15871-3 0	74
8011	67.1393		291.8421 0112781	115.6045	245.6977	16.07855802	681
8011U	87 46	A	87189.14437372	.00331530	28317-4	15871-3 0	75
8011	67.1368		290.7950 0110950	115.3224	245.9477	16.08059741	686
8011U	87 46	A	87189.82845640	.00379285	27954-4	17798-3 0	76
8011	67.1386		288.4800 0109257	114.9075	246.4107	16.08577327	697
8011U	87 46	A	87190.94735388	.00393004	28131-4	17949-3 0	77
011	67.1368		284.6949 0106110	113.7512	247.4801	16.09452378	715
8011U	87 46	A	87191.94141970	.00396849	27874-4	17733-3 0	78
8011	67.1370		281.3243 0102904	113.0834	248.1789	16.10207544	731
8011U	87 46	A	87192.93497971	.00424125	28321-4	18417-3 0	79
011	67.1373		277.9555 0099924	112.0136	249.3471	16.11126144	747
8011U	87 46	A	87193.86591486	.00391268	28046-4	16654-3 0	80
8011	67.1369		274.7943 0096973	111.3384	249.7634	16.11884813	762
8011U	87 46	A	87194.79647010	.00399353	28313-4	16365-3 0	81
8011	67.1368		271.6325 0095061	110.1289	251.0175	16.12632571	777

8011U	87 46	A	37195.78857170	.00345970	28362-4	14021-3 0	82
8011	67.1307	268.2574	0091839	109.6403	251.2930	16.13344505	773
8011U	87 46	A	87196.84226000	.00379953	28611-4	14807-3 0	94
8011	67.1363	264.0655	0089470	108.4936	252.7575	16.14170154	810
8011U	87 46	A	87197.52371228	.00387686	28298-4	14807-3 0	85
8011	67.1297	262.3362	0086454	108.5628	252.8722	16.14909996	821
8011U	87 46	A	87197.83329625	.00463490	28401-4	17428-3 0	87
8011	67.1367	261.2840	0085604	108.0223	253.0600	16.15205047	826
8011U	87 46	A	87198.82373727	.00514431	28504-4	18533-3 0	88
8011	67.1382	257.8997	0082218	107.0192	253.9839	16.16233015	842
8011U	87 46	A	87199.81356302	.00507842	28939-4	17502-3 0	89
8011	67.1366	254.5127	0078986	106.2734	254.7048	16.17251077	858
18011U	87 46	A	87201.91683485	.00526618	28770-4	16473-3 0	91
18011	67.1362	247.3023	0071746	104.4936	267.9111	16.19460240	892
18011U	87 46	A	87202.77926385	.00565067	28892-4	16810-3 0	92
18011	67.1359	244.3353	0068610	103.6784	257.3837	16.20480970	906
18011U	87 46	A	87202.77926385	.00565067	28892-4	16810-3 0	93
18011	67.1359	244.3353	0068610	103.6784	257.3837	16.20480970	906
8011U	87 46	A	87203.21121743	.00693863	28788-4	19779-3 0	94
8011	67.1337	242.8510	0066618	103.2190	257.9575	16.21221803	913

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8011U	87	46	A	87203.70460371	.00088182	29199-4	25473-4	0	95
8011	67.1312	241.1490	0064391	111.2413	249.7372	16.21852381			921

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18017U	87 47	A	87148.58520396	-.00001687	11723-4	00000 0 0	1
18017	72.8653		81.3788 0132321	86.2122	273.0288	15.97134441	1
18017U	87 47	A	87148.64825899	-.00000202	00000-0	00000 0 0	2
18017	72.8536		81.2070 0122255	87.5406	273.9781	15.96418298	2
18017U	87 47	A	87148.64825899	-.00000202	00000-0	00000 0 0	3
18017	72.8536		81.2070 0122255	87.5406	273.9781	15.96418298	2
18017U	87 47	A	87149.02425915	.01124157	11601-4	10262-2 0	4
18017	72.8423		80.2610 0132461	85.4109	273.9830	15.96542200	8
18017U	87 47	A	87149.21225868	.00090490	00000-0	10262-2 0	5
18017	72.8530		79.8191 0042171	212.1860	130.3100	15.60858548	11
18017U	87 47	A	87149.85627005	.00729382	00000-0	76709-2 0	6
18017	72.8441		78.2774 0043656	211.4712	148.2087	15.60844492	21
18017U	87 47	A	87150.81771145	.00090376	00000-0	10262-2 0	8
18017	72.8507		75.9806 0042732	208.7167	151.0101	15.60795737	37

180170	87 47	A	87150.81771145	.00090376	00000-0	10262-2 0	9
18017	72.8507	75.9806	0042732	208.7167	151.0181	15.60795737	36
180170	87 47	A	87151.84327621	.00090240	00000-0	10262-2 0	11
18017	72.8476	73.5275	0042441	206.6376	153.2545	15.60774411	52
180170	87 47	A	87151.84327621	.00090240	00000-0	10262-2 0	12
18017	72.8476	73.5275	0042441	206.6376	153.2545	15.60774411	52
180170	87 47	A	87152.86877330	.00048386	00000-0	55356-3 0	13
18017	72.8498	71.0721	0042554	203.7602	155.8581	15.60763178	68
180170	87 47	A	87153.95845073	.00076660	00000-0	87475-3 0	14
18017	72.3531	68.4726	0042006	202.1423	157.5899	15.60753944	95
180170	87 47	A	87154.91921268	.00076721	00000-0	87475-3 0	16
18017	72.3477	66.1697	0042461	199.0637	160.6433	15.60750350	100
180170	87 47	A	87155.43273052	.00076550	00000-0	87475-3 0	17
18017	72.8510	64.9440	0041777	198.4312	161.4464	15.60731405	108
180170	87 47	A	87156.20190532	.00076764	00000-0	87475-3 0	18
18017	72.3510	63.1631	0042441	196.3140	163.5120	15.60765453	120
180170	87 47	A	87157.09932797	.00076104	00000-0	86999-3 0	19
18017	72.8490	60.9627	0041957	194.2172	165.7778	15.60711375	134
180170	87 47	A	87157.93259260	.00008640	00000-0	99999-4 0	20
18017	72.3501	58.9710	0041912	192.4425	167.3579	15.60706303	147

87-47A

Kosmos 1848

font. 1

80170	87 47	A	87158.83002647	.00008629	00000-0	99999-4 0	21
8017	72.8508		56.8263	0041768	191.0417	168.9233	15.60684490 161
80170	87 47	A	87160.88121454	.00092331	00000-0	10553-2 0	24
8017	72.8504		51.9209	0041705	185.8772	173.8051	15.60674643 193
80170	87 47	A	87161.90691828	.00092189	00000-0	10553-2 0	26
8017	72.8504		49.4711	0041217	183.6241	176.4385	15.60660712 209

87-48A

Kosmos 1849

Upp: 4 juni

180830	87 48	A	87156.32757416	.00000046	00000-0	99999-4	0	3
18083	62.9078	124.7005	7348214	318.2056	4.5293	2.03137319		0
180830	87 48	A	87156.81998441	.00000109	00000-0	99999-4	0	4
18083	62.8885	124.6669	7348488	318.1910	4.6195	2.03129679		3
180830	87 48	A	87157.31227437	.00000173	00000-0	99999-4	0	5
18083	62.8843	124.6034	7348237	318.2012	4.6189	2.03128001		4

87-49A

Kosmos 1850

Upp: 9, juni

18095U	87 49	A	97160.74351328	-.00000012	00000-0	00000 0 0	2
18095	74.0397		126.6749 0016677	4.4189	355.7302	14.28871631	2
18095U	87 49	A	97161.51365440	.00001762	00000-0	70592-3 0	3
18095	74.0406		125.2767 0016677	2.8382	357.3758	14.28903424	13

87-50A

Kosmos 1851

Чрр: 12,4ми'

30U	87 50	A	87162.87711245	-	.00000304	00000-0	99999-4	0	1
30	62.8243	325.3767	7344838	318.2569	4.4469	2.02857690			1
30U	87 50	A	87163.37016800	-	.00000285	00000-0	99999-4	0	2
30	62.8794	325.1783	7354223	316.1699	4.7001	2.02790669			2

87-51A-H

Kosmas 1852-1859

4PP: 16, juni

18113U	87 51	A	87168.04670308	-.000000006	00000-0	00000 0 0	2	
18113	74.0001		179.9858	0017602	230.1415	127.0502	12.44661909	4
18114U	87 51	B	87168.20735858	-.000000006	00000-0	00000 0 0	1	
18114	74.0026		179.8054	0006493	197.7915	162.2881	12.46777023	6
18115U	87 51	C	87168.12665495	-.000000007	00000-0	00000 0 0	1	
18115	74.0016		179.9126	0014089	147.6208	212.4964	12.48582203	5
18116U	87 51	D	87168.12616447	-.000000006	00000-0	00000 0 0	1	
18116	74.0018		179.8793	0019084	111.8960	248.4071	12.60481909	5
18117U	87 51	E	87168.12568641	-.000000006	00000-0	00000 0 0	1	
18117	74.0026		179.9147	0029138	110.0026	250.2960	12.52273471	5
18118U	87 51	F	87168.12521337	-.000000007	00000-0	00000 0 0	1	
18118	74.0071		179.8756	0038233	105.5571	254.7249	12.53993808	5
18119U	87 51	G	87168.36379730	.00074828	00000-0	44706 0 0	3	
18119	74.0036		179.5713	0047977	106.3618	254.2613	12.55809104	8

87-52A

Kosmos 1860

Upp: 18 juni

18122U	87 52	A	87169.95335667	.00349080	61752-4	46995-3 0	2
18122	64.9940	264.5528	0015565	282.0117	77.9298	16.05952809	1
18122U	87 52	A	87170.32696660	.00356813	64979-4	46995-3 0	3
18122	64.9891	263.1840	0010197	266.3561	93.7499	16.06458616	7
18122U	87 52	A	87184.89537584	.00003167	00000-0	46727-5 0	27
18122	64.9928	209.7622	0010272	273.1620	86.9547	16.06295257	241
18122U	87 52	A	87186.82536641	.00018291	00000-0	24489-4 0	29
18122	64.9933	202.6856	0009946	270.5584	89.3556	16.06360335	272
18122U	87 52	A	87188.87985010	.00013257	00000-0	17840-4 0	31
18122	64.9930	195.1540	0010022	271.4614	88.5284	16.06412520	305
18122U	87 52	A	87189.87602413	.00012561	00000-0	17062-4 0	33
18122	64.9926	191.4988	0009985	268.8083	91.1614	16.06289663	321
18122U	87 52	A	87190.99670575	.00016715	00000-0	22463-4 0	3
18122	64.9919	187.3891	0010113	268.7936	91.2380	16.06331944	33

122U	87 52	A	87192.05508641	.00016757	00000-0	22463-4 0	35
122	64.9918	183.5081	0010121	268.2586	91.7416	16.06367084	356
122U	87 52	A	87192.92668114	.00017192	00000-0	22986-4 0	36
122	64.9923	180.3121	0009950	268.0665	91.9498	16.06408807	370
122U	87 52	A	87193.92275602	.00017522	00000-0	23362-4 0	37
122	64.9921	176.6601	0009873	267.2565	92.7382	16.06442627	386
18122U	87 52	A	87194.04726627	.00017295	00000-0	23362-4 0	38
18122	64.9890	176.2002	0010847	270.9086	88.8827	16.06216100	388
18122U	87 52	A	87194.42087863	.00519935	13875-3	69247-3 0	39
18122	64.9943	174.8338	0010316	265.5788	94.4757	16.06281865	394
18122U	87 52	A	87194.79438710	.00525046	14194-3	69247-3 0	40
18122	64.9981	173.4613	0010861	268.9778	90.7645	16.06426717	400
18122U	87 52	A	87194.79438710	.00525046	14194-3	69247-3 0	41
18122	64.9981	173.4613	0010861	268.9778	90.7645	16.06426717	400
18122U	87 52	A	87195.04343005	.00013264	00000-0	18007-4 0	42
18122	64.9939	172.5518	0011003	268.0824	91.6004	16.06243680	404
18122U	87 52	A	87195.91514663	.00013303	00000-0	18007-4 0	43
18122	64.9929	169.3560	0010862	266.7895	93.3194	16.06298700	418
18122U	87 52	A	87196.84901894	.00013548	00000-0	18298-4 0	44
18122	64.9948	165.9316	0010776	266.7068	93.2899	16.06325965	433

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Kosmos 1860

font 5.7

18122U	87 52	A	87206.87266760	.00002214	00000-0	34135-5 0	58
18122	64.9934	129.1737	0009640	261.1769	98.9817	16.06300833	594
18122U	87 52	A	87208.86486093	.00026273	00000-0	34767-4 0	62
18122	64.9945	121.8725	0009729	262.5455	97.4519	16.06429465	626
18122U	87 52	A	87230.98124164	.00152857	00000-0	13120 0 0	74
18122	65.0128	63.5581	0064336	248.3591	111.0554	13.84259850	934

87-53A

DMSP2-3

Upp: 20 juni fr. WTR m. Atlas E.

186730	87 53	A	87171.18139764	- .00000018	00000-0	00000	0 0	2
18123	98.8183		0.6614	0009282	138.5101	8.6965	14.10295962	1
181230	87 53	A	87171.43621061	- .00000019	00000-0	00000	0 0	3
18123	98.8440		0.8847	0015069	254.7388	107.8843	14.12910008	5
181230	87 53	A	87172.00221567	- .00000019	00000-0	00000	0 0	4
18123	98.8360		1.4354	0013455	243.5369	116.4481	14.12897334	13
181230	87 53	A	87187.22773686	.00000178	00000-0	11571-3	0	16
18123	98.8362		16.4572	0014085	198.4427	161.6237	14.12893254	228
181230	87 53	A	87179.08385293	- .00000019	00000-0	00000	0 0	11
18123	98.8348		8.4230	0014012	222.1333	137.8772	14.12893498	113
81230	87 53	A	87188.99814332	.00000177	00000-0	11571-3	0	17
8123	98.8361		18.2049	0014119	193.0980	166.9710	14.12893396	253

87-54A

Kosmos 1801

Upp: 23, juni

Medförde transpondernum R570 och R571

8129U	87 54	A	87174.59593305	.00000006	00000-0	00000	0 0	2
8129	82.9265		53.3166	0010301	259.8854	100.1119	13.71883140	3
8129U	87 54	A	87174.74179934	.00000006	00000-0	00000	0 0	3
8129	82.9250		53.2077	0010174	259.8817	100.1035	13.71862255	5

87-55A

Kosmos 1862

Upp: 1 juli

52U 87 55 A 87183.07712507 .00000011 00000-0 00000 0 0	1
52 82.5240 239.6541 0027926 305.6827 54.5823 14.73655066	3
52U 87 55 A 87183.14494878 .00000011 00000-0 00000 0 0	2
52 82.5037 239.5799 0023373 290.9686 68.8815 14.73616525	4

87-56A

Kosmas 1863

Upp: 4 juli

Ned: 18 juli 87

8155U	87 56	A	87185.57167518	- .00001658	11534-4	00000 0 0	1
8155	72.8871		112.9634 0120903	87.3373	274.3107	15.99271450	1
8155U	87 56	A	87185.75931539	- .00001650	11224-4	00000 0 0	2
8155	72.8739		112.4916 0120661	86.8744	274.5859	15.99208075	4
8155U	87 56	A	87185.94699493	.00057010	11703-4	51356-4 0	3
8155	72.8730		112.0142 0120674	86.6340	274.8743	15.99246432	7
8155U	87 56	A	87186.07210503	.00054754	11348-4	51356-4 0	4
8155	72.8773		111.6998 0127006	85.4943	275.6979	15.97577350	9
8155U	87 56	A	87186.19741296	.00004502	00000-0	51356-4 0	5
8155	72.8626		111.4065 0038996	211.7044	147.1674	15.61421503	11
8155U	87 56	A	87186.58217342	.00080677	00000-0	92538-3 0	7
8155	72.8785		110.4765 0043585	210.1717	149.4584	15.60522374	17
8155U	87 56	A	87186.83864307	.00080558	00000-0	92538-3 0	8
8155	72.8758		109.8638 0043973	208.9303	150.8869	15.60464122	21
8155U	87 56	A	87200.11004502	.00380907	00000-0	42894-2 0	26
8155	72.8904		78.2547 0043654	175.9070	185.4760	15.60097727	214

87-57A

Kosmos 1864

Upp: 6 juli

18160U	87 57	A	87187.97533036	.000000006	00000-0	00000	0 0	1
18160	82.9464	282.4453	0062331	300.0449	59.4535	13.79186207		0
18160U	87 57	A	87187.97533036	.000000006	00000-0	00000	0 0	2
18160	82.9314	282.2495	0032794	290.7376	69.2891	13.74901348		0

87-58A

Kosmos 1865

LPP: 8,241'

8162U	87058	A	87189.51501958	.00000000	00000-0	00000-0	0	0001
8162	064.7548		126.2156	0086920	069.9164	291.1248	16.0879203800001	
8162U	87058	A	87189.63934510	.00000000	00000-0	00000-0	0	0003
8162	064.7553		125.7544	0087000	069.8792	291.1633	16.0879360600003	
8162U	87 58	A	87189.95014521	.00027424	35177-4	22069-4	0	4
8162	64.7494		124.5995	0082035	68.0930	292.9145	16.08837969	8
8162U	87 58	A	87190.13662365	.00025257	00000-0	22069-4	0	5
8162	64.7516		123.8977	0077247	71.0584	289.1914	16.06620559	11
8162U	87 58	A	87190.44797714	.00030463	00000-0	22069-4	0	6
8162	64.7533		122.7429	0045302	63.7337	304.3007	16.13182225	16
8162U	87 58	A	87194.47537458	.00060192	00000-0	41776-4	0	12
8162	64.7536		107.6379	0042711	62.6153	298.0549	16.13902105	81
8162U	87 58	A	87194.20910832	.00182160	10901-4	12675-3	0	13
8162	64.7557		106.0697	0042608	60.3584	300.1593	16.13955142	88
8162U	87 58	A	87195.90042105	.00183113	10527-4	12675-3	0	14
8162	64.7572		102.3586	0041138	61.8146	298.4060	16.14166088	104

8162U	87 58	A	87196.70582468	.00073889	00000-0	50168-4 0	15
8162	64.7528		99.3450 0042034	61.4194	298.7010	16.14240122	117
8162U	87 58	A	87197.88294294	.00098987	00000-0	66060-4 0	18
8162	64.7532		94.9401 0041582	60.7246	300.0192	16.14489083	136
8162U	87 58	A	87198.87393982	.00088835	00000-0	58721-4 0	19
8162	64.7525		91.2265 0040917	59.6360	300.9422	16.14690554	152
8162U	87 58	A	87199.55519635	.00040691	00000-0	26744-4 0	20
8162	64.7497		88.6777 0041199	57.9386	302.6651	16.14843238	163
8162U	87 58	A	87199.86482783	.00103246	00000-0	67149-4 0	21
8162	64.7517		87.5157 0040701	59.0835	301.4558	16.14913841	168
8162U	87 58	A	87203.95395555	.00191535	10910-4	13605-3 0	28
8162	64.7530		72.2079 0045200	65.4307	295.1571	16.13401269	234
8162U	87 58	A	87204.88362778	.00104787	00000-0	72892-4 0	29
8162	64.7517		68.7320 0045198	64.4089	295.7731	16.13560928	249
8162U	87 58	A	87205.93726717	.00155241	11121-4	10792-3 0	30
8162	64.7525		64.7923 0044501	64.1352	296.4628	16.13809541	266
8162U	87 58	A	87206.86672001	.00108196	00000-0	73261-4 0	31
8162	64.7494		61.3138 0044297	63.4160	296.9295	16.14011809	281
8162U	87 58	A	87207.92003224	.00176523	11351-4	11896-3 0	34
8162	64.7505		57.3741 0043827	62.7266	297.8268	16.14266301	298
8162U	87 58	A	87208.97309252	.00149549	00000-0	98029-4 0	35
8162	64.7506		53.4333 0043685	61.6475	298.5308	16.14485583	315

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Kosmos 1865

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18162U	87 58	A	87209.96416192	.00178353	11614-4	11657-3 0	36
18162	64.7513		49.7209 0043128	00.8291	299.5746	16.14741657	331
18162U	87 58	A	87210.95507779	.00114862	00000-0	72299-4 0	37
18162	64.7525		46.0091 0043279	61.0633	299.7973	16.15076950	347
18162U	87 58	A	87211.88375317	.00131243	86547-5	11779-3 0	39
18162	64.7397		42.5641 0043914	97.4061	261.4702	16.10372298	362
18162U	87 58	A	87212.00825542	.00164615	11511-4	11779-3 0	40
8162	64.7468		42.0674 0052124	92.3233	268.7160	16.12567468	364
8162U	87 58	A	87212.19424722	.00158636	11437-4	11359-3 0	41
8162	64.7487		41.3698 0052163	91.5125	269.1410	16.12562583	367
18162U	87 58	A	87212.93841032	.00123152	00000-0	86201-4 0	42
18162	64.7490		38.5921 0051697	91.4536	269.1741	16.12742887	379
8162U	87 58	A	87213.86851429	.00124747	00000-0	86201-4 0	43
8162	64.7494		35.1178 0051342	91.0804	269.5706	16.12954319	394
18162U	87 58	A	87214.86051025	.00102421	00000-0	70324-4 0	45
18162	64.7491		31.4109 0050619	90.5260	270.1703	16.13136140	410
18162U	87 58	A	87215.85237254	.00103751	00000-0	70324-4 0	46
18162	64.7499		27.7816 0050359	89.3778	271.2892	16.13335147	426

18162U	87 58	A	87216.90609569	.00105017	00000-0	70324-4	0	47
18162	64.7480		23.7620	0049700	88.5761	272.1602	16.13568856	443
18162U	87 58	A	87217.95967034	.00108857	00000-0	71948-4	0	47
18162	64.7484		19.8186	0048984	88.2454	272.5833	16.13819414	460
18162U	87 58	A	87217.95967034	.00108857	00000-0	71948-4	0	48
18162	64.7484		19.8186	0048984	88.2454	272.5833	16.13819414	460
18162U	87 58	A	87217.95967034	.00108857	00000-0	71948-4	0	49
18162	64.7484		19.8186	0048984	88.2454	272.5833	16.13819414	460
18162U	87 58	A	87217.89769934	.00119625	00000-0	79068-4	0	50
18162	64.7492		20.0508	0049009	88.1686	272.6516	16.13809964	459
18162U	87 58	A	87217.95967034	.00108857	00000-0	71948-4	0	51
18162	64.7484		19.8186	0048984	88.2454	272.5833	16.13819414	460
8162U	87 58	A	87218.88912173	.00107228	00000-0	69986-4	0	52
8162	64.7477		16.3422	0048758	87.3720	273.2615	16.14011825	475
8162U	87 58	A	87218.88912173	.00107228	00000-0	69986-4	0	53
8162	64.7477		16.3422	0048758	87.3720	273.2615	16.14011825	475
8162U	87 58	A	87219.88044997	.00105568	00000-0	68102-4	0	54
8162	64.7474		12.6328	0048258	86.6994	273.9568	16.14220776	491
8162U	87 58	A	87220.87164600	.00102773	00000-0	65502-4	0	55
8162	64.7480		5.9225	0047895	86.0867	274.5695	16.14421925	507
8162U	87 58	A	87221.55302646	.00413204	12416-4	26050-3	0	57
8162	64.7489		6.3680	0047592	86.0119	274.6954	16.14613754	518

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Kosmos 1865

for ts. 2

8162U	87 58	A	87221.80109506	.00350775	10761-4	25192-3 0	58
8162	64.7499		5.4449 0045694	115.9412	244.6477	16.13112742	522
8162U	87 58	A	87222.35899228	.00353310	10300-4	25192-3 0	60
8162	64.7508		3.3600 0044586	115.5372	244.7628	16.13324041	531
8162U	87 58	A	87222.60697897	.00177458	10654-4	12801-3 0	61
8162	64.7513		2.4334 0044705	115.5814	244.7711	16.13259772	535
8162U	87 58	A	87223.72279612	.00188092	10583-4	13403-3 0	64
8162	64.7522		358.2621 0044055	114.8633	245.7485	16.13480267	553
8162U	87 58	A	87224.90040818	.00092901	00000-0	64757-4 0	66
8162	64.7500		353.8603 0044068	113.9849	246.6390	16.13661334	572

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Kosmos 1866

Upp: 9 juli

8184U	87 59	A	87190.72661156	- .00004007	27756-4	00000 0 0	1
8184	67.1533	156.0891	0143812	94.5693	266.9812	16.03728708	1
8184U	87 59	A	87190.72661156	- .00004007	27756-4	00000 0 0	2
8184	67.1533	156.0891	0143812	94.5693	266.9812	16.03728708	1
8184U	87 59	A	87190.91333953	.31976126	28188-4	11301-1 0	3
8184	67.1520	155.4686	0142134	94.4730	264.8474	16.04832816	4
184U	87 59	A	87190.97597788	.00644583	27763-4	23148-3 0	4
184	67.1514	155.2518	0146255	94.0989	266.8978	16.03885646	5
184U	87 59	A	87190.97597788	.00644583	27763-4	23148-3 0	5
184	67.1514	155.2518	0146255	94.0989	266.8978	16.03885646	5
184U	87 59	A	87191.72427923	.00372895	27412-4	13172-3 0	6
184	67.1555	152.7390	0144030	93.2747	268.5438	16.04544965	17
184U	87 59	A	87192.03591888	.00434941	27511-4	15220-3 0	7
184	67.1549	151.6917	0142968	92.8961	268.9160	16.04839957	22

184U	87 59	A	87192.90821918	.00457362	27682-4	15442-3 0	0
8184	67.1558	148.7596	0140487	92.0852	269.8382	16.05685711	36
8184U	87 59	A	87193.84228297	.00415574	27933-4	13594-3 0	9
8184	67.1548	145.6153	0137687	91.1471	270.6465	16.06568309	51
8184U	87 59	A	87194.90032069	.00375886	28060-4	11780-3 0	10
8184	67.1562	142.0500	0135099	89.9882	271.8683	16.07509083	68
8184U	87 59	A	87195.77117906	.00404609	28016-4	12270-3 0	11
8184	67.1559	139.1004	0132722	89.2930	272.6228	16.08294479	82
8184U	87 59	A	87195.83331931	.00405201	28054-4	12270-3 0	12
8184	67.1548	138.9981	0132436	88.9897	272.6662	16.08366761	83
8184U	87 59	A	87195.89550105	.00464197	28185-4	14190-3 0	13
8184	67.1562	138.6923	0131322	89.0710	272.7039	16.08496589	84
8184U	87 59	A	87196.82987776	.00313494	27764-4	14573-3 0	15
8184	67.1562	135.5419	0127793	81.2359	280.2837	16.05127772	99
8184U	87 59	A	87196.14418114	.00300144	27614-4	14190-3 0	14
8184	67.1570	137.8485	0129002	81.2676	278.5565	16.04718403	88
8184U	87 59	A	87197.82667476	.00377757	28111-4	16779-3 0	16
8184	67.1536	132.1886	0126014	80.0843	281.8090	16.05929363	115
8184U	87 59	A	87197.88889298	.00373141	27599-4	16579-3 0	18
8184	67.1545	131.9801	0125817	80.1157	281.4092	16.05964400	116

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18184U	87 59	A	87198.63611327	.00385297	27533-4	16668-3	0	19
18184	67.1545	129.4611	0124070	79.4875	282.1475	16.06580675		128
18184U	87 59	A	87198.88509828	.00385339	28043-4	16542-3	0	20
18184	67.1545	128.6226	0123489	79.2212	282.2856	16.06775208		132
18184U	87 59	A	87199.00958984	.00605286	28193-4	25494-3	0	21
18184	67.1537	128.1995	0123488	79.2036	282.3154	16.06932047		134
18184U	87 59	A	87199.69189063	.00899655	28269-4	25494-3	0	23
18184	67.1675	125.8911	0111881	70.2834	291.0900	16.13070618		145
18184U	87 59	A	87199.87787585	.00563739	28388-4	16391-3	0	24
18184	67.1534	125.2512	0110123	69.0664	292.1132	16.13199753		148
18184U	87 59	A	87201.86037909	.00641045	28287-4	16574-3	0	27
18184	67.1542	118.4963	0102940	67.4155	293.8155	16.15686223		180
18184U	87 59	A	87201.86037909	.00641045	28287-4	16574-3	0	28
18184	67.1542	118.4963	0102940	67.4155	293.8155	16.15686223		180
18184U	87 59	A	87202.85045128	.00659430	28753-4	16107-3	0	29
18184	67.1541	115.1147	0098758	66.4230	294.8423	16.17014500		196
18184U	87 59	A	87202.85045128	.00659430	28753-4	16107-3	0	30
18184	67.1541	115.1147	0098758	66.4230	294.8423	16.17014500		196

18184U	87 59	A	87203.77788028	.00551958	28460-4	12785-3 0	31
18184	67.1570	111.9411	0094373	65.8114	295.6307	16.18346977	211
18184U	87 59	A	87204.39569194	.00794853	28157-4	17400-3 0	33
18184	67.1564	109.8162	0091501	65.0533	296.3467	16.19381955	221
18184U	87 59	A	87204.82788343	.00736160	28514-4	15618-3 0	34
18184	67.1551	108.3339	0089535	64.5787	296.4476	16.20038196	228
18184U	87 59	A	87205.56849147	.00825749	28692-4	16137-3 0	35
18184	67.1549	105.7889	0086437	63.7664	297.6087	16.21344488	240
18184U	87 59	A	87206.12345411	.00920615	29204-4	17070-3 0	36
18184	67.1586	103.8760	0083482	63.3181	297.6829	16.22353007	249
18184U	87 59	A	87206.61650374	.01007277	29229-4	17383-3 0	37
18184	67.1572	102.1775	0080695	62.8521	298.0943	16.23309071	257
18184U	87 59	A	87206.92451030	.01076939	28904-4	17482-3 0	38
18184	67.1560	101.1151	0078859	62.5776	298.3428	16.23948455	262
18184U	87 59	A	87207.23242315	.01038734	28916-4	16688-3 0	44
18184	67.1544	100.0500	0075951	62.3136	298.7335	16.24618876	267
18184U	87 59	A	87208.35486111	-.00004150	28535-4	00000 0 0	45
18184	67.1556	99.6314	0075716	62.0882	298.0003	16.24929904	285
18184U	87 59	A	87207.60199851	.01099941	28662-4	16423-3 0	46
18184	67.1494	98.7735	0073576	61.7654	300.9577	16.25421506	273
18184U	87 59	A	87218.75116211	.00113769	49037-5	64525-3 0	50
18184	67.1599	67.9731	0598968	282.6932	55.8981	14.71883987	437

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18184U	87 59	A	87235.78638559	.00110524	48410-5	64525-3	0	51
18184	67.1711		20.7007	0574688	267.8697	92.9772	14.76811889	688
18184U	87 59	A	87237.40997208	.00257472	13984-4	13632-2	0	54
18184	67.1631		16.1712	0576443	266.4854	88.0010	14.77794146	712
18184U	87 59	A	87242.81552304	.00332668	27792-4	20148-2	0	56
18184	67.1618		1.0436	0556873	291.9102	91.8458	14.82173703	722
18184U	87 59	A	87244.77175223	.00382075	27867-4	19461-2	0	57
18184	67.1552		355.5462	0552241	260.2626	93.6060	14.83581970	521
18184U	87 59	A	87245.71457773	.00683523	85415-4	34472-2	0	58
18184	67.1524		352.8816	0546116	252.5100	93.6352	14.85166175	835
184U	87 59	A	87275.02821442	.00536666	65723-4	19699-2	0	82
184	67.1393		267.6867	0389897	233.1635	122.8216	15.24032996	1276
184U	87 59	A	87280.00967909	.00299387	23599-4	10297-2	0	86
184	67.1454		252.7910	0377132	227.4787	129.0945	15.27771139	1352
184U	87 59	A	87280.40249600	.00334053	28273-4	11520-2	0	88
184	67.1479		251.6139	0375580	226.9853	129.9269	15.28061584	1368
184U	87 59	A	87280.53340164	.00333761	28267-4	11520-2	0	89
184	67.1480		251.2212	0375124	226.8995	130.0161	15.28147302	1366

184U	87 59	A	87281.25324988	.00337470	29025-4	11526-2 0	90
184	67.1477	240.0525	0373565	226.1468	130.8486	15.28638093	1371
18184U	87 59	A	87302.95862864	.01748259	62375-5	35587-2 0	144
18184	67.1500	182.2656	0219143	203.9508	155.1321	15.68634300	1706
18184U	87 59	A	87303.14986233	.01844779	66181-5	35162-2 0	145
18184	67.1403	181.6544	0220080	204.0802	154.9963	15.69358902	1709
18184U	87 59	A	87303.59576451	.01911822	65320-5	35301-2 0	146
18184	67.1396	180.2366	0214134	203.5796	155.5452	15.71012340	1716
18184U	87 59	A	87303.78672162	.01942551	66918-5	35203-2 0	147
18184	67.1399	179.6240	0211842	203.2374	155.9112	15.71737517	1719
18184U	87 59	A	87304.61314886	.02108396	63443-5	39112-2 0	149
18184	67.1402	176.9834	0193743	202.8216	156.4277	15.75061996	1732
18184U	87 59	A	87304.93052533	.02183979	65499-5	38871-2 0	150
18184	67.1419	175.9573	0189853	202.4034	156.8775	15.76416709	1737
18184U	87 59	A	87305.05739229	.02307582	73772-5	37170-2 0	151
18184	67.1401	175.5302	0193488	201.3490	158.0175	15.77061702	1739
18184U	87 59	A	87305.75430414	.02538417	75617-5	39021-2 0	152
18184	67.1381	173.2788	0179885	200.4498	158.9414	15.80411243	1750
18184U	87 59	A	87306.07056804	.02693717	76250-5	39522-2 0	153
18184	67.1355	172.2496	0174512	199.8427	159.5910	15.82103101	1755

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18184U	87 59	A	87306.76516425	.02997958	83549-5	39957-2	0	154
18184	67.1373		169.9807 0161305	198.8443	160.6741	15.85976125		1766
18184U	87 59	A	87307.14326969	.03784456	87312-5	46518-2	0	155
18184	67.1294		168.7385 0151406	198.1098	161.9118	15.88959408		1772
18184U	87 59	A	87307.89712521	.04646717	26990-4	46981-2	0	158
18184	67.1294		166.2511 0131936	196.9731	162.7084	15.95190977		1784
18184U	87059	A	87309.51773406	.08442405	00000-0	00000-0	0	0185
18184	067.1196		160.8109 0072508	195.4122	164.5081	16.1636234501810		
18184U	87 59	A	87307.58334199	.04282358	91210-5	47503-2	0	157
18184	67.1282		167.2898 0139907	197.4103	162.2255	15.92492770		1779
18184U	87 59	A	87307.95981384	.04799614	27467-4	46715-2	0	159
18184	67.1267		166.0395 0131092	196.7136	163.0261	15.95834340		1788
18184U	87 59	A	87308.27284930	.05531739	27391-4	47259-2	0	160
18184	67.1223		164.9907 0122026	196.5488	163.1983	15.99154418		1790
18184U	87 59	A	87308.58522128	.06435389	27877-4	47974-2	0	161
18184	67.1230		163.9526 0111017	195.6354	164.1248	16.02837317		1795
18184U	87 59	A	87308.77229847	.07139787	27744-4	46442-2	0	162
18184	67.1283		163.3236 0106541	194.8222	164.9822	16.05278700		1798

18184U	87 59	A	87308.95906560	.06398783	27602-4	43115-2 0	163
18184	67.1174		162.6905 0092592	194.9574	164.3059	16.07286951	1801
18184U	87 59	A	87309.26992804	.07885465	28254-4	43454-2 0	164
18184	67.1107		161.6377 0078975	194.8746	165.2731	16.11940450	1806
18184U	87059	A	87309.64139081	.10012419	00000-0	00000-0 0	0166
18184	067.1161		160.3704 0062460	189.9955	170.0221	16.1930127801812	
18184U	87059	A	87309.70312294	.15185309	00000-0	00000-0 0	0167
18184	067.1098		160.1487 0057622	191.8248	168.1817	16.2133042101813	
18184U	87 59	A	87310.01083512	.28220750	29877-4	35539-2 0	167
18184	67.0963		159.0818 0027663	203.1838	158.3540	16.34255232	1818
18184U	87 59	A	87310.01057297	.27982670	29787-4	35322-2 0	168
18184	67.0963		159.0828 0027642	203.1811	156.8148	16.34236026	1818

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1070	57 00	A	87191.84663260	.00000045	00000-0	00000 0 0	1
187	65.0037		196.1585	0009601	269.1139	90.9200 14.29166133	3
1870	87 60	A	87192.05655296	-.00000045	00000-0	00000 0 0	2
157	65.0023		195.5813	0009786	272.4975	87.6683 14.29358158	6
81870	87 60	A	87195.90447027	.00062279	00000-0	24222-1 0	10
8187	65.0083		184.8399	0009633	258.3602	91.5614 14.29261646	61
81870	87 60	A	87196.88409997	.00062222	00000-0	24222-1 0	12
8187	65.0052		182.1055	0009521	272.8973	86.9636 14.29215758	75
81870	87 60	A	87231.94126281	.00002458	00000-0	99999-3 0	59
8187	65.0078		84.2829	0009589	271.1607	88.8152 14.29229132	576

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81920	87	61	A	87195.83073082	.000000058	00000-0	00000	0	0	1
8192	74.0091	149.5985	0306662	132.9963	228.7983	15.22796513				3
81920	87	61	A	87196.82226726	.00001033	00000-0	11389-4	0		5
8192	74.0062	147.5137	0308830	130.6807	232.1707	15.22971823				18

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Kosmos 1869

UAP: 16, juli

8214U	87 62	A	87197.24141578	.00000011	00000-0	00000	0	0	1
8214	82.5201		26.4927 0028731	281.7040	78.1562	14.75357038			0

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222U	87 63	A	87203.13648872	-	.00008388	57974-4	00000 0 0	1
222	51.5852	338.6684	0015687	112.3964	247.8106	16.24740617	1	
222U	87 63	A	87203.13649920	.	03039810	57816-4	10119-2 0	2
222	51.6179	338.6521	0015160	113.3616	246.9081	16.24715407	1	
222U	87 63	A	87203.25948008	.	03078441	57772-4	10119-2 0	3
222	51.6168	337.9738	0014952	113.5128	246.6026	16.24871076	3	
222U	87 63	A	87203.38247475	.	00713151	25539-3	10119-2 0	4
222	51.6227	337.3555	0046532	243.9634	110.4244	16.02760757	5	
222U	87 63	A	87203.44572862	.	00773444	30671-3	10119-2 0	5
222	51.6290	337.0203	0049984	244.4328	115.3330	16.03697150	6	
222U	87 63	A	87203.94414743	.	00065004	00000-0	83182-4 0	7
222	51.6321	334.3488	0050269	246.9238	112.5817	16.03859928	14	
222U	87 63	A	87204.81685795	.	00155706	19751-4	21840-3 0	10
222	51.6331	329.6724	0047996	254.6601	104.8723	16.02982409	28	

18222U	87 63	A	87205.06622052	.00704352	25000-3	96509-3	0	11
18222	51.6283	328.3432	0047817	256.8170	102.7444	16.03186352		32
18222U	87 63	A	87205.19087935	.00162749	00000-0	83647-3	0	12
18222	51.5838	327.6495	0048437	255.6659	96.2097	15.78449834		34
18222U	87 63	A	87205.88859289	.00155752	00000-0	83647-3	0	13
18222	51.6331	324.0776	0035620	296.9571	61.5546	15.78322354		45
18222U	87 63	A	87206.77516320	.00155941	00000-0	83647-3	0	15
18222	51.6350	319.4922	0035643	301.0694	58.2449	15.78347517		59
18222U	87 63	A	87207.78817430	.00156475	00000-0	83647-3	0	16
18222	51.6314	314.2613	0035543	304.3805	54.8377	15.78425728		75
18222U	87 63	A	87208.99104720	-.00238544	00000-0	-13515-2	0	17
18222	51.6288	308.0409	0036957	308.2943	50.6380	15.78372844		94
18222U	87 63	A	87208.99119416	.04555920	00000-0	14918-1	0	18
18222	51.5974	308.0318	0047984	305.4136	54.2133	15.79169978		94
18222U	87 63	A	87212.02987074	.04284529	00000-0	14918-1	0	21
18222	51.6350	292.3564	0036536	317.9024	41.3787	15.78739597		142

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Kosmos 1871

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18259U	87 65	A	87213.33141185	-.00001571	10929-4	00000	0 0	1
18259	97.0206	246.4439	0014895	272.9579	89.7461	16.31400894		1
18259U	87 65	A	87213.45362706	.00001585	11019-4	00000	0 0	2
18259	97.0333		246.5812	0033397	294.7085	65.0848	16.29284300	3
18259U	87 65	A	87213.88295428	.00606791	11068-4	11200-3	0	5
18259	97.0215	247.0475	0015493	264.5722	95.5642	16.31969242		10
18259U	87 65	A	87214.25078746	.00454588	10940-4	81325-4	0	6
18259	97.0202		247.4517	0015545	263.5266	96.3360	16.32292386	16
18259U	87 65	A	87214.66376800	.00520570	10975-4	87004-4	0	7
18259	97.0211	248.1258	0015745	261.3900	98.7136	16.32958812		26
18259U	87 65	A	87215.84394734	.00582599	10948-4	87004-4	0	8
18259	97.0187		249.2026	0015609	254.9593	105.1059	16.34068137	42
18259U	87065	A	87217.12926402	.00792997	00000-0	00000-0	0 0009	
18259	097.0250	250.6287	0016631	246.8142	113.2071	16.3594256500065		

18259U	87065	A	87217.12926402	.00792997	00000-0	00000-0	0	0010
18259	097.0250	250.6287	0016631	246.8142	113.2071	16.3594256500065		
18259U	87065	A	87217.31277116	.00693178	00000-0	00000-0	0	0011
18259	097.0233	250.8313	0017500	250.0138	109.9942	16.3612734600068		
18259U	87 65	A	87217.98531436	.00946710	11120-4	98888-4	0	11
18259	97.0204	251.5671	0015571	248.8173	111.2335	16.37381005		77
18259U	87 65	A	87218.65732176	.0090 904	11292-4	81870-4	0	12
18259	97.0187	252.3112	0015508	247.0434	112.8427	16.38605639		88
18259U	87 65	A	87219.57293976	.01168630	11048-4	04428-4	0	13
18259	97.0150	253.3276	0015586	245.9887	114.7025	16.40715663		103
18259U	87 65	A	87220.48711024	.02031336	10872-4	64428-4	0	14
18259	97.0146	254.3445	0014026	239.6685	120.9763	16.43570649		118
18259U	87 65	A	87220.54788193	.01644471	11422-4	50289-4	0	15
18259	97.0139	254.4130	0015196	245.7236	114.2051	16.43598983		119
18259U	87 65	A	87221.21718340	.02466359	11272-4	44207-4	0	16
18259	97.0138	255.1027	0014949	244.4769	116.2944	16.46627521		130
18259U	87 65	A	87221.52075989	.03142261	11658-4	41173-4	0	17
18259	97.0124	255.5029	0014418	248.7139	111.3748	16.48561319		135
18259U	87 65	A	87221.76343897	.04287526	11775-4	41173-4	0	18
18259	97.0147	255.7755	0014182	250.0723	110.1206	16.50643693		139

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~~259U 87 65 A 87222.06623723 .09708534 11416-4 53484-4 0 20~~

~~259 97.0064 256.1160 0013661 252.4887 107.7591 16.54791366 144~~

~~259U 87 65 A 87222.18705493 .11809786 11710-4 46554-4 0 21~~

~~259 97.0082 256.2573 0013844 254.2825 105.7574 16.57543265 146~~

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Progress 31

Upp: 3 aug

18283U	87 66	A	87215.91783713	-.00008277	57249-4	00000	0 0	1
18283	51.6340		272.4820	0048310	89.7626	270.9206	16.20355902	1
18283U	87 66	A	87216.04117553	.00571716	56841-4	21856-3	0	2
18283	51.6340		271.8034	0047740	89.5858	271.0418	16.20371582	3
18283U	87 66	A	87216.10284852	.00119339	57464-4	48128-4	0	3
18283	51.6332		271.4634	0047928	90.0995	270.5374	16.20342610	4
18283U	87 66	A	87216.16452266	.00027906	00000-0	48128-4	0	4
18283	51.6315		271.1260	0050718	217.1225	142.0038	15.99346359	5
18283U	87 66	A	87216.22711292	.00027585	00000-0	48128-4	0	5
18283	51.6344		270.7962	0050221	217.3870	142.3298	15.99206258	6
18283U	87 66	A	87216.91447424	.00027717	00000-0	48128-4	0	6
18283	51.6341		267.1310	0050061	220.9847	138.8742	15.99298691	17
18283U	87066	A	87217.03980474	.00027716	00000-0	00000-0	0 0007	
18283	051.6356		266.4700	0035519	239.9718	119.8437	15.9444056900018	

18283U	87 66	A	87217.77105016	.00018469	00000-0	45956-4 0	5
18283	51.6331	262.5990	0033163	241.9242	358.2249	15.94506718	31
18283U	87 66	A	87218.00488263	.00307889	00000-0	16030-2 0	5
18283	51.6294	261.4319	0037681	344.6746	153.1952	15.78485278	35
18283U	87 66	A	87219.87956570	.00310872	00000-0	16030-2 0	7
18283	51.6355	251.7409	0038172	351.7984	6.4853	15.78660595	65
18283U	87 66	A	87220.57610549	.00313296	00000-0	16030-2 0	8
18283	51.5897	248.1727	0039272	359.3571	0.2286	15.78759178	76
18283U	87 66	A	87265.93660412	.00016339	00000-0	81781-4 0	57
18283	51.6282	13.2186	0038953	173.5113	186.6034	15.79008276	792

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Kina 20

Upp: 5 augusti fr. Jiguan

Störtade: 23 aug.

8306U	87067	A	87217.31916136	.00000000	00000-0	00000-0	0	0001
8306	062.9599	000.5825	0170586	147.2085	214.0600	15.9577433300001		
8306U	87067	A	87217.50710301	.00000000	00000-0	00000-0	0	0002
8306	062.9482	359.8406	0169343	147.1609	214.1019	15.9621514000004		
8306U	87 67	A	87217.94548489	-.00005567	38514-4	00000 0 0		2
8306	62.9579	358.1407	0166966	147.4651	213.7735	15.97127724		0
8306U	87 67	A	87218.38374700	.00745506	39054-4	34364-3 0		3
8306	62.9529	356.4314	0162964	146.7006	215.0492	15.97863468		7
8306U	87 67	A	87218.57136401	.00425267	38498-4	19740-3 0		4
8306	62.9538	355.7056	0168535	146.7310	210.5079	15.96678829		10
8306U	87 67	A	87218.75992627	.05252837	38032-4	23719-2 0		6
8306	62.9514	354.9720	0168181	146.9687	214.2012	15.96907280		13
8306U	87 67	A	87218.83518676	.00352237	35692-4	16357-3 0		7
8306	62.9503	354.4815	0167620	146.6604	214.6125	15.96894310		1
8306U	87 67	A	87221.63889065	.00338044	38955-4	15229-3 0		14
8306	62.9551	343.7494	0160266	146.9670	214.1547	15.98743200		76

18306U	87 67	A	87222.51439402	.01034414	39051-4	46291-3	0	16
18306	62.9503	340.3304	0156819	145.8404	215.1730	15.99418930		84
18306U	87 67	A	87223.70159707	.00825582	39322-4	35330-3	0	20
18306	62.9501	335.6854	0149559	145.7605	215.3297	16.01379833		103
18306U	87067	A	87224.38823624	.00870607	00000-0	00000-0	0	0022
18306	062.9554	333.0017	0150203	146.5866	214.5693	16.0259069700008		
18306U	87067	A	87224.51302352	.00873810	00000-0	00000-0	0	0023
18306	062.9539	332.5125	0149511	146.3836	214.7731	16.0281168000116		
18306U	87 67	A	87225.13008100	.00908906	39124-4	36530-3	0	24
18306	62.9481	330.0551	0139653	145.5270	215.5857	16.04025760		126
18306U	87 67	A	87226.38240620	.01162596	39563-4	42133-3	0	28
18306	62.9474	325.1452	0130708	145.9351	215.0239	16.06821785		146
18306U	87 67	A	87226.69351361	.01164619	39842-4	40509-3	0	29
18306	62.9427	323.9172	0129408	146.1579	214.7924	16.07498839		151
18306U	87 67	A	87226.94229810	.01096810	39414-4	38187-3	0	30
18306	62.9464	322.9302	0126766	145.8074	215.1052	16.08024582		155
18306U	87 67	A	87227.75023767	.01201519	39974-4	38777-3	0	32
18306	62.9476	319.7314	0120845	145.7728	215.1338	16.09933424		168
18306U	87 67	A	87228.06071541	.01245947	40227-4	38826-3	0	33
18306	62.9474	318.4904	0118591	145.9466	214.9372	16.10713937		173

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parts. 1

18306U	87 67	A	87228.43308775	.01303365	40182-4	39345-3	0	34
18306	62.9471	317.0171	0115186	145.9333	214.9312	16.11687773		179
18306U	87 67	A	87228.74322717	.01353343	40153-4	39694-3	0	35
18306	62.9455	315.7824	0112320	145.8015	215.0455	16.12522882		184
18306U	87 67	A	87228.92923464	.01384665	39858-4	39745-3	0	36
18306	62.9453	315.0414	0110739	145.8324	215.0061	16.13035132		187
18306U	87 67	A	87229.54882777	.01394462	40198-4	38193-3	0	38
18306	62.9422	312.5625	0104469	145.7079	214.9787	16.14696372		197
18306U	87 67	A	87229.73460624	.01410193	40124-4	38041-3	0	39
18306	62.9422	311.8218	0102570	145.6594	215.1247	16.15204800		200
18306U	87 67	A	87229.92030473	.01454868	40239-4	38451-3	0	40
18306	62.9423	311.0799	0100764	145.7021	215.0754	16.15741712		203
18306U	87 67	A	87230.41518375	.01582992	40539-4	39049-3	0	41
18306	62.9417	309.0986	0096145	145.6077	215.1350	16.17260501		211
18306U	87 67	A	87232.82040607	.01991002	41418-4	28950-3	0	48
18306	62.9374	299.3978	0071231	145.8305	214.6641	16.26071502		250
18306U	87 67	A	87233.06629960	.02029879	41696-4	28950-3	0	49
18306	62.9384	298.3982	0066173	144.2923	216.3032	16.27223834		254

18306U	87 67	A	87233.43471046	.02609909	41424-4	28950-3	0	50
18306	62.9358	296.8906	0060493	144.7887	215.7268	16.29435737		260
18306U	87 67	A	87233.55742184	.02772225	41800-4	28950-3	0	51
18306	62.9400	296.3931	0058454	144.9486	215.5608	16.30109302		262
18306U	87 67	A	87233.92519658	.03600479	41642-4	28950-3	0	52
18306	62.9400	294.8904	0052385	147.5469	212.8956	16.32470127		268
18306U	87 67	A	87233.98644225	.03808361	41679-4	28950-3	0	53
18306	62.9401	294.6395	0051418	147.4762	212.9591	16.32913120		269
18306U	87 67	A	87234.29237656	.05352825	42138-4	28950-3	0	54
18306	62.9418	293.3808	0045560	144.7295	215.6906	16.35635187		274
18306U	87 67	A	87234.59772484	.11129935	42708-4	28950-3	0	55
18306	62.8725	292.1073	0044538	149.1820	211.1826	16.39700277		279
18306U	87 67	A	87234.65868697	.13597614	42926-4	28950-3	0	56
18306	62.8867	291.8582	0043582	151.0775	209.2815	16.41056658		280
18306U	87 67	A	87235.14418421	.26928420	43946-4	28950-3	0	57
18306	62.9320	289.8582	0017319	163.5307	188.0668	16.49216528		288
18306U	87 67	A	87235.20622957	.36245121	43597-4	28950-3	0	58
18306	62.8914	289.5717	0015304	160.5875	199.5923	16.51428735		289
18306U	87 67	A	87235.26669875	.62939738	44574-4	28950-3	0	59
18306	62.8736	289.3107	0012677	163.9162	196.2225	16.55736561		290

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Meteor 2-16

Upp: 18 aug

8312U	87 68	A	87230.16191723	.000000006	00000-0	00000	0 0	1
8312	82.5706		29.4865	0018543	270.5748	89.0337	13.84737799	1
18312U	87 68	A	87250.05260544	.00036510	00000-0	33004-1	0	35
18312	82.5571		13.7741	0011632	212.0172	146.7260	13.83358240	276

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Kosmos 1872

Upp: 19 aug

Ned: 30 aug

18314U	87 69	A	87231.34555243	-	.00001715	11780-4	00000	0	0	1
18314	72.8573		76.6955	0082076	89.0537	271.8314	16.08526730			1
18314U	87 69	A	87231.40777847	-	.00001731	12038-4	00000	0	0	2
18314	72.8626		76.5387	0082463	89.0487	271.9943	16.08484551			2
18314U	87069	A	87231.65658403	.	.00000676	00000-0	00000-0	0	0	0003
18314	072.8568		075.9031	0083008	088.1005	273.0260	16.0846914600006			
18314U	87 69	A	87231.78097089	.	.00153480	11483-4	10876-3	0		3
18314	72.8509		75.5786	0082850	87.9474	273.1573	16.08537371			8
18314U	87 69	A	87231.96919410	.	.00039023	20252-5	10876-3	0		5
18314	72.8642		75.1042	0103349	40.0852	320.5157	15.85151633			11
18314U	87 69	A	87232.78967482	.	.00156746	98532-5	43335-3	0		6
18314	72.8660		73.0723	0102819	37.5178	323.1752	15.85176785			24
8314U	87 69	A	87235.87009656	.	.00074438	00000-0	61153-4	0		16
8314	72.8672		65.3702	0020685	151.2940	208.9685	16.13192302			73
18314U	87 69	A	87236.92430501	.	.00071656	00000-0	58396-4	0		17
18314	72.8691		62.6502	0020702	148.6946	311.4492	16.13316116			8

183140	87 69	A	87238.41248349	.00112225	00000-0	89305-4 0	19
18314	72.8637		58.8107 0020124	145.9219	214.3770	16.13575178	114
183140	87 69	A	87237.45444596	.00083867	00000-0	67554-4 0	18
18314	72.8660		60.2506 0020655	146.5057	213.7288	16.13451005	105
183140	87 69	A	87239.77638813	.00132339	11477-4	10598-3 0	21
18314	72.8628		55.2883 0020090	143.2719	216.9534	16.13827950	136
183140	87 69	A	87240.95410922	.00133872	11692-4	10598-3 0	22
18314	72.8645		52.2463 0019655	141.4338	218.4499	16.14011868	156
183140	87 69	A	87241.88391862	.00083216	00000-0	64255-4 0	24
18314	72.8654		49.8458 0019404	138.6604	221.6013	16.14117324	170

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Kiku 5 (ETS-5)

Upp: 27 aug

med H-1-raket

18316U 87 70 A 87252.52060567 -.00000266 00000-0 99999-4 0 20

~~18316 0.1618 399.6955 0956287 339.5820 46.6370 0.99727708 545~~

18316U 87 70 A 87256.60754951 -.00000137 00000-0 99999-4 0 31

~~18316 0.1257 309.8052 0010085 329.9410 80.1434 1.00412129 549~~

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Kosmos 1873

Upp: 28 augusti

Ned: 14 sept

183180	87 71	A	87240.49485563	-.00005167	35745-4	00000 0 0	1
18318	64.8352	136.6264	0039985	59.0913	312.8425	16.22247349	1
183180	87 71	A	87240.40289936	-.00005213	36171-4	00000 0 0	2
8318	64.8252	136.6376	0049302	57.9583	302.5663	16.23228825	1
183180	87 71	A	87240.46452158	-.00005152	35578-4	00000 0 0	3
8318	64.8385	136.3750	0058938	59.4765	300.3401	16.21330518	2
183180	87 71	A	87240.46452158	-.00005152	35578-4	00000 0 0	4
18318	64.8385	136.3750	0058938	59.4765	300.3401	16.21330518	2
183180	87 71	A	87241.81981329	.00373631	35737-4	12141-3 0	5
18318	64.8252	134.3058	0053924	61.8524	299.3163	16.21750481	11
180	87 71	A	87241.82123602	.00311208	35403-4	97722-4 0	7
18	64.8229	131.2804	0053073	61.1913	299.3275	16.22264375	24
183180	87 71	A	87242.80741458	.01741214	35365-4	51480-3 0	8
18318	64.8257	127.5554	0051008	60.2840	300.5430	16.23045549	40

183180	87 71	A	87243.05378021	.00416687	35557-4	12322-3 0	9
18318	64.8238		126.6221 0050603	60.7253	299.5554	16.23197151	44
183180	87 71	A	87243.60825926	.00404603	35873-4	11608-3 0	10
18318	64.8210		124.5249 0050020	59.8717	300.6205	16.23599804	53
183180	87 71	A	87244.03940408	.00398873	35986-4	11215-3 0	11
18318	64.8200		122.8924 0049057	59.8467	300.7416	16.23943010	60
183180	87 71	A	87244.03940408	.00398373	35986-4	11215-3 0	12
18318	64.8200		122.8924 0049057	59.8467	300.7416	16.23943010	50
183180	87 71	A	87244.77324636	.00446453	35849-4	11994-3 0	13
18318	64.8192		120.0925 0047520	59.6076	300.9830	16.24607966	72
183180	87 71	A	87245.08600298	.00473259	35329-4	12397-3 0	14
18318	64.8207		118.9245 0047080	58.5518	302.0309	16.24920394	77
183180	87 71	A	87245.33216911	.00478579	36075-4	12303-3 0	15
18318	64.8210		117.9915 0046307	58.4371	302.1364	16.25150591	31
183180	87 71	A	87246.56253591	.00531804	36012-4	12259-3 0	17
18318	64.8324		113.3342 0046704	49.3605	311.1748	16.26253522	101
180	87 71	A	87246.93148497	.00521684	35952-4	12259-3 0	18
18	64.8210		111.9229 0043387	58.8540	301.6888	16.26500407	107
180	87 71	A	87247.23889014	.00539737	36177-4	12259-3 0	19
18	64.8204		110.7549 0043676	56.2927	304.2287	16.26805339	112
183180	87 71	A	87247.91502405	.00419882	36330-4	91959-4 0	21
18318	64.8209		108.1856 0042776	58.1141	302.4135	16.27312375	123

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1818U	87 71	A	87248.09938215	.00365708	36015-4	79718-4	0	22
1818	64.8206	107.4800	0041808	57.3570	303.1769	16.27486610		126
1818U	87 71	A	87248.59090791	.00530635	36190-4	11058-3	0	23
1818	64.8218	105.6078	0040998	56.6513	303.9406	16.28002416		134
18318U	87 71	A	87249.81900836	.00563758	36210-4	10615-3	0	27
18318	64.8188	100.9291	0038460	56.4128	304.0792	16.29300750		154
18318U	87 71	A	87251.41400195	.00653213	36252-4	10454-3	0	28
18318	64.8175		94.8355 0035370	55.8706	304.5820	16.31206111		180
18318U	87 71	A	87251.78179681	.00683643	36488-4	10467-3	0	29
18318	64.8176	93.4284	0034635	55.5061	304.9403	16.31701995		186
18318U	87071	A	87252.39456252	.00638589	00000-0	00000-0	0	0031
18318	64.8200	091.0761	0040789	060.5735	299.9405	16.3247421000196		18318U
18318U	87 71	A	87252.76200221	.00786195	36584-4	10469-3	0	31
18318	64.8147		89.6817 0032968	53.2762	307.1594	16.33161774		202
18318U	87 71	A	87253.25176234	.00914231	36403-4	11467-3	0	33
18318	64.8164	87.7888	0030509	52.2536	308.1633	16.33963979		210
18318U	87 71	A	87253.25176234	.00914231	36403-4	11467-3	0	34
18318	64.8164		87.7888 0030509	52.2536	308.1633	16.33963979		210

18318U	87 71	A	87253.68009116	.00799862	36752-4	94170-4	0	35
18318	64.8170		86.1455 0029538	52.0420	308.2458	16.34639409		217
18318U	87 71	A	87253.86363069	.01042793	36382-4	11832-3	0	36
18318	64.8180		85.4366 0028198	52.8353	307.6338	16.35090020		220
18318U	87 71	A	87254.23950021	.01176581	36987-4	12321-3	0	37
18318	64.8155		84.0246 0026806	52.5006	307.8673	16.35924896		226
18318U	87 71	A	87254.59717763	.01403547	36691-4	12506-3	0	38
18318	64.8166		82.6137 0026582	51.5578	308.8030	16.36918324		232
18318U	87 71	A	87255.39084956	.01884534	37129-4	11103-3	0	41
18318	64.8145		79.5475 0022752	51.1152	309.2058	16.39309266		245
18318U	87 71	A	87255.63480804	.01674554	37250-4	89932-4	0	42
18318	64.8135		78.5970 0020742	50.8751	309.3727	16.40048346		249
18318U	87 71	A	87256.48760835	.02201258	37447-4	65989-4	0	44
18318	64.8175		75.2880 0016826	47.5274	312.2635	16.43401377		263
18318U	87 71	A	87256.08672850	.01539566	37306-4	10835-3	0	40
18318	64.8135		80.7261 0024344	51.3942	308.9454	16.38279398		240
18318U	87 71	A	87257.15632180	.04461668	38166-4	69568-4	0	47
18318	64.8137		72.6764 0013364	45.8469	314.3621	16.47393749		274
18318U	87 71	A	87257.46960116	.07290259	38072-4	69766-4	0	48
18318	64.8125		71.4872 0012137	44.5991	315.6172	16.50547207		279
18318U	87071	A	87257.58076479	.05772548	00000-0	00000-0	0	0040
18318	064.8190		071.0177 0010870	053.1157	307.0908	16.5173131600281		

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18318U	87071	A	87257.58076355	.05853724	00000-0	00000-0	0	0050
18318	064.7981		070.9996	0011652	058.0723	302.1473	16.517364	2900281
18318U	87071	A	87257.70178093	.07208994	00000-0	00000-0	0	0051
18318	064.7330		070.4670	0013503	079.3905	200.8692	16.53552797	00203
18318U	87 71	A	87257.88306547	.16306064	38572-4	53555-4	0	51
18318	64.8109		69.8117	0005611	24.0494	336.7331	16.58837779	286

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Upp: 3 sept

Ned: 17 sept

18326U	87 72	A	87246.42573840	-	.00001732	11962-4	00000 0 0	1
18326	72.6787	143.0828	0084041	87.8496	273.0872	16.08340967	0	
18326U	87 72	A	87246.48794718	.00222519	11956-4	15999-3 0	2	
18326	72.8664	142.9117	0084021	86.4907	274.4861	16.08129031	1	
18326U	87 72	A	87246.79899618	.00221630	11943-4	15999-3 0	3	
18326	72.8615	142.1074	0082604	87.4052	273.6971	16.08303558	6	
8326U	87 72	A	87247.67088625	.00061086	00000-0	70416-4 0	5	
8326	72.8563	139.8876	0047096	72.6788	287.9458	16.06233704	20	
326U	87 72	A	87247.92002145	.00061003	00000-0	70416-4 0	6	
526	72.8577	139.2511	0040750	72.6403	287.9776	16.06246521	24	
26U	87 72	A	87248.85424101	.00037714	00000-0	43519-4 0	7	
26	72.8579	136.8639	0046802	70.0447	290.5530	16.06325740	39	
18326U	87 72	A	87249.85070662	.00038144	00000-0	43866-4 0	8	
18326	72.8574	134.3180	0046535	67.2852	293.3480	16.06403908	55	

18326U	87 72	A	87250.59801657	.00020900	00000-0	24123-4	0	9
18326	72.8560	132.4066	0046237	64.9780	295.6439	16.06467994	67	18
18326U	87 72	A	87250.84711120	.00036871	00000-0	42249-4	0	18
18326	72.8575	131.7705	0046359	64.8560	295.7307	16.06478206	71	18
18326U	87 72	A	87251.84348044	.00041748	00000-0	47530-4	0	18
18326	72.8588	129.2225	0046240	62.1018	298.4732	16.06506822	87	18
18326U	87 72	A	87253.83603646	.00037287	00000-0	42164-4	0	13
18326	72.8527	124.1270	0046784	56.3931	304.1032	16.06731872	110	18
18326U	87 72	A	87255.82832531	.00037848	00000-0	42164-4	0	18
18326	72.8511	119.0254	0045776	51.9010	308.6347	16.06955897	151	18
18326U	87 72	A	87256.88664667	.00136385	10739-4	15155-3	0	16
18326	72.8611	116.3231	0045506	40.9211	311.7970	16.07130186	166	18
18326U	87072	A	87257.82035178	.00034571	00000-0	00000-0	0	0017
18326	072.8522	113.9362	0046146	047.2977	313.2657	16.0717049900183		
18326U	87072	A	87257.94484179	.00045868	14938-4	00000-0	0	0018
18326	072.8532	113.6195	0046001	046.7553	313.8034	16.0720097100189		
18326U	87 72	A	87257.88259030	.00022791	00000-0	25189-4	0	18
18326	72.8612	113.7748	0045183	46.4618	314.0586	16.07208191	184	18
18326U	87072	A	87258.94075623	.00044394	76485-5	00000-0	0	0019
18326	072.8531	111.0712	0045892	044.0506	316.4899	16.0728947800201		

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Kina 21

Upp: 9 sept fr. Jiquan

Frekvens: 179.985, 393.675, 479.970 MHz

341U	87 75	A	87252.34403050	-	.00000658	00000-0	00000	0	0	1
341	62.9933		44.1178		0078173	156.7070	203.7990	16.06073968		1
341U	87 75	A	87252.40628685	-	.00000658	00000-0	00000	0	0	2
341	62.9937		43.8727		0078176	156.7247	203.7466	16.06072091		2
341U	87 75	A	87252.59307404	-	.00000673	00000-0	00000	0	0	3
341	62.9915		43.1340		0079984	156.7480	204.7914	16.06142910		6
341U	87 75	A	87253.65131830	-	.00207780	12986-4	17767-3	0		6
341	62.9918		38.9625		0078733	157.1097	203.1728	16.06536641		22
341U	87 75	A	87256.88087744	.	.00202725	13160-4	16828-3	0	0	12
341	62.9903		26.2035		0073158	157.1997	203.3082	16.07758176		74
8341U	87075	A	87258.13064006	.	.00195419	00000-0	00000-0	0	0	0013
8341	062.9910		021.2953		0072525	158.3518	202.1522	16.08232504	000094	
8341U	87075	A	87258.87671338	.	.00197171	59801-5	00000-0	0	0	0014
8341	062.9924		018.3452		0073122	158.8362	201.6637	16.08526483	000104	

18341U	87 75	A	87260.30630981	.17611069	12781-4	13735-1 0	17
18341	62.9711		12.6951 0065708	155.8990	204.5598	16.09418967	129
18341U	87 75	A	87260.80066105	.38063305	41913-4	47595-2 0	18
18341	63.0117		10.7352 0033168	155.9430	202.5929	16.33581376	137
18341U	87 75	A	87261.67783810	.00420814	14295-4	30494-3 0	19
18341	62.9779		7.2641 0065276	154.8395	235.0515	16.10548330	151
18341U	87 75	A	87261.92110016	.00415557	13730-4	29811-3 0	20
18341	62.9750		6.2941 0064767	154.8328	205.6016	16.10747406	155
18341U	87 75	A	87262.54182151	.00472075	14151-4	33165-3 0	22
18341	62.9754		3.8258 0063072	155.1474	205.2617	16.11237613	165
18341U	87 75	A	87263.65858135	.00407925	40279-4	27657-3 0	23
18341	62.9755		359.3922 0060407	154.8219	205.2319	16.12141628	183
18341U	87 75	A	87264.89876107	.00484712	40188-4	30639-3 0	26
18341	62.9735		354.4588 0058127	154.6601	205.7453	16.13307621	203
18341U	87 75	A	87265.02272148	.00488659	39995-4	30683-3 0	27
18341	62.9733		353.9656 0057825	154.6430	205.7565	16.13430043	205
18341U	87 75	A	87265.27063205	.00446999	40136-4	27874-3 0	28
18341	62.9735		352.9808 0057169	155.8293	204.6207	16.13616590	209
18341U	87 75	A	87265.70435369	.00468467	40159-4	28131-3 0	29
18341	62.9699		351.2433 0057440	154.6227	205.7918	16.14050242	216
18341U	87 75	A	87266.01408660	.00473914	40262-4	27996-3 0	30
18341	62.9721		350.0157 0056527	154.6573	205.7497	16.14372464	221

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Ekran 16

HP: 3 sept

8333U	87 73	F	87259.73456886	.00000522	00000-0	24386-3 0	3
8333	47.3969	282.0264	7259577	0.8517	0.0760	2.29516047	4
9U	87 73	U	87248.51639278	.02927179	58981-4	33864-3 0	7
9	51.0161	273.8091	0004373	197.4081	163.1659	16.35984580	28
8328U	87 73	A	87249.76436923	.00000260	00000-0	99999-4 0	9
8328	0.4387	274.7505	0017567	70.0820	15.1817	1.00184096	3
328U	87 73	A	87252.76238133	-.00000267	00000-0	99999-4 0	12
328	0.4481	277.9319	0002998	39.0143	43.9193	1.00292161	6
328U	87 73	A	87272.70192173	-.00000273	00000-0	99999-4 0	20
328	0.3782	277.0177	0003236	27.4045	55.5719	1.00285347	26

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Kosmos 1875-1880

Upp: 7 sept fr. Pleseetsk

18334U	87 74	A	87251.05809832	.000000004	00000-0	00000 0 0	1
18334	82.5446		10.8686 0032359	199.6548	160.3877	12.65235206	0
18335U	87 74	B	87251.13712141	.000000004	00000-0	00000 0 0	1
18335	82.4773		10.8220 0023552	75.4929	283.8541	12.64797257	2
18336U	87 74	C	87251.29514985	.000000004	00000-0	00000 0 0	0
18336	82.5402		10.6992 0027676	167.3570	190.2767	12.65109200	3
18337U	87 74	D	87251.37463518	.000000004	00000-0	00000 0 0	1
18337	82.5733		10.6955 0005344	13.3086	346.3724	12.63937913	5
18338U	87 74	E	87251.45317793	.000000004	00000-0	00000 0 0	1
18338	82.5751		10.6399 0009000	28.3853	329.4393	12.64555737	6
18339U	87 74	F	87251.45317793	.000000004	00000-0	00000 0 0	1
18339	82.5058		10.6403 0011429	23.2166	335.4950	12.65138434	6

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King 21

forts. 1

18341U	87 75	A	87266.32375358	.00510923	40308-4	30150-3	0	31
18341	62.9713	348.7784	0053605	154.2127	206.2007	16.14744786		226
18341U	87 75	A	87266.69526005	.00555606	39927-4	31542-3	0	32
18341	62.9727	347.2935	0053860	153.9862	206.4050	16.15185335		232
18341U	87 75	A	87266.88097932	.00563159	40257-4	31549-3	0	33
18341	62.9728	346.5514	0053498	153.9904	206.3919	16.15394936		235
18341U	87 75	A	87271.33006890	.00753181	40893-4	28962-3	0	43
18341	62.9718	328.7095	0039529	155.4839	204.9352	16.21515053		307
18341U	87 75	A	87271.57669753	.00877319	40305-4	32716-3	0	44
18341	62.9738	327.7150	0038345	155.1132	205.2413	16.21982164		311
18341U	87 75	A	87271.94652240	.00721153	40484-4	25633-3	0	45
18341	62.9714	326.2252	0039591	154.8595	205.2275	16.22414779		317
18341U	87 75	A	87272.43953130	.01035090	41082-4	34495-3	0	46
18341	62.9719	324.2308	0035444	155.9706	205.0055	16.23553584		325
18341U	87 75	A	87272.56258632	.01049618	40533-4	34495-3	0	47
18341	62.9659	323.7288	0034720	155.5809	204.6872	16.23781679		327
18341U	87 75	A	87273.48577948	.01234831	41557-4	34495-3	0	48
18341	62.9707	319.9942	0030884	155.8887	204.5279	16.25943894		342

18341U	87 75	A	87274.03900536	.01394000	41511-4	34495-3 0	50
18341	62.9679		317.7500	0028117	158.0484	202.2395	16.27494201 351
18341U	87075	A	87274.28472761	.01362937	00000-0	00000-0 0	0051
18341	062.9646		316.7496	0029888	159.8744	200.4431	16.2815509100355

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18341U	87076	A	87258.87671338	.00197171	59801-5	00000-0	0	0014
18341	062.9924	018.3452	0073122	158.8362	201.6637	16.0852648300106		
18343U	87 76	A	87260.17174522	.00215623	29030-4	21821-3	0	15
18343	64.7616	34.0379	0030860	82.0724	278.3296	16.09619636		100
18343U	87 76	A	87260.91724982	.00210705	28369-4	20932-3	0	16
18343	64.7589	31.2662	0030553	81.5302	278.8770	16.09922818		112
18343U	87 76	A	87261.91103240	.00208943	28112-4	20235-3	0	17
18343	64.7595	27.5699	0030127	80.3561	280.0370	16.10328920		126
18343U	87 76	A	87262.84247950	.00203545	27369-4	19264-3	0	18
18343	64.7609	24.1022	0029772	79.0032	281.3697	16.10697093		141
18343U	87 76	A	87265.94572283	.00209900	29410-4	18228-3	0	24
18343	64.7612	12.5369	0027988	75.4273	285.1118	16.12064397		191
18343U	87 76	A	87266.81411506	.00196567	98238-5	18228-3	0	25
18343	64.7751	9.3037	0061801	190.4476	169.3028	16.07812277		205
18343U	87 76	A	87270.93018998	.00125073	12453-4	17503-3	0	35
18343	64.7602	354.1352	0036994	88.7298	271.8077	16.04266476		271

343U	87 76	A	87271.80286301	.00145518	15082-4	20049-3 0	37
343	64.7597	350.9163	0036619	88.3275	272.2268	16.04512022	386
343U	87 76	A	87273.36086421	.00142672	14628-4	19187-3 0	37
343	64.7605	345.1658	0035864	87.2181	273.3045	16.04953178	310
343U	87 76	A	87273.85933381	.00157223	16790-4	20882-3 0	38
343	64.7591	343.3270	0035915	87.5743	273.0181	16.05129759	318
3343U	87 76	A	87277.78308919	.00150212	16180-4	18682-3 0	44
3343	64.7585	328.8245	0033616	84.0703	276.4477	16.06340945	381
3U	87 76	A	87278.90360236	.00151546	16544-4	18457-3 0	45
3	64.7581	324.6780	0033239	84.1609	276.3729	16.06694338	399
3U	87 76	A	87279.83717004	.00153813	16935-4	18457-3 0	47
3	64.7591	321.2226	0032726	82.8619	277.5712	16.06957183	414
8343U	87 76	A	87281.89049848	.00167499	19214-4	19264-3 0	49
8343	64.7587	313.6179	0032318	82.1248	278.4793	16.07624229	447
8343U	87 76	A	87282.13933224	.00050140	00000-0	56830-4 0	52
8343	64.7557	312.6935	0031976	81.6610	279.0025	16.07676865	451
8343U	87 76	A	87282.45032669	.00194719	23904-4	22086-3 0	53
8343	64.7597	311.5403	0031792	81.8852	278.6995	16.07848209	456
8343U	87 76	A	87282.88567934	.00163337	18723-4	18413-3 0	54
8343	64.7553	309.9290	0031643	80.3993	280.0333	16.07982576	463

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for 15.7

18343U	87 76	A	87283.88068791	.00188252	23019-4	20657-3	0	55
18343	64.7572	308.2365	0031661	81.1169	279.4638	16.08367232	479	
8343U	87 76	A	87285.49693435	.00261078	39196-4	27284-3	0	58
8343	64.7573	308.2320	0030397	80.0242	280.3618	16.09148390	505	
8343U	87 76	A	87285.86981786	.00245263	35400-4	25343-3	0	59
8343	64.7561	298.8487	0030611	79.2830	281.1231	16.09309531	511	
8343U	87 76	A	87286.92611800	.00236916	33834-4	23804-3	0	60
8343	64.7555	294.9237	0030015	78.7554	281.7394	16.09773995	528	
8343U	87 76	A	87287.60941369	.00218860	30108-4	21420-3	0	61
8343	64.7518	292.3834	0030694	78.6415	281.8305	16.10126501	539	
8343U	87 76	A	87288.04416406	.00205886	27617-4	19975-3	0	62
8343	64.7552	290.7637	0029571	78.8153	281.6949	16.10343556	540	
8343U	87076	A	87288.10626771	.00257398	00000-0	00000-0	0	0063
8343	064.7530	290.5309	0036842	079.8546	280.6676	16.1038930800547		
8343U	87 76	A	87288.47884879	.00270332	42980-4	25728-3	0	63
8343	64.7581	289.1467	0029450	78.7174	281.8091	16.10601248	553	
8343U	87 76	A	87291.82996027	.00262653	42457-4	22320-3	0	68
8343	64.7528	276.6542	0027222	76.1142	284.1876	16.12398816	607	

18343U	87 76	A	87292.88419730	.00273260	81024-5	22320-3 0	69
18343	64.7527	272.7200	0027068	76.3494	284.0293	16.12960438	624
18343U	87 76	A	87293.88058424	.00147246	14607-4	22320-3 0	72
18343	64.7535	269.0327	0041513	91.6956	268.9231	16.02577669	640
18343U	87 76	A	87295.93949715	.00125690	12347-4	18466-3 0	74
18343	64.7536	261.4519	0040755	91.0455	269.5148	16.03183674	673
18343U	87 76	A	87297.81057370	.00142520	14383-4	20289-3 0	77
18343	64.7551	254.5580	0039636	90.0960	270.5109	16.03752486	703
18343U	87 76	A	87298.87055212	.00185405	20740-4	25692-3 0	78
18343	64.7545	250.6498	0039399	89.3244	271.4160	16.04153162	720
18343U	87 76	A	87298.87055212	.00185405	20740-4	25692-3 0	79
18343	64.7545	250.6498	0039399	89.3244	271.4160	16.04153162	720
18343U	87 76	A	87299.86788425	.00160948	17095-4	21904-3 0	80
18343	64.7533	246.9700	0039071	89.2324	271.2733	16.04489582	736
18343U	87 76	A	87300.92736297	.00184505	20846-4	24524-3 0	82
18343	64.7531	243.0598	0038566	88.7084	271.8385	16.04879959	753
18343U	87 76	A	87307.90048426	.00495537	12743-3	54886-3 0	90
18343	64.7540	217.2586	0036170	87.9029	272.8521	16.07808126	865
18343U	87 76	A	87308.52233051	.00233233	32176-4	25473-3 0	91
18343	64.7522	214.9553	0035676	87.3836	272.7796	16.08108467	875

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parts. 2

343U	87 76	A	87309.33075955	.00142674	16407-4	15308-3 0	93
343	64.7538		211.9567 0035590	87.0690	273.4735	16.08468265	888
343U	87 76	A	87309.95245079	.00237664	33578-4	24858-3 0	95
343	64.7540		209.6495 0035342	86.7664	273.7856	16.08781867	898
343U	87 76	A	87310.88476066	.00255783	38328-4	25976-3 0	98
343	64.7540		206.1864 0034667	86.5705	274.0157	16.09265749	913
343U	87 76	A	87310.88476066	.00255783	38328-4	25976-3 0	99
343	64.7540		206.1864 0034667	86.5705	274.0157	16.09265749	913
343U	87 76	A	87312.87276610	.00244023	36128-4	23352-3 0	102
343	64.7519		198.7948 0033458	85.5795	274.9731	16.10240513	945
343U	87 76	A	87313.92839929	.00255040	39237-4	23625-3 0	103
343	64.7491		194.8634 0032675	85.5512	274.9463	16.10770309	962
343U	87 76	A	87314.85955285	.00273039	44502-4	24433-3 0	104
343	64.7521		191.3933 0032281	85.8191	274.7410	16.11293944	977
343U	87 76	A	87315.85242787	.00283884	80821-5	24459-3 0	105
343	64.7498		187.6907 0031688	85.1924	275.3484	16.11870878	993

18343U	87 76	A	87315.85241720	.00283908	79593-5	24459-3	0	106
18343	64.7498		187.6925 0031726	85.3856	275.0886	16.11867846		993
18343U	87 76	A	87316.84494796	.00295162	82205-5	24459-3	0	107
18343	64.7492		183.9889 0031065	84.9252	275.6336	16.12467789		1009
18343U	87 76	A	87317.27904499	.00271684	83961-5	22101-3	0	108
18343	64.7499		182.3678 0030918	84.7303	275.7984	16.12752140		1016
18343U	87 76	A	87318.02374388	.00392321	74325-4	59293-3	0	110
18343	64.7543		179.5903 0039381	93.5591	267.0181	16.02690074		1028
18343U	87 76	A	87318.39815204	.00121677	11744-4	18486-3	0	111
18343	64.7524		178.2146 0040283	92.1248	268.4475	16.02688616		1034
18343U	87 76	A	87318.83493426	.00170555	17954-4	25574-3	0	112
18343	64.7537		176.6078 0040151	91.6155	269.0089	16.02841948		1041
18343U	87 76	A	87318.89731901	.00151104	15244-4	22655-3	0	113
18343	64.7529		176.3774 0040254	91.8074	268.7706	16.02856938		1042
18343U	87 76	A	87318.89731901	.00151104	15244-4	22655-3	0	114
18343	64.7529		176.3774 0040254	91.8074	268.7706	16.02856938		1042
18343U	87 76	A	87319.83312777	.00140147	13900-4	20730-3	0	115
18343	64.7513		172.9315 0039760	90.8333	269.7353	16.03130816		1057
18343U	87 76	A	87320.64403848	.00064088	00000-0	91920-4	0	117
18343	64.7491		169.9418 0039701	90.1121	270.4605	16.03328845		1070

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8343U	87 76	A	87320.95590703	.00141254	14198-4	20502-3	0	118
8343	64.7511	168.7960	0039561	90.3529	270.2874	16.03451551		1074
8343U	87 76	A	87321.95372094	.00134055	13394-4	19197-3	0	119
8343	64.7501	155.1166	0039166	90.3195	270.1830	16.03711041		1090
8343U	87 76	A	87322.88905172	.00135853	13591-4	19155-3	0	120
8343	64.7489	161.6677	0039077	89.7637	270.7818	16.03960392		1106
8343U	87 76	A	87323.88656793	.00164001	17407-4	22626-3	0	121
8343	64.7493	157.9884	0039006	89.4360	271.1763	16.04274505		1122
8343U	87 76	A	87324.88385938	.00168077	18267-4	22774-3	0	122
8343	64.7493	154.3083	0038421	88.4061	272.1446	16.04606454		1138
8343U	87 76	A	87326.87784935	.00172354	19078-4	22501-3	0	124
8343	64.7484	146.9449	0037531	87.0437	273.4579	16.05258092		1170
8343U	87 76	A	87327.93682610	.00209274	25545-4	26626-3	0	125
8343	64.7465	143.0313	0036977	86.2079	274.3714	16.05673030		1187
8343U	87 76	A	87328.87095447	.00228205	29703-4	28277-3	0	126
8343	64.7491	139.5764	0036551	85.5564	275.0228	16.06108792		1202
8343U	87 76	A	87329.92931503	.00328396	56341-4	39531-3	0	127
8343	64.7489	135.6619	0035968	84.8493	275.5469	16.06566285		1219

18343U	87 76	A	87329.92931503	.00328396	56341-4	39531-3	0	128
18343	64.7489		135.6619	0035968	84.8493	275.5469	16.06566285	1219
18343U	87 76	A	87330.55174481	.00082443	94921-5	10021-3	0	129
18343	64.7458		133.3555	0035428	84.1204	276.1441	16.06741212	1229
18343U	87 76	A	87330.80075397	.00085932	00000-0	99925-4	0	130
18343	64.7505		132.4333	0035107	84.0838	276.5346	16.06907402	1233
18343U	87 76	A	87330.92520684	.00216393	27687-4	25514-3	0	131
18343	64.7472		131.9740	0035454	84.3741	276.1547	16.06968107	1235
18343U	87 76	A	87331.85858419	.01717843	22080-2	20381-2	0	132
18343	64.7486		128.5154	0034475	83.5997	276.8919	16.07435932	1250
18343U	87 76	A	87331.85858419	.00222063	29113-4	25514-3	0	133
18343	64.7486		128.5154	0034475	83.5997	276.8919	16.07435932	1250
18343U	87 76	A	87332.41849599	.00222016	29300-4	25209-3	0	134
18343	64.7437		126.4395	0034203	82.7795	277.7213	16.07637914	1259
18343U	87 76	A	87332.91612050	.00229711	31108-4	25770-3	0	135
18343	64.7482		124.5935	0033602	82.2855	278.2042	16.07861910	1267
18343U	87 76	A	87333.84897463	.00202704	25788-4	22273-3	0	136
18343	64.7474		121.1320	0033236	81.8938	278.4322	16.08221667	1282
18343U	87 76	A	87334.90600006	.00193915	24288-4	20843-3	0	137
18343	64.7473		117.2082	0032488	81.0669	279.3099	16.08615898	1299

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343U	87 76	A	87335.90060872	.00193930	24559-4	20363-3	0	138
343	64.7455		113.5147 0032120	80.4213	280.0157	16.08995990		1315
343U	87 76	A	87337.01923853	.00207558	27448-4	21161-3	0	139
343	64.7451		109.3571 0031563	79.5559	280.9346	16.09467134		1333
343U	87 76	A	87338.88288659	.00243104	35622-4	23530-3	0	141
343	64.7469		102.4271 0030371	77.8859	282.6697	16.10298829		1363
343U	87 76	A	87339.44176226	.00611330	20516-3	58114-3	0	142
343	64.7482		100.3466 0029854	76.7296	283.6542	16.10562845		1372
343U	87 76	A	87339.75220776	.00178345	22597-4	16894-3	0	143
343	64.7480		99.1885 0029662	77.0179	283.3102	16.10712313		1377
343U	87 76	A	87340.86964507	.00268115	42906-4	24369-3	0	146
343	64.7472		95.0267 0029158	76.4755	284.1076	16.11294090		1395
343U	87 76	A	87341.61432045	.00263020	41712-4	23438-3	0	147
343	64.7471		92.2474 0028568	76.2353	284.0384	16.11622237		1407
343U	87 76	A	87341.92459989	.00197301	26660-4	17504-3	0	148
343	64.7476		91.0910 0028460	75.6602	284.7305	16.11732244		1412
343U	87 76	A	87342.85523827	.00181230	23935-4	15714-3	0	149
343	64.7469		87.6195 0027798	74.7917	285.6761	16.12123248		1427

18343U	87 76	A	87342.85523827	.00181230	23935-4	15714-3	0	150
18343	64.7469		87.6195 0027798	74.7917	285.6761	16.12123248		1427
18343U	87 76	A	87343.84766553	.00195937	27062-4	16542-3	0	151
18343	64.7455		83.9150 0027163	73.7721	286.7259	16.12537300		1443
18343U	87 76	A	87343.97168609	.00149772	16896-4	16542-3	0	153
18343	64.7599		83.4665 0028433	102.2741	256.7210	16.08528574		1445
18343U	87 76	A	87344.15845041	.00127214	13560-4	16542-3	0	155
18343	64.7438		82.7654 0046670	99.3711	258.6288	16.04590149		1448
18343U	87 76	A	87344.90676844	.00128629	13811-4	16542-3	0	157
18343	64.7462		79.9996 0046145	99.4016	261.2577	16.04810101		1460
18343U	87 76	A	87345.65452217	.00108346	11828-4	13731-3	0	158
18343	64.7460		77.2368 0046058	99.2958	261.5013	16.05093538		1472
18343U	87 76	A	87345.96601759	.00186778	22006-4	23343-3	0	159
18343	64.7404		76.0910 0045600	98.4725	262.2003	16.05224034		1477
18343U	87 76	A	87346.65126426	.00173478	20035-4	21409-3	0	160
18343	64.7459		73.5554 0045377	98.4570	262.1011	16.05453491		1488
8343U	87 76	A	87346.90043791	.00175135	20340-4	21512-3	0	161
8343	64.7447		72.6352 0045244	98.2063	262.4179	16.05536274		1492
8343U	87 76	A	87347.89694786	.00163366	18579-4	19736-3	0	162
8343	64.7448		68.9497 0044758	98.2348	262.2867	16.05847922		1508

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18343U	87 76	A	87348.89328873	.00149038	16812-4	17751-3 0	163
18343	64.7443		65.2049 0044275	97.7527	262.7429	16.06131485	1524
18343U	87 76	A	87349.88946640	.00147549	16655-4	17317-3 0	164
18343	64.7448		61.5778 0043591	97.1232	263.4452	16.06420707	1540
18343U	87 76	A	87352.87645666	.00202289	25856-4	22056-3 0	168
18343	64.7444		50.5083 0041267	95.1884	265.2500	16.07683271	1588
8343U	87 76	A	87352.87645666	.00202289	25856-4	22056-3 0	169
8343	64.7444		50.5083 0041267	95.1884	265.2500	16.07683271	1588
8343U	87 76	A	87353.87164381	.00206352	27127-4	22056-3 0	170
8343	64.7452		46.8176 0040539	93.8807	266.5501	16.08045957	1604
8343U	87 76	A	87354.86660400	.00188007	23719-4	19681-3 0	171
8343	64.7439		43.1260 0039933	93.5444	266.9430	16.08421590	1620
18343U	87 76	A	87357.04217489	.00241374	35351-4	23781-3 0	174
18343	64.7425		35.0428 0038551	92.5155	267.9828	16.09401653	1655
18343U	87 76	A	87357.72564410	.00223220	31492-4	21620-3 0	175
18343	64.7425		32.4980 0037881	91.6962	268.8344	16.09719875	1666
18343U	87 76	A	87357.84989912	.00224295	31726-4	21668-3 0	176
18343	64.7434		32.0365 0037715	91.3685	269.1745	16.09771677	1668

8343U	87 76	A	87358.90586495	.00223349	79798-5	20924-3 0	177
8343	64.7423		28.1079 0037282	90.7611	269.7945	16.10251509	1685
18343U	87 76	A	87359.89942729	.00225637	82199-5	20530-3 0	178
18343	64.7419		24.4073 0036857	90.4838	270.0811	16.10709533	1701
18343U	87 76	A	87361.94773716	.00221621	84009-5	19003-3 0	180
18343	64.7414		16.7733 0035891	89.8945	270.5711	16.11641868	1734
18343U	87 76	A	87363.00248979	.00249729	85403-5	20818-3 0	181
18343	64.7413		12.8377 0035060	88.9189	271.5003	16.12094003	1751
18343U	87 76	A	87364.36745253	.00135021	14293-4	17877-3 0	184
18343	64.7422		7.7481 0050211	95.2296	264.4408	16.03944776	1773
18343U	87 76	A	87364.86641192	.00135704	14602-4	17877-3 0	185
18343	64.7411		5.9041 0049634	95.0097	265.6927	16.04085157	1781
18343U	87 76	A	87365.86384351	.00138038	14956-4	17877-3 0	186
18343	64.7409		2.2239 0049530	94.7947	265.8628	16.04354701	1797
18343U	87 76	A	88 1.92342536	.00140224	15204-4	17877-3 0	187
18343	64.7406		358.3110 0048876	94.1302	266.5313	16.04656410	1814
18343U	87 76	A	88 3.41897309	.00240472	32682-4	29416-3 0	189
18343	64.7426		352.7848 0048450	93.3436	267.5349	16.05240992	1838
18343U	87 76	A	88 3.91730058	.00204628	25507-4	24800-3 0	190
18343	64.7397		350.9454 0048325	93.9768	266.5989	16.05416749	1846
18343U	87 76	A	88 4.60248244	.00127767	14219-4	15480-3 0	191
18343	64.7399		348.4089 0047551	93.2693	267.2379	16.05594957	1857

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8343U	87 76	A 88	4.85164976	.00164415	18965-4	19678-3	0	192
8343	64.7402	347.4886	0047786	93.0396	267.6490	16.05699871		1861
8343U	87 76	A 88	5.97259628	.00183615	22273-4	21442-3	0	193
8343	64.7417	343.3421	0047090	92.4669	268.2696	16.06122022		1879
8343U	87 76	A 88	6.90647037	.00195348	24428-4	22306-3	0	194
8343	64.7411	339.8862	0046624	92.0874	268.6185	16.06495144		1894
8343U	87 76	A 88	7.65340995	.00000304	00000-0	86397-6	0	195
8343	64.7578	337.1328	0046737	92.4142	268.3232	16.06711647		1906
8343U	87 76	A 88	7.90236818	.00000316	00000-0	86397-6	0	196
8343	64.7422	336.2010	0046403	91.8585	268.9930	16.06911417		1910
8343U	87 76	A 88	8.89799134	.00213099	28206-4	23090-3	0	198
8343	64.7414	332.5060	0045462	91.1255	269.8088	16.07379023		1926
8343U	87 76	A 88	9.89328254	.00225843	31176-4	23791-3	0	199
8343	64.7392	328.8189	0045025	90.4233	270.2338	16.07831640		1942
8343U	87 76	A 88	13.80973442	.00261542	81808-5	24652-3	0	204
8343	64.7392	314.2682	0042824	89.1946	271.0712	16.09641872		2005
8343U	87 76	A 88	13.87192260	.00191782	82692-5	18141-3	0	205
8343	64.7390	314.0360	0042874	88.9986	271.5906	16.09634572		2006

1343U	87076	A	88014.80372081	.00274957	00000-0	00000-0	0	0206
1343	064.7436		310.5579 0048147	088.8456	271.8125	16.1017849302021		
1343U	87 76	A	88 14.86581782	.00306579	84213-5	27731-3	0	207
1343	64.7366		310.3376 0042554	89.5819	271.0185	16.10240016		2022
1343U	87 76	A	88 15.42471895	.00389753	87108-5	34110-3	0	208
1343	64.7400		308.2537 0041696	89.3427	271.5045	16.10768177		2031
1343U	87 76	A	88 16.79019898	.00285736	91183-5	23653-3	0	210
1343	64.7387		303.1641 0040981	88.8693	271.8543	16.11653569		2053
1343U	87 76	A	88 16.91427714	.00286891	92227-5	23653-3	0	211
1343	64.7369		302.6990 0041041	89.2976	271.2784	16.11704944		2055
18343U	87 76	A	88 17.90690630	.00298735	93084-5	23653-3	0	212
18343	64.7365		298.9897 0040801	89.3800	271.2505	16.12285040		2071
18343U	87 76	A	88 18.83715568	.00300934	96230-5	22976-3	0	213
18343	64.7372		295.5217 0040024	88.9652	271.6592	16.12861112		2086
18343U	87 76	A	88 20.01499597	.00321624	10067-4	23328-3	0	214
18343	64.7366		291.1162 0039207	88.7725	271.9301	16.13633296		2105
18343U	87 76	A	88 21.06834234	.00209212	27378-4	22382-3	0	216
18343	64.7386		287.1768 0031279	127.6063	231.3211	16.08763784		2122
18343U	87 76	A	88 21.13076019	.00168471	18764-4	22382-3	0	217
18343	64.7360		286.9460 0049652	97.7719	261.6436	16.03903161		2123
18343U	87 76	A	88 23.00122353	.00155726	17194-4	20023-3	0	219
18343	64.7363		280.0424 0049084	97.3273	263.4230	16.04483696		2153

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3343U	87 76	A 88	23.87374881	.00158224	17676-4	20023-3 0	220
3343	64.7356	276.8195	0048781	97.0131	263.6611	16.04756268	2167
3343U	87 76	A 88	24.87075171	.00174569	20359-4	21738-3 0	221
3343	64.7346	273.1333	0048049	96.6439	263.9656	16.05059727	2183
3343U	87 76	A 88	25.86756557	.00148461	16694-4	18192-3 0	222
3343	64.7349	269.4498	0047712	96.2717	264.3204	16.05370866	2199
3343U	87 76	A 88	26.86420526	.00170154	19905-4	20414-3 0	223
3343	64.7350	265.7619	0047163	95.7682	265.0018	16.05719320	2215
3343U	87 76	A 88	26.86420526	.00170154	19905-4	20414-3 0	225
3343	64.7350	265.7619	0047163	95.7682	265.0018	16.05719320	2215
3343U	87 76	A 88	27.92285090	.00192151	23628-4	22385-3 0	226
3343	64.7359	261.8459	0047290	95.5540	265.1979	16.06129496	2232
3343U	87 76	A 88	31.84380229	.00183803	22984-4	19701-3 0	230
3343	64.7352	247.3209	0045394	93.4904	267.1605	16.07571131	2295
3343U	87 76	A 88	33.89619682	.00197548	25806-4	20104-3 0	232
3343	64.7331	239.7022	0044680	92.5973	268.0381	16.08391900	2328
3343U	87 76	A 88	34.89090235	.00215550	78849-5	21311-3 0	233
3343	64.7330	236.0072	0044240	92.0734	268.5581	16.08840145	2344

18343U	87 76	A 88	34.89090235	.00215550	78849-5	21311-3 0	234
18343	64.7330	236.0072	0044240	92.0734	268.5581	16.08840145	2344
18343U	87 76	A 88	35.94748256	.00213575	81411-5	20524-3 0	235
18343	64.7325	232.0795	0043788	91.4287	269.1888	16.09299671	2361
18343U	87 76	A 88	36.94163818	.00284498	83128-5	26392-3 0	236
18343	64.7330	228.3814	0042836	90.7725	270.0620	16.09859574	2377
18343U	87 76	A 88	37.06583911	.00252925	83698-5	23402-3 0	238
18343	64.7310	227.9196	0042657	90.5838	270.0248	16.09929873	2379
18343U	87 76	A 88	37.25218913	.00176087	19822-4	23402-3 0	239
18343	64.7326	227.2295	0046500	120.3388	237.0169	16.04196125	2382
18343U	87 76	A 88	38.00077408	.00048277	00000-0	62412-4 0	241
18343	64.7325	224.4655	0046497	120.3671	240.1985	16.04455733	2394
18343U	87 76	A 88	38.87331945	.00153565	16909-4	19780-3 0	242
18343	64.7347	221.2431	0045764	120.4624	240.1126	16.04780625	2408
18343U	87 76	A 88	39.80800382	.00247442	33922-4	31115-3 0	243
18343	64.7345	217.7881	0045188	119.8717	240.7260	16.05129280	2423
18343U	87 76	A 88	39.80800382	.00247442	33922-4	31115-3 0	243
18343	64.7345	217.7881	0045188	119.8717	240.7260	16.05129280	2423
18343U	87 76	A 88	40.24410010	.00152991	16801-4	19235-3 0	245
18343	64.7326	216.1782	0044783	119.2735	241.1896	16.05245504	2430
18343U	87 76	A 88	40.24410010	.00152991	16801-4	19235-3 0	245
18343	64.7326	216.1782	0044783	119.2735	241.1896	16.05245504	2430

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18343U	87 76	A 88	41.61445761	.00274960	40825-4	33301-3	0	247
18343	64.7320	211.1055	0044025	118.9440	241.4954	16.05801482		2452
18343U	87 76	A 88	41.86358115	.00278418	42001-4	33501-3	0	248
18343	64.7339	210.1862	0043574	118.0468	242.5067	16.05943412		2456
18343U	87 76	A 88	42.42398267	.00001969	00000-0	28827-5	0	249
18343	64.7321	208.1151	0042587	117.9689	242.4260	16.06088628		2465
18343U	87 76	A 88	42.85983631	.00184739	22129-4	21845-3	0	251
18343	64.7348	206.5005	0042887	117.7035	242.8066	16.06326394		2472
18343U	87 76	A 88	43.85585628	.00299694	48388-4	34382-3	0	252
18343	64.7323	202.8106	0042104	117.5784	243.0602	16.06795215		2488
18343U	87 76	A 88	44.41593951	.00207409	26767-4	23602-3	0	253
18343	64.7309	200.7351	0041722	117.4191	242.9441	16.06998362		2497
18343U	87 76	A 88	44.85156971	.00264672	39296-4	29777-3	0	254
18343	64.7333	199.1202	0040702	117.0259	243.5371	16.07227358		2504
18343U	87 76	A 88	45.10044684	.00200013	25355-4	22447-3	0	255
18343	64.7309	198.1976	0040533	116.2808	244.2208	16.07317209		2508

18343U	87 76	A 88	45.72260022	.00249286	35621-4	27458-3	0	256
18343	64.7333	195.8895	0039794	116.7545	243.8281	16.07630185		2518
18343U	87 76	A 88	45.84700296	.00236032	32800-4	25906-3	0	257
18343	64.7325	195.4279	0040020	116.2567	244.2559	16.07671986		2520
18343U	87 76	A 88	46.03361848	.00156212	18173-4	17198-3	0	258
18343	64.7314	194.7347	0039667	116.2681	244.2461	16.07724659		2523
18343U	87 76	A 88	48.89373869	.00258111	39089-4	25897-3	0	262
18343	64.7320	184.1162	0038024	114.9584	245.6677	16.09169771		2569
18343U	87 76	A 88	47.89918893	.00211834	28191-4	21994-3	0	261
18343	64.7323	187.8100	0038315	115.1198	245.3891	16.08663549		2553
18343U	87 76	A 88	40.24410010	.00152991	16801-4	19235-3	0	245
18343	64.7326	216.1782	0044783	119.2735	241.1896	16.05245504		2430
18343U	87 76	A 88	49.88792570	.00285194	46643-4	27761-3	0	263
18343	64.7343	180.4158	0036970	113.2833	247.1549	16.09691947		2585
18343U	87 76	A 88	50.88180464	.00293419	49604-4	27761-3	0	264
18343	64.7329	176.7174	0035819	112.8140	247.4708	16.10201490		2601
18343U	07 76	A 88	51.56494483	.00474099	12232-3	43760-3	0	265
18343	64.7336	174.1712	0035580	112.6165	247.6986	16.10554200		2612
18343U	87 76	A 88	51.87541980	.00479960	78416-5	43760-3	0	266
18343	64.7346	173.0155	0035262	110.6618	249.6893	16.10727806		2617

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18343U	87 76	A 88	52.37207394	.00481257	12635-3	43760-3 0	267
18343	64.7394	171.1720	0034291	111.2419	248.8882	16.10872811	2625
18343U	87 76	A 88	52.86871839	.00494694	79311-5	43760-3 0	268
18343	64.7325	169.3154	0033928	110.7582	249.6583	16.11268173	2633
18343U	87 76	A 88	53.24108912	.00503271	81347-5	43760-3 0	269
18343	64.7311	167.9265	0033449	110.0268	250.3428	16.11551981	2639
18343U	87 76	A 88	53.55135819	.00475811	82285-5	40723-3 0	270
18343	64.7301	166.7646	0033243	110.9626	249.4460	16.11798247	2644
18343U	87 76	A 88	53.86157405	.00440193	83998-5	37076-3 0	271
18343	64.7314	165.6097	0032686	110.4184	250.0476	16.12076355	2649
18343U	87 76	A 88	54.91588025	.00438881	87283-5	34785-3 0	272
18343	64.7326	161.6703	0031733	110.5393	249.9226	16.13008812	2666
18343U	87 76	A 88	55.28784239	.00329074	85255-5	25955-3 0	273
18343	64.7303	160.2786	0030945	108.7948	251.4110	16.13161590	2672
18343U	87 76	A 88	55.90774345	.00298654	89264-5	23021-3 0	274
18343	64.7298	157.9589	0030707	108.4369	251.8796	16.13513966	2682
18343U	87 76	A 88	56.96123151	.00287631	90191-5	21305-3 0	275
18343	64.7303	154.0133	0029591	107.9172	252.5231	16.14154047	2699

18343U	87 76	A 88	57.58072396	.00207783	27497-4	21305-3 0	276
18343	64.7327	151.7014	0032557	85.2049	273.0292	16.09308783	2709
18343U	87 76	A 88	57.70539646	.00161561	17953-4	21305-3 0	277
18343	64.7293	151.2380	0052161	96.9583	261.4364	16.03771858	2711
18343U	87 76	A 88	57.95521995	.00177328	20183-4	23209-3 0	279
18343	64.7312	150.3183	0052270	97.0522	263.6570	16.03856752	2715
18343U	87 76	A 88	61.81949829	.00167599	19459-4	20436-3 0	283
18343	64.7318	136.0451	0049925	94.6129	265.9809	16.05199399	2777
18343U	87 76	A 89	62.87852442	.00175003	20667-4	20912-3 0	284
18343	64.7308	132.1295	0049132	94.0226	266.7018	16.05577304	2794
18343U	87 76	A 88	63.87499915	.00177722	21294-4	20912-3 0	285
18343	64.7282	128.4406	0047722	93.8083	266.9131	16.05950445	2810
18343U	87 76	A 88	64.87123833	.00182310	22157-4	20912-3 0	286
18343	64.7299	124.7504	0047225	93.0563	267.7441	16.06379989	2826
18343U	87 76	A 88	65.86719380	.00186392	23069-4	20831-3 0	287
18343	64.7280	121.0614	0046636	91.8878	268.9622	16.06824501	2842
18343U	87 76	A 88	66.92508496	.00310654	52368-4	33584-3 0	288
18343	64.7276	117.1395	0045543	91.5208	269.3414	16.07360797	2859
18343U	87 76	A 88	67.92033719	.00226191	31266-4	23880-3 0	289
18343	64.7270	113.4476	0044830	90.9061	269.3081	16.07818544	2875

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18343U	87 76	A	88 69.91017813	.00270684	78787-5	26817-3 0	291
18343	64.7269		106.0553 0043121	90.2207	270.5723	16.08884877	2907
18343U	87 76	A	88 70.96666005	.00380395	82639-5	36098-3 0	292
18343	64.7272		102.1254 0042727	89.4250	271.1704	16.09512801	2924
18343U	87 76	A	88 71.33943721	.00397156	81528-5	37451-3 0	293
18343	64.7285		100.7374 0041889	89.5684	270.8445	16.09678332	2930
18343U	87 76	A	88 71.96065640	.00264423	81622-5	24485-3 0	294
18343	64.7275		98.4292 0041958	89.3309	271.0043	16.09976775	2940
18343U	87 76	A	88 72.89231043	.00266987	85594-5	23918-3 0	295
18343	64.7275		94.9602 0041532	88.9871	271.6912	16.10491537	2955
18343U	87 76	A	88 73.88568235	.00288424	88166-5	24914-3 0	296
18343	64.7277		91.2537 0040479	88.0811	272.7369	16.11099513	2971
18343U	87 76	A	88 74.07185584	.00202744	86238-5	17541-3 0	297
18343	64.7256		90.5603 0040113	87.9316	272.6279	16.11160303	2974
18343U	87 76	A	88 74.81659764	.00853104	89681-5	70593-3 0	299
18343	64.7272		87.7821 0039561	87.6622	272.9335	16.11707759	2986
18343U	87 76	A	88 75.12679198	.00503941	89252-5	41490-3 0	300
18343	64.7263		86.6244 0039226	88.2222	272.0792	16.11837889	2991

18343U	87 76	A	88 76.92541623	.00385750	96183-5	29224-3	0	302
18343	64.7250		79.9004 0037698	.86.0280	274.4800	16.13155101		3020
18343U	87 76	A	88 77.54527491	.00312014	97726-5	23093-3	0	303
18343	64.7241		77.5797 0036936	.86.2838	274.1558	16.13566488		3030
8343U	87 76	A	88 78.90839986	.00360574	10130-4	24978-3	0	305
8343	64.7261		72.4764 0035691	.85.6139	274.9069	16.14561566		3052
8343U	87 76	A	88 79.21808123	.00932315	96254-5	82129-3	0	306
8343	64.7276		71.3151 0054980	100.7460	258.9603	16.09211523		3057
8343U	87 76	A	88 79.34254232	.00626238	19528-3	82129-3	0	307
8343	64.7287		70.8491 0047404	.73.3868	287.1946	16.04232360		3059
8343U	87 76	A	88 79.40489059	.00609292	18330-3	82129-3	0	308
8343	64.7250		70.6220 0047872	.75.9826	284.5872	16.03759227		3060
8343U	87 76	A	88 79.84133308	.00613698	18702-3	82129-3	0	309
8343	64.7245		69.0102 0046207	.76.1115	284.2167	16.04032684		3067
8343U	87 76	A	88 79.90373074	.00187643	21620-4	25186-3	0	310
8343	64.7241		68.7811 0047663	.75.7177	284.8466	16.03919556		3068
18343U	87 76	A	88 80.90124860	.00189262	22143-4	24858-3	0	311
18343	64.7244		65.0994 0047311	.75.1270	285.4693	16.04291604		3084
18343U	87 76	A	88 81.89852771	.00193871	23096-4	24923-3	0	313
18343	64.7239		51.4165 0046719	.74.6929	285.9311	16.04676633		3100

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8343U	87 76	A	88 82.89555853	.00203900	25093-4	25578-3	0	314
8343	64.7247		57.7305 0046286	74.6528	286.0122	16.05088428		3116
8343U	87 76	A	88 82.89555853	.00203900	25093-4	25578-3	0	315
8343	64.7247		57.7305 0046286	74.6528	286.0122	16.05088428		3116
8343U	87 76	A	88 83.83002903	.00214995	27245-4	26365-3	0	316
8343	64.7261		54.2746 0045641	74.3883	286.2501	16.05490174		3131
8343U	87 76	A	88 85.01335207	.00223406	29345-4	26557-3	0	317
8343	64.7255		49.8976 0045062	73.8559	286.7541	16.06015870		3150
8343U	87 76	A	88 85.88502507	.00247028	34687-4	28647-3	0	318
8343	64.7249		46.6667 0044220	73.7320	286.9727	16.06457429		3164
8343U	87 76	A	88 86.88089819	.00291273	46251-4	32649-3	0	319
8343	64.7232		42.9770 0043249	73.4177	287.3362	16.07042995		3180
8343U	87 76	A	88 87.62752963	.00318371	54872-4	34485-3	0	320
8343	64.7222		40.2065 0042616	72.8192	288.0068	16.07607405		3192
8343U	87 76	A	88 87.87630860	.00351568	65915-4	37525-3	0	321
8343	64.7242		39.2824 0042955	73.3526	287.2313	16.07788014		3196

18343U	87 76	A	88	89.92813032	.00347799	66139-4	34279-3 0	323
18343	64.7246			31.6610 0041020	72.6931	287.9329	16.09141293	3229
18343U	87 76	A	88	89.92813032	.00347799	66139-4	34279-3 0	324
18343	64.7246			31.6610 0041020	72.6931	287.9329	16.09141293	3229

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18348U	87077	A	87258.49163394	.00000000	00000-0	00000-0	0	0001
18348	082.3255		177.7430	0027930	086.2977	274.2160	16.2647771800001	
18348U	87077	A	87258.49166934	.00000000	00000-0	00000-0	0	0002
18348	082.3552		177.7355	0031461	090.5124	270.0424	16.2540655600001	
18348U	87077	A	87258.67636629	.00000000	00000-0	00000-0	0	0003
18348	082.3582		177.5147	0031065	089.9834	270.5669	16.2539795600004	
18348U	87077	A	87258.86106166	.00067096	00000-0	00000-0	0	0004
18348	082.3479		177.2940	0031075	089.3515	271.1989	16.2543631100007	
18348U	87077	A	87259.41554798	.00273775	00000-0	00000-0	0	0006
18348	082.3226		176.6205	0057442	091.1489	269.7027	16.1912985300016	
18348U	87077	A	87259.72712375	.00000000	00000-0	00000-0	0	0007
18348	082.3341		176.2631	0016254	302.0426	057.9920	16.0265479100032	
18348U	87 77	A	87260.53866126	.00054116	00000-0	89594-4	0	7
18348	82.3264		176.3246	0011939	293.8876	65.2386	16.02694890	34
18348U	87 77	A	87260.91343295	.00054147	00000-0	89594-4	0	8
18348	82.3251		174.8910	0011434	288.6385	71.3337	16.02717113	40

18348U	87 77	A	87261.91238962	.00028136	00000-0	46611-4 0	9
18348	82.3268	173.7443	0011605	286.3686	73.5023	16.02761675	56
18348U	87 77	A	87262.78648606	.00025702	00000-0	42493-4 0	10
18348	82.3276	172.7386	0011446	282.9455	77.0538	16.02806595	70
18348U	87 77	A	87265.84555805	.00011424	00000-0	18692-4 0	15
18348	82.3245	169.2188	0012501	270.8995	89.1009	16.02956309	119
18348U	87 77	A	87265.97040973	.00026640	00000-0	43594-4 0	16
18348	82.3262	169.0732	0011677	269.6625	90.3272	16.02972895	121
18348U	87 77	A	87266.84437053	.00021590	00000-0	35204-4 0	17
18348	82.3231	168.0674	0012188	264.2757	95.7729	16.03027323	135
18348U	87 77	A	87270.90159393	.00024908	00000-0	39939-4 0	24
18348	82.3229	163.3977	0012390	247.0078	112.9811	16.03300327	200
18348U	87 77	A	87272.21221547	.00012829	00000-0	20363-4 0	28
18348	82.3255	161.8869	0012435	239.9515	120.1084	16.03473015	221
18348U	87 77	A	87271.83775709	.00043822	00000-0	69627-4 0	27
18348	82.3232	162.3194	0012249	244.4343	115.5389	16.03412681	215
18348U	87 77	A	87272.89866347	.00065076	10470-5	10304-3 0	29
18348	82.3239	161.0977	0012043	238.3189	121.6873	16.03569846	232
18348U	87 77	A	87272.89866347	.00065076	10470-5	10304-3 0	30
18348	82.3239	161.0977	0012043	238.3189	121.6873	16.03569846	232

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348U	87 77	A	87273.83468043	.00282850	34870-4	44531-3 0	31
348	82.3259	160.0218	0011736	232.5269	127.5713	16.03746891	247
348U	87 77	A	87274.52094546	.00064205	00000-0	99108-4 0	32
348	82.3257	159.2280	0012534	227.8118	131.8422	16.03831600	258
348U	87 77	A	87278.38873813	.00035290	00000-0	53114-4 0	40
348	82.3241	154.7673	0012399	215.1017	144.8451	16.04336703	320
348U	87 77	A	87278.88773941	.00025734	00000-0	38706-4 0	41
348	82.3227	154.1932	0012664	210.9653	149.0788	16.04360141	328
348U	87 77	A	87279.32433776	.00455410	97575-4	67147-3 0	43
348	82.3246	153.6876	0014093	207.9295	152.4489	16.04801774	335
348U	87 77	A	87280.01005741	.00217203	19959-4	31568-3 0	44
348	82.3210	152.8977	0013950	207.9700	151.4513	16.04996135	346

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350U	87 78	A	87270.52867610	-	.00000044	00000-0	99999-4	0	11
350	0.0713	298.8749	0005313	183.2765	237.9229	1.00272384			7
350U	87 78	A	87270.52867610	-	.00000044	00000-0	99999-4	0	12
350	0.0713	298.8749	0005313	183.2765	237.9229	1.00272384			7
355U	87 79	A	87272.21037891	-	.00000003	00000-0	00000-0	0	13
355	64.8610	72.5415	0007856	306.0501	53.8963	2.13102323			27

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8355U	87 79	A	87263.89999998	-.00000002	00000-0	99999-4 0	3	
8355	64.8470		72.8130	0004142	268.8990	196.6940	2.13173345	0
8356U	87 79	B	87265.16978037	-.00000002	00000-0	99999-4 0	4	
8356	64.8569		72.7866	0003661	278.8324	81.1422	2.13164144	3
8357U	87 79	C	87264.23149556	-.00000002	00000-0	99999-4 0	4	
8357	64.8767		72.8150	0004298	280.0986	80.2456	2.13190231	1

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Transit 21, 22 (OSCAR 27, 29)

Upp: 16 sept fr. Vandenberg

~~18361U 87080 A 87259.85079029 .00000006 00000-0 00000-0 0 0001~~

~~18361 090.3242 344.6014 0113491 197.0012 162.7867 13.4225646900001~~

~~18362U 87080 B 87260.29808382 .00000006 00000-0 00000-0 0 0001~~

~~18362 090.3241 344.6173 0112081 194.3805 165.4692 13.4221213400007~~

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Upp: 17 sept

366U	87081	A	87260.67803096	.00000000	00000-0	00000-0	0	0001
366	067.1387		207.4408 0142669	091.0804	270.6965	16.04736984	000001	
366U	87 81	A	87260.74033786	.00004003	27641-4	00000	0 0	2
366	67.1374		207.2282 0143957	92.0726	269.3031	16.04023239		2
366U	87 81	A	87260.92747018	.00582305	27934-4	21472-3	0	3
366	67.1426		206.5984 0143415	92.0935	269.7483	16.04227701		5
366U	87 81	A	87261.30146093	.00597168	27763-4	21501-3	0	4
366	67.1441		205.3429 0142405	91.7502	269.8770	16.04661937		21
366U	87 81	A	87261.92463146	.00509896	27955-4	18006-3	0	5
366	67.1423		203.2461 0140366	91.2210	270.3193	16.05278057		31
366U	87 81	A	87263.91717718	.00535962	27769-4	17202-3	0	8
366	67.1452		196.5315 0134736	89.2708	272.3238	16.07331753		53
366U	87 81	A	87266.27957115	.00666096	28536-4	18349-3	0	13
366	67.1434		188.5428 0126284	87.1849	274.5072	16.10454129		91

18366U	87 81	A	87266.83836658	.00622312	27759-4	16503-3 0	14
18366	67.1419	186.6452	0124181	86.4971	275.1030	16.11229141	100
8366U	87 81	A	87270.93862399	.00546937	28101-4	23080-3 0	25
8366	67.1431	172.7555	0119350	66.2913	294.9459	16.07729814	166
8366U	87 81	A	87271.49843389	.00458652	28027-4	18921-3 0	26
8366	67.1440	170.8640	0117937	65.5531	295.6020	16.08251329	175
8366U	87 81	A	87271.80937548	.00463656	28229-4	18899-3 0	27
8366	67.1434	169.8143	0117053	65.2713	296.0673	16.08545760	180
8366U	87 81	A	87272.24457283	.00489137	27930-4	19494-3 0	28
8366	67.1432	168.3413	0115731	65.1185	296.2079	16.09026759	187
8366U	87 81	A	87272.86604202	.00503431	28303-4	19483-3 0	29
8366	67.1432	166.2400	0114063	64.3473	296.9577	16.09656497	197
8366U	87 81	A	87273.85983787	.01120535	28390-4	40877-3 0	30
8366	67.1430	162.8708	0110301	63.7218	297.5507	16.10922931	213
8366U	87 81	A	87274.29773693	.00905382	27057-4	40877-3 0	32
8366	67.1458	161.4032	0159330	59.0521	302.2818	15.98924350	220
8366U	87 81	A	87274.54797127	.00495856	27228-4	22498-3 0	33
8366	67.1417	160.5777	0158621	59.1675	302.2816	15.99058343	224
8366U	87 81	A	87278.23442377	.00522729	27209-4	20769-3 0	41
8366	67.1432	148.2526	0147563	56.4951	304.9289	16.02656290	283

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366U	87	81	A	87278.79600312	.00451257	27974-4	17777-3	0	42
366	67.1407	146.3691	0145657	55.8419	305.5202	16.03146207	292		
6U	87	81	A	87278.85841172	.00459317	27691-4	18044-3	0	43
6	67.1423	146.1602	0145463	55.7885	305.6986	16.0321095	27691		
366U	87	81	A	87279.17031296	.00500031	28017-4	19226-3	0	44
366	67.1430	145.1122	0144726	55.5682	305.9822	16.03565102	298		
6U	87	81	A	87279.85624412	.00509015	27610-4	19226-3	0	45
6	67.1454	142.8107	0142233	54.9738	306.4388	16.04248596	309		
6U	87	81	A	87279.85624412	.00509015	27610-4	19226-3	0	46
6	67.1454	142.8107	0142233	54.9738	306.4388	16.04248596	309		
6U	87	81	A	87280.72884287	.00514912	27836-4	18740-3	0	47
6	67.1405	139.8754	0139598	53.9953	307.4032	16.05147538	323		
6U	87	81	A	87281.22724805	.00533048	28317-4	19062-3	0	48
6	67.1390	138.1962	0137593	53.7268	307.7555	16.05725022	331		
8366U	87	81	A	87282.90789227	.00694034	27668-4	22893-3	0	52
8366	67.1385	132.5251	0130817	52.2342	308.9832	16.07859396	358		
8366U	87	81	A	87283.90276226	.00713858	27985-4	22415-3	0	53
8366	67.1373	129.1620	0126264	51.2297	309.9197	16.09245944	374		

18366U	87 81	A	87285.46539273	.00840856	28641-4	23328-3	0	6
18366	67.1337	123.8986	0119197	50.0825	311.0468	16.11813016		39
18366U	87 81	A	87285.70357683	.00786119	27740-4	21569-3	0	56
18366	67.1370	123.0551	0117885	49.8151	311.2933	16.12180154		40
18366U	87 81	A	87285.82765287	.00188105	81349-5	21569-3	0	57
18366	67.1373	122.6394	0113314	81.9062	273.8408	15.97026571		405
18366U	87 81	A	87285.95389023	.00429564	27226-4	21569-3	0	58
18366	67.1412	122.2202	0125847	96.5564	266.6266	16.04658602		407
18366U	87 81	A	87285.95389023	.00429564	27226-4	21569-3	0	59
18366	67.1412	122.2202	0125847	96.5564	266.6266	16.04658602		407
18366U	87 81	A	87286.82606529	.00238235	27948-4	11934-3	0	60
18366	67.1395	119.2827	0122696	95.5200	266.1146	16.05377962		421
18366U	87 81	A	87286.95064713	.01534513	28027-4	74995-3	0	61
18366	67.1378	118.8640	0122421	95.2612	266.2711	16.05544194		423
18366U	87 81	A	87287.19976335	.00603146	27914-4	29445-3	0	62
18366	67.1344	118.0251	0121653	94.9137	266.3010	16.05747373		427
18366U	87 81	A	87287.63575408	.00398089	27978-4	19160-3	0	63
18366	67.1365	116.5565	0120703	94.4360	266.9465	16.06118881		434
18366U	87 81	A	87287.94711569	.00662770	27981-4	31271-3	0	64
18366	67.1376	115.5065	0119602	94.3745	267.2279	16.06500571		439
18366U	87081	A	87288.50734627	.00504719	00000-0	00000-0	0	0066
18366	067.1358	113.6201	0123782	093.5664	267.9922	16.0704564500448		

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Kosmos 1886

forts. 2

18366U	87 81	A	87288.94292513	.00523080	28130-4	23535-3 0	66
18366	67.1368		112.1478 0117063	93.3857	268.0494	16.07509215	455
18366U	87 81	A	87289.87593145	.00767499	27935-4	23535-3 0	67
18366	67.1387		108.9893 0111692	101.0673	262.1294	16.12368728	470
18366U	87 81	A	87290.61961196	.01003857	28518-4	29304-3 0	69
18366	67.1371		106.4580 0107112	99.4344	261.7658	16.13718903	482
18366U	87 81	A	87290.18573801	.00870863	27834-4	26245-3 0	68
18366	67.1348		107.9362 0108847	100.2855	261.3186	16.13083445	475
18366U	87 81	A	87290.80555163	.00876776	28512-4	25280-3 0	70
18366	67.1351		105.8255 0106110	99.7984	261.5227	16.14054947	485
18366U	87 81	A	87291.42500897	.00790240	27856-4	21728-3 0	71
18366	67.1351		103.7152 0103401	98.9227	262.1786	16.15011608	495
18366U	87 81	A	87292.84844969	.00823882	28260-4	20272-3 0	73
18366	67.1368		98.8469 0096937	97.4629	263.7489	16.17282756	518
18366U	87 81	A	87292.84844969	.00823882	28260-4	20272-3 0	74
18366	67.1368		98.8469 0096937	97.4629	263.7489	16.17282756	518
18366U	87 81	A	87298.56018777	.00817497	27871-4	31312-3 0	87
18366	67.1370		79.4603 0122537	119.7304	241.7619	16.08060719	610

18366U	87 81	A	87299.05763033	.00654158	28053-4	24780-3 0	90
18366	67.1364		77.7807 0119680	119.2153	242.0918	16.08746527	618
18366U	87 81	A	87299.86559410	.00668127	28011-4	24293-3 0	91
18366	67.1389		75.0463 0116064	118.1444	243.2362	16.09862417	631
18366U	87 81	A	87299.86557983	.00690051	27936-4	24994-3 0	92
18366	67.1369		75.0465 0116207	118.2381	243.0619	16.09870757	631
18366U	87 81	A	87300.05194854	.00480989	28025-4	24994-3 0	94
18366	67.1398		74.4143 0124371	127.7013	231.7411	16.04568884	634
18366U	87 81	A	87300.80009437	.00494912	27648-4	24994-3 0	95
18366	67.1368		71.8999 0121818	127.2115	234.1006	16.05367671	646
18366U	87 81	A	87300.92468164	.00598481	27786-4	29740-3 0	96
18366	67.1365		71.4812 0121746	127.1307	234.1229	16.05540236	648
18366U	87 81	A	87301.54749004	.00569161	27676-4	27773-3 0	97
18366	67.1356		69.3826 0119176	126.5219	234.6091	16.06234047	658
18366U	87 81	A	87301.92106890	.00572867	28220-4	27298-3 0	98
18366	67.1357		68.1245 0118215	126.0573	235.1796	16.06673335	664
18366U	87 81	A	87302.85452908	.00511820	27897-4	23648-3 0	99
18366	67.1357		64.9746 0114609	125.1978	235.9609	16.07700440	679
18366U	87 81	A	87302.97895511	.00516458	27835-4	23895-3 0	100
18366	67.1352		64.5510 0113836	125.1192	236.0793	16.07832398	681

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Kosmos 1886

forts. 3

366U	87 31	A	87303.60089725	.00604866	27681-4	27162-3 0	101
366	67.1359		62.4486 0111778	124.5429	236.6591	16.08528152	691
366U	87 81	A	87303.97393767	.00568790	28089-4	25046-3 0	104
366	67.1354		61.1376 0110771	124.0106	237.1988	16.08931636	697
366U	87 81	A	87304.53330002	.00524657	28077-4	22696-3 0	105
366	67.1352		59.2943 0108802	123.7779	237.2895	16.09497207	706
366U	87 81	A	87304.96825199	.00598752	27613-4	25502-3 0	106
366	67.1364		57.8201 0106913	122.9750	238.2262	16.10005179	715
366U	87 81	A	87304.96825199	.00598752	27613-4	25502-3 0	107
366	67.1364		57.8201 0106913	122.9750	238.2262	16.10005179	713
366U	87 81	A	87305.27882206	.00526507	28105-4	22150-3 0	108
366	67.1341		56.7700 105844	122.4739	238.6537	16.10346035	7182
366U	87 81	A	87305.83771074	.00560121	28071-4	22713-3 0	109
366	67.1353		54.8750 0104438	122.0572	239.1504	16.10989430	727

87-82A

Progress 32

Upp: 23 september fr. Baikonur

18376U	87 82	A	87267.04259156	-.00008261	57069-4	00000 0 0	1
18376	51.6053		7.7398 0045001	88.4668	272.0055	16.20167567	1
18376U	87 82	A	87267.10429503	.00025173	57386-4	12384-4 0	2
18376	51.6115		7.4034 0047912	91.3939	269.3283	16.20557492	2
18376U	87 82	A	87267.28927340	.00020652	57163-4	12384-4 0	3
18376	51.6045		6.3796 0049150	105.3124	255.2169	16.18719958	5
18376U			87267.65967455	0.00020289	56836-4	12384-4 0	4
18376	51.6114		4.3518 0046143	104.6325	255.9845	16.18923163	11
8376U	87 82	A	87270.79962455	.00044576	00000-0	20340-3 0	10
8376	51.6297		347.9278 0045327	203.2384	156.7522	15.81717193	61
8376U	87 82	A	87270.79962455	.00044576	00000-0	20340-3 0	11
8376	51.6297		347.9278 0045327	203.2384	156.7522	15.81717193	61

87-83A

Kosmos 1887

Upp: 29 sept

Ned: 12 okt

Frekvens:

239.5 MHz

8380U	87 83	A	87272.64819949	.06954019	94291-5	10312-1	0	2
8380	62.8181	149.9565	0125050	112.8938	248.5463	15.91116756		2
8380U	87 83	A	87272.96242240	.00009581	00000-0	15208-4	0	4
8380	62.8228	148.7376	0125988	112.4276	248.5547	15.90795850		7
8380U	87 83	A	87273.52823993	.00160810	96123-5	24323-3	0	5
8380	62.8194	146.5448	0125957	112.5275	249.0040	15.90911716		16
8380U	87 83	A	87273.84249108	.00094338	93740-5	14444-3	0	6
8380	62.8201	145.3272	0125656	112.4531	248.9501	15.90955254		21
8380U	87 83	A	87274.28246078	.00061367	00000-0	92001-4	0	7
8380	62.8210	143.6202	0125309	112.4914	248.9824	15.91041248		28
8380U	87 83	A	87275.16232515	.00102093	95674-5	15462-3	0	8
8380	62.8207	140.2097	0124897	112.4482	249.0974	15.91218654		42
80U	87 83	A	87276.60755633	.00037668	00000-0	56282-4	0	9
80	62.8185	134.6072	0123848	112.6772	248.5034	15.91429085		65

18380U	87 83	A	87277.11027078	.00138786	95116-5	20704-3	0	10
18380	62.8182		132.6521	0123505	113.0909	248.4500	15.91578495	73
380U	87 83	A	87279.49746604	.00054858	00000-0	80419-4	0	14
380	62.8187		123.3941	0121933	112.7260	248.7648	15.91971715	111
380U	87 83	A	87281.19329920	.00085808	95775-5	12712-3	0	16
380	62.8172		116.8071	0121081	112.9961	248.6763	15.92273579	138
18380U	87 83	A	87281.94683483	.00090102	95749-5	13240-3	0	17
18380	62.8190		113.8328	0120826	113.0884	248.3015	15.92411436	150
18380U	87 83	A	87282.19801533	.00091255	96531-5	13389-3	0	19
18380	62.8189		112.9077	0120657	113.1074	248.2881	15.92460436	154
18380U	87 83	A	87282.95150795	.00131569	95928-5	19084-3	0	20
18380	62.8209		109.9772	0119824	112.9797	248.4409	15.92638630	166
18330U	87 83	A	87283.89326154	.00103742	98187-5	15022-3	0	21
18380	62.8204		106.3193	0119374	113.1596	248.2470	15.92822568	181
18380U	87 83	A	87284.89767089	.00184039	96535-5	26320-3	0	23
18380	62.8190		102.4141	0118495	113.1501	248.1996	15.92986691	197
18380U	87 83	A	87285.83916663	.00286502	98158-5	30762-3	0	24
18380	62.8211		98.7516	0115800	113.5296	248.8099	15.93803561	212
18380U	87 83	A	87284.83489150	.00097386	98422-5	14081-3	0	22
18380	62.8204		102.6586	0118587	113.2603	248.0665	15.93005016	196

87-84A

Kosmos 1888

Upp: 10kt.

18384U	87 84	A	87274.72095628	-.00000138	00000-0	99999-4	0	1
18384	0.8960	274.0166	0027044	46.7662	38.8825	1.00070508		0
18384U	87 84	A	87274.72139218	-.00000053	00000-0	99999-4	0	2
18384	1.4728	283.1047	0014687	80.2171	356.8595	0.99772717		0
84U	87 84	A	87279.50595045	.00000016	00000-0	99999-4	0	6
84	1.4473	279.3204	0015304	83.7989	275.7301	0.99779567		5
84U	87 84	A	87280.50701013	-.00000020	00000-0	99999-4	0	7
84	1.5313	276.6753	0005921	95.3927	267.0432	0.99969296		6
18385U	87 84	B	87276.96800750	.10338409	60715-4	27051-3	0	11
18385	51.6186	263.9985	0003842	260.9409	99.1133	16.45698453		37

87-85A

Kosmos 1889

8394U	87 85	A	87282.41188547	.14710037	60163-5	17485-1 0	1
8394	69.9827	187.2923	0125098	68.4747	293.1059	15.94377054	1
8394U	87 85	A	87282.59993996	.15328952	62447-5	17485-1 0	2
8394	69.9679	186.7437	0128132	64.9560	295.1848	15.94388512	4
8394U	87 85	A	87282.72547505	.14990488	62106-5	17485-1 0	3
8394	69.9742	186.3779	0126494	68.2322	292.0425	15.94379499	6
8394U	87 85	A	87282.78837367	.00029869	00000-0	36707-4 0	4
8394	69.9709	186.1919	0126886	67.0230	294.0185	15.93743828	7
8394U	87 85	A	87282.85120988	.00189581	56181-5	23191-3 0	5
8394	69.9750	186.0106	0126803	66.8873	294.5704	15.93784405	8
8394U	87 85	A	87283.10225227	.00021643	00000-0	23191-3 0	6
8394	69.9844	185.3226	0049843	216.4495	119.6273	15.62196879	12
8394U	87 85	A	87283.93889922	.00085306	00000-0	98256-3 0	7
8394	69.9813	183.0161	0049468	214.8506	144.9322	15.62185721	26

18394U	87 85	A	87284.83534709	.00096040	00000-0	10150-2 0	8	
18394	69.9976		180.5182	0050040	212.6299	147.0605	15.62140241	40
18394U	87 85	A	87285.41165562	.00044233	00000-0	47232-3 0	9	
18394	69.9799		178.8985	0049006	213.4190	146.3055	15.62154865	49
18394U	87 85	A	87285.85989973	.00043714	00000-0	47232-3 0	10	
18394	69.9715		177.6607	0044746	211.0502	148.6339	15.62112084	56
18394U	87 85	A	87285.85989973	.00043714	00000-0	47232-3 0	11	
18394	69.9715		177.6607	0044746	211.0502	148.6339	15.62112084	56
18394U	87 85	A	87286.94849595	.00044257	00000-0	47232-3 0	12	
18394	69.9802		174.6181	0049301	210.9012	148.9350	15.62148132	83
18394U	87 85	A	87287.46075765	.00044165	00000-0	47232-3 0	13	
18394	69.9822		173.1985	0048673	210.2111	149.5408	15.62136104	91
18394U	87 85	A	87287.90900748	.00133416	00000-0	14062-2 0	14	
18394	69.9839		171.9512	0049169	208.7064	151.0789	15.62145648	98
18394U	87 85	A	87288.74144239	.00286809	00000-0	27462-2 0	17	
18394	69.9817		169.6416	0052145	207.1143	152.5690	15.62168187	111
18394U	87 85	A	87289.06161946	.00025793	00000-0	27721-3 0	18	
18394	69.9830		168.7409	0049040	207.1329	152.5335	15.62123698	110
18394U	87 85	A	87289.83006241	.00033731	00000-0	36222-3 0	20	
18394	69.9827		166.6070	0048799	206.0740	153.6737	15.62093460	117
18394U	87 85	A	87290.85463890	.00033730	00000-0	36222-3 0	21	
18394	69.9833		163.7393	0048579	204.0229	155.1326	15.62103853	133

87-85A

Kosmos 1889

forts. 1

394U	87 85	A	87291.49500888	.00007588	00000-0	82356-4 0	22
394	69.9813		161.9788	0048546	203.5510	156.2535 15.62086895	143
394U	87 85	A	87292.83979380	.00071149	00000-0	75933-3 0	24
394	69.9822		158.2368	0048635	201.3831	158.4652 15.62070006	164
394U	87 85	A	87293.86438146	.00127503	00000-0	13516-2 0	26
394	69.9839		155.3912	0048194	199.5374	160.2480 15.62079086	180
394U	87 85	A	87294.56877107	.00127514	00000-0	13516-2 0	27
394	69.9814		153.4296	0047884	198.4725	161.1860 15.62099411	191
394U	87 85	A	87294.56877107	.00127514	00000-0	13516-2 0	27
394	69.9814		153.4296	0047884	198.4725	161.1860 15.62099411	191
394U	87 85	A	87294.69689245	.00177025	00000-0	18710-2 0	28
394	69.9825		153.0738	0047793	198.4463	161.4345 15.62029736	193
394U	87 85	A	87295.46532469	.00011892	00000-0	13005-3 0	30
394	69.9819		150.9355	0047827	197.0488	162.7144 15.62043867	205
394U	87 85	A	87295.97766273	.00013493	00000-0	14712-3 0	31
394	69.9823		149.5113	0048113	195.9588	163.9749 15.62043580	213

18394U	87 85	A	87296.48997137	.00013949	00000-0	14712-3 0	32
18394	69.9916	148.0847	0047859	193.6974	166.8128	15.62886122	221
18394U	87 85	A	87296.55388244	.00013705	00000-0	14712-3 0	33
18394	69.9834	147.9088	0048983	195.5545	164.2850	15.62380465	222
18394U	87 85	A	87296.61792976	.00013680	00000-0	14712-3 0	34
18394	69.9797	147.7292	0048815	196.2156	163.7381	15.62343037	223

87-86A

Kosmos 1890

18396U	87	86	A	87283.96484591	-.00000147	00000-0	00000	0.0	1
18396	65.0115	20.8274	0021045	286.1583	73.7279	15.50199200	0	0	0
18396U	87	86	A	87284.28714902	.00578419	00000-0	07719	2.0	3
18396	65.0089	19.7350	0010371	265.3170	94.5592	15.52284551			5
18396U	87	86	A	87286.73554848	.00005827	00000-0	97835-4	0	8
18396	65.0122	11.4526	0009917	269.1692	90.8305	15.52111465	44		

87-87 A

184020 87 87 A 87287.65654802 .00000006 00000-0 00000 0 0 2
18402 82.9233 239.3753 0050526 192.4587 167.5462 13.72485403 1

87-88A

18421U	87 88	A	87293.43863831	.00000012	00000-0	00000 0 0	1
18421	82.5207	192.3006	0041060	283.2342	76.4641	14.78224280	1
18421U	87 88	A	87293.57438813	.00000011	00000-0	00000 0 0	3
18421	82.5173	192.2132	0021632	287.2315	72.4202	14.73535716	3
8421U	87 88	A	87293.77814841	.00000011	00000-0	00000 0 0	4
8421	82.5156	192.0257	0021748	289.4108	70.4531	14.73345064	6
8421U	87 88	A	87293.84606680	.00215334	00000-0	31996-1 0	6
8421	82.5176	191.9637	0021781	287.6687	72.2586	14.73540535	7

87-89A

Kosmos 1893

432U	87089	A	87295.65365208	.00000000	00000-0	00000-0	0	0001
432	067.1708		233.2602 0139194	092.6477	269.0889	16.0574157000001		
432U	87089	A	87295.65365947	.00000000	00000-0	00000-0	0	0001
432	067.1607		233.2607 0141023	092.4807	269.2768	16.0573825900001		
432U	87 89	A	87295.96506432	.00444221	27398-4	16184-3	0	4
432	67.1572		232.2130 0135494	92.5656	269.1251	16.05988517		6
432U	87 89	A	87296.46321707	.00638094	27881-4	22486-3	0	5
432	67.1596		230.5310 0134031	92.2343	269.5935	16.06581469		14
432U	87 89	A	87297.14783347	.00580326	28031-4	19702-3	0	9
432	67.1636		228.2256 0131934	91.4097	270.2312	16.07371130		25
432U	87 89	A	87297.83213115	.00569468	28144-4	18735-3	0	10
432	67.1587		225.9172 0129550	90.6556	270.9230	16.08155212		36
432U	87 89	A	87298.57826704	.00689795	28075-4	21404-3	0	11
432	67.1595		223.3959 0127008	89.8805	271.9583	16.09208867		48

18432U	87 89	A	87299.19956705	.00636021	28075-4	19018-3 0	13
18432	67.1605	221.2944	0124413	89.4414	271.9991	16.10084138	58
18432U	87 89	A	87299.57224768	.00678078	28143-4	19821-3 0	14
18432	67.1590	220.0311	0122901	88.8662	272.6845	16.10596477	64
18432U	87 89	A	87299.63434183	.00660802	27885-4	19301-3 0	15
18432	67.1597	219.8206	0122569	88.8113	272.7091	16.10671767	65
18432U	87 89	A	87299.88270473	.00677033	28045-4	19481-3 0	16
18432	67.1591	218.9798	0121512	88.5495	272.9818	16.11022122	69
18432U	87 89	A	87300.56542195	.00703609	28375-4	19335-3 0	18
18432	67.1581	216.6628	0118644	88.0213	273.5833	16.12020972	80
18432U	87 89	A	87300.99961048	.00955937	28202-4	25063-3 0	19
18432	67.1558	215.1861	0116732	87.7345	273.7420	16.12818545	87
18432U	87 89	A	87301.55754823	.00857220	28197-4	21575-3 0	20
18432	67.1569	213.2891	0113857	87.1529	274.1256	16.13767875	96
18432U	87 89	A	87301.86741019	.00853728	28779-4	20906-3 0	21
18432	67.1538	212.2340	0112287	86.7924	274.6562	16.14329120	101
18432U	87 89	A	87302.17713223	.00960009	27877-4	22570-3 0	22
18432	67.1563	211.1788	0110901	86.5391	274.9317	16.14963513	106
18432U	87 89	A	87302.54862594	.00864367	28618-4	19861-3 0	23
18432	67.1559	209.9108	0108835	86.2208	275.0575	16.15582638	112

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8432U	87 89	A	87302.85812952	.00843261	28243-4	18786-3 0	24
8432	67.1548	208.8544	0107543	85.9333	275.4146	16.16113343	117
8432U	87 89	A	87303.10564858	.00472523	27559-4	18786-3 0	25
8432	67.1522	208.0106	0143075	67.2807	285.6644	16.03583853	121
8432U	87 89	A	87304.97718062	.00393845	28148-4	14478-3 0	27
8432	67.1576	201.7301	0137253	66.5336	295.0508	16.05555072	151
8432U	87 89	A	87305.78679293	.00548914	27705-4	19526-3 0	29
8432	67.1553	199.0062	0134260	65.7137	295.8803	16.06453973	164
8432U	87 89	A	87306.72037826	.00543592	28088-4	18228-3 0	30
8432	67.1535	195.8566	0131570	64.8134	296.8663	16.07566406	179
8432U	87 89	A	87308.46097532	.00712298	28322-4	21530-3 0	33
8432	67.1538	189.9719	0123792	63.2621	297.7772	16.10103272	207
8432U	87 89	A	87310.01296684	.00343972	27281-4	20326-3 0	35
8432	67.1563	184.7184	0160363	83.8848	267.8241	15.96012288	232
8432U	87 89	A	87311.89396273	.00333235	27280-4	19204-3 0	37
8432	67.1514	178.4711	0155328	82.2183	279.4878	15.97315711	262
8432U	87 89	A	87312.89564084	.00333139	27676-4	18580-3 0	39
8432	67.1510	175.1397	0153700	81.1110	280.7633	15.97006770	252

18432U	87 89	A	87312.89564084	.00333139	27676-4	18580-3	0	40
18432	67.1510		175.1397 0153700	81.1110	280.7633	15.97996779		278
18432U	87 89	A	87313.89685871	.00335567	27715-4	18158-3	0	41
18432	67.1513		171.8047 0151904	80.1780	281.6763	15.98682352		294
18432U	87 89	A	87314.89764521	.00392498	27309-4	20482-3	0	42
18432	67.1508		168.4682 0149644	79.2272	282.9015	15.99505370		310
18432U	87 89	A	87315.08517076	.00299568	27578-4	15360-3	0	43
18432	67.1530		167.8443 0149957	79.2093	282.6020	15.99657676		313
18432U	87 89	A	87315.08517076	.00299568	27578-4	15360-3	0	44
18432	67.1530		167.8443 0149957	79.2093	282.6020	15.99657676		313
18432U	87 89	A	87315.77285031	.00414887	27481-4	21066-3	0	45
18432	67.1505		165.5459 0147571	78.4422	283.4827	16.00207427		324
18432U	87 89	A	87315.83532556	.00414760	27146-4	21066-3	0	46
18432	67.1503		165.3375 0147285	78.4300	283.3399	16.00261759		325
18432U	87 89	A	87316.89754544	.00428490	27196-4	21066-3	0	47
18432	67.1508		161.7895 0144387	77.2989	284.5203	16.01186085		342
8432U	87 89	A	87317.64695601	.00423915	27653-4	19806-3	0	48
8432	67.1507		159.2821 0143419	76.4724	285.4063	16.01908490		354
18432U	87 89	A	87319.83077440	.00456357	27501-4	19755-3	0	56
18432	67.1512		151.9609 0136958	74.5373	287.1763	16.03986615		389

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8432U	87 89	A	87317.77179631	.00447358	27685-4	20878-3	0	49
8432	67.1498	158.8639	0142813	76.3990	285.3281	16.02038095		356
8432U	87 89	A	87317.77179245	.00463363	27820-4	21840-3	0	50
8432	67.1493	158.8630	0142281	76.4528	285.2490	16.02041918		356
8432U	87 89	A	87318.02149963	.00473422	27693-4	21840-3	0	51
8432	67.1509	158.0269	0142062	76.3424	285.3772	16.02304440		360
8432U	87 89	A	87318.89517497	.00537221	28006-4	24074-3	0	52
8432	67.1504	155.0994	0139277	75.3856	286.3016	16.03155095		374
8432U	87 89	A	87318.89517497	.00537221	28006-4	24074-3	0	53
8432	67.1504	155.0994	0139277	75.3856	286.3016	16.03155095		374
18432U	87 89	A	87319.58127953	.00291611	27880-4	12741-3	0	54
18432	67.1483	152.7986	0138104	74.7721	286.6384	16.03711541		385
18432U	87 89	A	87320.70352153	.00434034	27878-4	18152-3	0	58
18432	67.1488	149.0273	0134749	73.6823	287.9505	16.04784952		403
8432U	87 89	A	87320.95279733	.00460333	27541-4	18906-3	0	59
8432	67.1505	148.1912	0134354	73.4180	288.2080	16.05040021		407
8432U	87 89	A	87321.70040757	.00442187	28309-4	17561-3	0	60
8432	67.1491	145.6758	0132644	72.8980	288.6698	16.05724592		418

18432U	87 89	A	87321.88726265	.00281691	27209-4	17561-3 0	61
18432	67.1491	145.0545	0137902	126.6861	227.4909	15.99986020	422
18432U	87 89	A	87321.95102569	.00450709	27675-4	27768-3 0	62
18432	67.1476	144.8436	0137963	127.4969	233.9145	16.00048335	423
18432U	87 89	A	87322.20104122	.00449875	27697-4	27768-3 0	63
18432	67.1461	144.0093	0136954	127.3411	233.9909	16.00226963	427
18432U	87 89	A	87322.20104122	.00449875	27697-4	27768-3 0	64
18432	67.1461	144.0093	0136954	127.3411	233.9909	16.00226963	427
18432U	87 89	A	87323.13844458	.00332660	27640-4	20103-3 0	65
18432	67.1468	140.8742	0135262	126.1093	235.3717	16.00828681	442
18432U	87 89	A	87324.01295595	.00151332	27539-4	90643-4 0	66
18432	67.1473	137.9494	0133211	125.1706	236.2360	16.01484780	456
18432U	87 89	A	87324.63744953	.00780795	28017-4	45325-3 0	67
18432	67.1457	135.8591	0131124	124.7210	237.0194	16.02009368	466
18432U	87 89	A	87325.76087233	.00420608	28084-4	23946-3 0	69
18432	67.1474	132.0967	0127933	123.3859	237.9322	16.02894467	484
18432U	87 89	A	87325.88567106	.00390136	27579-4	22003-3 0	70
18432	67.1470	131.6799	0128065	123.2011	238.1393	16.02978787	496
18432U	87 89	A	87326.88375339	.00406976	28026-4	22483-3 0	71
18432	67.1473	128.3308	0124983	122.3645	238.9580	16.03773019	502

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432U	87 89	A	87327.94366310	.00478878	27414-4	25745-3	0	72
432	67.1458		124.7696 0121580	121.5084	239.8989	16.04736269		519
432U	87 89	A	87329.00286662	.00443745	27781-4	23222-3	0	73
432	67.1463		121.2064 0117712	120.3861	240.9492	16.05779087		536
432U	87 89	A	87329.81239984	.00468131	27937-4	23676-3	0	74
432	67.1472		118.4813 0115594	119.5175	241.8308	16.06549549		549
432U	87 89	A	87331.80011443	.02191710	28252-4	69960-3	0	78
432	67.1469		111.7487 0096363	129.2184	231.9112	16.14872825		581
432U	87 89	A	87332.29385738	.00999382	28393-4	24768-3	0	81
432	67.1473		110.0494 0064788	130.2350	230.4568	16.22897783		589
432U	87 89	A	87334.01777813	.00950475	29264-4	19163-3	0	84
432	67.1454		104.0879 0056584	128.2291	232.4862	16.26181679		617
432U	87 89	A	87335.06270763	.00577358	27875-4	19163-3	0	85
432	67.1447		100.4805 0154167	118.3500	227.5339	16.02972063		634
432U	87 89	A	87336.99821693	.00603809	27529-4	18914-3	0	87
432	67.1459		93.9780 0145351	115.6500	245.7232	16.05349393		665

18432U	87 89	A	87338.92800052	.00651313	27495-4	18690-3 0	89
18432	67.1435		87.4711 0136097	113.3279	248.2310	16.08066605	696
18432U	87 89	A	87339.54981867	.00802565	27857-4	21977-3 0	90
18432	67.1441		85.3698 0133325	112.8171	248.8927	16.09051787	706
18432U	87 89	A	87341.84702159	.00734395	28146-4	17561-3 0	94
18432	67.1447		77.5771 0121155	109.6590	251.8891	16.12756777	743
18432U	87 89	A	87341.90901651	.00751915	28212-4	17895-3 0	95
18432	67.1446		77.3649 0120870	109.5923	251.8387	16.12855665	744
18432U	87 89	A	87342.90074090	.00552495	28506-4	17663-3 0	97
18432	67.1453		73.9869 0109932	110.6019	250.6577	16.12332175	760
18432U	87 89	A	87344.94607993	.00782438	28562-4	21994-3 0	106
18432	67.1436		67.0232 0101594	107.9733	253.2455	16.15152072	793
18432U	87 89	A	87345.50325350	.00845794	28575-4	22604-3 0	107
18432	67.1453		65.1234 0098934	107.2715	254.0685	16.16132731	802
18432U	87 89	A	87345.87448078	.00905848	28210-4	22604-3 0	108
18432	67.1437		63.8484 0090735	106.1131	255.6605	16.18316392	808
18432U	87 89	A	87345.99796747	.00903075	28103-4	22332-3 0	109
18432	67.1435		63.4256 0090015	105.9092	255.2010	16.18534790	810
18432U	87 89	A	87346.92441495	.00880757	28907-4	19841-3 0	111
18432	67.1434		60.2456 0085691	104.8482	256.1647	16.20199517	825

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18432U	87 89	A	87347.60322326	.00926749	28665-4	19313-3 0	112
18432	67.1448		57.9118 0082498	104.2305	256.9289	16.21492908	836
18432U	87 89	A	87347.84989788	.00738152	28482-4	19313-3 0	113
18432	67.1433		57.0633 0117290	108.7838	248.8208	16.12736893	840
18432U	87 89	A	87347.91256677	.00792105	28111-4	20696-3 0	114
18432	67.1426		56.8526 0116879	108.7379	252.6522	16.12828097	841
18432U	87 89	A	87348.59449066	.00829247	28189-4	20696-3 0	115
18432	67.1442		54.5343 0113901	107.9648	253.2498	16.13836120	852
18432U	87 89	A	87348.71845901	.00779247	28253-4	19355-3 0	116
18432	67.1448		54.1105 0113185	107.8341	253.5208	16.14025204	854
18432U	87 89	A	87348.84238806	.00676650	28610-4	16719-3 0	117
18432	67.1449		53.6860 0112694	107.9116	253.4314	16.14177918	856

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Kosmos 1894

18443U	87 91	A	87301.41276752	-.00000081	00000-0	99999-4	0	3
18443	1.3711	275.7767	0014857	84.2691	275.0205	0.99882948		0
18444U	87 91	B	87302.72979131	.03178029	59406-4	40492-3	0	8
18444	51.6203	268.5697	0005360	197.4707	162.7261	16.35073914		18
18447U	87 91	E	87305.21888553	-.00000180	00000-0	99999-4	0	4
18447	47.3165	273.5674	7280317	0.4649	0.7547	2.26671566		7

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Kosmos 1895

Ned: 26 nov 87

18491U	87 92	A	87315.49898840	.02624089	53734-5	32580-2 0	2
18491	70.3685	229.0722	0125920	63.9209	297.5119	15.93652138	2
18491U	87 92	A	87315.56174553	.00064222	00000-0	79895-4 0	3
18491	70.3593	228.8842	0127748	65.5392	295.7718	15.93351173	3
18491U	87 92	A	87315.81289137	.00043558	00000-0	54575-4 0	4
18491	70.3575	228.1677	0127496	65.0113	296.4074	15.93327905	7
18491U	87 92	A	87316.00123931	.00028564	00000-0	54575-4 0	5
18491	70.3612	227.6291	0112673	66.8022	293.5606	15.89680045	10
18491U	87 92	A	87316.31603115	.00044842	00000-0	54575-4 0	6
18491	70.3513	226.7114	0041173	78.2837	300.9296	16.05971660	15
18491U	87 92	A	87316.87339030	.00046411	00000-0	54575-4 0	7
18491	70.3576	225.0908	0045638	73.8212	286.8339	16.06088283	24
18491U	87 92	A	87317.86986321	.00136705	12141-4	16154-3 0	8
18491	70.3565	222.1842	0045240	72.3287	288.2580	16.06218200	40

18491U	87 92	A	87318.92850264	.00064272	00000-0	74031-4 0	9
18491	70.3583	219.1007	0045341	70.8288	289.5313	16.06365143	57
18491U	87 92	A	87318.92850264	.00064272	00000-0	74031-4 0	10
18491	70.3583	219.1007	0045341	70.8288	289.5313	16.06365143	57
18491U	87 92	A	87319.80033293	.00041040	00000-0	47431-4 0	11
18491	70.3585	216.5561	0044870	69.0530	291.5230	16.06449362	71
18491U	87 92	A	87321.91731962	.00042958	00000-0	48907-4 0	14
18491	70.3610	210.3841	0044767	64.6228	295.9363	16.06678060	105
18491U	87 92	A	87322.91346574	.00043196	00000-0	48907-4 0	15
18491	70.3591	207.4765	0044512	63.3541	297.2692	16.06782634	121
18491U	87 92	A	87323.90953437	.00038756	00000-0	43700-4 0	16
18491	70.3597	204.5756	0044537	60.4378	300.1296	16.06863876	137
18491U	87 92	A	87324.84331248	.00058583	00000-0	65366-4 0	17
18491	70.3585	201.8490	0044100	59.2440	301.4466	16.06982487	152
18491U	87 92	A	87324.84331248	.00058583	00000-0	65366-4 0	18
18491	70.3585	201.8490	0044100	59.2440	301.4466	16.06982487	152
18491U	87 92	A	87325.90147155	.00057673	00000-0	63762-4 0	20
18491	70.3583	198.7631	0044259	56.6482	303.8911	16.07109936	169
18491U	87 92	A	87326.52389621	.00059152	00000-0	65370-4 0	21
18491	70.3626	196.9467	0043473	55.6898	304.8572	16.07183281	179

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18491U	87 92	A	37326.52389621	.00167621	16611-4	18665-3	0	22
18491	70.3559	196.9456	0043960	55.0109	305.5348	16.07212820		179
18491U	87 92	A	87327.71610437	.00029710	00000-0	52323-4	0	25
18491	70.3565	193.5279	0092067	75.5067	285.4428	15.94149132		198
18491U	87 92	A	87328.02988381	.01283549	47336-5	91378-3	0	26
18491	70.3587	192.6151	0023510	6.2280	7.9294	16.15154112		203
18491U	87 92	A	87328.15133021	.01285611	47779-5	91378-3	0	27
18491	70.3545	192.2702	0023887	6.4980	353.5666	16.15153539		205
18491U	87 92	A	87328.46093845	-.00023308	00000-0	-16433-4	0	28
18491	70.3481	191.3266	0022128	5.6654	354.0928	16.15187472		210
18491U	87 92	A	87328.89453635	.00143152	48445-5	10199-3	0	29
18491	70.3597	190.0651	0022911	8.3107	351.9389	16.15296950		217
18491U	87 92	A	87329.20415454	.00084504	00000-0	59368-4	0	30
18491	70.3570	189.1493	0023150	3.8813	356.3152	16.15389430		222
18491U	87 92	A	87329.88529430	.00185102	48001-5	12905-3	0	31
18491	70.3557	187.1363	0023006	2.2743	357.8927	16.15558628		233
18491U	87 92	A	87330.07103955	.00189997	49322-5	13192-3	0	32
18491	70.3596	186.5909	0023221	2.2336	357.8746	16.15601976		236

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18535U	87 93	A	87318.45245787	-	.00004993	34426-4	00000 0 0	1
18535	64.7782		230.8640	0079778	69.9588	290.9513	16.10425615	1
18535U	87 93	A	87318.70081724		.00135743	35000-4	89759-4 0	3
18535	64.7940		229.9365	0076365	69.6480	291.1147	16.10510174	5
18535U	87 93	A	87318.82504175		.00047954	35062-4	33843-4 0	4
18535	64.7942		229.4753	0076316	69.6502	291.2866	16.10504492	7
18535U	87 93	A	87318.88713803		.00091959	34626-4	61737-4 0	5
18535	64.7939		229.2444	0076341	69.5848	291.3549	16.10529998	8
18535U	87 93	A	87318.88713720		.00092162	34869-4	61737-4 0	6
18535	64.7938		229.2445	0076613	70.1137	290.8252	16.10517809	8
18535U	87 93	A	87319.19797313		.00085400	00000-0	61737-4 0	8
18535	64.7930		228.0882	0043705	62.1564	301.0794	16.13216457	13
18535U	87 93	A	87319.81744804		.01933273	10792-4	13647-2 0	9
18535	64.7927		225.7743	0043863	61.3761	299.4547	16.13449289	24

18535U	87 93	A	87320.06525877	.01939718	10551-4	13647-2 0	10
18535	64.7982	224.8499	0043176	61.5268	298.5898	16.13564049	28
18535U	87 93	A	87320.68510521	.00102323	00000-0	71751-4 0	12
18535	64.7957	222.5378	0043386	60.9412	299.5052	16.13644209	38
18535U	87 93	A	87320.99499673	.00141298	00000-0	98315-4 0	13
18535	64.7956	221.3816	0043280	61.6739	298.8904	16.13737911	34
18535U	87 93	A	87321.92450357	.00120979	00000-0	83197-4 0	14
18535	64.7958	217.9097	0042708	60.9347	299.5404	16.13961841	49
18535U	87 93	A	87322.85390630	.00050392	00000-0	34363-4 0	15
18535	64.7975	214.4394	0042732	59.9996	300.5778	16.14161153	64
18535U	87 93	A	87323.78303016	.01518621	10865-4	10079-2 0	16
18535	64.8081	210.9840	0040795	58.4853	301.4041	16.14587066	79
18535U	87 93	A	87324.03083752	.01533433	10907-4	10079-2 0	17
18535	64.8015	210.0420	0040024	62.9308	297.2337	16.14790723	83
18535U	87 93	A	87324.15474805	.00208343	11383-4	13842-3 0	18
18535	64.7961	209.5780	0042020	59.3862	300.9193	16.14608048	85
18535U	87 93	A	87324.83605404	.00181403	11389-4	11961-3 0	19
18535	64.7961	207.0294	0041455	59.0511	301.3184	16.14790783	96
18535U	87 93	A	87324.83605404	.00181403	11389-4	11961-3 0	20
18535	64.7961	207.0294	0041455	59.0511	301.3184	16.14790783	96

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18535U	87 93	A	87325.88879646	.00156723	00000-0	99646-4 0	21
18535	64.7956	203.0938	0041257	58.3352	302.1253	16.15133546	113
18535U	87 93	A	87325.01264252	.00132652	00000-0	99646-4 0	23
18535	64.7951	202.6327	0037959	46.6323	312.9380	16.13213037	115
18535U	87 93	A	87326.88062359	.00122797	00000-0	91283-4 0	24
18535	64.7965	199.3920	0037239	46.8710	313.5355	16.13426042	129
18535U	87 93	A	87328.92573960	.00765223	10019-4	53685-3 0	26
18535	64.7981	191.7579	0037184	47.4171	313.1830	16.14206017	162
18535U	87 93	A	87329.17349807	.00085082	00000-0	60557-4 0	27
18535	64.7901	190.8288	0036289	44.3181	315.8726	16.14131174	166
18535U	87 93	A	87329.17349807	.00085082	00000-0	60557-4 0	28
18535	64.7901	190.8288	0036289	44.3181	315.8726	16.14131174	174
18535U	87 93	A	87329.85504012	.00368465	98807-5	25823-3 0	29
18535	64.7924	188.2787	0035804	44.2132	316.3298	16.14392732	185
18535U	87 93	A	87330.22666702	.00374535	10177-4	25823-3 0	30
18535	64.7904	186.8907	0037320	43.8770	316.3372	16.14477625	191
18535U	87 93	A	87330.78412337	.00374360	99996-5	25823-3 0	31
18535	64.7917	184.8046	0035322	42.4714	317.6471	16.14647975	200

18535U	87 93	A	87330.96997401	.00148180	10345-4	10249-3 0	32
18535	64.7928	184.1150	0036185	43.6370	316.7260	16.14686407	203
18535U	87 93	A	87331.77508715	.00355387	10300-4	23931-3 0	33
18535	64.7899	181.0972	0035304	43.3524	317.0656	16.14980120	216
18535U	87 93	A	87331.77508715	.00355387	10300-4	23931-3 0	34
18535	64.7899	181.0972	0035304	43.3524	317.0656	16.14980120	216
18535U	87 93	A	87332.27042548	.00189181	10344-4	12679-3 0	35
18535	64.7900	179.2458	0035471	41.7353	318.4321	16.15117937	224
18535U	87 93	A	87332.51813403	.00190408	10673-4	12679-3 0	36
18535	64.7902	178.3196	0035416	41.6616	318.7246	16.15210922	228
18535U	87 93	A	87332.88961229	.00170200	10221-4	12679-3 0	38
18535	64.7922	176.9294	0042142	49.8223	310.1228	16.13091145	234
18535U	87 93	A	87333.81956974	.00140855	10372-4	10347-3 0	39
18535	64.7905	173.4568	0042226	49.0253	311.2584	16.13320392	249
18535U	87 93	A	87333.94357908	.00128306	00000-0	92727-4 0	40
18535	64.7911	172.9956	0042184	48.9510	311.6235	16.13342877	251
18535U	87 93	A	87334.93530127	.00115982	00000-0	82504-4 0	41
18535	64.7911	169.2949	0042188	48.2656	312.1236	16.13563295	267
18535U	87 93	A	87336.05084876	.00094192	00000-0	65857-4 0	42
18535	64.7882	165.1284	0041784	47.7210	312.7835	16.13850281	285

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535U	87 93	A	87336.67049600	.00160472	10872-4	11239-3 0	44
535	64.7915	162.8161	0041630	46.3932	314.0696	16.13994118	295
535U	87 93	A	87336.85637968	.00140177	34838-4	11239-3 0	45
535	64.6345	162.4842	0093757	40.6942	315.3852	16.05289121	298
535U	87 93	A	87336.91949622	.00143754	94420-5	11239-3 0	46
535	64.7926	161.8906	0039059	171.0247	192.4729	16.12753849	299
535U	87 93	A	87336.98093601	.00248260	96830-5	19191-3 0	47
535	64.7932	161.6644	0039262	171.1687	189.0231	16.12789572	300
535U	87 93	A	87338.90295716	.00147968	95877-5	11232-3 0	50
535	64.7928	154.4927	0037900	170.4625	189.7561	16.13260388	331
535U	87 93	A	87339.77075226	.00143990	95294-5	10798-3 0	51
535	64.7915	151.2535	0037350	170.3027	189.7815	16.13481030	345
535U	87 93	A	87340.88633065	.00146752	96679-5	10798-3 0	54
535	64.7935	147.0888	0036854	169.8258	190.2700	16.13782251	363
535U	87 93	A	87341.62994447	.00063841	00000-0	46293-4 0	55
535	64.7910	144.3107	0036287	169.9569	190.1121	16.13905284	375

18535U	87	93	A	87341.93979144	.00185802	99314-5	13442-3	0	56
18535	64.7916	143.1532	0035826	169.7010	190.5727	16.14055922			380
18535U	87	93	A	87342.55933426	.00362204	97905-5	25880-3	0	57
18535	64.7897	140.8344	0035686	168.9373	191.0137	16.14141740			390
18535U	87	93	A	87342.86913918	.00077106	00000-0	55064-4	0	58
18535	64.7715	139.6797	0034860	168.7621	191.3550	16.14216814			395
18535U	87	93	A	87343.92231756	.00124473	00000-0	87289-4	0	59
18535	64.7905	135.7427	0034531	168.5593	191.7471	16.14455768			412
18535U	87	93	A	87344.91333993	.00154667	98855-5	10815-3	0	61
18535	64.7906	132.0363	0033787	167.9188	192.2553	16.14729357			428
18535U	87	93	A	87345.71342743	.00143645	95514-5	10815-3	0	62
18535	64.7932	129.0246	0034588	155.4069	204.4222	16.13668526			441
18535U	87	93	A	87349.93271018	.00112546	00000-0	80429-4	0	71
18535	64.7883	113.2864	0034725	154.2090	206.0526	16.14189074			509
18535U	87	93	A	87350.92392729	.00024814	00000-0	17835-4	0	72
18535	64.7881	109.5786	0032966	151.8645	208.5736	16.14486332			525
18535U	87	93	A	87351.54333344	.00266662	10105-4	18557-3	0	73
18535	64.7902	107.2641	0033618	152.3400	208.1825	16.14713063			535
18535U	87	93	A	87351.91489400	.00155189	98203-5	10832-3	0	74
18535	64.7898	105.8738	0033044	151.9011	208.3878	16.14813949			541

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18535U	87 93	A	87352.84377708	.00156154	10043-4	10728-3	0	75
18535	64.7893		102.4000 0032301	151.7349	208.4957	16.15088862		556
18535U	87 93	A	87352.84377708	.00156154	10043-4	10728-3	0	76
18535	64.7893		102.4000 0032301	151.7349	208.4957	16.15088862		556
8535U	87 93	A	87352.84377708	.00156154	10043-4	10728-3	0	77
8535	64.7893		102.4000 0032301	151.7349	208.4957	16.15088862		556
8535U	87 93	A	87353.89632797	.00157777	99206-5	10728-3	0	78
8535	64.7886		95.4609 0030923	149.7708	210.2968	16.15333085		573
8535U	87 93	A	87354.57734412	.00134118	92212-5	10728-3	0	79
8535	64.7904		95.9137 0037715	167.0458	193.0193	16.12574107		584
8535U	87 93	A	87354.82543320	.00135435	90395-5	10728-3	0	80
8535	64.7862		94.9886 0036912	166.6836	193.6361	16.12774877		588
18535U	87 93	A	87355.07344754	.00135742	93007-5	10728-3	0	81
18535	64.7889		94.0613 0036595	166.8433	193.3623	16.12837972		592
18535U	87 93	A	87355.87948363	.00123132	00000-0	94745-4	0	82
18535	64.7889		91.0576 0036538	166.4072	193.7038	16.13011148		605
8535U	87 93	A	87356.62346298	.00183457	93185-5	14014-3	0	83
8535	64.7835		88.2779 0036346	166.1037	194.1831	16.13263009		617

18535U	87 93	A	87357.05736378	.00114402	00000-0	86465-4 0	84
18535	64.7876		86.6575 0035670	165.7054	194.4190	16.13337875	624
18535U	87 93	A	87357.86317465	.00095115	00000-0	71165-4 0	85
18535	64.7890		83.6473 0034843	165.2289	195.0863	16.13560805	637
18535U	87 93	A	87358.91750504	.00107595	00000-0	91355-4 0	88
18535	64.7880		79.7177 0047903	163.5222	196.5115	16.10549769	654

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18568U	87 94	A	87325.04494707	-.00008282	57245-4	00000 0 0	1
18568	51.6515		65.9004 0047234	90.8794	269.8877	16.20466124	1
18568U	87 94	A	87325.10659287	.00864677	56971-4	32334-3 0	2
18568	51.6536		65.5618 0047260	91.0677	269.5959	16.20627315	2
18568U	87 94	A	87325.29155373	.00206275	27224-4	32334-3 0	3
18568	51.6633		64.5589 0080703	195.7998	162.6573	15.97288290	5
18568U	87 94	A	87325.41691855	.00195445	24880-4	32334-3 0	4
18568	51.6550		63.8809 0079079	194.3717	165.2121	15.96680759	7
18568U	87 94	A	87325.91762845	.00110123	14352-4	18423-3 0	5
18568	51.6567		61.2280 0078435	195.8313	162.9136	15.96785857	15
18568U	87 94	A	87326.16862454	.01327176	93908-3	42379-2 0	8
18568	51.6563		59.9077 0048597	182.8126	177.3506	15.88865294	19

18568U	87 94	A	87326.54594037	.00101622	87042-5	32120-3 0	10
18568	51.6571		57.9229 0048731	184.5830	175.2813	15.88921606	25
18568U	87 94	A	87326.86042972	.00072620	68042-5	23117-3 0	11
18568	51.6563		56.2718 0048725	185.6350	174.3744	15.88949560	30
18568U	87 94	A	87327.36355492	.00040885	00000-0	23117-3 0	12
18568	51.6315		53.5361 0012866	14.7310	334.1152	15.78671196	38
18568U	87 94	A	87327.61876122	.00040897	00000-0	23117-3 0	13
18568	51.6287		52.2160 0011547	45.4932	314.7393	15.78602218	42
18568U	87 94	A	87328.88479884	.00041112	00000-0	23117-3 0	14
18568	51.6309		45.6707 0012430	50.2182	309.9481	15.78699759	62
18568U	87 94	A	87333.82177708	.00041694	00000-0	23117-3 0	18
18568	51.6310		20.1271 0012236	64.0159	296.2416	15.79009734	140
18568U	87 94	A	87342.93405455	.00024578	00000-0	13554-3 0	25
18568	51.6268		332.9548 0011737	112.7361	247.5114	15.79434257	284
18568U	87 94	A	87345.84444934	.00024737	00000-0	13554-3 0	27
18568	51.6292		317.8946 0012253	111.0029	249.3839	15.79566640	330
18568U	87 94	A	87346.91991750	.00019430	00000-0	13554-3 0	28
18568	51.6282		312.3341 0019755	201.4957	154.5193	15.74096242	347
18568U	87 94	A	87348.82516758	.00019464	00000-0	13554-3 0	30
18568	51.6260		302.5550 0019436	210.9197	149.0479	15.74138771	377

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Kosmos 1897

Upp = 26 nov

8575U	87 96	A	87337.31641012	-.00000237	00000-0	99999-4	0	9
8575	1.4387	276.4724	0012630	95.1006	266.1248	1.00345853		7
8576U	87 96	B	87330.73734118	.02931939	58333-4	56862-3	0	1
8576	51.6171	275.4477	0004503	145.0761	215.2242	16.30975008		3
8577U	87 96	C	87330.86026606	.08663338	58538-4	16393-2	0	1
8577	51.5989	274.7689	0014118	125.5370	234.6765	16.30886072		6
8579U	87 96	E	87333.25294772	.00000052	00000-0	99999-4	0	5
8579	47.3912	275.4911	7247268	0.6335	359.7990	2.27377891		5

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Upp: 29 nov fr. Cape Canaveral. Titan 340

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Kosmos 1898

Kpp = 1 dcc

585U	87 98	A	87335.72313999	-.00000012	00000-0	00000	0	0	1
585	74.0192	291.8035	0014576	351.9578	8.1334	14.27524731			2
585U	87 98	A	87340.97282804	-.00000012	00000-0	00000	0	0	7
585	74.0082	282.2550	0022858	334.6094	25.3929	14.29230669			77
585U	87 98	A	87342.86270647	-.00000012	00000-0	00000	0	0	8
585	74.0082	278.8182	0022740	330.7579	29.2296	14.29230860			104

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Kosmos 1899

Upp: 7 dec

Ned: 21 dec

18625U	87 99	A	87341.42501052	-.00000313	00000-0	00000 0 0	1
18625	70.3710		251.1252 0042586	66.3772	294.4193	16.14209659	1
18625U	87 99	A	87341.48694145	.01404685	61758-5	93176-3 0	2
18625	70.3737		250.9459 0043288	65.3615	295.2425	16.14490727	2
18625U	87 99	A	87341.61084064	.01292974	59187-5	93176-3 0	3
18625	70.3800		250.5809 0049758	72.1717	286.8567	16.12688739	4
18625U	87 99	A	87341.73516646	.00020162	00000-0	14795-4 0	4
18625	70.3796		250.2158 0049636	72.4547	288.1223	16.12653376	6
18625U	87 99	A	87342.04548989	.00029698	18464-4	14795-4 0	5
18625	70.4059		249.3432 0113434	13.2650	345.7559	16.08052889	11
18625U	87 99	A	87342.17014986	.00012541	00000-0	14795-4 0	7
18625	70.3835		248.9432 0039616	80.9310	280.2580	16.06883831	13
18625U	87 99	A	87342.85481582	.00073872	00000-0	84830-4 0	9
18625	70.3801		246.9474 0039519	80.2289	280.3044	16.06901206	24

18625U	87 99	A	87343.72627447	.00044650	00000-0	51455-4 0	10
18625	70.3813		244.4069 0039191	77.9714	282.3139	16.06980250	14
18625U	87 99	A	87343.72627447	.00044650	00000-0	51455-4 0	11
18625	70.3813		244.4069 0039191	77.9714	282.3139	16.06980250	14
18625U	87 99	A	87346.65174259	.00057069	00000-0	64169-4 0	16
18625	70.3846		235.8823 0039254	72.6939	287.8738	16.07301391	61
18625U	87 99	A	87346.90068335	.00054389	00000-0	61174-4 0	17
18625	70.3813		235.1556 0039064	72.1981	288.3366	16.07322693	65
18625U	87 99	A	87347.89642234	.00033708	00000-0	37965-4 0	18
18625	70.3813		232.2498 0038949	70.0465	290.4756	16.07404354	81
18625U	87 99	A	87348.89212440	.00042286	00000-0	47218-4 0	19
18625	70.3820		229.3476 0038828	68.0400	292.5873	16.07501335	97
18625U	87 99	A	87348.89212440	.00042286	00000-0	47218-4 0	20
18625	70.3820		229.3476 0038828	68.0400	292.5873	16.07501335	121
18625U	87 99	A	87349.88774171	.00042875	00000-0	47637-4 0	21
18625	70.3828		226.4439 0038648	66.4567	294.0978	16.07590470	137
18625U	87 99	A	87350.94553672	.00228201	27707-4	25251-3 0	22
18625	70.3828		223.3568 0038452	64.1118	296.4970	16.07771441	154
18625U	87 99	A	87351.94099995	.00060999	00000-0	66373-4 0	24
18625	70.3826		220.4547 0038586	62.2087	298.2515	16.07840831	170

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8625U	87 99	A	87352.87420959	.00044661	00000-0	48667-4 0	26
8625	70.3805		217.7301 0038085	59.8446	300.6151	16.07923014	185
8625U	87 99	A	87352.87420959	.00044661	00000-0	48667-4 0	27
8625	70.3805		217.7301 0038085	59.8446	300.6151	16.07923014	185
8625U	87 99	A	87353.86958695	.00035400	00000-0	38482-4 0	28
8625	70.3737		214.8223 0037950	58.1187	302.4274	16.08015954	201
8625U	87 99	A	87355.05147897	.00079393	00000-0	84497-4 0	31
8625	70.3792		211.3747 0037915	55.4345	305.0153	16.08170976	220
8625U	87 99	A	87355.05147897	.00079393	00000-0	84497-4 0	32
8625	70.3792		211.3747 0037915	55.4345	305.0153	16.08170976	220

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631U	87100	A	87347.17560376	-.00000074	00000-0	99999-4	0	1
631	1.4902		259.4732	0050446	76.0257	286.1880	1.02355736	3
632U	87100	B	87346.97527135	.10921768	61564-4	12652-3	0	10
632	51.5098		246.6125	0004641	217.6492	142.5759	16.49838219	41

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part 5.4

8665U	87101	A	38	45.39184679	.00027270	00000-0	42352-4	0	117
8665	64.9893	325.8479	0009507	267.0569	92.9425	16.03789792	1029		
8665U	87101	A	38	45.89070292	.00026629	00000-0	41317-4	0	118
8665	64.9898	324.0254	0009513	266.9836	93.0146	16.03812666	1037		
8665U	87101	A	88	46.88839152	.00012004	00000-0	18907-4	0	119
8665	64.9897	320.3785	0009678	268.3651	91.6806	16.03867737	1053		
8665U	87101	A	88	47.88604631	.00029303	00000-0	45102-4	0	120
8665	64.9899	316.7334	0009391	268.8965	91.2589	16.03922705	1069		
8665U	87101	A	88	48.69658746	.00020011	00000-0	30875-4	0	121
8665	64.9919	313.7698	0009721	267.1278	93.0078	16.04000042	1082		
8665U	87101	A	88	48.94596097	.00034420	00000-0	52493-4	0	122
8665	64.9897	312.8632	0009293	266.1450	93.8778	16.04029609	1086		
8665U	87101	A	88	49.00830685	.00082612	70978-5	13015-3	0	123
8665	64.9904	312.6320	0010717	265.8297	93.8325	16.03745541	1087		

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Wsp: 1st dec

18666U	87102	A	87348.53612060	-.00004922	33989-4	00000	0	0	
18666	64.9070		290.8316	0136116	63.8593	297.6014	16.03606577		1
18666U	87102	A	87348.59849325	-.00004905	34025-4	00000	0	0	2
18666	64.9082		290.6048	0135913	63.7817	297.7206	16.03586958		2
18666U	87102	A	87348.84795374	.00150634	34173-4	70233-4	0		3
18666	64.9050		289.6902	0135375	63.7428	297.8429	16.03720998		6
18666U	87102	A	87348.91029824	.00251170	33850-4	11515-3	0		4
18666	64.9049		289.4604	0135316	63.8117	297.6961	16.03772586		7
18666U	87102	A	87350.84244569	.00389869	34057-4	16472-3	0		7
18666	64.9069		282.3694	0130677	63.0606	298.7768	16.05465223		38
18666U	87102	A	87350.96695738	.00442510	33904-4	18640-3	0		8
18666	64.9057		281.9084	0130033	63.4859	297.9774	16.05608422		40
18666U	87102	A	87351.96321657	.00484372	34207-4	19515-3	0		10
18666	64.9080		273.2470	0127273	62.9530	298.4475	16.06597727		56
18666U	87102	A	87352.89666850	.00477187	34273-4	18509-3	0		11
18666	64.9073		274.8090	0124668	62.5361	298.8128	16.07496734		71

18666U	87102	A	87352.89666850	.00477187	34273-4	18509-3	0	12
18666	64.9073		274.8090	0124668	62.5361	298.8128	16.07496734	71
8666U	87102	A	87353.89178321	.00437356	34592-4	16331-3	0	13
8666	64.9052		271.1364	0122092	62.4433	298.7912	16.08395443	87
8666U	87102	A	87354.38632242	.00480906	34410-4	17134-3	0	14
8666	64.9064		267.4623	0119224	62.1277	299.1897	16.09413846	103
18666U	87102	A	87355.07272870	.00404095	34603-4	17134-3	0	15
18666	64.9065		266.7748	0117647	65.5185	295.2477	16.07992238	106
18666U	87102	A	87355.88118086	.00423065	34660-4	17134-3	0	16
18666	64.8931		263.7753	0116494	65.4390	295.8656	16.08680797	119
18666U	87102	A	87356.56489872	.00527696	34343-4	20745-3	0	17
18666	64.9052		261.2651	0114022	65.1413	296.3970	16.09438462	130
18666U	87102	A	87357.06187825	.00521670	34634-4	19990-3	0	18
18666	64.9058		259.4279	0112669	65.0094	296.2613	16.09960720	138
18666U	87102	A	87357.43453934	.00532689	34499-4	19990-3	0	19
18666	64.9046		258.0477	0111680	64.9541	296.3164	16.10360015	144
18666U	87102	A	87358.73816824	.00524542	00000-0	00000-0	0	0021
18666	64.9087		253.2152	0118708	65.5355	295.8070	16.1171473600166	
8666U	87102	A	87358.92428898	.00551189	35047-4	19158-3	0	22
8666	64.9012		252.5255	0107664	64.7836	296.4259	16.11895979	168
8666U	87102	A	87359.91664193	.00520203	34798-4	17172-3	0	23
8666	64.9031		248.8458	0104880	64.3394	296.7570	16.12942853	184

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18666U	87102	A	87360.04065987	.00480706	34025-4	17172-3	0	24
18666	64.9074		248.3854 0111624	61.0645	299.1695	16.10872907		186
18666U	87102	A	87361.21998533	.00555257	34654-4	18816-3	0	25
18666	64.9040		244.0133 0107992	60.8562	300.4246	16.12082698		205
18666U	87102	A	87361.65415621	.00468507	34985-4	15585-3	0	26
18666	64.9034		242.4019 0107019	60.7472	300.3238	16.12468042		212
18666U	87102	A	87363.01805415	.00632338	34387-4	19639-3	0	28
18666	64.9042		237.3332 0102561	60.7017	300.6034	16.13962775		234
18666U	87102	A	87364.82022419	.00366011	33981-4	16359-3	0	31
18666	64.9039		230.6706 0128156	74.4627	287.0445	16.05401224		263
18666U	87102	A	87365.87896977	.00377572	34149-4	16359-3	0	32
18666	64.9030		226.7791 0125715	73.9930	287.5169	16.06199136		280
18666U	87102	A	88 1.87493148	.00396216	33837-4	16359-3	0	33
18666	64.8998		223.1094 0123955	73.7882	287.8647	16.07030527		296
18666U	87102	A	88 3.92716260	.00559609	34492-4	21114-3	0	35
18666	64.9013		215.5410 0117195	73.2581	288.0136	16.09230632		329
18666U	87102	A	88 4.61065171	.00309267	34820-4	11231-3	0	37
18666	64.8984		213.0136 0116552	72.7491	288.5243	16.09808719		340

18666U	87102	A	88	4.85915434	.00626301	34680-4	22247-3	0	38
18666	64.9803	212.0933	0115564	72.6996	288.7691	16.10139793	344		
8666U	87102	A	88	5.97673232	.00589896	34626-4	19854-3	0	40
8666	64.3993	207.9528	0111874	72.1526	289.2570	16.11393682	362		
8666U	87102	A	88	6.90733519	.00572857	34764-4	18281-3	0	41
8666	64.8999	204.5016	0109077	71.7734	289.4168	16.12456991	377		
8666U	87102	A	88	6.90735424	.00614027	34782-4	19534-3	0	42
8666	64.9003	204.4995	0108842	72.0149	289.3368	16.12526431	377		
18666U	87102	A	88	007.96310634	.00000000	00000-0	00000-0	0	0044
18666	064.9040	200.5815	0142950	110.6633	250.9788	16.04663565	00394		
18666U	87102	A	88	8.46159278	.00527584	33799-4	20642-3	0	45
18666	64.8970	198.7611	0135542	111.1739	250.4102	16.05216623	402		
18666U	87102	A	88	8.89766158	.00562569	34319-4	21620-3	0	47
18666	64.9951	197.1542	0134110	110.7280	250.9385	16.05678222	409		
18666U	87102	A	88	9.89386428	.00517702	34246-4	19237-3	0	49
18666	64.8965	193.4906	0130692	110.2617	251.2669	16.06705553	425		
8666U	87102	A	88	13.31339497	.00385530	33813-4	18410-3	0	53
8666	64.8838	180.8615	0166019	118.2518	229.3482	15.96980780	480		
8666U	87102	A	88	13.87939119	.00397290	33542-4	18410-3	0	54
8666	64.8980	178.8300	0165104	118.5940	243.2400	15.97467624	489		
8666U	87102	A	88	13.87939119	.00397290	33542-4	18410-3	0	55
8666	64.8980	178.8300	0165104	118.5940	243.2400	15.97467624	489		

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8666U	87102	A	88	14.88078827	.00410735	33801-4	18410-3	0	56
8666	64.8960	175.1887	0162176	118.1459	243.8158	15.98407338			505
8666U	87102	A	88	15.25611831	.00759485	33823-4	33806-3	0	57
8666	64.8946	173.8198	0159317	117.8003	244.1868	15.99020207			511
8666U	87102	A	88	16.62670173	.00581809	34969-4	20248-3	0	60
8666	64.8923	168.7887	0109769	120.5142	240.5254	16.11473144			533
8666U	87102	A	88	16.93699269	.00473385	34513-4	15995-3	0	61
8666	64.8938	167.6325	0109393	120.6789	240.5718	16.11855448			538
8666U	87102	A	88	17.06106918	.00468203	34602-4	15680-3	0	62
8666	64.8942	167.1692	0109212	120.7346	240.4703	16.11979076			540
18666U	87102	A	88	17.86739772	.00965559	34597-4	36520-1	0	63
18666	64.8936	164.1684	0106578	119.9101	241.5540	16.11613737			553
8666U	87102	A	88	17.92910226	.00601165	34555-4	19230-3	0	64
8666	64.8957	163.9507	0105852	120.1236	239.6740	16.13050900			554
8666U	87102	A	88	18.85899487	.00652742	35093-4	20059-3	0	65
8666	64.8946	160.4894	0101598	119.5149	241.6923	16.14247351			569
8666U	87102	A	88	20.03552035	.00663486	35084-4	19069-3	0	66
8666	64.8964	156.1044	0096655	118.8112	242.3372	16.15826096			588

8666U	87102	A	88	20.46865285	.00765214	35016-4	21448-3	0	67
8666	64.8894	154.4881	0094148	118.5396	242.5391	16.16526113			595
8666U	87102	A	88	21.14894259	.00567649	34569-4	20063-3	0	69
8666	64.8930	151.9575	0129414	126.2683	228.9118	16.07441878			606
8666U	87102	A	88	21.95853131	.00597655	34503-4	20509-3	0	71
8666	64.8946	148.9622	0125880	125.5024	235.7061	16.08433305			619
18666U	87102	A	88	23.01513273	.00617605	34324-4	20194-3	0	72
18666	64.8934	145.0617	0121661	125.3359	235.9763	16.09738589			636
18666U	87102	A	88	23.88459966	.00646451	35034-4	20194-3	0	73
18666	64.8914	141.8411	0118317	125.0318	236.1907	16.10836746			550
18666U	87102	A	88	24.31911285	.00645440	35005-4	20194-3	0	74
18666	64.8941	140.2317	0115911	124.8971	236.2206	16.11299008			657
8666U	87102	A	88	24.87759854	.00669323	34294-4	20194-3	0	75
8666	64.8913	138.1569	0113744	124.9917	236.2706	16.12067787			666
8666U	87102	A	88	25.86975840	.00704300	34626-4	20194-3	0	76
8666	64.8913	134.4694	0109359	124.3864	236.6676	16.13406189			682
18666U	87102	A	88	26.86110427	.00751475	35239-4	20194-3	0	77
18666	64.8907	130.7796	0105131	123.9455	237.1309	16.14832732			698
18666U	87102	A	88	26.86110427	.00751475	35239-4	20194-3	0	78
18666	64.8907	130.7796	0105131	123.9455	237.1309	16.14832732			698

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18666U	87102	A	88	27.66588533	.00872076	35425-4	22365-3	0	79
18666	64.8918	127.7769	0100429	123.2752	237.8268	16.16166693			711
18666U	87102	A	88	27.91336542	.00884489	34907-4	22365-3	0	80
18666	64.8920	126.8556	0098825	123.1373	237.9261	16.16603627			715
18666U	87102	A	88	28.53177950	.00879252	35391-4	21003-3	0	81
18666	64.8933	124.5428	0096050	122.9087	238.0453	16.17657090			725
18666U	87102	A	88	28.90265256	.00661590	33642-4	21003-3	0	83
18666	64.8973	123.1690	0151320	128.5408	223.9395	16.03910518			731
18666U	87102	A	88	29.02890953	.01454385	34218-4	21003-3	0	84
18666	64.8903	122.7047	0160163	131.5413	230.9401	16.06219305			733
18666U	87102	A	88	29.52661016	.01259090	34412-4	16839-3	0	85
18666	64.8906	120.8683	0156763	131.2958	229.8262	16.07345787			741
18666U	87102	A	88	29.89987249	.01095801	34580-4	14253-3	0	86
18666	64.8926	119.4909	0153837	131.0042	230.3344	16.08143875			747
18666U	87102	A	88	30.52150470	.01241298	34372-4	14934-3	0	87
18666	64.8914	117.1934	0148829	130.6584	230.8848	16.09641463			757
18666U	87102	A	88	30.89415419	.01162361	34662-4	13548-3	0	88
18666	64.8916	115.8152	0145786	130.3813	230.9300	16.10482119			763

8666U	87102	A	88	31.88701066	.01200018	34807-4	12327-3	0	89
8666	64.8894			112.1311	0137747	129.3500	232.1763	16.12897890	779
8666U	87102	A	88	32.50673514	.01342407	34900-4	12995-3	0	90
8666	64.8911			109.8246	0131256	129.1151	232.5970	16.14642350	789
8666U	87102	A	88	33.31131538	.01372862	35393-4	12186-3	0	93
8666	64.8882			106.8239	0123300	128.3199	233.0086	16.16844143	802
8666U	87102	A	88	33.86768115	.00345040	34643-4	11193-3	0	94
8666	64.8872			104.7375	0101933	133.7207	226.2056	16.13720428	811
8666U	87102	A	88	34.42555185	.00360712	34888-4	11193-3	0	95
8666	64.8885			102.6633	0100168	133.7674	227.5592	16.14483108	820

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668U	87103	A	87349.80857829	.00007774	00000-0	99999-4 0	1
668	65.7978		266.6023 0033816	333.5160	26.4471	15.58552624	4
668U	87103	A	87349.80857798	.00007978	00000-0	99999-4 0	2
668	65.8318		266.6472 0031639	327.4058	32.5134	15.59313931	4
668U	87103	A	87349.93685466	.00203128	00000-0	24480-2 0	3
668	65.8341		266.2209 0031374	327.2418	32.6700	15.59310241	6
668U	87103	A	87350.19340627	.00015188	00000-0	19046-3 0	5
668	65.8368		265.3743 0031843	327.5342	32.3590	15.59314686	10
668U	87103	A	87350.89892710	.00007590	00000-0	95180-4 0	6
668	65.8344		263.0357 0031825	326.9893	32.8940	15.59317425	21
68U	87103	A	88 16.67714888	.00162341	00000-0	18869-2 0	16
68	65.8337		160.9946 0034921	311.3544	48.5436	15.60240648	501
68U	87103	A	88 17.57445456	.00003897	00000-0	48009-4 0	17
68	65.3323		158.0149 0034510	311.1473	48.0954	15.60210898	515

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8699U	87104	A	87356.20867112	.00149060	15699-4	27594-3	0	5
8699	51.6286	264.8511	0030192	222.3143	137.4510	15.99801918		12
18699U	87104	A	87357.02099594	.00117226	11956-4	22763-3	0	7
18699	51.6272	260.5180	0029139	231.5980	128.4817	15.99119949		25
18699U	87104	A	87357.52086328	.00050247	00000-0	21093-3	0	9
18699	51.6611	257.8627	0045654	186.9730	170.4530	15.83364637		33
18699U	87104	A	87357.83688499	.00031125	00000-0	21093-3	0	10
18699	51.6272	256.2373	0018843	247.5967	102.2081	15.74467736		38
18699U	87104	A	87358.91764133	.00043796	00000-0	29403-3	0	11
18699	51.6280	250.6864	0018623	251.7652	108.1232	15.74516577		55
18699U	87104	A	87359.93311195	.00043835	00000-0	29403-3	0	12
18699	51.6266	245.4566	0017878	259.6084	100.1632	15.74557038		71
18699U	87104	A	87364.94713000	.00004762	00000-0	34239-4	0	18
18699	51.6291	219.6868	0014767	278.6345	80.8142	15.74321759		150

8699U	87104	A	87365.89936081	.00004788	00000-0	34239-4	0	19
8699	51.6272	214.7916	0017416	274.1263	85.9773	15.74370251		165
8699U	87104	A	88 3.88248819	.00042527	00000-0	28789-3	0	22
8699	51.6561	199.4970	0018073	300.4506	58.8941	15.74354453		212
8699U	87104	A	88 16.95937628	.00113556	00000-0	75025-3	0	33
8699	51.6256	132.2699	0017033	345.5009	14.2517	15.74531109		418
18699U	87104	A	88 17.84792710	.00113738	00000-0	75025-3	0	34
18699	51.6237	127.7064	0017993	349.3747	10.3718	15.74543469		432
18699U	87104	A	88 18.92684998	.00114288	00000-0	75025-3	0	35
18699	51.6265	122.1640	0017579	355.6398	4.1325	15.74662616		449
18699U	87104	A	88 21.14798696	.00115075	00000-0	75025-3	0	37
18699	51.6347	110.7354	0018784	6.2602	353.1003	15.74787159		484
8699U	87104	A	88 25.84397298	.00115299	00000-0	75025-3	0	43
8699	51.6223	86.5461	0016139	28.3860	331.1966	15.74896015		558
8699U	87104	A	88 33.07750217	.00017270	00000-0	11638-3	0	48
8699	51.6282	49.3820	0016037	45.1969	315.0509	15.75084995		672
8699U	87104	A	88 34.98081957	.00019754	00000-0	13191-3	0	50
8699	51.6281	39.5899	0016566	53.1519	307.1117	15.75172077		222
8699U	87104	A	88 37.96240970	.00020133	00000-0	13191-3	0	53
8699	51.6295	24.2425	0016366	67.5070	293.4663	15.75601401		269

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8699U	87104	A	88	38.91364921	.00020160	00000-0	13191-3 0	55
8699	51.6319			19.3463 0015858	72.6251	287.6733	15.75642105	764
8699U	87104	A	88	39.80156119	.00020103	00000-0	13191-3 0	56
8699	51.6213			14.7756 0013182	74.1086	286.0900	15.75629291	778
8699U	87104	A	88	40.43580221	.00020112	00000-0	13191-3 0	57
8699	51.6311			11.5112 0015563	81.8382	278.2784	15.75595280	788

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18701U	87105	A	87355.99195418	-.00000045	00000-0	99999-4 0	4
18701	63.0407		18.7798 7353929	318.2845	4.5948	2.03430353	3
8701U	87105	A	88 5.40984847	-.00001083	00000-0	00000 0 0	21
8701	63.0087		16.5683 7374389	318.4108	4.4497	2.00657366	29

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Kosmos 1907

Upp: 29 dec fr. Placeta-K

8720U	87110	A	87364.10443027	.00004275	00000-0	48036-4 0	5
8720	72.8260		275.5354 0046141	212.3815	138.3576	15.61442141	10
8720U	87110	A	87364.10604960	.00004268	00000-0	48036-4 0	6
8720	72.8254		275.5252 0045878	212.3302	147.5097	15.61415930	10
8720U	87110	A	87364.87522553	.00002642	00000-0	30940-4 0	8
8720	72.8215		273.6776 0044154	208.2864	151.5606	15.60735584	22
8720U	87110	A	87365.90080895	.00002640	00000-0	30940-4 0	9
8720	72.8226		271.2225 0043772	205.9602	153.9051	15.60725011	38
8720U	87110	A	88 1.92638815	.00002636	00000-0	30940-4 0	10
8720	72.8211		268.7682 0043870	203.5955	156.2981	15.60703521	54
8720U	87110	A	88 2.82379262	.00001809	00000-0	21455-4 0	12
8720	72.8211		266.6211 0043713	201.4371	158.5381	15.60712056	68
8720U	87110	A	88 4.29807582	.00001807	00000-0	21455-4 0	13
8720	72.8230		263.0891 0042974	198.3157	161.5903	15.60705362	91
8720U	87110	A	88 4.87498573	.00001804	00000-0	21455-4 0	14
8720	72.8214		261.7097 0043083	197.1849	162.7559	15.60679377	100

8720U	87110	A	88	7.11851236	.00091922	00000-0	10454-2	0	18
8720	72.8201	256.3396	0043234	191.6681	168.3382	15.60721770			135
8720U	87110	A	88	7.88767169	.00127239	00000-0	14431-2	0	19
8720	72.8185	254.4940	0042912	190.2408	169.4710	15.60699982			147
18720U	87110	A	88	8.01592810	.00023869	00000-0	27498-3	0	20
18720	72.8230	254.1907	0043018	189.8766	170.1499	15.60696505			149
720U	87110	A	88	10.64406744	.00003742	00000-0	43802-4	0	23
720	72.8188	247.8993	0042516	184.7235	175.2289	15.60655118			190

87-109A

Ekran 17

8715U	87109	A	87361.25754802	-.00000257	00000-0	99999-4	0	4
8715	1.3564	274.1005	0059131	97.0990	265.9360	1.00535704		29
8716U	87109	B	87361.77453451	.01056989	58557-4	21402-3	0	4
8716	51.6214	274.5251	0008084	182.2871	177.8527	16.30501762		5
8719U	87109	E	87365.04095978	.00000010	00000-0	53135-4	0	6
8719	47.3921	275.0194	7237421	0.5969	359.9181	2.27776618		7

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Kosmas 1206

Lip: 25 dec fr. Plezetsk

8713U	87108	A	87360.53341090	.00000871	-60463-5	00000	0	0	1
8713	82.6183		294.0715 0048293	103.3883	257.2797	16.22370966			0
8713U	87108	A	87360.59509219	.00000837	-58070-5	00000	0	0	2
8713	82.5937		294.0082 0050131	104.4877	256.1958	16.22729518			1
8713U	87108	A	87360.84176325	.00108175	-62854-5	34003-4	0		3
8713	82.5894		293.7271 0050157	103.5079	257.2531	16.22833501			5
8713U	87108	A	87360.90341425	.00195404	-57058-5	61285-4	0		4
8713	82.5905		293.6559 0050275	103.3538	257.3490	16.22887017			6
8713U	87108	A	87361.27336524	.00224738	-57183-5	69319-4	0		5
8713	82.5912		293.2332 0049630	102.2451	258.5818	16.23159106			12
8713U	87108	A	87364.87912069	.00041710	00000-0	68647-4	0		11
8713	82.5942		289.1852 0014550	282.3814	77.6247	16.02762487			71
8713U	87108	A	88 3.93684903	.00053351	00000-0	85409-4	0		16
8713	82.5940		284.6739 0014110	263.2719	96.7359	16.03211052			136
8713U	87108	A	88 4.87307789	.00043196	00000-0	68883-4	0		17
8713	82.5940		283.6336 0014022	260.3463	99.6412	16.03306340			151

8713U	87108	A	88	7.86858182	.00070341	12463-5	11001-3	0	20
8713	82.5914	280.3038	0014518	245.1428	114.8933	16.03706224			199
8713U	87108	A	88	8.86690281	.00068527	11203-5	10633-3	0	21
8713	82.5906	279.1944	0014445	241.4621	118.4960	16.03838367			215
8713U	87108	A	88	9.92754510	.00066681	11312-5	10270-3	0	22
8713	82.5918	278.0129	0014236	237.9736	121.9677	16.03972022			232
713U	87108	A	88	11.67425625	.00068303	12254-5	10388-3	0	24
773	82.5908	276.0708	0014747	229.2481	130.3842	16.04171007			260
713U	87108	A	88	12.36049646	.00020430	00000-0	30867-4	0	26
713	82.5923	275.3054	0014788	225.6965	134.3506	16.04230850			271
8713U	87108	A	88	13.91983780	.00052249	00000-0	77672-4	0	28
713	82.5913	273.5716	0014470	219.0015	141.0885	16.04441359			296
8713U	87108	A	88	14.91771270	.00145154	83685-5	21525-3	0	29
8713	82.5967	272.4628	0014877	212.8951	147.2707	16.04625885			312
8713U	87108	A	88	16.78832416	.00265620	30701-4	38544-3	0	31
8713	82.5868	270.3731	0014558	210.1501	149.6943	16.05014096			342
18713U	87108	A	88	17.91061414	.00119369	53194-5	17176-3	0	34
18713	82.5946	269.1277	0014941	198.9159	161.1668	16.05106876			360
18713U	87108	A	88	18.84574632	.00063408	00000-0	89692-4	0	35
18713	82.5925	268.0807	0015062	196.0525	164.0317	16.05210102			375
18713U	87108	A	88	19.96781912	.00067370	00000-0	94350-4	0	36
18713	82.5925	266.8289	0014970	191.2209	168.9246	16.05364639			393

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18713U	87108	A	88	21.90001080	.00062456	00000-0	86199-4	0	38
18713	82.5891	264.6747	0015164	183.9677	176.1274	16.05612093	424		
18713U	87108	A	88	22.89716815	.00059417	00000-0	81439-4	0	39
18713	82.5885	263.5620	0015243	180.3255	179.7998	16.05730432	440		
18713U	87108	A	88	23.89425062	.00059835	00000-0	81439-4	0	40
18713	82.5879	262.4513	0015251	178.2566	181.8769	16.05843779	456		
18713U	87108	A	88	24.89126219	.00060202	00000-0	81439-4	0	41
18713	82.5866	261.3377	0014900	175.7366	184.3864	16.05951941	472		
18713U	87108	A	88	25.88820949	.00060654	00000-0	81439-4	0	42
18713	82.5867	260.2241	0014949	172.1867	187.9775	16.06070411	488		
18713U	87108	A	88	26.88507772	.00061109	00000-0	81439-4	0	43
18713	82.5847	259.1105	0014946	168.3947	191.7868	16.06191456	504		
18713U	87108	A	88	26.88507772	.00061109	00000-0	81439-4	0	45
18713	82.5847	259.1105	0014946	168.3947	191.7868	16.06191456	504		
18713U	87108	A	88	26.88507772	.00061109	00000-0	81439-4	0	46
18713	82.5847	259.1105	0014946	168.3947	191.7868	16.06191456	504		

8713U	87108	A	88	27.94416670	.00061787	00000-0	81439-4	0	47
8713	82.5871	257.9248	0015724	164.3533	195.9077	16.06340662			521
8713U	87108	A	88	27.94416670	.00061787	00000-0	81439-4	0	47
8713	82.5871	257.9248	0015724	164.3533	195.9077	16.06340662			521
8713U	87108	A	88	29.87515888	.001956114	16302-4	25409-3	0	48
8713	82.5904	255.7716	0015595	156.5081	203.8210	16.06762269			552
8713U	87108	A	88	30.87152193	.00174892	12805-4	22253-3	0	49
8713	82.5872	254.6565	0015551	152.1926	208.0352	16.07089398			568
8713U	87108	A	88	41.85851543	.00390188	48300-4	10995-2	0	51
8713	83.0315	243.6682	0148546	165.0537	193.2754	15.77486599			741
8713U	87108	A	88	66.29621973	.00870749	-17439-5	92456-3	0	106
8713	83.0234	218.6177	0081465	96.3947	294.4954	16.03403624			73
8713U	87108	A	88	66.42104679	.00867688	-17327-5	92456-3	0	107
8713	83.0216	218.4924	0079096	65.0233	296.0771	16.03701059			75
8713U	87108	A	88	67.04473748	.00909435	-18380-5	92456-3	0	109
8713	83.0343	217.8345	0074728	67.3056	293.7791	16.04989023			85
8713U	87108	A	88	67.60550707	.00996726	-17649-5	92456-3	0	111
8713	83.0225	217.2498	0073220	60.8447	300.0377	16.06477664			94
8713U	87108	A	88	67.91687019	.01044780	-22972-5	92456-3	0	112
8713	83.0259	216.9124	0072697	61.1900	299.6672	16.07195323			99
8713U	87108	A	88	68.60132147	.01364451	-22654-5	10931-2	0	115
8713	83.0316	216.1917	0068464	57.1731	303.6571	16.09132905			110

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Kosmos 1906

for H. 2

18713U	87108	A	88	68.78781536	01798486	-62929-5	13819-2	0	116
18713	83.0311	216.0000	0066700	58.3814	302.4032	16.09930977			113
18713U	87108	A	88	69.40896419	01680676	-60425-5	11610-2	0	118
18713	83.0215	215.3435	0061974	53.4184	307.0642	16.11967666			123
18713U	87108	A	88	69.40896419	01680676	-60425-5	11610-2	0	119
18713	83.0215	215.3435	0061974	53.4184	307.0642	16.11967666			123
18713U	87108	A	88	69.53314271	01975681	-60007-5	13287-2	0	120
18713	83.0237	215.2145	0061038	52.5567	308.1362	16.12441007			125
18713U	87108	A	88	70.52491087	02381014	-56607-5	12592-2	0	124
18713	83.0215	214.1578	0053934	48.1759	312.3553	16.16401686			141
18713U	87108	A	88	70.72699835	00000926	-63351-5	00000	0	121
18713	83.0220	213.9043	0042481	37.3489	58.7110	16.22961802			1
18713U	87108	A	88	70.89559481	02255969	-60828-5	10929-2	0	126
18713	83.0190	213.7563	0048891	46.2240	310.9910	16.18098837			4
18713U	87108	A	88	71.14344126	02559589	-58206-5	11330-2	0	127
18713	83.0219	213.4932	0047525	46.3043	314.2204	16.19351248			8

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Kosmos 1904

18709U	87106	A	87357.90808433	.00000006	00000-0	00000	0	0	1
18709	82.9146		65.4505 0028087	271.5922	88.2196	13.73444425			0
18709U	87106	A	87357.90808433	.00000006	00000-0	00000	0	0	2
18709	82.9146		65.4505 0028087	271.5922	88.2196	13.73444425			0
18709U	87106	A	87358.41816909	.00000000	00000-0	00000-0	0	0004.	
18709	082.9118		065.0844 0027295	270.1106	089.7465	13.7310678800008			

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Kosmos 1905

Upp = 25 dec

Net: 8, Jan 88

18711U	87107	A	87359.42156619	-	.00000315	00000-0	00000	0	0	1
18711	70.3684		267.5993		0049601	74.1887	286.5104	16.12459841		1
18711U	87107	A	87359.48360064		.00243008	59595-5	17941-3	0		2
18711	70.3511		267.3998		0049495	73.4124	287.2675	16.12460864		2
18711U	87107	A	87359.66970457		.00011349	00000-0	85612-5	0		3
18711	70.3482		266.8541		0049500	73.2630	287.3677	16.12460570		3
18711U	87107	A	87359.91785929		.00012452	00000-0	93733-5	0		4
18711	70.3501		266.1235		0049415	72.9015	287.7562	16.12462091		4
18711U	87107	A	87360.04193455		.00008081	00000-0	93733-5	0		5
18711	70.3624		265.7640		0040253	84.3230	275.1996	16.07264042		5
18711U	87107	A	87364.83492864		.00038678	00000-0	43956-4	0		16
18711	70.3518		251.7679		0038260	71.0119	289.5890	16.07298068		88
18711U	87107	A	87365.89291126		.00038909	00000-0	43956-4	0		17
18711	70.3542		248.6767		0038228	68.7862	291.7909	16.07391023		105

8711U	87107	A 88	1.88859421	.00039121	00000-0	43956-4 0	18
8711	70.3515	245.7703	0038193	66.5369	294.0373	16.07474748	121
8711U	87107	A 88	2.82199389	.00046434	00000-0	51706-4 0	19
8711	70.3526	243.0462	0038162	65.0858	295.4456	16.07579833	136
8711U	87107	A 88	3.63090547	.00068347	00000-0	75222-4 0	20
8711	70.3500	240.6816	0037858	63.2205	297.4030	16.07702139	149
8711U	87107	A 88	3.87976637	.00041631	00000-0	46096-4 0	21
8711	70.3526	239.9554	0037914	62.7192	297.7628	16.07708583	153
8711U	87107	A 88	4.87527491	.00124929	10725-4	13907-3 0	22
8711	70.3496	237.0473	0037375	60.3932	300.1757	16.07828939	169
8711U	87107	A 88	7.86134268	.00072138	00000-0	77139-4 0	25
8711	70.3488	228.3164	0037268	54.5936	305.9235	16.08174635	217