

Fwd: NASA JPL Horizons API location codes - 2300+



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Date 2024-07-04 14:18

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From: Srinivasan Kannan <[ka.shrinivaasan@gmail.com](mailto:ka.shrinivaasan@gmail.com)>  
Date: Thu, Jul 4, 2024 at 12:21 PM  
Subject: NASA JPL Horizons API location codes - 2300+  
To: Srinivasan Kannan <[ka.shreenivaasan@gmail.com](mailto:ka.shreenivaasan@gmail.com)>

code_subc	east	long	cyl_rho	z	epoch	Site name
-1	293.2473068	6056.45681	1994.72593	2005.4	Arecibo (300-m, 1963 to 2020)	
-2	288.5118390	4700.47834	4296.88178	2000.0	Haystack (37-m)	
-5	252.3816645	5290.11612	3554.87562	2013.0	Very Large Array (VLA, center)	
-9	280.1601614	5003.33210	3943.72936	2007.8	Green Bank (100-m, GBT)	
-13	243.2055410	5215.52454	3660.91273	2003.0	DSS-13 (34-m BWG, R&D)	
-14	243.1104618	5203.99697	3677.05232	2003.0	DSS-14 (70-m)	
-15	243.1128049	5204.23434	3676.66998	2003.0	DSS-15 (34-m HEF)	
-24	243.1252056	5209.48256	3669.24233	2003.0	DSS-24 (34-m BWG)	
-25	243.1246368	5209.63556	3669.04057	2003.0	DSS-25 (34-m BWG)	
-26	243.1269835	5209.76637	3668.87180	2003.0	DSS-26 (34-m BWG)	
-28	243.2211109	5216.08918	3660.10358	1993.0	DSS-28 (34-m HSB, GAVRT)	
-34	148.9819644	5205.50801	-3674.39313	2003.0	DSS-34 (34-m BWG)	
-35	148.9814558	5205.68282	-3674.15209	2003.0	DSS-35 (34-m BWG)	
-36	148.9785442	5205.71976	-3674.08390	2003.0	DSS-36 (34-m BWG)	
-38	33.1869540	4502.75072	4502.23707	1995.0	Evpatoria (70-m)	
-43	148.9812673	5205.25184	-3674.74815	2003.0	DSS-43 (70-m)	
-45	148.9776856	5205.49497	-3674.38098	2003.0	DSS-45 (34-m HEF)	
-47	149.5501388	5511.03677	-3200.48375	1984.5	DSS-47 (ATCA ref. W196)	
-49	148.2635124	5354.91881	-3454.03497	2017.0	Parkes (64-m, Murriyang)	
-53	355.7465920	4862.73303	4114.74729	2003.0	DSS-53 (34-m BWG)	
-54	355.7459032	4862.83216	4114.61884	2003.0	DSS-54 (34-m BWG)	
-55	355.7473667	4862.91394	4114.49508	2003.0	DSS-55 (34-m BWG)	
-56	355.7479393	4862.80646	4114.64699	2003.0	DSS-56 (34-m BWG)	
-63	355.7519915	4862.45084	4115.10925	2003.0	DSS-63 (70-m)	
-65	355.7493011	4862.71559	4114.75073	2003.0	DSS-65 (34-m HEF)	
-71	6.8836164	4063.23644	4900.43114	2019.4	Effelsberg (100-m)	
-73	19.2258700	2231.25902	5955.21612	2022.5	Tromso (32-m, EISCAT)	
-74	133.8098322	5421.95827	-3348.06748	2000.0	Ceduna (30-m, UTAS)	
-75	147.4381385	4686.68663	-4311.70858	2000.0	Hobart-12 (12-m, UTAS)	
-76	147.4405184	4686.85487	-4311.56242	2000.0	Hobart-26 (26-m, UTAS)	
-77	132.1523692	6179.89315	-1573.30396	2000.0	Katherine (12-m, UTAS)	
-78	115.3456221	5580.51970	-3078.59152	2000.0	Yarragade (12-m, UTAS)	
-81	11.0782310	4285.97517	4708.52163	2022.5	Weilheim (30-m)	
-82	11.6469338	4555.15972	4449.55923	2000.0	Medicina (32-m, G.Grueff RT)	
-83	9.2451600	4929.19408	4035.12234	2022.5	Sardinia (64-m, SRT)	
-84	140.6921142	5120.22444	3790.59770	2021.9	Hitachi (32-m, Ibaraki University)	
-85	140.6600905	5168.93625	3724.27880	2000.0	Kashima (34-m)	
-86	138.3627624	5158.58754	3740.97110	2000.0	Usuda (64-m)	
	295.4163673	6076.16513	1932.73957	2000.0	St Croix (25-m, VLBA)	
	288.5087110	4700.75928	4296.57737	2022.5	Millstone Hill (46-m, MISA)	
	288.0134198	4677.19660	4322.30613	2000.0	Hancock (25-m, VLBA)	
	281.9272744	4442.03259	4561.97118	2000.0	Algonquin (ARO, 46-m)	
	279.2278840	4652.11287	4349.10648	2022.5	CMOR (meteor radar array; main site)	
	268.4258621	4764.11501	4226.85103	2000.0	North Liberty (25-m, VLBA)	
	265.0942400	1685.13876	6131.01624	2022.5	Resolute Bay ISR (N/S mid-point)	
	256.0551791	5494.10273	3231.96246	2000.0	Fort Davis (25-m, VLBA)	
	253.7544039	5182.21749	3709.12391	2000.0	Los Alamos (25-m, VLBA)	
	253.1143420	5272.74521	3579.25051	2022.5	LWA-SV (Sevilleta, array center)	
	252.3717070	5290.72971	3553.96147	2022.5	LWA1 (array center)	
	251.8808102	5276.46747	3575.41186	2000.0	Pie Town (25-m, VLBA)	
	248.3875773	5418.23800	3357.32811	2000.0	Kitt Peak (25-m, VLBA)	
	241.7229455	5085.43238	3838.61739	2000.0	Owens Valley (25-m, VLBA)	
	241.7184060	5084.85749	3839.36062	2022.0	Owens Valley RO-LWA (OVRO array center)	

	240.3167220	4265.03055	4726.81378	2000.0	Brewster (25-m, VLBA)
	238.5281944	4834.64402	4147.76053	2015.1	Hat Creek Observatory (Allen Array)
	237.8204000	5072.68878	3853.59792	2022.5	Stanford Dish (46-m)
	214.8492910	2963.78384	5629.45589	2022.5	HAARP (array center, dipole level)
	212.5290240	2689.91204	5764.02293	2022.5	Poker Flats ISR (PFISR)
	204.5444956	6006.86131	2148.29694	2000.0	Mauna Kea (25-m, VLBA)
	174.6629499	5137.69898	-3767.04206	2017.6	Warkworth (30-m, WARK30M)
	167.4792963	6293.20102	1034.34732	2005.0	ALTAIR (46-m, Kwajalein Atoll)
	149.0996449	5457.38037	-3291.75921	2000.0	Mopra (22-m)
	116.1888146	5469.42257	-3270.67437	2010.4	New Norcia (2-m, EStRack NNO-2)
	116.1915054	5469.45190	-3270.60487	2010.0	New Norcia (35-m, EStRack DSA-1 NNO-1)
	357.6915290	3825.74020	5086.49629	2022.5	Lovell (76-m, Jodrell Bank)
	356.0474039	4861.26223	4116.19557	2010.0	Villafranca (15-m, former EStRack VIL-2)
	355.6324523	4860.84954	4116.87901	2010.0	Cebreros (35-m, EStRack DSA-2 CEBR)
	131.7575100	4594.31797	4409.46762	2022.7	Galenki (70-m)
	37.9002778	3461.23737	5339.52380	2022.5	Kalyazin (64-m)
	37.9517778	3587.09873	5256.36843	2022.5	Bear Lake (64-m)
	29.7819385	3145.64406	5529.96905	2000.0	Svetloe (32-m)
	20.9668949	2410.98103	5885.53111	2010.0	Kiruna (13-m, EStRack KIR-2)
	20.9643336	2411.11588	5885.47786	2010.0	Kiruna (15-m, EStRack KIR-1)
	16.0282130	1313.78909	6220.92352	2022.5	Svalbard (32-m steerable, EISCAT)
	16.0336090	1313.73832	6220.94745	2022.5	Svalbard (42-m fixed, EISCAT)
	14.9890531	5108.37381	3806.48484	2020.6	NOTO (32-m)
	7.1925660	3985.13065	4963.46268	2006.0	Sternwarte Bochum (20-m)
	7.1296000	4055.29663	4906.84231	2022.5	TIRA (34-m)
	6.8688900	3854.80120	5064.47321	2022.5	LOFAR (dipole array, superterp core)
	6.6033180	3854.24462	5064.91009	2022.5	Westerbork SRT (25-m x 14-elements, array center, WSRT)
	6.3964300	3863.37545	5057.95758	2022.7	Dwingeloo (25-m)
	5.9079167	4548.12660	4460.32326	2022.0	NOEMA (15-m array phase center)
	5.1453492	4108.07374	4863.11790	2010.0	Redu (15-m, EStRack RED-1)
	136.1056210	5240.03409	3624.82483	2022.5	MU radar (475 element Yagi array)
	106.8566669	5754.07279	2744.93497	2021.0	FAST (500-m, spherical center)
	102.2339168	3955.58031	4987.67093	2000.0	Badary (32-m, BdRAO)
	100.3200150	6378.94112	-22.53401	2022.5	EAR (560 element Yagi array)
	74.0505080	6029.99808	2073.28877	2022.5	GMRT (45m x 30-elements, C-02 array center)
	307.1953358	6351.52907	579.87650	2010.0	Kourou (15-m, EStRack KRU)
	292.2452521	5877.51430	-2481.68209	2013.0	Atacama Large mm/sub-mm Array (ALMA, center)
	292.2489250	3776.51813	-5122.70423	2022.5	SAAMER-C (meteor array mid-point)
	290.6018183	5181.84556	-3708.97180	2010.0	Malarque (35-m, EStRack DSA-3 MGUE)
	283.1256170	6241.29768	-1312.26250	2016.1	Jicamarca RO (array center)
	344.3662013	5648.18909	2953.37521	2010.0	Maspalomas (15-m, former EStRack MAS1)
	40.1945136	6369.46735	-331.08275	2010.0	Malindi (2-m, EStRack MAL2)
	27.6853932	5742.93989	-2768.69697	2000.0	Hartebeesthoek (HartRAO 26-m)
	21.4430556	5489.22765	-3239.16625	2022.0	MeerKAT (13.5-m 64-element array)
	314.2102222	0.76358	-6359.57212	2002.3	MAPO_2002 (South Pole)
	315.5545833	0.98117	-6359.57677	2023.5	MAPO_2023 (South Pole)
	315.7986667	1.15475	-6359.57021	2023.3	South Pole Telescope (10-m, SPT)
000	0.000000	3980.66470	4966.84378	-	Greenwich
001	0.154200	4017.72009	4937.38796	-	Crowborough
002	0.620000	3967.20089	4981.32486	-	Rayleigh
003	3.900000	4624.14498	4381.78147	-	Montpellier
004	1.462500	4625.43152	4377.12898	-	Toulouse
005	2.231000	4208.87625	4776.43561	-	Meudon
006	2.124200	4790.25846	4197.64145	-	Fabra Observatory, Barcelona
007	2.336700	4206.19845	4778.64966	-	Paris
008	3.035500	5113.47962	3799.96543	-	Algiers-Bouzareah
009	7.441700	4361.37632	4638.17726	-	Berne-Uecht
010	6.921200	4615.57302	4389.02201	-	Caussols
011	8.797500	4332.02522	4666.31662	-	Wetzikon
012	4.358200	4039.48658	4919.49606	-	Uccle
013	4.484000	3921.36411	5013.39864	-	Leiden
014	5.395100	4648.76879	4352.34061	-	Marseilles
015	5.129300	3927.46770	5008.65639	-	Utrecht
016	5.989300	4337.51546	4660.88622	-	Besancon
017	6.849200	4094.41892	4874.69150	-	Hoher List
018	6.761200	4004.13661	4948.03933	-	Dusseldorf-Bilk
019	6.957500	4358.24973	4641.94713	-	Neuchatel
020	7.300400	4617.20364	4386.05997	-	Nice
021	8.385500	4190.50563	4792.41267	-	Karlsruhe
022	7.774800	4515.08813	4490.77848	-	Pino Torinese
023	8.262500	4101.07603	4868.75246	-	Wiesbaden

024	8.721600	4159.25464	4819.95364	- Heidelberg-Konigstuhl
025	9.196500	4210.88086	4774.90972	- Stuttgart
026	7.465100	4368.28774	4633.09093	- Berne-Zimmerwald
027	9.191200	4480.90502	4523.94433	- Milan
028	9.936300	4125.75968	4847.95836	- Wurzburg
029	10.240600	3803.92978	5102.51409	- Hamburg-Bergedorf
030	11.254500	4614.79512	4388.24410	- Arcetri Observatory, Florence
031	11.189800	4076.01838	4890.14496	- Sonneberg
032	11.583000	4028.58090	4928.42705	- Jena
033	11.711200	4023.98824	4932.45123	- Karl Schwarzschild Observatory, Tautenburg
034	12.452500	4752.84403	4239.27454	- Monte Mario Observatory, Rome
035	12.575900	3603.69303	5244.87143	- Copenhagen
036	12.650400	4766.03856	4225.00290	- Castel Gandolfo
037	13.733300	4698.13609	4299.89160	- Collurania Observatory, Teramo
038	13.770400	4466.79794	4537.66245	- Trieste
039	13.187400	3602.69072	5245.57454	- Lund
040	13.729800	4019.44047	4935.84711	- Lohrmann Institute, Dresden
041	11.380800	4336.25884	4662.50188	- Innsbruck
042	13.064300	3901.64711	5028.77730	- Potsdam
043	11.526400	4449.74378	4555.70396	- Asiago Astrophysical Obs., Padua
044	14.255900	4830.67980	4151.02676	- Capodimonte Observatory, Naples
045	16.339000	4256.70269	4734.30885	- Vienna (since 1879)
046	14.288100	4204.59775	4781.37234	- Klet Observatory, Ceske Budejovice
047	16.878200	3899.97161	5030.04888	- Poznan
048	15.840800	4092.90798	4875.64892	- Hradec Kralove
049	17.606700	3245.19669	5472.43971	- Uppsala-Kvistaberg
050	18.058200	3260.38087	5463.50872	- Stockholm (before 1931)
051	18.476600	5297.36532	-3540.38321	- Cape
052	18.308300	3267.14270	5459.49949	- Stockholm-Saltsjobaden
053	18.964200	4317.22999	4679.82531	- Konkoly Obs., Budapest (since 1934)
054	11.665400	3609.70686	5240.84724	- Brorfelde
055	19.959600	4102.48225	4867.54072	- Cracow
056	20.234200	4177.68510	4805.74184	- Skalnat Pleso
057	20.513300	4533.20444	4472.09371	- Belgrade
058	20.495000	3692.74864	5182.99775	- Kaliningrad
059	20.220100	4177.68510	4806.81894	- Lomnicky Stit
060	21.420000	3927.15354	5009.07526	- Warsaw-Ostrowik
061	22.298500	4223.23765	4763.85443	- Uzhgorod
062	22.229300	3153.35856	5525.51703	- Turku
063	22.445000	3156.91899	5523.52738	- Turku-Tuorla
064	22.750000	3156.48515	5523.78170	- Turku-Kevola
065	12.631800	4287.51985	4707.06708	- Traunstein
066	23.718200	5034.40218	3903.08325	- Athens
067	24.029700	4122.31893	4851.08495	- Lvov University Observatory
068	24.014200	4122.00477	4851.33927	- Lvov Polytechnic Institute
069	24.404200	3503.19318	5312.16055	- Baldone, near Riga
070	25.286500	3695.50124	5181.15769	- Vilnius (before 1939)
071	24.737800	4771.03513	4221.36768	- Smolyan
072	7.170000	4011.85586	4936.68485	- Scheuren Observatory
073	26.093900	4563.64760	4441.00727	- Bucharest
074	26.405800	5582.02015	-3078.27539	- Boyden Observatory, Bloemfontein
075	26.721600	3352.15917	5408.08270	- Tartu
076	27.876800	5748.43282	-2756.95412	- Johannesburg-Hartbeespoort
077	28.029200	5728.77566	-2798.46753	- Yale-Columbia Station, Johannesburg
078	28.075000	5729.10477	-2797.95890	- Johannesburg
079	28.228800	5747.98403	-2758.61466	- Radcliffe Observatory, Pretoria
080	28.966700	4819.69932	4163.51818	- Istanbul
081	27.876800	5748.43282	-2756.95412	- Leiden Station, Johannesburg
082	15.756100	4268.82012	4723.83700	- St. Polten
083	30.505600	4076.78133	4888.90329	- Golosseevo-Kiev
084	30.327400	3219.10682	5487.81837	- Pulkovo
085	30.502300	4069.25656	4895.15648	- Kiev
086	30.758200	4400.09225	4601.95962	- Odessa
087	31.341100	5536.16840	3156.85915	- Helwan
088	31.825000	5532.45837	3164.06976	- Kottomia
089	31.974700	4360.02994	4639.64332	- Nikolaev
090	8.250000	4113.89656	4860.13562	- Mainz
091	4.209200	4487.84636	4517.55650	- Obs. de Nurol, Aurec sur Loire
092	18.554600	3838.17273	5077.06750	- Torun-Piwnice
093	20.364700	2255.95085	5945.70753	- Skibotn
094	33.997400	4564.51527	4440.45376	- Crimea-Simeis



095	34.016000	4539.44267	4466.22947	-	Crimea-Nauchnij
096	9.428300	4462.59424	4542.19527	-	Merate
097	34.762500	5495.71714	3227.84334	-	Wise Observatory, Mitzpeh Ramon
098	11.569000	4451.40432	4554.56701	-	Asiago Observatory, Cima Ekar
099	25.535300	3087.49061	5562.46771	-	Lahti
100	24.141400	2941.37837	5640.63259	-	Ahtari
101	36.232200	4107.71817	4863.08270	-	Kharkov
102	36.759500	3602.63088	5245.81389	-	Zvenigorod
103	14.527700	4435.12807	4568.95833	-	Ljubljana
104	10.803800	4591.24841	4413.93005	-	San Marcello Pistoiese
105	37.570600	3597.46976	5249.32944	-	Moscow
106	14.071100	4443.14652	4561.58315	-	Crni Vrh
107	11.003000	4528.35747	4476.56668	-	Cavezzo
108	11.027800	4615.66278	4387.13708	-	Montelupo
109	3.070500	5117.87779	3793.78704	-	Algiers-Kouba
110	39.415000	3464.35757	5337.41267	-	Rostov
111	10.972100	4620.25544	4382.42474	-	Piazzano Observatory, Florence
112	10.903900	4479.49880	4525.29071	-	Pleiade Observatory, Verona
113	13.016600	4050.24267	4911.23826	-	Volkssternwarte Drebach, Schoenbrunn
114	41.427700	4623.45683	4381.91611	-	Engelhardt Obs., Zelenchukskaya Sta.
115	41.440700	4624.17490	4381.22796	-	Zelenchukskaya
116	11.595800	4266.53127	4725.81170	-	Giesing
117	11.538500	4266.78559	4725.69202	-	Sendling
118	17.274000	4245.16870	4744.96022	-	Astro and Geophysical Obs., Modra
119	42.820000	4766.44248	4226.28945	-	Abastuman
120	13.726100	4495.87977	4509.28374	-	Visnjan
121	36.934000	4138.49045	4837.14243	-	Kharkov U., Chuguevskaya Sta.
122	3.503500	4593.34278	4412.13488	-	Pises Observatory
123	44.291700	4869.84453	4107.38906	-	Byurakan
124	2.255000	4626.31415	4376.17155	-	Castres
125	44.789500	4768.25261	4222.48966	-	Tbilisi
126	9.790300	4585.42905	4418.97150	-	Monte Viseggi
127	6.979700	4042.77774	4916.77338	-	Bornheim
128	46.006600	3975.35398	4971.07740	-	Saratov
129	45.920000	4955.81842	4005.46803	-	Ordubad
130	10.239600	4465.64604	4539.93634	-	Lumezzane
131	4.725000	4543.15270	4462.14545	-	Observatoire de l'Ardeche
132	5.246100	4587.08959	4417.50544	-	Bedoin
133	5.090600	4644.49029	4356.84351	-	Les Tardieux
134	11.482500	4028.47618	4928.86089	-	Groszschwabhausen
135	49.121000	3594.26836	5251.37893	-	Kasan
136	48.815600	3589.75051	5254.50553	-	Engelhardt Observatory, Kasan
137	34.814700	5409.99756	3367.01424	-	Givatayim Observatory, Raanana
138	7.571700	4308.43364	4687.54456	-	Village-Neuf
139	7.110800	4625.80552	4376.54555	-	Antibes
140	3.629400	4461.18802	4543.85581	-	Augerolles
141	7.367200	4186.99008	4795.65894	-	Hottviller
142	7.187400	3964.40341	4979.73912	-	Sinsen
143	9.024100	4419.95885	4583.27484	-	Gnosca
144	1.666000	4180.81169	4800.70039	-	Bray et Lu
145	4.559700	4001.26433	4950.32818	-	's-Gravenwezel
146	10.667300	4574.08953	4431.97156	-	Frignano
147	8.573900	4467.44121	4537.36326	-	Osservatorio Astronomico di Suno
148	2.037500	4622.93324	4379.67214	-	Guitalens
149	4.223600	4171.49175	4808.86843	-	Beine-Nauroy
150	2.157200	4197.19266	4786.47363	-	Maisons Laffitte
151	8.744000	4319.21964	4678.10493	-	Eschenberg Observatory, Winterthur
152	25.563300	3637.83126	5221.65384	-	Moletai Astronomical Observatory
153	9.174700	4214.68065	4771.73824	-	Stuttgart-Hoffeld
154	12.104300	4396.00823	4608.21281	-	Cortina
155	10.197100	3563.07720	5272.42735	-	Ole Romer Observatory, Aarhus
156	15.085800	5066.22165	3861.89895	-	Catania Astrophysical Observatory
157	12.811700	4730.40435	4264.67626	-	Frasso Sabino
158	7.603300	4456.47569	4549.72004	-	Promiod
159	10.515300	4596.40954	4408.24534	-	Monte Agliale
160	10.841400	4609.17024	4393.98866	-	Castelmartini
161	8.160500	4510.94427	4494.48851	-	Cerrina Tololo Observatory
162	15.780500	4846.62694	4133.53877	-	Potenza
163	6.149200	4146.86794	4830.23101	-	Roeser Observatory, Luxembourg
164	6.886100	4249.82119	4740.54709	-	St. Michel sur Meurthe
165	1.755300	4782.58409	4206.12365	-	Piera Observatory, Barcelona

166	16.011700	4064.78358	4899.18067	- Upice
167	8.572700	4315.58441	4681.42601	- Bulach OBservatory
168	59.547200	3478.70401	5328.36200	- Kourovskaya
169	8.401600	4511.70722	4493.59092	- Airali Observatory
170	1.920600	4797.43916	4191.13395	- Observatorio de Begues
171	14.469700	5171.97238	3720.18489	- Flarestar Observatory, San Gwann
172	7.036400	4374.95981	4626.64327	- Onnens
173	55.506100	5961.26571	-2260.85766	- St. Clotilde, Reunion
174	25.513100	2968.12647	5626.73495	- Nyrola Observatory, Jyvaskyla
175	7.608300	4421.32019	4584.60627	- F.-X. Bagnoud Observatory, St-Luc
176	2.822500	4917.41665	4048.52230	- Observatori Astronomic de Consell
177	3.941400	4622.67892	4379.80678	- Le Cres
178	6.134400	4427.90250	4575.98943	- Collonges
179	9.017500	4445.18105	4560.82020	- Monte Generoso
180	3.951900	4628.67780	4373.49375	- Mauguio
181	55.410000	5950.04587	-2292.36297	- Observatoire des Makes, Saint-Louis
182	55.258600	5956.79273	-2272.78061	- St. Paul, Reunion
183	41.420000	4623.89067	4381.46732	- Starlab Obs., Karachay-Cherkessia
184	6.036100	4597.42680	4407.10839	- Valmeca Observatory, Puimichel
185	7.421900	4329.22774	4668.79995	- Obs. Astronomique Jurassien-Vicques
186	66.882100	4954.47204	4004.25629	- Kitab
187	17.073300	3910.69778	5021.83596	- Astronomical Observatory, Borowiec
188	66.895600	4988.08668	3965.68995	- Shokin Majdanak
189	6.151400	4422.60673	4580.97104	- Geneva (before 1967)
190	68.681900	4999.30652	3948.63580	- Gissar
191	68.781100	4994.45955	3954.82915	- Dushanbe
192	69.293600	4797.18484	4189.92220	- Tashkent
193	69.217800	5016.28588	3929.57703	- Sanglok
194	18.009400	5855.57481	-2524.40423	- Tivoli
195	11.449200	4260.84655	4730.92794	- Untermenzing Observatory, Munich
196	7.333100	4164.67008	4814.85235	- Homburg-Erbach
197	12.183600	4575.61543	4428.59065	- Bastia
198	8.756700	4223.56676	4763.98907	- Wildberg
199	2.438000	4251.60140	4738.57239	- Buthiers
200	4.303600	4042.77774	4916.77338	- Beersel Hills Observatory
201	7.603300	4456.47569	4549.66020	- Jonathan B. Postel Observatory
202	5.899700	4664.77576	4335.28645	- Tamaris Obs., La Seyne sur Mer
203	8.995500	4474.99591	4529.85344	- GiaGa Observatory
204	8.769700	4449.69891	4555.94331	- Schiaparelli Observatory
205	11.273100	4558.96519	4445.74952	- Obs. Casalecchio di Reno, Bologna
206	10.566700	3139.32628	5534.31339	- Haagaar Observatory, Eina
207	9.306500	4474.65183	4530.07784	- Osservatorio Antonio Grosso
208	9.587500	4521.65548	4483.44818	- Rivalta
209	11.568800	4451.32952	4554.62685	- Asiago Observatory, Cima Ekar-ADAS
210	76.957300	4658.71705	4343.76865	- Alma-Ata
211	11.176400	4613.82273	4389.11177	- Scandicci
212	355.357500	5123.26332	3786.75594	- Observatorio La Dehesilla
213	2.385400	4782.59905	4205.88430	- Observatorio Montcabre
214	11.656900	4254.78784	4736.28355	- Garching Observatory
215	10.732800	4274.69932	4718.61604	- Buchloe
216	5.691400	4192.48033	4790.87181	- Observatoire des Cote de Meuse
217	77.871100	4656.77228	4347.61332	- Assah
218	78.454100	6087.55623	1898.65130	- Hyderabad
219	78.728300	6098.65639	1863.43596	- Japal-Rangapur
220	78.826300	6226.78697	1379.84588	- Vainu Bappu Observatory, Kavalur
221	16.361700	5865.53803	-2501.53071	- IAS Observatory, Hakos
222	2.493900	4216.77502	4769.37460	- Yerres-Canotiers
223	80.246400	6214.02627	1432.84841	- Madras
224	7.501700	4293.62345	4700.99341	- Ottmarsheim
225	288.825000	4654.76767	4346.05750	- Northwood Ridge Observatory
226	11.885800	4483.38835	4521.34133	- Guido Ruggieri Observatory, Padua
227	281.285300	4699.60215	4298.35074	- OrbitJet Observatory, Colden
228	13.875000	4467.12706	4537.85693	- Bruno Zugna Observatory, Trieste
229	14.974300	4843.30586	4136.66536	- G. C. Gloriosi Astro. Obs., Salerno
230	12.013300	4301.41750	4696.22124	- Mt. Wendelstein Observatory
231	5.398300	4107.71817	4863.51654	- Vesqueville
232	1.331700	4783.60135	4205.10639	- Masquefa Observatory
233	10.540300	4606.67195	4396.51686	- Sauro Donati Astro. Obs., San Vito
234	1.128300	3922.24673	5012.78529	- Coddendam Observatory
235	13.113500	4443.44571	4560.32653	- CAST Observatory, Talmassons
236	84.946500	3531.57189	5293.53561	- Tomsk

237	2.733300	4351.17375	4648.39480	-	Baugy
238	10.909400	3202.08258	5497.76663	-	Gorudalen Optical Observatory
239	8.411400	4114.28552	4857.53262	-	Michael Adrian Observatory, Trebur
240	8.833200	4224.29979	4763.40564	-	Herrenberg Sternwarte
241	13.470000	4239.22966	4750.06151	-	Schaerding
242	1.695600	4635.69394	4366.47761	-	Varennes
243	9.413000	3799.59144	5105.70053	-	Umbrella Observatory
246	14.284800	4204.56783	4781.46210	-	Klet Observatory-KLENOT
257	243.124600	5209.64113	3669.03738	-	Goldstone DSS 25, Fort Irwin
259	19.225900	2231.25224	5955.19204	-	EISCAT Tromso UHF
260	149.066100	5457.13585	-3292.78377	-	Siding Spring Observatory-DSS
261	243.140200	5334.19632	3488.05387	-	Palomar Mountain-DSS
262	289.266300	5570.91999	-3100.10171	-	European Southern Obs., La Silla-DSS
266	204.524000	6006.36947	2150.96306	-	New Horizons KBO Search-Subaru
267	204.531100	6006.39939	2150.96306	-	New Horizons KBO Search-CFHT
268	289.308000	5584.15940	-3076.45029	-	New Horizons KBO Search-Magellan/Cla
269	289.309100	5584.12948	-3076.49517	-	New Horizons KBO Search-Magellan/Baa
276	20.382800	3879.79086	5045.59210	-	Plonsk
277	356.817500	3581.83678	5259.86113	-	Royal Obs.,Blackford Hill,Edinburgh
278	116.449400	4899.55466	4069.82503	-	Peking, Transit of Venus site
279	10.728200	4027.96755	4929.20496	-	Seeberg Obs., Gotha (1787-1857)
280	8.911800	3834.14855	5079.93977	-	Lilienthal
281	11.352200	4557.05034	4447.66437	-	Bologna
282	4.360300	4607.88369	4395.30512	-	Nimes
283	8.816300	3839.89310	5075.66128	-	Bremen
284	15.831100	3861.07616	5059.71414	-	Driesen
285	2.370800	4218.18124	4768.23765	-	Flammarion Observatory, Juvisy
286	102.788300	5784.59063	2682.45438	-	Yunnan Observatory
290	250.108000	5375.12629	3427.85569	-	Mt. Graham-VATT
291	248.400200	5418.04592	3357.90373	-	LPL/Spacewatch II
292	285.105800	4887.57187	4084.11163	-	Burlington, New Jersey
293	285.589900	4907.07944	4060.83420	-	Burlington remote site
294	285.846700	4849.36458	4129.14059	-	Astro. Obs., College of Staten Is.
295	283.000000	4967.93585	3986.97773	-	Catholic University Obs., Washington
296	286.220000	4698.13609	4299.30817	-	Dudley Observatory, Albany (after 1893)
297	286.819000	4594.18053	4409.20276	-	Middlebury
298	287.340800	4779.96612	4208.80145	-	Van Vleck Observatory
299	107.616000	6334.51240	-753.13552	-	Bosscha Observatory, Lembang
300	133.544400	5251.57341	3608.24080	-	Bisei Spaceguard Center-BATTeRS
301	288.846700	4482.49076	4523.76481	-	Mont Megantic
302	288.880000	6314.36156	956.72326	-	University of the Andes station
303	289.129600	6307.34542	968.52653	-	Merida
304	289.298000	5584.63811	-3075.34327	-	Las Campanas Observatory
305	109.551400	5234.27990	3633.17877	-	Purple Mountain, Hainan Island Sta.
306	290.676900	6281.00124	1108.58006	-	Observatorio Taya Beixo,Barquisimeto
307	287.716600	4618.41538	4384.51911	-	Shattuck Observatory, Hanover
309	289.595700	5803.73915	-2642.69127	-	Cerro Paranal
310	288.871600	4718.55620	4277.01808	-	Minor Planet Center Test Code
312	112.334000	6106.43548	1834.99740	-	Tsingtao Field Station,Xisha Islands
318	115.691000	5434.56153	-3327.47552	-	Quinns Rock
319	116.135000	5413.96190	-3361.40432	-	Perth Obs., Perth-Lowell Telescope
320	116.438100	5476.20957	-3259.36361	-	Chiro Observatory
321	115.757100	5426.39348	-3340.74485	-	Craigie
322	116.134000	5413.88710	-3361.46415	-	Perth Observatory, Bickley-MCT
323	116.135000	5413.88710	-3361.46415	-	Perth Observatory, Bickley
324	116.327700	4885.52238	4086.59495	-	Peking Observatory, Shaho Station
327	117.575000	4865.11723	4111.98171	-	Peking Observatory, Xinglong Station
330	118.820900	5410.44635	3366.89456	-	Purple Mountain Observatory, Nanking
333	249.523600	5417.34281	3357.57461	-	Desert Eagle Observatory
334	120.319600	5161.51549	3734.53132	-	Tsingtao
337	121.184300	5466.57547	3275.04146	-	Zo-Se
340	135.485300	5242.76210	3620.35823	-	Toyonaka
341	137.948600	5145.17941	3758.19771	-	Akashina
342	134.318900	5320.95690	3505.10803	-	Shishikui
343	127.125800	5018.82904	3923.00968	-	Youchun
344	128.976700	5156.14493	3743.64183	-	Bohyunsan Optical Astronomy Obs.
345	128.457500	5105.44621	3812.41198	-	Sobaeksan Optical Astronomy Obs.
346	127.385400	5132.74782	3773.69605	-	KNUE Astronomical Observatory
347	139.908600	5129.11259	3778.66270	-	Utsunomiya-Imaizumi
348	135.266900	5210.80799	3665.83598	-	Ayabe
349	139.566200	5168.86075	3724.29883	-	Ageo



350	139.263500	5134.66268	3771.52688	- Kurohone
351	135.867800	5226.18665	3644.14429	- Sakamoto
352	136.177800	5233.96574	3633.17877	- Konan
353	135.064800	5246.98076	3614.43415	- Nishi Kobe
354	140.020600	5109.47039	3806.08399	- Kawachi
355	139.213300	5205.70670	3673.16628	- Hadano
356	141.086700	4995.29730	3952.54030	- Kogota
357	140.006400	5153.99072	3744.73390	- Shimotsuma
358	140.158600	5029.54025	3909.54587	- Nanyo
359	135.171900	5279.95213	3566.14396	- Wakayama
360	132.944200	5313.88092	3516.77666	- Kuma Kogen
361	134.893300	5271.46993	3578.51571	- Sumoto
362	140.655000	4698.97384	4298.73969	- Ray Observatory
363	130.770300	5320.38843	3505.87098	- Yamada
364	130.574700	5435.01032	3327.08656	- YCPM Kagoshima Station
365	135.957900	5268.14886	3584.26026	- Uto Observatory
366	138.300300	5175.66745	3716.35518	- Miyasaka Observatory
367	133.167000	5198.43625	3683.18934	- Yatsuka
368	138.811700	5179.88611	3711.50821	- Ochiai
369	139.150000	5166.93094	3727.38055	- Chichibu
370	133.527300	5320.89707	3505.16787	- Kochi
371	133.596500	5257.69196	3599.24997	- Tokyo-Okayama
372	133.827600	5322.55760	3502.87902	- Geisei
373	135.339700	5285.30773	3558.81367	- Oishi
374	134.719600	5224.66075	3646.64258	- Minami-Oda Observatory
375	134.870800	5233.90590	3633.62756	- Uzurano
376	139.039200	5186.76761	3700.72221	- Uenohara
377	135.793300	5230.97378	3637.51711	- Kwasan Observatory, Kyoto
378	136.014200	5257.94628	3598.93581	- Murou
379	137.627900	5249.20977	3610.85876	- Hamamatsu-Yuto
380	137.034900	5242.19363	3621.00150	- Ishiki
381	137.625400	5180.14043	3710.65550	- Tokyo-Kiso
382	137.555300	5160.87222	3740.08141	- Tokyo-Norikura
383	137.895900	5116.41174	3796.64436	- Chirorin
384	138.179200	5242.19363	3621.51013	- Shimada
385	138.468000	5232.55952	3635.34794	- Nihondaira Observatory
386	138.321700	5174.00692	3719.03299	- Yatsugatake-Kobuchizawa
387	139.194400	5166.28767	3729.23556	- Tokyo-Dodaira
388	139.542100	5187.33609	3698.74751	- Tokyo-Mitaka
389	139.744700	5188.42815	3697.08698	- Tokyo (before 1938)
390	139.872500	5129.62123	3778.03439	- Utsunomiya
391	140.778400	5014.34111	3928.67944	- Sendai Observatory, Ayashi Station
392	141.366700	4678.68837	4320.61090	- JCPM Sapporo Station
393	140.129200	5159.91480	3736.31154	- JCPM Sakura Station
394	142.320800	4508.83494	4496.14904	- JCPM Hamatonbetsu Station
395	142.358300	4607.56954	4395.17048	- Tokyo-Asahikawa
396	142.420800	4615.22895	4387.52603	- Asahikawa
397	141.476100	4669.44322	4330.24501	- Sapporo Science Center
398	139.108000	5157.99994	3739.49797	- Nagatoro
399	144.590000	4666.12214	4333.94007	- Kushiro
400	143.782700	4614.19672	4388.85745	- Kitami
401	139.420800	5158.64321	3738.22639	- Oosato
402	136.307800	5217.31550	3656.90499	- Dynic Astronomical Observatory
403	137.055600	5204.12097	3675.41025	- Kani
404	140.929200	5044.47012	3890.02335	- Yamamoto
405	139.329200	5146.52579	3754.81680	- Kamihoriguchi
406	141.823300	4652.59850	4348.22667	- Bibai
407	140.309900	5002.11896	3944.04314	- Kahoku
408	138.174700	5174.00692	3720.24473	- Nyukasa
409	139.521100	5181.21753	3707.22971	- Kiyose and Mizuho
410	134.891000	5222.61126	3649.69437	- Sengamine
411	139.417000	5149.65238	3750.65798	- Oizumi
412	140.599100	5103.21720	3814.31187	- Iwaki
413	149.066100	5457.10593	-3292.79873	- Siding Spring Observatory
414	149.007700	5210.55368	-3667.36188	- Mount Stromlo
415	149.063600	5205.51223	-3674.19850	- Kambah, near Canberra
416	149.133600	5211.00247	-3666.47925	- Barton, near Canberra
417	137.137100	5077.69581	3847.10372	- Yanagida Astronomical Observatory
418	150.940300	5467.71242	-3273.85964	- Tamworth
419	150.832900	5317.45631	-3510.40379	- Windsor
420	151.205000	5301.89814	-3533.74106	- Sydney

421	133.765000	5309.42291	3524.69039	-	Mt. Kajigamori, Otoyō
422	151.046100	5453.50062	-3298.07954	-	Loomberah
423	151.124700	5305.38377	-3528.52010	-	North Ryde
424	149.065800	5214.63770	-3661.37797	-	Macquarie, near Canberra
425	152.931600	5663.53603	-2923.93526	-	Taylor Range Observatory, Brisbane
426	136.821700	5460.83091	-3284.61573	-	Woomera
427	138.728300	5272.62183	-3577.10949	-	Stockport
428	153.397000	5630.04106	-2987.33484	-	Reedy Creek
429	149.040000	5214.83217	-3661.18349	-	Hawker
430	149.212300	5456.49258	-3292.58929	-	Rainbow Obs., near Coonabarabran
431	149.757800	5328.81079	-3494.77082	-	Mt. Tarana Observatory, Bathurst
432	153.082200	5509.37542	-3202.89041	-	Boambee
433	152.107800	5370.20452	-3429.59102	-	Bagnall Beach Observatory
434	10.920600	4513.48744	4491.42175	-	S. Benedetto Po
435	11.893600	4485.75199	4519.03752	-	G. Colombo Astronomical Obs., Padua
436	11.335600	4570.45431	4434.58952	-	Osservatorio di Livergnano
437	284.697100	4892.02989	4079.01034	-	Haverford
438	287.362100	4723.58269	4271.94672	-	Smith College Obs., Northampton
439	253.253900	5176.23592	3717.68660	-	ROTSE-III, Los Alamos
440	278.684200	4657.63995	4343.31986	-	Elginfield Observatory
441	357.169700	3543.62948	5285.36757	-	Swilken Brae, St. Andrews
442	357.482200	4768.94076	4221.69679	-	Gualba Observatory
443	301.465600	5253.66778	-3604.47094	-	Obs. Astronomico Plomer,Buenos Aires
444	243.279400	5326.19283	3499.55795	-	Star Cruiser Observatory
445	359.420000	4976.22357	3976.77516	-	Observatori d'Ontinyent
446	262.166600	5552.10057	3128.98906	-	Kingsnake Observatory
447	255.205600	4920.99204	4046.80192	-	Centennial Observatory
448	253.280100	5392.27021	3397.50228	-	Desert Moon Observatory, Las Cruces
449	279.650300	5269.43540	3581.70214	-	Griffin Hunter Observatory
450	279.333900	5220.95073	3651.74386	-	Carla Jane Observatory, Charlotte
451	262.756900	5067.23892	3861.07616	-	West Skies Observatory, Mulvane
452	279.106300	5727.56392	2796.80699	-	Big Cypress Observatory
453	242.133100	5231.99105	3636.87383	-	Edwards Raven Observatory
454	283.376800	4940.14056	4020.93645	-	Maryland Space Grant Consortium Obs.
455	237.963600	5033.11564	3904.56426	-	CBA Concord
456	358.827800	3912.86695	5020.17543	-	Daventry Observatory
457	18.340300	4223.67148	4763.51036	-	Partizanske
458	355.980600	4846.88125	4133.35925	-	Guadarrama Observatory
459	288.117200	4630.98160	4371.44426	-	Smith River Observatory, Danbury
460	265.998100	5294.49304	3544.90106	-	Area 52 Observatory, Nashville
461	19.893700	4283.19648	4711.46526	-	University of Szeged, Piszkesteto Stn. (Konkoly)
462	283.084200	4968.89328	3985.57151	-	Mount Bellevue Observatory
463	254.737500	4893.69043	4079.39930	-	Sommers-Bausch Observatory, Boulder
464	288.501300	4790.55765	4196.75883	-	Toby Point Observatory, Narragansett
465	174.780100	5113.10562	-3799.96543	-	Takapuna
466	174.848700	5103.78568	-3812.21750	-	Mount Molehill Observatory, Auckland
467	174.776600	5106.20916	-3809.28538	-	Auckland Observatory
468	13.329600	4761.41599	4231.83953	-	Astronomical Obs., Campo Catino
469	7.382000	4329.03326	4669.11410	-	Courroux
470	13.327600	4778.93390	4210.13288	-	Ceccano
471	8.238900	3594.97147	5250.81046	-	Houstrup
472	6.320300	4542.82358	4464.56893	-	Merlette
473	13.316600	4431.49284	4571.99516	-	Remanzacco
474	170.465000	4597.18745	-4407.79654	-	Mount John Observatory, Lake Tekapo
475	7.696500	4512.33553	4492.94765	-	Turin (before 1913)
476	7.140700	4506.77049	4498.87173	-	Grange Observatory, Bussoleno
477	0.485600	3961.02250	4982.41692	-	Galleywood
478	3.089600	4627.21174	4375.21413	-	Lamalou-les-Bains
479	6.050500	4657.31083	4343.26002	-	Sollies-Pont
480	0.773300	3920.39172	5014.23639	-	Cockfield
481	7.930700	3797.31755	5107.43586	-	Moorwarfen
482	357.185400	3543.68932	5285.30773	-	St. Andrews
483	173.803600	4766.63695	-4225.76585	-	Carter Observatory,Black Birch Sta.
484	174.759400	4795.79358	-4190.81979	-	Happy Valley, Wellington
485	174.765400	4799.93744	-4186.28697	-	Carter Observatory, Wellington
486	175.470000	4879.28415	-4101.15083	-	Palmerston North
487	355.444400	3626.47678	5229.37309	-	Macnairston Observatory
488	358.366400	3666.53909	5201.56284	-	Newcastle-upon-Tyne
489	359.870000	3903.42732	5025.97982	-	Hemingford Abbots
490	358.000000	4037.36229	4923.92416	-	Wimborne Minster
491	356.900000	4855.73745	4123.08187	-	Centro Astronomico de Yebes



492	358.470000	3858.77236	5070.61983	-	Mickleover
493	357.454200	5086.76144	3838.48688	-	Calar Alto
494	357.836100	3898.70003	5031.00631	-	Stakenbridge
495	357.662500	3813.21980	5095.72235	-	Altrincham
496	358.686000	4025.24487	4930.94030	-	Bishopstoke
497	359.294500	3969.26534	4975.96925	-	Ascot-Loudwater
498	359.258100	3911.96936	5020.74390	-	Northampton
499	359.790800	3990.02953	4959.39381	-	Cheam
500	0.000000	0.00000	0.00000	-	Geocentric
501	0.347500	4033.33811	4924.43279	-	Herstmonceux
502	0.847900	3942.39757	4997.10743	-	Colchester
503	0.094800	3916.17306	5017.49762	-	Cambridge
504	4.394400	4372.40169	4628.61796	-	Le Creusot
505	4.563900	3972.94545	4973.03714	-	Simon Stevin
506	9.960000	3814.13235	5083.38053	-	Bendestorf
507	5.220000	3935.30663	4994.08556	-	Nyenheim
508	5.290000	3935.30663	4994.08556	-	Zeist
509	5.872500	4664.46161	4335.60061	-	La Seyne sur Mer
510	8.025600	4030.03200	4927.55938	-	Siegen
511	5.715700	4601.19667	4403.08421	-	Haute Provence
512	4.489300	3921.09483	5013.60808	-	Leiden (before 1860)
513	4.785500	4462.84856	4541.80631	-	Lyons
514	8.438000	4154.07855	4823.78334	-	Mundenheim (1907-1913)
515	7.495600	4123.84482	4849.81337	-	Volkssternwarte Dhaun, near Kirn
516	9.973200	3797.54195	5107.24139	-	Hamburg (before 1909)
517	6.135800	4413.73558	4589.51308	-	Geneva (from 1967)
518	9.972700	3797.85610	5107.04691	-	Marine Observatory, Hamburg
519	8.286700	3992.58765	4957.65848	-	Meschede
520	7.096600	4045.45554	4914.54437	-	Bonn
521	10.887900	4117.87587	4854.75010	-	Bamberg
522	7.767700	4227.36655	4760.20425	-	Strasbourg
523	8.651200	4098.02423	4871.23579	-	Frankfurt
524	8.460500	4151.53539	4825.69819	-	Mannheim
525	8.769200	4038.45436	4920.55820	-	Marburg
526	10.147700	3726.49792	5159.01721	-	Kiel
527	9.943100	3798.18522	5106.97211	-	Altona
528	9.942600	3976.13189	4970.55381	-	Göttingen
529	10.722900	3205.58317	5495.59746	-	Christiania
530	10.689800	3770.12066	5127.39222	-	Lubeck
531	12.479700	4754.57937	4237.25497	-	Collegio Romano, Rome
532	11.608400	4263.97315	4728.11550	-	Munich
533	11.871500	4486.06615	4518.72336	-	Padua
534	12.391300	3993.09628	4957.03016	-	Leipzig (since 1861)
535	13.357800	5024.82792	3915.29043	-	Palermo
536	13.106200	3899.26850	5030.63232	-	Berlin-Babelsberg
537	13.364200	3888.75177	5038.72556	-	Urania Observatory, Berlin
538	13.846100	4528.35747	4476.62652	-	Pola
539	14.131600	4271.31840	4721.35368	-	Kremsmünster
540	14.275300	4239.54382	4750.24103	-	Linz
541	14.395300	4101.52482	4868.49814	-	Prague
542	13.037400	3884.92206	5041.28368	-	Falkensee
543	12.368800	3992.72229	4957.09000	-	Leipzig (before 1861)
544	13.351300	3894.76560	5034.02819	-	Wilhelm Foerster Observatory, Berlin
545	16.381700	4258.49787	4732.57352	-	Vienna (before 1879)
546	16.354900	4258.04907	4733.02231	-	Oppolzer Observatory, Vienna
547	17.036300	4012.11017	4941.72630	-	Breslau
548	13.395000	3890.60678	5037.19966	-	Berlin (1835-1913)
549	17.625700	3210.81910	5492.60550	-	Uppsala
550	11.419600	3790.52581	5112.07340	-	Schwerin
551	18.189500	4286.17347	4707.57571	-	Hurbanovo, formerly O'Gyalla
552	11.341800	4559.41398	4445.57000	-	Osservatorio S. Vittore, Bologna
553	18.993800	4082.13694	4883.99648	-	Chorzow
554	8.395900	4061.85147	4901.27504	-	Burgsolms Observatory, Wetzlar
555	19.826300	4103.43967	4866.89745	-	Cracow-Fort Skala
556	11.260000	4305.24720	4681.56065	-	Reintal, near Munich
557	14.779600	4115.49726	4857.14367	-	Ondřejov
558	21.030300	3915.91874	5017.81178	-	Warsaw
559	14.980000	5057.85913	3871.53305	-	Serra La Nave
560	10.931000	4485.49768	4519.30679	-	Madonna di Dossobuono
561	19.893700	4283.19648	4711.46526	-	Piszkesteto Stn. (Konkoly)
562	15.923600	4269.40355	4723.77716	-	Figl Observatory, Vienna

563	13.600000	4279.72580	4713.43995	- Seewalchen
564	11.190000	4279.72580	4726.20065	- Herrsching
565	10.134400	4492.57365	4512.27569	- Bassano Bresciano
566	203.742400	5971.40845	2242.29256	- Haleakala-NEAT/GEODSS
567	12.711700	4450.85081	4553.16079	- Chions
568	204.527800	6006.35451	2151.02290	- Mauna Kea
569	24.958700	3182.11127	5509.12111	- Helsinki
570	25.299000	3695.50124	5180.96322	- Vilnius (since 1939)
571	10.630000	4490.21001	4515.71645	- Cavriana
572	6.890000	4024.60160	4923.92416	- Cologne
573	9.661200	3919.37445	5014.49071	- Eldagsen
574	10.266700	4494.23419	4510.68996	- Gottolengo
575	6.808000	4351.09895	4649.27742	- La Chaux de Fonds
576	0.376000	4022.50723	4933.22914	- Burwash
577	7.500000	4324.38077	4681.56065	- Metzerlen Observatory
578	27.990000	5727.56392	-2800.00839	- Linden Observatory
579	8.850000	4534.86497	4471.07644	- Novi Ligure
580	15.493600	4352.56501	4647.24289	- Graz
581	22.800000	5293.84977	-3546.24744	- Sedgefield
582	1.240800	3934.16968	5003.46534	- Orwell Park
583	30.271700	4406.46512	4595.82611	- Odessa-Mayaki
584	30.294600	3202.65106	5497.25799	- Leningrad
585	30.524600	4082.43613	4884.04136	- Kyiv comet station
586	0.142300	4678.88284	4324.32093	- Pic du Midi
587	9.229200	4448.48716	4557.05034	- Sormano
588	11.250000	4560.37141	4445.57000	- Eremo di Tizzano
589	12.643700	4708.48826	4288.56704	- Santa Lucia Stroncone
590	7.460000	4324.38077	4681.56065	- Metzerlen
591	9.625800	3890.35247	5037.39414	- Resse Observatory
592	7.021100	4007.03881	4945.84024	- Solingen
593	11.170000	4713.43995	4279.72580	- Monte Argentario
594	13.203300	4751.52757	4243.31368	- Monte Autore
595	13.525800	4445.09129	4558.77071	- Farra d'Isonzo
596	12.618300	4748.26634	4244.33095	- Colleverde di Guidonia
597	9.663100	3920.06260	5014.55055	- Springe
598	11.334100	4575.95951	4429.29376	- Loiano
599	13.557600	4715.42960	4283.58543	- Campo Imperatore-CINEOS
600	11.470800	4567.89618	4436.89333	- TLC Observatory, Bologna
601	13.728100	4018.79720	4936.29590	- Engelhardt Observatory, Dresden
602	16.385400	4258.30339	4732.76800	- Urania Observatory, Vienna
603	10.130000	3738.98934	5150.02638	- Bothkamp
604	13.475200	3892.16260	5036.00288	- Archenhold Sternwarte,Berlin-Treptow
605	7.113000	3963.50583	4980.42727	- Marl
606	9.995600	3785.61900	5116.03774	- Norderstedt
607	8.000000	4003.55318	4949.43059	- Hagen Observatory, Ronkhausen
608	203.742000	5971.40845	2242.29256	- Haleakala-AMOS
609	12.853300	4705.28687	4293.38409	- Osservatorio Polino
610	11.343100	4565.27822	4439.43649	- Pianoro
611	8.653100	4137.95190	4837.69594	- Starkenburg Sternwarte, Heppenheim
612	7.100000	3986.33446	4962.19129	- Lenkerbeck
613	7.070900	3986.58878	4962.19129	- Heisingen
614	2.467000	4222.96837	4763.83947	- Soisy-sur-Seine
615	6.906700	4543.34717	4465.58620	- St. Veran
616	16.583500	4175.48601	4805.71192	- Brno
617	2.572500	4241.20435	4747.69786	- Arbonne la Foret
618	5.007700	4640.09212	4361.49600	- Martigues
619	2.090100	4780.45980	4208.47234	- Sabadell
620	2.951700	4918.17960	4047.75935	- Observatorio Astronomico de Mallorca
621	7.485000	4014.78798	4939.87129	- Bergisch Gladbach
622	7.568000	4386.76308	4615.09431	- Oberwichtlach
623	5.566700	4055.02980	4906.82512	- Liege
624	9.616700	4128.12332	4845.92383	- Dertingen
625	203.568300	5967.18979	2245.16484	- Kihei-AMOS Remote Maui Exper. Site
626	4.986400	4008.47495	4944.58362	- Geel
627	5.214600	4592.38535	4411.62625	- Blauvac
628	6.843700	3984.98808	4963.37311	- Mulheim-Ruhr
629	20.151100	4418.32823	4584.60627	- JATE Observatory, Szeged
630	7.236700	4276.59921	4716.70118	- Osenbach
631	10.022900	3801.32677	5104.47383	- Hamburg-Georgswerder
632	11.173900	4616.50053	4386.43397	- San Polo A Mosciano
633	9.933900	4587.79270	4416.09922	- Romito

634	5.145600	4476.31237	4528.92594	- Crolles
635	2.901900	4694.63550	4303.13787	- Pergignan
636	6.979400	3987.87532	4961.11419	- Essen
637	10.090300	3783.89862	5117.30932	- Hamburg-Himmelsmoor
638	8.893300	3940.28824	4998.79789	- Detmold
639	13.723300	4013.95023	4940.24528	- Dresden
640	13.599600	4100.50756	4869.06662	- Senftenberger Sternwarte
641	20.027200	5259.92097	-3595.61474	- Overberg
642	236.685000	4240.18709	4748.52065	- Oak Bay, Victoria
643	243.279400	5326.19283	3499.55795	- OCA-Anza Observatory
644	243.140200	5334.19632	3488.05387	- Palomar Mountain/NEAT
645	254.179400	5370.03997	3435.03639	- Apache Pt.-Sloan Digital Sky Survey
646	242.436900	5293.78993	3546.44192	- Santana Observatory, Rancho Cucamonga
647	245.968300	4041.82031	4918.82287	- Stone Finder Observatory, Calgary
648	249.398200	5434.90560	3329.73445	- Winer Observatory, Sonoita
649	265.300300	4988.14652	3961.90513	- Powell Observatory, Louisburg
650	242.902800	5326.38731	3497.52342	- Temecula
651	249.419200	5434.62137	3330.16828	- Grasslands Observatory, Tucson
652	245.933300	4012.48417	4942.41445	- Rock Finder Observatory, Calgary
653	237.867800	4342.94586	4655.78493	- Torus Observatory, Buckley
654	242.318400	5271.35025	3582.77924	- Table Mountain Obs., Wrightwood-PHMC
655	236.383000	4245.28837	4744.06264	- Sooke
656	236.392100	4246.55996	4743.22489	- Victoria
657	236.690300	4237.44945	4751.13861	- Climenhaga Observatory, Victoria
658	236.583000	4232.73711	4755.55175	- National Research Council of Canada
659	237.051400	4225.96033	4761.28135	- Heron Cove Observatory, Orcas
660	237.737900	5041.14905	3894.42153	- Leuschner Observatory, Berkeley
661	245.711700	4034.23570	4925.33038	- Rothney Astrophysical Obs., Priddis
662	238.354500	5078.20444	3848.25563	- Lick Observatory, Mount Hamilton
663	248.313600	5324.66693	3500.26106	- Red Mountain Observatory
664	239.277500	4362.64790	4638.82053	- Manastash Ridge Observatory
665	240.990300	5243.79432	3621.56997	- Wallis Observatory
666	241.169200	5274.71620	3574.31201	- Moorpark College Observatory
667	240.009200	4365.72962	4634.52707	- Wanapum Dam
668	240.820000	5236.44907	3622.78172	- San Emigdio Peak
669	240.823800	5264.51363	3589.55603	- Ojai
670	240.955800	5279.50333	3566.78723	- Camarillo
671	242.002000	5275.89803	3575.08991	- Stony Ridge
672	241.943600	5280.71508	3568.05881	- Mount Wilson
673	242.317800	5271.36521	3582.73437	- Table Mountain Obs., Wrightwood
674	242.336100	5271.30537	3582.79420	- Ford Observatory, Wrightwood
675	243.137500	5334.40575	3487.76964	- Palomar Mountain
676	242.390700	5329.12495	3492.79613	- San Clemente
677	242.828100	5277.64832	3572.51683	- Lake Arrowhead
678	248.259700	5316.30441	3513.27607	- Fountain Hills
679	244.536700	5471.93108	3271.48104	- San Pedro Martir
680	244.780000	5312.98334	3533.48675	- Los Angeles
681	245.885800	4015.29661	4940.43976	- Calgary
682	247.638100	5098.17576	3822.53975	- Kanab
683	248.918200	5405.53954	3375.43660	- Goodricke-Pigott Observatory, Tucson
684	247.510000	5262.73341	3594.46284	- Prescott
685	247.840000	5204.55480	3667.43668	- Williams, AZ
686	249.209200	5390.29552	3403.30668	- U. of Minn. Infrared Obs.,Mt. Lemmon
687	248.347300	5220.38226	3655.82788	- Northern Arizona U., Flagstaff
688	248.464500	5226.12681	3647.85432	- Lowell Obs., Anderson Mesa Station
689	248.260100	5220.57673	3655.88772	- U.S. Naval Observatory, Flagstaff
690	248.336700	5219.36499	3657.47346	- Lowell Observatory, Flagstaff
691	248.399700	5418.01600	3357.96356	- Steward Obs., Kitt Peak-Spacewatch
692	249.051300	5400.94689	3382.70705	- Steward Observatory, Tucson
693	249.267400	5391.52222	3400.88319	- Catalina Station, Tucson
694	248.994300	5402.27831	3380.98668	- Tumamoc Hill, Tucson
695	248.405300	5418.25536	3357.61949	- Kitt Peak
696	249.115400	5434.48673	3332.51697	- Whipple Observatory, Mt. Hopkins
697	248.383800	5418.52464	3356.87150	- Kitt Peak, McGraw-Hill
698	249.267400	5391.53718	3400.89815	- Mt. Bigelow
699	248.463300	5226.12681	3647.85432	- Lowell Observatory-LONEOS
700	250.381700	5144.35662	3760.54639	- Chinle
701	249.797200	5445.79633	3311.67798	- Junk Bond Observatory, Sierra Vista
702	252.811700	5297.05116	3546.89072	- Joint Obs. for Cometary Res.,Socorro
703	249.267400	5391.50726	3400.89815	- Catalina Sky Survey
704	253.340900	5305.77272	3530.56959	- Lincoln Laboratory ETS, New Mexico



705	254.179400	5370.03997	3435.03639	- Apache Point
706	253.936600	4993.69660	3957.19280	- Salida
707	254.560000	4936.68485	4037.36229	- Chamberlin field station
708	255.047500	4917.04265	4051.39457	- Chamberlin Observatory, Denver
709	254.228800	5359.23900	3451.19296	- W & B Observatory, Cloudcroft
710	254.733600	4973.68041	3983.65666	- Florissant
711	255.978500	5492.47086	3235.69722	- McDonald Observatory, Fort Davis
712	255.118700	4964.52502	3994.30803	- USAF Academy Obs., Colorado Springs
713	254.989700	4902.56158	4068.80777	- Thornton
714	246.817300	5258.39507	3599.75860	- Bagdad
715	253.275900	5392.46469	3397.24797	- Jornada Observatory, Las Cruces
716	255.248900	4959.19933	4001.06985	- Palmer Divide Obs., Colorado Springs
717	256.048100	5495.40298	3229.63851	- Prude Ranch
718	247.704200	4847.64420	4133.16477	- University of Utah, Tooele
719	253.086100	5289.93031	3553.92182	- Etscorn Observatory
720	259.626100	5754.10258	2743.74463	- Universidad de Monterrey
721	259.731200	4864.66844	4112.37067	- Lime Creek
722	264.419200	5550.06604	3132.31014	- Missouri City
723	263.330000	5238.61824	3626.67126	- Cottonwood Observatory, Ada
724	260.805300	6020.19231	2106.44274	- National Observatory, Tacubaya
725	261.345300	5541.52400	3148.12263	- Fair Oaks Ranch
726	265.693300	4402.44094	4599.91013	- Brainerd
727	262.538700	5191.43507	3693.55647	- Zeno Observatory, Edmond
728	262.608400	5651.67292	2946.31510	- Corpus Christi
729	262.878600	4138.16134	4837.50147	- Glenlea Astronomical Obs., Winnipeg
730	262.841400	4283.19648	4710.49287	- U. of North Dakota, Grand Forks
731	272.671100	4929.66871	4033.78691	- Rose-Hulman Observatory, Terre Haute
732	263.230000	6096.92106	1872.56143	- Oaxaca
733	263.354600	5345.01224	3468.87543	- Allen, Texas
734	263.997600	4971.28684	3983.07323	- Farpoint Observatory, Eskridge
735	264.406400	5562.58738	3110.19957	- George Observatory, Needville
736	263.335700	5549.36293	3133.70140	- Houston
737	275.663300	5282.37561	3562.82289	- New Bullpen Observatory, Alpharetta
738	267.673300	4967.29258	3987.60604	- Obs. of the State U. of Missouri
739	265.244000	4972.72298	3981.17333	- Sunflower Observatory, Olathe
740	265.338300	5428.42801	3337.67809	- SFA Observatory, Nacogdoches
741	266.850300	4559.92262	4445.04641	- Goodsell Observatory, Northfield
742	266.312200	4777.15368	4212.30204	- Drake University, Des Moines
743	267.761500	4519.20208	4486.27558	- University of Minnesota, Minneapolis
744	273.837800	4903.77332	4065.11270	- Doyan Rose Observatory, Indianapolis
745	267.174700	4947.45590	4012.22985	- Glasgow, Missouri
746	275.225400	4627.40622	4375.21413	- Brooks Observatory, Mt. Pleasant
747	268.929200	5508.98647	3203.54864	- Baton Rouge Observatory
748	268.468000	4784.49894	4203.95448	- Van Allen Observatory, Iowa City
749	276.164200	5280.77492	3565.50069	- Oakwood
750	268.728200	4532.24701	4473.05113	- Hobbs Observatory, Fall Creek
751	269.243900	4977.37547	3975.11462	- Lake Saint Louis
752	275.464700	5247.80355	3613.79088	- Puckett Observatory, Mountain Town
753	270.590700	4666.39142	4333.89519	- Washburn Observatory, Madison
754	271.443200	4704.64360	4292.68098	- Yerkes Observatory, Williams Bay
755	274.647800	4678.55373	4320.74554	- Optec Observatory
756	272.325700	4742.82097	4250.43454	- Dearborn Observatory, Evanston
757	280.005000	5163.74450	3731.85352	- High Point
758	279.237900	5615.57495	3014.11286	- BCC Observatory, Cocoa
759	273.194700	5162.84691	3733.12510	- Nashville
760	273.604800	4924.94142	4039.72594	- Goethe Link Observatory, Brooklyn
761	277.645600	5621.55887	3003.01270	- Zephyrhills
762	274.200800	4521.14685	4484.09146	- Four Winds Observatory,Lake Leelanau
763	280.465800	4602.27377	4401.48351	- King City
764	275.143900	5310.69449	3521.05516	- Puckett Observatory, Stone Mountain
765	275.577500	4953.84373	4004.45076	- Cincinnati
766	275.516700	4694.30638	4303.78114	- Michigan State U. Obs., East Lansing
767	276.269700	4726.33529	4268.89492	- Ann Arbor
768	272.324900	4742.68634	4250.58414	- Dearborn Observatory
769	276.989200	4893.04715	4077.93324	- McMillin Observatory, Columbus
770	274.078600	4947.71022	4011.85586	- Crescent Moon Observatory, Columbus
771	277.570000	5880.64742	2481.09565	- Boyeros Observatory, Havana
772	284.086500	4497.67494	4507.36888	- Boltwood Observatory, Stittsville
773	278.431800	4781.43218	4207.41019	- Warner and Swasey Obs., Cleveland
774	278.925000	4777.54264	4212.06269	- Warner, Swasey Nassau Stn., Chardon
775	284.616800	4849.22994	4129.39490	- Sayre Observatory, South Bethlehem

776	284.466900	4686.15330	4312.83181	-	Foggy Bottom, Hamilton
777	280.601700	4621.21286	4381.46732	-	Toronto
778	279.977800	4858.35541	4119.13249	-	Allegheny Observatory, Pittsburgh
779	280.577900	4606.22316	4397.27981	-	David Dunlap Obs., Richmond Hill
780	281.477800	5030.31816	3908.52861	-	L. McCormick Obs., Charlottesville
781	281.507500	6381.00742	-25.83555	-	Quito
782	281.650000	6371.76227	0.00000	-	Quito, comet astrograph station
783	282.020000	4994.08556	3967.20089	-	Rixeyville
784	282.214600	4728.75877	4266.65095	-	Stull Observatory, Alfred University
785	285.354200	4867.98951	4107.32922	-	Fitz-Randolph Observatory, Princeton
786	282.934500	4968.95311	3985.51167	-	U.S.N.O., Washington (since 1893)
787	282.949400	4970.73333	3983.20787	-	U.S.N.O., Washington (before 1893)
788	284.366700	4908.17150	4059.68230	-	Mount Cuba Observatory, Wilmington
789	284.594000	4668.03700	4332.15986	-	Litchfield Observatory, Clinton
790	284.283500	4486.57478	4518.27457	-	Dominion Observatory, Ottawa
791	284.523600	4892.86764	4077.99308	-	Flower and Cook Obs., Philadelphia
792	288.299100	4794.74639	4191.94177	-	University of Rhode Island, Quonochontaug
793	286.251500	4697.49282	4300.14591	-	Dudley Observatory, Albany (before 1893)
794	286.110000	4770.15250	4219.84178	-	Vassar College Obs., Poughkeepsie
795	286.038600	4834.43471	4146.46402	-	Rutherford
796	286.450000	4815.49562	4171.29727	-	Stamford
797	287.075100	4797.51395	4188.90494	-	Yale Observatory, New Haven
798	287.015400	4789.54039	4198.22488	-	Yale Observatory, Bethany
799	288.865000	4713.18563	4282.92720	-	Winchester
800	288.451100	6123.39988	-1787.21584	-	Harvard Observatory, Arequipa
801	288.442300	4709.38585	4287.28050	-	Oak Ridge Observatory
802	288.871600	4718.55620	4277.01808	-	Harvard Observatory, Cambridge
803	288.916700	4754.45969	4237.37465	-	Taunton
804	289.312100	5320.70259	-3506.43945	-	Santiago-San Bernardo
805	288.980000	5357.44382	-3453.43693	-	Santiago-Cerro El Roble
806	289.451300	5331.09964	-3491.27023	-	Santiago-Cerro Calan
807	289.194100	5520.92438	-3187.79599	-	Cerro Tololo Observatory, La Serena
808	290.670800	5427.66507	-3343.03370	-	El Leoncito
809	289.266300	5570.91999	-3100.10171	-	European Southern Obs., La Silla
810	288.515400	4701.45716	4295.80758	-	Wallace Observatory, Westford
811	289.895600	4800.10200	4185.89802	-	Maria Mitchell Observatory, Nantucket
812	288.454300	5357.12967	-3450.13081	-	Vina del Mar
813	289.308300	5327.85337	-3495.53377	-	Santiago-Quinta Normal (1862-1920)
814	288.419200	4758.13980	4233.39534	-	North Scituate
815	289.347900	5328.22736	-3495.15977	-	Santiago-Santa Lucia (1849-1861)
816	285.758300	4569.61656	4435.48711	-	Rand Observatory
817	288.610400	4720.96472	4274.44500	-	Sudbury
818	286.416700	4490.21001	4515.08813	-	Gemeaux Observatory, Laval
819	284.385000	4446.84159	4557.24481	-	Val-des-Bois
820	295.375800	5934.80185	-2333.57719	-	Tarija
821	295.450400	5438.57075	-3323.21198	-	Cordoba-Bosque Alegre
822	295.801400	5448.21981	-3305.94838	-	Cordoba
823	288.169100	4701.65164	4295.92725	-	Fitchburg
824	285.752800	4569.36224	4435.74142	-	Lake Clear
825	288.259500	4721.92215	4273.54741	-	Granville
826	288.228200	4420.81156	4582.24262	-	Plessisville
827	287.539300	4221.69679	4765.11106	-	Saint-Felicien
828	288.975800	4761.67030	4229.34124	-	Assonet
829	290.697900	5427.91938	-3342.85418	-	Complejo Astronomico El Leoncito
830	288.569700	4687.36504	4310.99176	-	Hudson
831	277.413400	5561.16621	3112.78761	-	Rosemary Hill Obs., U. of Florida
832	283.185000	4881.18404	4092.21983	-	Etters
833	301.463300	5253.86226	-3604.15678	-	Obs. Astro. de Mercedes, Buenos Aires
834	301.565400	5255.46296	-3601.92777	-	Buenos Aires-AAAA
835	288.642800	4701.26268	4295.92725	-	Drum Hill Station, Chelmsford
836	288.501100	4764.97642	4225.64617	-	Furnace Brook Observatory, Cranston
837	279.755300	5691.09196	2869.90051	-	Jupiter
838	275.862800	4911.16346	4056.24155	-	Dayton
839	302.067800	5236.25459	-3629.54354	-	La Plata
840	276.283300	4671.02895	4328.83879	-	Flint
841	279.442300	5078.45876	3847.41788	-	Martin Observatory, Blacksburg
842	282.767800	4904.85043	4063.70648	-	Gettysburg College Observatory
843	273.064800	5260.75872	3594.52268	-	Emerald Lane Observatory, Decatur
844	303.809800	5246.00837	-3615.66086	-	Los Molinos
845	283.505800	4716.11775	4280.17460	-	Ford Observatory, Ithaca
846	269.655000	4973.93472	3979.48288	-	Principia Astronomical Obs., Elsay

847	275.975000	4514.44486	4490.85328	- Lunar Cafe Observatory
848	237.021900	4618.53506	4384.39943	- Tenagra Observatory, Cottage Grove
849	265.169400	4970.29950	3984.24009	- Everstar Observatory, Olathe
850	274.080200	5217.95877	3656.78531	- Cordell-Lorenz Observatory, Sewanee
851	296.419600	4546.53361	4458.22598	- Burke-Gaffney Observatory, Halifax
852	269.405000	4978.13842	3974.21703	- River Moss Observatory, St. Peters
853	249.151700	5380.91573	3415.10995	- Biosphere 2 Observatory
854	249.179900	5397.07230	3389.03504	- Sabino Canyon Observatory, Tucson
855	266.538300	4524.01913	4481.27902	- Wayside Observatory, Minnetonka
856	242.554000	5293.84977	3546.24744	- Riverside
857	249.399200	5435.01032	3329.64469	- Iowa Robotic Observatory, Sonoita
858	253.780000	5226.24649	3647.65984	- Tebbutt Observatory, Edgewood
859	316.309700	6003.87118	-2149.88596	- Wykrota Observatory-CEAMIG
860	313.034700	5874.78318	-2477.40058	- Valinhos
861	312.920400	5884.02833	-2454.75146	- Barao Geraldo
862	138.526200	5157.43147	3741.29315	- Saku
863	137.180000	5147.15410	3750.34382	- Furukawa
864	130.753300	5374.03423	3423.78663	- Kumamoto
865	285.879200	4768.61165	4221.62199	- Emmy Observatory, New Paltz
866	283.510000	4964.74941	3990.80744	- U.S. Naval Academy, Michelson
867	134.122200	5209.08762	3668.82794	- Saji Observatory
868	135.135900	5298.06843	3539.35098	- Hidaka Observatory
869	133.429800	5324.47245	3499.69259	- Tosa
870	313.174100	5879.36088	-2466.97361	- Campinas
871	134.392500	5246.39733	3615.00263	- Akou
872	134.241100	5287.73122	3554.78948	- Tokushima
873	133.771700	5256.22591	3600.77587	- Kurashiki Observatory
874	314.417300	5895.69696	-2429.97805	- Itajuba
875	139.235300	5159.66048	3737.14929	- Yorii
876	139.246700	5151.11844	3748.68328	- Honjo
877	139.082800	5178.67437	3711.82237	- Okutama
878	136.914200	5231.28794	3636.75416	- Kagiya
879	137.353500	5228.16135	3641.85544	- Tokai
880	316.777100	5878.67273	-2466.04610	- Rio de Janeiro
881	137.257100	5221.90815	3650.20300	- Toyota
882	137.355800	5219.99330	3653.46424	- JCPM Oi Station
883	138.421500	5229.17861	3639.68627	- Shizuoka
884	138.079200	5221.78848	3650.84628	- Kawane
885	138.466700	5233.20279	3633.94172	- JCPM Yakiimo Station
886	138.936700	5219.61931	3653.40440	- Mishima
887	139.336700	5150.02638	3750.22414	- Ojima
888	138.995200	5222.74590	3649.38022	- Gekko
889	140.142700	5123.05388	3786.83074	- Karasuyama
890	140.250000	5171.38895	3721.00768	- JCPM Tone Station
891	140.863300	5013.60808	3929.50223	- JCPM Kimachi Station
892	139.475300	5156.84804	3740.78452	- YGCO Hoshikawa and Nagano Stations
893	140.862200	5014.70014	3928.11097	- Sendai Municipal Observatory
894	138.447600	5173.49828	3719.79593	- Kiyosato
895	140.720300	5011.49875	3932.62882	- Hatamae
896	138.367800	5174.71003	3717.94092	- Yatsugatake South Base Observatory
897	139.492900	5153.34745	3745.55669	- YGCO Chiyoda Station
898	138.188300	5236.89786	3629.09475	- Fujieda
899	142.550000	4607.56954	4395.17048	- Toma
900	135.989900	5227.33856	3642.45384	- Moriyama
901	137.087700	5208.63882	3669.02242	- Tajimi
902	132.220800	5279.50333	3566.78723	- Ootake
903	135.176900	5213.36612	3662.20075	- Fukuchiyama and Kannabe
904	135.120000	5255.58263	3603.64815	- Go-Chome and Kobe-Suma
905	135.924600	5317.32168	3510.52347	- Nachi-Katsuura Observatory
906	145.667000	5174.59035	-3722.92253	- Cobram
907	144.975800	5043.96149	-3890.72646	- Melbourne
908	137.246700	5124.96873	3784.15294	- Toyama
909	237.871700	4280.36908	4712.81164	- Snohomish Hilltop Observatory
910	6.926700	4615.73758	4388.85745	- Caussols-ODAS
911	282.923300	4738.31808	4255.49095	- Collins Obs., Corning Comm. College
912	288.234200	4768.86596	4221.44247	- Carbuncle Hill Observatory, Greene
913	303.816100	5236.00027	-3629.93249	- Observatorio Kappa Crucis, Montevideo
914	288.010800	4707.63555	4289.55438	- Underwood Observatory, Hubbardston
915	261.878900	5540.11778	3150.35164	- River Oaks Observatory, New Braunfels
916	272.683600	4929.47424	4034.04122	- Oakley Observatory, Terre Haute
917	237.552200	4346.05750	4652.71818	- Pacific Lutheran Univ. Keck Obs.



918	257.869400	4596.78353	4407.93118	-	Badlands Observatory, Quinn
919	248.318300	5369.75573	3430.80277	-	Desert Beaver Observatory
920	282.335300	4666.31662	4333.76056	-	RIT Observatory, Rochester
921	254.472500	5356.87535	3454.33451	-	SW Inst. for Space Res., Cloudcroft
922	272.833300	5251.43877	3608.04632	-	Timberland Observatory, Decatur
923	284.630000	4889.15761	4082.39125	-	Bradstreet Observatory, St. Davids
924	287.676900	4400.15209	4601.82498	-	Obs. du Cegep de Trois-Rivieres
925	249.858900	5450.11971	3304.57208	-	Palominas Observatory
926	249.120900	5446.54432	3310.37648	-	Tenagra II Observatory
927	270.561900	4687.97839	4310.66264	-	Madison-YRS
928	286.676100	4827.49337	4154.46751	-	Moonedge Observatory, Northport
929	268.775800	5505.54572	3209.41288	-	Port Allen
930	210.412200	6083.15806	-1911.12776	-	Tahiti
931	210.384200	6080.28578	-1919.81939	-	Punaauia
932	286.574000	4782.12033	4206.34805	-	John J. McCarthy Obs., New Milford
933	249.734200	5445.84121	3311.78270	-	Rockland Observatory, Sierra Vista
934	242.957200	5356.68088	3451.08824	-	Poway Valley
935	282.339400	4973.48593	3979.96159	-	Wyrick Observatory, Haymarket
936	263.379200	4950.32818	4008.78910	-	Ibis Observatory, Manhaatan
937	358.690000	3703.45985	5175.41314	-	Bradbury Obs., Stockton-on-Tees
938	351.616200	4926.66180	4037.30246	-	Linhaceira
939	359.603300	4910.02651	4057.70760	-	Observatorio Rodeno
940	358.961100	4030.91463	4926.34764	-	Waterlooville
941	359.613900	4910.40051	4057.00449	-	Observatorio Pla D'Arguines
942	359.363600	3853.22228	5065.71302	-	Grantham
943	355.866400	4074.41769	4890.69847	-	Peeverell
944	354.083100	5081.19640	3842.30163	-	Observatorio Geminis, Dos Hermanas
945	354.398600	4635.05067	4367.36024	-	Observatorio Monte Deva
946	0.793100	4825.83283	4156.63668	-	Ametlla de Mar
947	2.124400	4162.88987	4816.19873	-	Saint-Sulpice
948	0.218900	3893.73338	5034.71634	-	Pymoor
949	359.816900	4302.31508	4692.84032	-	Durtal
950	342.117600	5597.71297	3051.75168	-	La Palma
951	358.298300	3966.82690	4977.88411	-	Highworth
952	359.758300	4966.66427	3988.24931	-	Marxuquera
953	2.133900	4758.21459	4234.63701	-	Montjoia
954	343.490600	5622.20214	3006.78256	-	Teide Observatory
955	350.673900	4984.25698	3966.43794	-	Sassoeiros
956	356.190800	4861.67648	4115.81142	-	Observatorio Pozuelo
957	359.350600	4531.48406	4473.44009	-	Merignac
958	358.969500	4619.13345	4383.57665	-	Observatoire de Dax
959	1.465300	4630.27849	4372.08753	-	Ramonville Saint Agne
960	0.610800	4019.24599	4935.84711	-	Rolvenden
961	356.820600	3578.90466	5261.83583	-	City Observatory, Edinburgh
962	359.818800	4965.06357	3990.22401	-	Gandia
963	359.733300	3880.46405	5044.47012	-	Werrington
964	358.843300	3984.49441	4963.85183	-	Southend Bradfield
965	351.400800	5087.27007	3834.40286	-	Obs. Astronomica no Algarve,Portimao
966	357.204200	3888.06362	5039.36883	-	Church Stretton
967	358.977800	3923.06952	5012.26170	-	Greens Norton
968	0.425000	3927.66218	5008.74615	-	Haverhill
969	359.845400	3976.77516	4969.85070	-	London-Regents Park
970	0.495400	3957.31247	4985.28920	-	Chelmsford
971	350.812500	4983.46411	3967.45521	-	Lisbon
972	357.583300	3467.09521	5335.69229	-	Dun Echt
973	359.667100	3971.73371	4973.85992	-	Harrow
974	8.922000	4563.04921	4441.54582	-	Genoa
975	359.633300	4929.78839	4033.47275	-	Valencia
976	358.466900	3907.12239	5024.57360	-	Leamington Spa
977	351.548300	3741.41283	5148.24616	-	Markree
978	357.245400	3754.71208	5138.70182	-	Conder Brow
979	358.669700	4011.60154	4942.10030	-	South Wonston
980	357.220000	3754.42784	5138.86638	-	Lancaster
981	353.352200	3725.40585	5159.79512	-	Armagh
982	353.662100	3812.27734	5096.39554	-	Dunsink Observatory, Dublin
983	353.795300	5135.47050	3769.91122	-	San Fernando
984	357.269700	4028.88009	4928.12786	-	Eastfield
985	357.531700	3877.96576	5047.02824	-	Telford
986	359.360500	3986.64862	4962.14641	-	Ascot
987	355.373500	3741.29315	5148.50048	-	Archallagan Observatory
988	355.706000	3586.11528	5256.92902	-	Glasgow

989	357.405800	3775.14715	5123.81683	- Wilfred Hall Observatory, Preston
990	356.312100	4863.96533	4113.07378	- Madrid
991	356.927800	3810.94592	5097.35297	- Liverpool (since 1867)
992	356.999500	3809.65938	5098.04112	- Liverpool (before 1867)
993	357.495600	4018.06417	4936.87933	- Woolston Observatory
994	359.387800	4007.18840	4945.61585	- Godalming
995	358.417700	3687.78199	5186.63298	- Durham
996	358.748300	3956.04089	4986.36631	- Oxford
997	359.150000	3948.06733	4994.08556	- Hartwell
998	359.757500	3968.81655	4976.26845	- London-Mill Hill
999	359.472500	4530.58647	4474.45735	- Bordeaux-Floirac
A00	0.377000	3984.74872	4963.53767	- Clark Observatory, Gravesend
A01	0.744100	4746.23180	4247.59218	- Masia Cal Maciarol Modul 1
A02	0.744100	4746.23180	4247.59218	- Masia Cal Maciarol
A03	1.400000	4809.75106	4175.12697	- Torredembarra
A04	1.718100	4605.40037	4398.11756	- Saint-Caprais
A05	1.817500	4638.25206	4363.72501	- Belesta
A06	2.441700	4778.63470	4210.34231	- Mataro
A07	2.744400	4214.03738	4771.79808	- Gretz-Armainvilliers
A08	2.884700	4639.13469	4363.03686	- Malibert
A09	1.180300	4148.15448	4828.95943	- Quincampoix
A10	1.928100	4801.34366	4184.89571	- Observatori Astronomic de Corbera
A11	2.471800	4032.38069	4925.13590	- Wormhout
A12	8.747700	4486.41022	4518.48401	- Stazione Astronomica di Sozzago
A13	7.139400	4377.44313	4624.21978	- Observatoire Naef, Marly
A14	5.186400	4594.04589	4410.04051	- Les Engarouines Observatory
A15	6.797200	3948.26180	4992.48486	- Josef Bresser Sternwarte, Borken
A16	7.192200	4376.79986	4624.84809	- Tentlingen
A17	8.681500	4146.64354	4830.35069	- Guidestar Observatory, Weinheim
A18	7.176100	3976.26652	4970.35933	- Herne
A19	7.074400	4028.68562	4928.20265	- Koln
A20	7.518900	3860.52265	5060.14798	- Sogel
A21	8.058100	4060.77436	4902.36710	- Irmtraut
A22	8.653100	4137.95190	4837.69594	- Starkenburg Stern., Heppenheim-SOHAS
A23	8.667700	4147.51121	4829.46806	- Weinheim
A24	8.948100	4464.37446	4540.28042	- New Millennium Observatory, Mozzate
A25	9.192500	4471.33076	4533.38395	- Nova Milanese
A26	8.657400	4124.08418	4849.31970	- Darmstadt
A27	10.323600	3943.16052	4996.70352	- Eridanus Observatory, Langelsheim
A28	10.334200	4298.73969	4696.98419	- Kempten
A29	10.673300	4615.79742	4387.01740	- Santa Maria a Monte
A30	11.223100	4467.23178	4538.39548	- Crespadoro
A31	11.418600	4466.22947	4538.36556	- Corcaroli Observatory
A32	10.551700	3726.30344	5159.09201	- Panker
A33	11.015700	4032.96412	4925.00126	- VdS-Sternwarte Kirchheim
A34	10.791100	4142.21544	4834.18039	- Grosshabersdorf
A35	12.897800	4050.82610	4910.84930	- Hormersdorf Observatory
A36	9.791100	4455.51826	4550.16884	- Ganda di Aviatico
A37	13.663400	3898.83467	5030.88663	- Mueggelheim
A38	13.374700	4764.85674	4226.54376	- Campocatino Auto. Teles., Collepardo
A39	12.418600	4023.58433	4932.60083	- Altenburg
A40	14.497800	5172.92981	3718.83851	- Pieta
A41	14.591100	4419.42030	4584.03779	- Rezman Observatory, Kamnik
A42	9.501900	3908.52861	5023.42170	- Gehrden
A43	13.089700	3903.48716	5027.31124	- Inastars Observatory, Potsdam
A44	13.697200	4248.41497	4741.89347	- Altschwendt
A45	9.362000	3987.93516	4961.29370	- Karrenkneul
A46	16.582500	4168.05099	4812.11471	- Lelekovice
A47	16.603100	4844.96640	4134.88515	- Matera
A48	10.888500	4490.26985	4514.57950	- Verona
A49	17.637200	3212.79379	5491.45360	- Uppsala-Angstrom
A50	28.997300	4107.97249	4863.00790	- Andrushivka Astronomical Observatory
A51	18.666700	3722.92253	5161.82965	- Danzig
A52	18.755300	4321.56833	4675.42713	- Etyek
A53	10.688300	4483.44818	4521.40116	- Peschiera del Garda
A54	16.621700	3879.70110	5045.62202	- Ostrorog
A55	13.118100	4711.59990	4286.36795	- Osserva. Astro. Vallemare di Borbona
A56	10.319700	4554.37254	4450.92561	- Parma
A57	11.103100	4615.48327	4387.58587	- Oss. Astron. Margherita Hack,Firenze
A58	2.469400	4218.18124	4768.16285	- Observatoire de Chalandray-Canotiers
A59	12.907100	4089.85619	4878.64088	- Karlovy Vary Observatory

A60	20.810600	5393.09300	-3396.99365	- YSTAR-NEOPAT Station, Sutherland
A61	8.858100	4525.23087	4479.87280	- Tortona
A62	9.230100	4224.43443	4763.06157	- Aichtal
A63	4.756700	4456.98432	4547.49103	- Cosmosoz Obs., Tassin la Demi Lune
A64	6.115100	4403.08421	4600.67308	- Couvaloup de St-Cergue
A65	2.408300	4588.37613	4416.15906	- Le Couvent de Lentin
A66	10.316100	4631.35560	4370.68131	- Stazione Osservativa Astro., Livorno
A67	7.678500	4570.88814	4434.21553	- Chiusa di Pesio
A68	9.653300	3683.69797	5189.38558	- Swedenborg Obs., Bockholmwik
A69	11.330000	4647.75153	4353.71691	- Osservatorio Palazzo Bindi Sergardi
A70	25.203300	2720.52704	5749.50992	- Lumijoki
A71	15.453300	4240.57604	4749.10408	- Stixendorf
A72	13.622200	4012.11017	4941.84598	- Radebeul Observatory
A73	16.289500	4259.82929	4731.49641	- Penzing Astrometric Obs., Vienna
A74	8.762400	4094.44884	4874.27262	- Bergen-Enkheim Observatory
A75	2.186100	4791.51508	4195.72660	- Fort Pius Observatory, Barcelona
A76	20.835600	4270.03186	4722.17647	- Andromeda Observatory, Miskolc
A77	5.646900	4595.97570	4408.54453	- Observatoire Chante-Perdrix, Dauban
A78	11.715100	4662.06804	4338.81696	- Stia
A79	23.843400	4743.32961	4251.81084	- Zvezdno Obshtestvo Obs., Plana
A80	14.122200	3916.68169	5017.16851	- Lindenberg Observatory
A81	12.403300	4756.68870	4234.89132	- Balzaretto Observatory, Rome
A82	13.874400	4467.05226	4537.91677	- Osservatorio Astronomico di Trieste
A83	29.996900	2930.44277	5646.24251	- Jakokoski Observatory
A84	30.333300	5113.67409	3803.40618	- TUBITAK National Observatory
A85	30.806500	4393.33043	4608.33249	- Odessa Astronomical Obs.,Kryzhanovka
A86	4.354700	4475.53446	4529.82352	- Albigneux
A87	8.766200	4141.64697	4834.50951	- Rimbach
A88	8.901300	4560.11709	4444.50786	- Bolzaneto
A89	10.330800	4300.20575	4695.65276	- Sterni Observatory, Kempten
A90	2.143100	4791.26076	4196.05572	- Barcelona
A91	26.599700	2977.19210	5621.88798	- Hankasalmi Observatory, Muurame
A92	26.092700	4560.74540	4443.83467	- Urseanu Observatory, Bucharest
A93	10.418900	4606.41763	4396.77118	- Lucca
A94	13.457700	4441.80014	4562.03195	- Cormons
A95	28.389200	2971.19323	5625.07442	- Taurus Hill Obs.,Karhilaipaleenti
A96	16.286700	4251.40693	4739.15583	- Pressberger Purgathofer Observatory
A97	16.421900	4250.77862	4739.46998	- Stammersdorf
A98	30.209200	3712.97427	5168.84579	- Taurus-1 Observatory, Baran'
A99	10.858900	4463.29735	4542.70390	- Osservatorio del Monte Baldo
B00	2.576700	4228.00982	4759.50114	- Savigny-le-Temple
B01	8.446400	4089.46723	4879.20935	- Taunus Observatory, Egelsbach
B02	20.656600	4032.51532	4925.45005	- Kielce
B03	16.269800	4257.98923	4733.27663	- Alter Satzberg, Vienna
B04	7.478500	4456.26625	4550.16884	- Saint-Barthelemy Observatory
B05	37.883100	3644.08445	5217.31550	- Ka-Dar Observatory, Barybino
B06	2.533700	4767.78886	4222.69910	- Montseny Astronomical Observatory
B07	9.003300	4425.34437	4578.09876	- Camorino
B08	11.380700	4560.23677	4444.47794	- San Lazzaro di Savena
B09	10.670800	4627.34638	4374.95981	- Capannoli
B10	5.515000	4564.45543	4441.15687	- Obs. du Mas des Gres, Moydans
B11	10.628600	4457.10400	4548.76262	- Osservatorio Cima Rest, Imola
B12	4.490600	3911.65520	5020.93837	- Koschny Observatory, Noordwijkerhout
B13	8.931100	4461.50218	4543.21253	- Osservatorio di Tradate
B14	9.075800	4532.36669	4473.49993	- Ca del Monte
B15	13.012900	3897.74260	5031.70942	- Inastars Obs., Potsdam (since 2006)
B16	36.954700	3596.12337	5250.28687	- 1st Moscow Gymnasium Obs., Lipki
B17	33.162800	4500.33778	4504.60132	- AZT-8 Evpatoria
B18	42.500800	4653.36145	4351.93670	- Terskol
B19	2.441400	4781.23771	4207.41019	- Observatori Iluro, Mataro
B20	2.263600	4785.26189	4202.99706	- Observatori Carmelita, Tiana
B21	13.474400	4230.94194	4757.39181	- Schaerding (since 2006)
B22	0.744100	4746.09717	4247.71186	- Observatori d'Ager, Barcelona
B23	10.971000	4472.60234	4532.87532	- Fiamene
B24	2.598300	4229.79004	4757.96028	- Cesson
B25	15.055700	5063.34937	3866.04281	- Catania
B26	5.666700	4605.26573	4398.74587	- Obs. des Terres Blanches, Reillanne
B27	14.154400	4236.68650	4752.73931	- Picard Observatory, St. Veit
B28	13.183600	4430.64014	4572.87779	- Mandi Observatory, Pagnacco
B29	0.670100	4834.68903	4146.29946	- L'Ampolla Observatory, Tarragona
B30	16.568900	3882.49858	5043.45285	- Szamotuly-Galowo



B31	20.810800	5393.36227	-3396.61965	-	S.African Large Telescope,Sutherland
B32	12.948600	4048.01366	4913.07831	-	Gelenau
B33	10.778300	4629.76986	4372.53632	-	Libbiano Observatory, Peccioli
B34	33.725800	5213.99443	3661.37797	-	Green Island Observatory, Gecitkale
B35	35.031700	5420.84340	3350.04984	-	RAS Observatory, Macabim
B36	13.712500	4253.20210	4737.55513	-	Kallham
B37	2.259300	4773.00982	4216.89470	-	Obs.deL'Ametlla del Valles,Barcelona
B38	11.857500	4624.11506	4378.74464	-	Subbiano
B39	8.907200	4461.50218	4543.21253	-	Tradate
B40	15.070600	5059.84878	3870.88978	-	Skylive Observatory, Catania
B41	17.692500	4174.42386	4806.69926	-	Zlin Observatory
B42	30.327500	3661.10869	5205.45239	-	Vitebsk
B43	7.308900	4043.98948	4915.83091	-	Hennef
B44	5.590600	4577.72476	4427.64818	-	Eygalayes
B45	19.935600	4092.78831	4875.90324	-	Narama
B46	12.054400	4556.37715	4448.24781	-	Sintini Observatory, Argenta
B47	24.750300	3177.96741	5511.54459	-	Metsala Observatory, Espoo
B48	6.598100	3948.12716	4992.48486	-	Bocholt
B49	2.112500	4780.39996	4208.57706	-	Paus Observatory, Sabadell
B50	8.276700	4197.32730	4786.47363	-	Corner Observatory, Durmersheim
B51	7.066700	4628.04949	4374.31654	-	Vallauris
B52	2.997300	4728.39974	4266.23208	-	Observatorio El Far
B53	12.353600	4756.29974	4235.34012	-	Rome
B54	0.743900	4746.17197	4247.65202	-	Ager
B55	12.876000	4398.07268	4604.86182	-	Comeglians
B56	2.449300	4781.14795	4207.42515	-	Observatorio Sant Pere, Mataro
B57	2.224400	4779.24805	4209.69904	-	Laietania Obs., Parets del Valles
B58	19.025300	4312.62238	4683.58022	-	Polaris Observatory, Budapest
B59	6.878800	3949.54834	4991.43767	-	Borken
B60	7.175300	3908.67821	5023.27210	-	Deep Sky Observatorium, Bad Bentheim
B61	2.043500	4787.26650	4200.66333	-	Sant Cugat del Valles
B62	9.685300	3886.04405	5040.73017	-	Brelingen
B63	20.108000	4098.51790	4870.96651	-	Solaris Observatory, Luczanowice
B64	24.887800	3135.40681	5535.76449	-	Slope Rock Observatory, Hyvinkaa
B65	24.387800	3180.39089	5510.13837	-	Komakallio Observatory, Kirkkonummi
B66	9.006900	4532.27693	4473.20073	-	Osservatorio di Casasco
B67	9.224200	4374.49606	4627.86997	-	Sternwarte Mirasteilas, Falera
B68	13.539500	4422.96577	4581.88358	-	Mount Matajur Observatory
B69	9.017200	4223.29749	4764.18355	-	Holzgerlingen
B70	2.493700	4770.01787	4220.09609	-	Sant Celoni
B71	1.521300	4806.75910	4178.31341	-	Observatorio El Vendrell
B72	7.681000	4048.20814	4912.62952	-	Soerth Observatory
B73	8.985000	4222.80381	4764.66226	-	Mauren Valley Obs., Holzgerlingen
B74	1.105400	4767.98333	4222.66918	-	Santa Maria de Montmagastrell
B75	8.805200	4471.55515	4533.20444	-	Stazione Astro. Betelgeuse, Magnago
B76	13.894400	4019.44047	4936.04158	-	Sternwarte Schonfeld, Dresden
B77	7.950800	4323.96189	4674.11067	-	Schafmatt Observatory, Aarau
B78	14.128100	4278.99277	4714.45722	-	Astrophoton Observatory, Audorf
B79	11.209900	4467.75537	4537.76717	-	Marana Observatory
B80	12.741300	4734.20414	4260.08360	-	Oss. Astronomico Campomaggiore
B81	2.899000	4909.06909	4058.66503	-	Caimari
B82	9.971600	4121.10718	4851.98254	-	Maidbronn
B83	5.797700	4503.18014	4502.01328	-	Gieres
B84	3.537700	3972.37698	4973.35129	-	Cyclops Observatory, Oostkapelle
B85	6.510100	3858.53300	5061.61404	-	Beilen Observatory
B86	7.455600	3992.27350	4957.88287	-	Sternwarte Hagen
B87	2.770100	4738.63223	4255.17679	-	Banyoles
B88	8.296800	4532.11237	4473.05113	-	Bigmuskie Observatory, Mombercelli
B89	2.261900	4784.75326	4203.64033	-	Observatori Astronomic de Tiana
B90	13.296900	4426.39156	4576.94685	-	Malina River Observatory, Povoletto
B91	7.255400	4287.05610	4707.03716	-	Bollwiller
B92	0.275400	4343.97809	4654.64799	-	Chinon
B93	6.478600	3872.17633	5051.24690	-	Hoogeveen
B94	34.281700	3024.64455	5596.69570	-	Petrozavodsk
B95	8.154500	3842.42131	5073.76138	-	Achternholt
B96	4.310300	4007.87655	4944.97258	-	Brixiis Observatory, Kruikebe
B97	6.111800	3934.54368	5003.13623	-	Sterrenwacht Andromeda, Meppel
B98	11.313000	4648.05072	4353.47755	-	Siena
B99	0.744300	4746.17197	4247.71186	-	Santa Coloma de Gramenet
C00	30.515000	3545.15538	5284.48494	-	Velikie Luki
C01	13.922900	4019.91918	4935.75735	-	Lohrmann-Observatorium, Triebenber

C02	2.530500	4767.02591	4223.47701	-	Observatorio Royal Park
C03	24.961100	3143.73941	5531.05215	-	Clayhole Observatory, Jokela
C04	37.633100	4209.44472	4775.82226	-	Kramatorsk
C05	12.115300	4338.60753	4661.64917	-	Konigsleiten
C06	92.974400	3573.80337	5265.35138	-	Krasnoyarsk
C07	0.744200	4746.17197	4247.65202	-	Anysllum Observatory, Ager
C08	17.376100	3208.33577	5493.99676	-	Fiby
C09	3.804000	4609.23007	4394.10834	-	Rouet
C10	3.426200	4216.20655	4770.04779	-	Maisoncelles
C11	14.090100	4087.80670	4879.85262	-	City Observatory, Slany
C12	2.110700	4781.50698	4207.27556	-	Berta Observatory, Sabadell
C13	9.100300	4454.05220	4550.36331	-	Como
C14	15.967000	4263.55427	4728.39974	-	Sky Vistas Observatory, Eichgraben
C15	132.165600	4618.92402	4384.14512	-	Ussuriysk Observatory
C16	11.572600	4296.86972	4698.71952	-	Isarwinkel Observatory, Bad Tolz
C17	0.743800	4746.12709	4247.69690	-	Observatorio Joan Roget, Ager
C18	3.604000	4049.40492	4911.40281	-	Frasnes-Lez-Anvaing
C19	5.423100	4566.17581	4439.12234	-	ROSA Observatory, Vaucluse
C20	42.661900	4616.87453	4388.82753	-	Kislovodsk Mtn. Astro. Stn.,Pulkovo
C21	0.743800	4746.12709	4247.69690	-	Observatorio Via Lactea, Ager
C22	12.959900	4072.95163	4893.12195	-	Oberwiesenthal
C23	5.154400	4009.89613	4943.38684	-	Olmen
C24	9.133100	4466.99242	4537.72229	-	Seveso
C25	13.558100	4715.42960	4283.58543	-	Pulkovo Obs. Stn., Campo Imperatore
C26	4.499300	3921.36411	5013.42856	-	Leiden
C27	1.353000	4775.71754	4214.38145	-	Pallerols
C28	7.483000	3981.38277	4966.35011	-	Wellinghofen
C29	1.078900	4701.98075	4297.43819	-	Obs. Astronomic de Les Planes de Son
C30	35.342500	3060.74251	5577.03854	-	Petrozavodsk Univ. Obs., Sheltozero
C31	6.982500	4004.00197	4948.21885	-	Sternwarte Neanderhoehe Hochdahl e.V
C32	41.425800	4623.89067	4381.39252	-	Ka-Dar Obs., TAU Stn., Nizhny Arkhyz
C33	2.898900	4909.06909	4058.66503	-	Observatorio CEAM, Caimari
C34	19.010800	4423.93815	4579.25066	-	Baja Astronomical Observatory
C35	2.034900	4778.94886	4210.34231	-	Terrassa
C36	30.308600	3713.99154	5168.08284	-	Starry Wanderer Observatory, Baran'
C37	1.018300	3917.72888	5016.30084	-	Stowupland
C38	7.649100	4485.88663	4519.42647	-	Varuna Observatory, Cuorgne
C39	5.799200	3949.92234	4991.07864	-	Nijmegen
C40	39.030800	4516.10540	4488.93843	-	Kuban State University Astro. Obs.
C41	42.661300	4616.85957	4388.82753	-	MASTER-II Observatory, Kislovodsk
C42	87.177800	4637.60879	4367.04608	-	Xingming Observatory, Mt. Nanshan
C43	14.279200	3983.20787	4964.86909	-	Hoyerswerda
C44	9.022400	4440.88759	4563.99168	-	A. Volta Obs., Lanzo d'Intelvi
C45	12.406400	4747.96714	4244.73486	-	MPC1 Cassia Obs., La Giustiniana
C46	69.122200	3677.75893	5193.69400	-	Horizon Observatory, Petropavlovsk
C47	15.235600	4210.65647	4775.37347	-	Nonndorf
C48	100.921400	3969.42990	4978.19826	-	Sayn Solar Observatory, Irkutsk
C60	7.069300	4045.41066	4914.64909	-	Argelander Inst. for Astro.Obs.,Bonn
C61	2.582000	4202.50338	4781.83610	-	Chelles
C62	11.346700	4398.80571	4603.42568	-	Eurac Observatory, Bolzano
C63	9.979700	4424.07279	4580.71672	-	Oss. Astro. G. Piazzi, San Bernardo
C64	15.284400	4282.14929	4712.28805	-	Puchenstuben
C65	0.729700	4744.36183	4250.95813	-	Observatori Astronomic del Montsec
C66	2.805000	4916.51906	4049.67420	-	Observatorio El Cielo de Consell
C67	12.219900	3810.75144	5097.53248	-	Gnevsdorf
C68	23.893400	5032.72669	3905.34217	-	Ellinogermaniki Agogi Obs., Pallini
C69	13.361100	4199.04767	4785.90516	-	Bayerwald Sternwarte, Neuhuette
C70	4.497700	3921.13971	5013.56320	-	Uiterstegracht Station, Leiden
C71	1.489200	4769.56907	4221.44247	-	Sant Marti Sesgueioles
C72	12.871700	4759.42634	4232.40800	-	Palestrina
C73	28.032500	4484.60009	4520.18942	-	Galati
C74	0.744900	4746.09717	4247.71186	-	Obs. El Teatrillo de Lyra, Ager
C75	13.222500	4425.40421	4577.97908	-	Whitestar Observatory, Borgobello
C76	0.744300	4746.14205	4247.68194	-	Observatorio Estels, Ager
C77	7.453500	4566.04117	4439.18217	-	Bernezzo Observer
C78	34.812400	5419.49702	3351.83005	-	Martin S. Kraar Observatory, Rehovot
C79	2.785500	4770.91545	4218.94419	-	Roser Observatory, Blanes
C80	39.765100	4334.52350	4663.38450	-	Don Astronomical Observatory, Rostov-on-Don
C81	10.841000	4420.19821	4585.07002	-	Dolomites Astronomical Observatory
C82	14.357600	4848.48195	4130.57673	-	Osservatorio Astronomico Nastro Verde, Sorrento
C83	91.842500	3567.29586	5270.00387	-	Badalozhnyj Observatory

C84	2.243700	4787.99953	4199.66102	-	Badalona
C85	1.240800	4971.06244	3983.01339	-	Observatorio Cala d'Hort, Ibiza
C86	2.781300	4770.91545	4218.94419	-	Blanes
C87	8.768900	4140.24075	4835.72125	-	Rimbach
C88	11.183300	4654.52831	4346.62597	-	Montarrenti Observatory, Siena
C89	21.555600	4662.15780	4339.66967	-	Dobrotic
C90	1.051800	4812.59342	4171.73110	-	Vinyols
C91	11.226200	4576.97677	4427.79778	-	Montevenere Observatory, Vallese
C92	13.609900	4639.61340	4362.10935	-	Valdicerro Observatory, Loreto
C93	13.406400	4722.50558	4273.60725	-	Bellavista Observatory, L'Aquila
C94	103.067000	3952.01671	4990.31569	-	MASTER-II Observatory, Tunka
C95	5.712400	4601.22659	4403.14405	-	SATINO Remote Observatory, Haute Provence
C96	13.878600	4690.74595	4307.61085	-	OACL Obs., Mosciano Sant Angelo
C97	57.976300	5846.55406	2540.75528	-	Al-Fulaij Observatory, Oman
C98	11.176400	4613.62825	4389.30624	-	Osservatorio Casellina, Scandicci
C99	2.896300	4759.97985	4231.37577	-	Observatori Can Roig, Llagostera
D00	42.653600	4617.00916	4388.73777	-	ISON-Kislovodsk Observatory
D01	23.930600	3163.05250	5520.10159	-	Andean Northern Obs., Nummi-Pusula
D02	2.051900	4792.62210	4194.55974	-	Observatori Petit Sant Feliu
D03	10.588900	4561.79259	4443.71499	-	Rantiga Osservatorio, Tincana
D04	38.856900	4525.93398	4479.05001	-	Krasnodar
D05	42.500100	4653.36145	4351.89182	-	ISON-Petrozavodsk Observatory
D06	12.770200	4765.94880	4225.33202	-	Associazione Tuscolana di Astro., Dom
D07	6.209400	4009.74653	4943.56636	-	Wegberg
D08	8.919100	4402.44094	4600.94235	-	Ghezz Observatory, Leontica
D09	5.679400	4027.09988	4929.47424	-	Observatory Gromme, Maasmechelen
D10	8.901800	4222.17550	4765.26065	-	Gaertringen
D11	5.628000	4611.93780	4391.66989	-	Bastidan Observatory
D12	11.338100	4404.61011	4597.99527	-	Filzi School Observatory, Laives
D13	11.563700	4711.31566	4285.21605	-	Fattoria di Montauto
D14	113.323100	5867.88672	2491.35806	-	Nanchuan Observatory, Guangzhou
D15	11.317800	4023.64417	4932.58587	-	Sternwarte F.Schiller-Gymnasium, Weim
D16	113.964200	5900.76833	2413.04357	-	Po Leung Kuk Observatory, Tuen Mun
D17	114.220000	5896.59455	2423.05167	-	Hong Kong
D18	114.358000	5499.17285	3220.31856	-	Mt. Guizi Observatory
D19	114.323000	5899.49675	2416.31977	-	Hong Kong Space Museum, Tsimshatsui
D20	115.713100	5451.60072	-3299.68023	-	Zadko Observatory, Wallinup Plain
D21	115.815000	5416.31059	-3356.81166	-	Shenton Park
D22	115.816700	5415.32324	-3358.45724	-	UWA Observatory, Crawley
D23	0.518500	4779.56221	4209.42977	-	OAIA, Alcarras
D24	117.089700	5383.75809	-3408.72212	-	LightBuckets Observatory, Pingelly
D25	117.089800	5383.81793	-3408.63236	-	Tzec Maun Observatory, Pingelly
D26	1.921300	4610.54654	4392.94147	-	Peyrole Observatory, Peyrole
D27	3.803600	4624.27962	4378.25096	-	Observatoire de Fontcaude, Juvignac
D28	2.182900	4775.35851	4214.32162	-	Escaldarium Obs., Caldes de Montbui
D29	118.463900	5370.65332	3429.33671	-	Purple Mountain Obs., XuYi Station
D30	11.083500	4027.18964	4929.80335	-	Sternwarte Silbergraben, Erfurt
D31	10.098000	4557.03538	4448.87612	-	Osservatorio Aldebaran, Rivalba
D32	119.599800	5502.86791	3215.81567	-	JiangNanTianChi Obs., Mt. Getianling
D33	120.698200	5914.45654	2379.56357	-	Kenting Observatory, Checheng
D34	120.783900	5918.66024	2369.34604	-	Kenting Observatory, Hengchun
D35	120.873600	5856.27792	2525.55613	-	Lulin Observatory
D36	120.889700	5855.20082	2527.33635	-	Mt. Yu-Shan National Park
D37	120.873200	5856.24801	2525.57109	-	Lulin Widefield Telescope, Mt. Lulin
D38	8.437600	4524.54272	4480.60583	-	Tecnosky Astropark, Felizzano
D39	122.049600	5064.05248	3864.78619	-	Shandong University Obs., Weihai
D40	13.337700	4772.87519	4217.07422	-	Frosinone
D41	10.717000	4639.65828	4362.58807	-	Osservatorio Astronomico Orciatice
D42	11.190800	4615.00455	4387.97482	-	Piero Angela Observatory, Scandicci
D43	7.770600	4514.50470	4491.22727	-	Pino Torinese
D44	124.139300	5813.20870	2616.03292	-	Ishigakijima Astronomical Obs.
D45	21.493200	4079.41426	4886.77900	-	Kamyk, Trzesn
D46	9.902600	4283.97438	4710.41807	-	Observatory Bad Wurzach
D47	11.563700	4711.31566	4285.21605	-	BigBang Observatory, Manciano
D48	7.263800	4164.78976	4814.85235	-	Niederbexbach Observatory
D53	127.482000	4080.79056	4885.65702	-	ISON-Blagoveshchensk Observatory
D54	127.483000	4080.79056	4885.71686	-	MASTER-II Obs., Blagoveshchensk
D55	127.974700	5075.15264	3850.48463	-	Kangwon Sci. High School Obs., Ksho
D57	128.887400	5214.59282	3661.03389	-	Gimhae Astro. Obs., Uhang-dong
D58	129.025000	5219.99330	3652.98553	-	KSA SEM Observatory, Danggam-dong
D60	13.549900	4424.23735	4579.92385	-	Masseris, Savogna



D61	134.913100 5272.87615 3576.54101	- Suntopia Marina, Sumoto
D62	130.449400 5336.97884 3480.87318	- Miyaki-Argenteus
D63	10.461400 4589.40836 4414.79772	- G. Pascoli Obs.,Barga (since June 20
D64	14.109700 4724.36060 4270.88457	- Fucama, Casalincontrada
D67	37.624700 3738.45079 5150.53501	- Tula Rooftop Observatory, Tula
D70	133.468600 5326.07315 3497.38878	- Tosa
D74	134.681900 5296.46773 3541.77447	- Nakagawa
D75	16.956100 4929.05536 4034.38530	- Cariati
D78	136.132800 5245.24542 3616.90252	- Iga-Ueno
D79	138.630900 5237.81041 -3627.38933	- YSVP Observatory, Vale Park
D80	138.972800 5127.51190 3782.04361	- Gumma Astronomical Observatory
D81	138.223900 5122.29093 3788.23696	- Nagano
D82	137.631700 5297.55980 -3540.12889	- Wallaroo
D83	138.468100 5134.46820 3773.36693	- Miwa
D84	138.508600 5224.97491 -3645.74499	- Hallet Cove
D85	138.659700 5241.93931 -3621.62981	- Ingle Farm
D86	138.640700 5298.63690 -3539.23130	- Penwortham
D87	138.550000 5235.11765 -3631.14424	- Brooklyn Park
D88	139.314200 5206.79877 3671.38606	- Hiratsuka
D89	140.338300 5020.23526 3921.91762	- Yamagata
D90	140.342000 5276.51138 -3571.18541	- RAS Observatory, Moorook
D91	140.825000 5055.37580 3876.32019	- Adati
D92	140.946400 4993.57692 3954.73939	- Osaki
D93	140.755200 5015.07414 3927.82673	- Sendai Astronomical Observatory
D94	139.996200 5124.89393 3784.46709	- Takanezawa, Tochigi
D95	141.068000 4977.18100 3975.17446	- Kurihara
D96	140.342200 5276.55626 -3571.15549	- Tzec Maun Observatory, Moorook
D97	140.570000 5278.03728 -3568.95640	- Berri
E00	144.208900 5096.26090 -3822.86887	- Castlemaine
E01	144.541400 5093.70278 -3826.39938	- South Yarra
E03	145.382200 5023.16738 -3917.38480	- RAS Observatory, Victoria
E04	145.740300 6157.77747 1656.85626	- Pacific Sky Observatory, Saipan
E05	145.697200 6107.87162 -1831.10786	- Earl Hill Observatory, Trinity Beach
E07	148.998900 5233.54687 -3634.45035	- Murrumbateman
E08	149.334300 5459.49949 -3287.75728	- Wobblesock Obs., Coonabarabran
E09	149.081400 5456.56737 -3293.03809	- Oakley Southern Sky Obs.,Coonabarabr
E10	149.070900 5457.34528 -3292.37986	- Siding Spring-Faulkes Telescope South
E11	149.662700 5387.55788 -3403.50116	- Frog Rock Observatory, Mudgee
E12	149.064200 5457.33032 -3292.45466	- Siding Spring Survey
E13	149.096900 5205.96102 -3673.61507	- Wanniasa
E14	149.110000 5220.63657 -3653.01544	- Hunters Hill Observatory, Ngunnawal
E15	149.606100 5231.09346 -3638.16038	- Magellan Observatory, near Goulburn
E16	149.366200 5304.59090 -3531.30262	- Grove Creek Observatory, Trunkey
E17	150.341700 5312.35503 -3520.09774	- Leura
E18	151.027100 5292.69787 -3547.45919	- BDI Observatory, Regents Park
E19	151.095800 5296.52757 -3541.65479	- Kingsgrove
E20	151.103200 5307.53798 -3525.37854	- Marsfield
E21	151.566700 5636.99737 -2975.39693	- Norma Rose Observatory
E22	151.855000 5646.79603 -2957.01135	- Univ. of S. Queensland Obs.,Mt Kent
E23	151.071200 5316.79808 -3511.64546	- Arcadia
E24	150.776900 5305.08457 -3528.95393	- Tangra Observatory, St. Clair
E25	153.117000 5658.24026 -2933.74888	- Rochedale (APTA)
E26	153.397100 5639.16653 -2970.04133	- RAS Observatory, Biggera Waters
E27	153.266700 5658.04579 -2933.94336	- Thornlands
E28	150.641100 5314.23996 -3515.69956	- Kuriwa Observatory, Hawkesbury Heights
E81	173.261700 4800.64055 -4185.46419	- Nelson
E83	173.957000 4781.35738 -4207.15588	- Wither Observatory, Witherlea
E85	174.894000 5106.95715 -3808.16340	- Farm Cove
E87	175.654000 4863.26222 -4112.93914	- Turitea
E89	176.204000 5023.36186 -3917.51944	- Geyserland Observatory, Pukehangi
E94	177.883300 4989.08899 -3960.31939	- Gisborne
F51	203.744100 5971.48324 2242.18785	- Pan-STARRS 1, Haleakala
F52	203.744100 5971.46829 2242.20281	- Pan-STARRS 2, Haleakala
F59	201.941000 5944.66035 2303.52297	- Ironwood Remote Observatory, Hawaii
F60	201.952800 5931.30126 2337.96040	- Ironwood North Observatory, Hawaii
F65	203.742500 5971.46829 2242.15793	- Haleakala-Faulkes Telescope North
F84	210.384200 6080.28578 -1919.81939	- Hibiscus Observatory, Punaauia
F85	210.384200 6080.28578 -1919.81939	- Tiki Observatory, Punaauia
F86	210.383800 6080.30074 -1919.84931	- Moana Observatory, Punaauia
G00	15.126000 4244.70494 4745.84285	- AZM Martinsberg, Oed
G01	8.165300 3833.11632 5080.80744	- Universitaetssternwarte Oldenburg

G02	18.765400	4166.88413	4813.26661	- KYSUCE Obs., Kysucke Nove Mesto
G03	18.260600	4328.33015	4669.45818	- Capricornus Observatory, Csokako
G04	7.141300	4002.29655	4949.95418	- Schuelerlabor Astro. St. 7,Wuppertal
G05	354.533600	5020.74390	3921.28931	- Piconcillo, Sierra Morena
G06	4.671500	3954.32052	4987.68277	- Dordrecht, Sterrenburg
G07	3.063900	4588.39109	4416.08426	- Millau Observatory
G08	1.996900	4775.64275	4214.63577	- Obs. Les Pedritxes, Matadepera
G09	0.610600	3965.82459	4978.61714	- SWF Obs., South Woodham Ferrers
G10	354.450600	5055.15141	3876.40995	- Clavier Observatory, Lora Del Rio
G11	7.183800	4022.77650	4933.27402	- Breitenweg Observatory, Herkenrath
G12	8.330600	3963.37119	4980.69655	- Sternwarte EG, Lippstadt
G13	9.771600	2882.09274	5670.83640	- Astronomihagen, Fannrem
G14	7.005200	4625.73072	4376.93450	- Novaloop Observatory, Mougins
G15	9.118300	4535.88224	4469.80486	- Magroforte Observatory, Alessandria
G16	13.348700	5025.63575	3914.27317	- OmegaLab Observatory, Palermo
G17	11.202600	4614.63056	4388.30394	- BAS Observatory, Scandicci
G18	11.280600	4546.84776	4457.98663	- ALMO Observatory, Padulle
G19	12.746000	4034.29554	4924.05879	- Immanuel Kant Observatory,Limbach
G20	6.059900	4641.64793	4360.19450	- Brignoles Observatory
G21	13.737900	5077.15725	3848.42018	- Osservatorio Castrofilippo
G22	9.214400	4180.45266	4801.26886	- Experimenta Observatory, Heilbronn
G23	19.092300	4309.69026	4686.27298	- Vulpecula Observatory, Budapest
G24	9.093500	4225.15250	4762.56789	- Dettenhausen
G25	288.105000	4484.91424	4519.99494	- Sherbrooke
G26	109.823600	5261.89566	3593.31093	- Fushan Observatory, Mt Shaohua
G27	0.729400	4744.33191	4250.92821	- Fabra Observatory, Montsec
G28	1.008500	3890.02335	5037.64846	- Attleborough
G29	358.912400	4929.33960	4034.99865	- Requena
G30	284.907200	4493.51612	4511.39307	- Casselman
G31	13.725300	4461.24786	4543.34717	- CCAT Trieste
G32	291.820400	5878.34361	-2472.88272	- Elena Remote Obs.,San Pedro de Ataca
G33	7.608800	3976.20668	4970.43413	- Wickede
G34	13.701500	4034.47506	4924.16351	- Oberfrauendorf
G35	249.157900	5418.07584	3355.74952	- Elephant Head Obsevatory, Sahuarita
G36	357.452500	5086.80632	3838.44201	- Calar Alto-CASADO
G37	248.577800	5248.56649	3615.94509	- Lowell Discovery Telescope
G38	356.768400	4847.18045	4132.71598	- Obs. La Senda, Cabanillas del Campo
G39	291.820400	5878.34361	-2472.86776	- ROAD, San Pedro de Atacama
G40	343.491700	5622.14230	3006.91720	- Slooh.com Canary Islands Observatory
G41	264.738200	5530.10969	3167.22628	- Insperity Observatory, Humble
G42	259.023000	5765.26258	2722.63637	- Obs. Astronomico UAdeC, Saltillo
G43	293.687900	5345.96967	-3468.56127	- Obs. Buenaventura Suarez, San Luis
G44	313.306100	5875.41149	-2475.74004	- Observatorio Longa Vista, Sao Paulo
G45	253.635600	5311.38264	3523.79280	- Space Surveillance Tele., Atom Site
G46	244.661500	5217.46510	3659.20880	- Pinto Valley Observatory
G47	253.806500	5228.96917	3643.57582	- HillTopTop Observatory, Edgewood
G48	251.101500	5418.31520	3356.15343	- Doc Greiner Res.Obs.,Rancho Hildalgo
G49	266.594300	4521.40116	4483.95682	- Minnetonka
G50	253.330000	5397.76045	3388.96024	- Organ Mesa Observatory, Las Cruces
G51	239.957800	5250.25695	3609.96118	- Byrne Observatory, Sedgwick Reserve
G52	237.496000	5012.69553	3930.68405	- Stone Farm Observatory, El Verano
G53	240.587300	5096.41050	3824.49948	- Alder Springs Observatory, Auberry
G54	243.063000	5312.66918	3518.57184	- Hemet
G55	241.095300	5206.85861	3671.58054	- Bakersfield
G56	237.929400	5037.64846	3898.83467	- Walnut Creek
G57	236.856400	4475.60926	4529.06058	- Dilbert Observatory, Forest Grove
G58	237.818000	5045.11339	3889.90367	- Chabot Space & Sci. Center, Oakland
G59	237.453000	4303.64650	4691.70338	- Maiden Lane Obs., Bainbridge Island
G60	240.338900	5265.44113	3587.67109	- Carroll Observatory, Montecito
G61	238.152400	5055.94428	3875.36276	- Pleasanton
G62	238.546900	4605.90900	4399.06003	- Sunriver Nature Center Obs.,Sunriver
G63	238.685800	4474.39751	4530.45184	- Mill Creek Observatory, The Dalles
G64	239.291100	4945.28673	4016.88235	- Blue Canyon Observatory
G65	238.361200	5078.02492	3848.43514	- Vulcan North,Lick Obs.,Mnt.Hamilton
G66	238.916900	4983.55387	3967.58985	- Lake Forest Obs., Forest Hills
G67	239.365000	4983.49403	3968.80159	- Rancho Del Sol, Camino
G68	240.225000	4977.74947	3977.08931	- Sierra Stars Obs., Markleeville
G69	241.015800	5282.94409	3562.19458	- Thousand Oaks
G70	241.454700	5264.70810	3589.16707	- Francisquito Observatory,Los Angeles
G71	241.604700	5307.62773	3525.58798	- Rancho Palos Verdes
G72	241.824100	5289.39175	3552.42584	- University Hills

G73	241.940000	5281.35835	3566.98171	- Mount Wilson-TIE
G74	242.885400	5341.24238	3475.12862	- Escondido
G75	243.278300	5326.38731	3499.69259	- Starry Knight Obs., Coto de Caza
G76	242.417800	5318.60822	3508.93774	- Altimira Observatory, Coto de Caza
G77	243.718300	5277.27433	3573.66873	- Baldwin Lake
G78	244.312700	5367.72120	3433.48057	- Desert Wanderer Obs., El Centro
G79	243.616500	5275.86811	3573.66873	- Goat Mountain Astro. Research Stn.
G80	240.587300	5096.39554	3824.45460	- Sierra Remote Observatories, Auberry
G81	242.913000	5325.13068	3499.30363	- Temecula
G82	248.400600	5418.12072	3357.79901	- SARA Observatory, Kitt Peak
G83	250.110400	5375.11133	3427.87065	- Mt. Graham-LBT
G84	249.210800	5390.23568	3403.44132	- Mount Lemmon SkyCenter
G85	247.565200	5099.34262	3820.93905	- Vermillion Cliffs Observatory, Kanab
G86	249.069700	5398.77772	3386.14780	- Tucson-Winterhaven
G87	248.189400	4762.29862	4230.68762	- Calvin M. Hooper Mem. Obs.,Hyde Park
G88	247.888100	5297.93379	3540.75720	- LAMP Observatory, New River
G89	248.306900	5225.79770	3648.10863	- Kachina Observatory, Flagstaff
G90	248.965800	5376.83171	3421.16866	- Three Buttes Observatory, Tucson
G91	249.121900	5434.68121	3331.55954	- Whipple Obs., Mt. Hopkins--2MASS
G92	249.281400	5416.31059	3358.72651	- Jarnac Observatory, Vail
G93	249.372600	5435.13000	3329.45021	- Sonoita Research Obs., Sonoita
G94	249.926700	5419.57182	3354.52281	- Sonoran Skies Observatory, St. David
G95	249.762200	5447.18759	3309.49385	- Hereford Arizona Obs., Hereford
G96	249.211300	5390.20576	3403.44132	- Mt. Lemmon Survey
G97	250.869400	5419.18287	3354.89681	- Astro. League Alpha Obs., Portal
G98	251.343500	5198.42129	3686.64505	- Calvin-Rehoboth Obs., Rehoboth
G99	251.810400	5369.89037	3433.67505	- NF Observatory, Silver City
H00	251.698700	5373.39096	3427.99033	- Tyrone
H01	252.810700	5296.88661	3546.86080	- Magdalena Ridge Observatory, Socorro
H02	253.370600	5175.60761	3719.03299	- Sulphur Flats Observatory, La Cueva
H03	253.355300	5214.32354	3663.60697	- Sandia View Observatory, Rio Rancho
H04	254.026000	5191.04611	3697.02714	- Santa Fe
H05	256.070700	4919.19686	4048.65693	- Edmund G. Kline Observatory, Denver
H06	254.471300	5362.18608	3446.16647	- New Mexico Skies Observatory
H07	254.471300	5362.17112	3446.16647	- 7300 Observatory, Cloudcroft
H08	254.470800	5362.14120	3446.22631	- BlackBird Observatory, Cloudcroft
H09	255.588600	4915.63643	4053.24959	- Antelope Hills Observatory, Bennett
H10	254.471400	5362.17112	3446.16647	- Tzec Maun Observatory, Cloudcroft
H11	250.984000	5423.26689	3348.01531	- Rodeo
H12	254.470800	5362.18608	3446.15151	- LightBuckets Observatory, Mayhill
H13	248.252100	5360.74994	3445.04448	- Lenomiya Observatory, Casa Grande
H14	249.212300	5398.46356	3386.76115	- Morning Star Observatory, Tucson
H15	254.471600	5362.17112	3446.16647	- ISON-NM Observatory, Mayhill
H16	253.289000	4920.85740	4048.32782	- HUT Observatory, Eagle
H17	254.383300	4999.08213	3952.22615	- Angel Peaks Observatory
H18	249.288000	5416.52002	3358.54700	- Vail
H19	263.862600	5282.01658	3563.37640	- Lone Star Observatory, Caney
H20	271.816800	4929.98287	4033.48771	- E. Illinois Univ. Obs., Charleston
H21	272.031700	4929.56400	4033.98138	- Astro. Research Obs., Westfield
H22	272.737100	4939.10834	4022.17811	- Terre Haute
H23	273.498600	5499.99564	3218.86746	- Pear Tree Observatory, Valparaiso
H24	274.598800	4679.31668	4319.98259	- J. C. Veen Observatory, Lowell
H25	266.870800	4556.97554	4448.03837	- Harvest Moon Observatory, Northfield
H26	270.789200	4688.41223	4310.27369	- Doc Greiner Research Obs.,Janesville
H27	266.231300	4975.41574	3977.68770	- Moonglow Observatory, Warrensburg
H28	263.231500	5337.93626	3479.72127	- Preston Hills Observatory, Celina
H29	262.549400	5190.01389	3695.50124	- Ivywood Observatory, Edmond
H30	262.555800	5217.82413	3656.45620	- University of Oklahoma Obs., Norman
H31	263.330000	5549.67709	3133.13292	- Star Ridge Observatory, Weimar
H32	263.633400	5496.30057	3225.24033	- Texas A&M Physics Obs., College Stn.
H33	264.121700	5165.65935	3729.04108	- Bixhoma Observatory, Bixby
H34	264.825800	5395.90544	3389.52872	- Chapel Hill
H35	264.951700	4938.15091	4023.64417	- Leavenworth
H36	264.293500	4977.67467	3975.03982	- Sandlot Observatory, Scranton
H37	265.200300	4652.65834	4348.75026	- Grems Timmons Obs., Graettinger
H38	265.986400	4788.64280	4199.36183	- Timberline Observatory, Urbandale
H39	266.682800	4524.90175	4480.45623	- S.O.S. Observatory, Minneapolis
H40	266.730600	5263.18221	3591.02209	- Nubbin Ridge Observatory
H41	267.074200	5221.78848	3650.72660	- Petit Jean Mountain
H42	267.507800	4692.27185	4306.01015	- Wartburg College Obs., Waverly
H43	267.499800	5224.84027	3645.93947	- Conway



H44	267.798200	5222.41679	3649.57469	- Cascade Mountain
H45	267.083100	5223.06006	3648.93142	- Petit Jean Mountain South
H46	265.729700	4963.34319	3992.84197	- Ricky Observatory, Blue Springs
H47	269.143900	5398.38876	3385.45965	- Vicksburg
H48	265.013900	5065.77286	3862.91622	- PSU Greenbush Observatory, Pittsburg
H49	266.863600	5211.70558	3664.68408	- ATU Astronomical Obs., Russellville
H50	267.541400	5225.30403	3645.34107	- Univ.of Central Arkansas Obs.,Conway
H51	270.400300	4663.50418	4337.82962	- Greiner Research Observatory, Verona
H52	270.673500	4714.41234	4281.86505	- Hawkeye Observatory, Durand
H53	271.228400	5036.28712	3900.74952	- Thompsonville
H54	271.651400	4547.93983	4457.23864	- Cedar Drive Observatory, Pulaski
H55	271.855800	4929.21992	4034.43018	- Antares Obseratory, Charleston
H56	272.167600	4737.00162	4256.98693	- Northbrook Meadow Observatory
H57	275.972500	4840.04463	4140.37539	- Ohio State University Obs., Lima
H58	273.335300	5252.33636	3606.71490	- NASA/MSFC ALMO, xxxx
H59	273.365100	4870.47284	4104.71126	- Camp Cullom
H60	273.865400	4894.81241	4075.85383	- Shadowbox Observatory, Carmel
H61	281.416900	4602.03442	4401.42367	- Newcastle
H62	274.411700	4677.40182	4322.01712	- Calvin College Observatory
H63	274.927600	4798.08243	4188.65062	- DeKalb Observatory, Auburn
H64	275.436400	4961.93697	3994.18835	- ThomasMore Coll.Obs.,Crestview Hills
H65	275.436400	4974.62287	3978.74985	- Waltonfields Observatory, Walton
H66	276.146000	4908.36598	4059.75710	- Yellow Springs
H67	276.162400	4725.00387	4270.30114	- Stonegate Observatory, Ann Arbor
H68	276.348200	5448.50405	3304.84136	- Red Barn Observatory, Ty Ty
H69	276.944600	4874.94581	4099.49029	- Ohio Wesleyan University
H70	277.445800	5192.57201	3692.74864	- Asheville
H71	276.482800	5439.82737	3319.03820	- Chula
H72	278.225800	5713.78595	2824.81171	- Evelyn Egan Observatory, Ft. Myers
H73	278.635100	4774.04205	4215.75776	- Lakeland Astronomical Obs., Kirtland
H74	278.874700	5587.37575	3065.72412	- Bar J Observatory, New Smyrna Beach
H75	278.918600	4780.74403	4208.39754	- Indian Hill North Obs., Huntsburg
H76	279.413300	5752.89084	2744.89653	- Oakridge Observatory, Miami
H77	279.765300	5732.48569	2786.93353	- Buehler Observatory
H78	282.709000	6379.30200	134.12945	- University of Narino Obs., Pasto
H79	280.492700	4613.04482	4390.12903	- York University Observatory, Toronto
H80	285.335700	4867.76511	4107.61345	- Halstead Observatory, Princeton
H81	283.615400	4713.18563	4283.66023	- Hartung-Boothroyd Obs., Ithaca
H82	281.783900	4964.49510	3991.18143	- CBA-NOVAC Observatory, Front Royal
H83	282.664100	4970.22470	3983.97081	- Oakton
H84	282.496100	4672.55485	4327.11841	- Northview Observatory, Mendon
H85	283.002900	4961.17403	3995.14578	- Silver Spring
H86	283.157600	4955.36963	4002.22175	- CBA-East Observatory, Laurel
H87	282.436100	5058.44256	3872.04169	- Fenwick Observatory, Richmond
H88	283.757700	4929.98287	4033.21843	- Hope Observatory, Belcamp
H89	284.297500	4479.69328	4524.97655	- Galaxy Blues Observatory, Gatineau
H90	284.473100	4481.72781	4522.98690	- Ottawa
H91	285.048400	4542.91334	4462.08561	- Reynolds Observatory, Potsdam
H92	285.621100	4897.46029	4072.38316	- Arcturus Observatory
H93	285.575800	4843.17122	4136.41104	- Berkeley Heights
H94	285.543900	4833.41744	4147.82536	- Cedar Knolls
H95	285.821200	4839.38640	4140.76434	- NJIT Observatory, Newark
H96	286.614200	4410.04051	4592.57983	- Saint-Eustache
H97	287.201300	4761.19159	4230.19395	- Talcott Mountain Science Ctr., Avon
H98	287.265500	4782.77856	4205.61502	- Dark Roseanne Obs., Middlefield
H99	288.803600	4722.37094	4272.84430	- Sunhill Observatory, Newton
I00	288.229400	4770.46666	4219.58746	- Carbuncle Hill Observatory,Coventry
I01	288.862500	4724.13620	4270.98929	- Clay Center Observatory, Brookline
I02	289.194900	5520.78974	-3187.54167	- Cerro Tololo Obs., La Serena--2MASS
I03	289.266300	5570.91999	-3100.10171	- Euro. S. Obs., La Silla-ASTROVIRTEL
I04	289.315200	5529.40658	-3169.73952	- Mamalluca Observatory
I05	289.298000	5584.63811	-3075.34327	- Las Campanas Observatory-TIE
I06	289.806100	4770.91545	4218.94419	- Werner Schmidt Obs.,Dennis-Yarmouth
I07	288.097100	4737.61497	4256.44838	- Conlin Hill Observatory, Oxford
I08	290.693200	5428.81697	-3341.76212	- Alianza S4, Cerro Burek
I09	289.803800	5805.16033	-2639.75915	- Cerro Armazones
I10	291.820000	5878.41841	-2472.80792	- CAOS-CampoCatino Austral Obs. Surv.
I11	289.263400	5517.21435	-3194.81213	- Gemini South Obs., Cerro Pachon
I12	288.870500	4698.64472	4298.85937	- Phillips Academy Obs., Andover
I13	282.930100	4969.31215	3985.01800	- Washington D.C.
I14	288.589300	4721.72767	4273.60725	- Tigh Speuran Observatory, Framingham

I15	288.700800	4764.69218	4225.88553	-	Wishing Star Observatory, Barrington
I16	291.820300	5878.34361	-2472.89768	-	IAA-AI Atacama, San Pedro de Atacama
I17	284.322100	4777.18360	4212.45164	-	Thomas G. Cupillari Obs., Fleetville
I18	281.306700	5041.14905	3895.12464	-	Fan Mountain Observatory, Covesville
I19	295.407100	5452.24400	-3300.18887	-	Tanti
I20	295.681600	5348.39315	-3464.10325	-	Rio Cuarto
I21	295.828100	5451.07713	-3301.32581	-	El Condor Observatory, Cordoba
I22	296.174000	4542.00079	4462.93832	-	Abbey Ridge Observatory, Stillwater Lake
I23	292.266500	4555.09061	4449.53435	-	Frosty Cold Observatory, Mash Harbor
I24	282.230600	5009.01542	3935.44126	-	Lake of the Woods Obs., Locust Grove
I25	295.443800	5427.08163	-3341.79203	-	La Estancia
I26	295.821400	5448.01038	-3306.36726	-	Observatorio Kappa Crucis, Cordoba
I27	284.000600	4490.26985	4514.63934	-	Barred Owl Observatory, Carp
I28	289.088900	4760.83256	4230.23883	-	Starhoo Observatory, Lakeville
I29	288.633000	4709.81968	4286.62227	-	Middlesex School Obs., Concord
I30	299.341700	5355.46913	-3452.55430	-	Observatorio Geminis Austral
I31	299.364900	5357.32415	-3449.68202	-	Obs. Astro. del Colegio Cristo Rey
I32	299.346400	5355.66361	-3452.16534	-	Observatorio Beta Orionis, Rosario
I33	289.266300	5517.42379	-3194.58773	-	SOAR, Cerro Pachon
I34	284.129700	4882.33595	4090.55930	-	Morgantown
I35	301.557200	5242.70226	-3620.35823	-	Sidoli
I36	301.282700	5229.94156	-3638.62413	-	Observatorio Los Campitos, Canuelas
I37	301.352800	5265.81513	-3586.80343	-	Astrodomi Observatory, Santa Rita
I38	302.021400	5449.47643	-3303.13594	-	Salto
I39	301.426600	5251.39389	-3607.80697	-	Observatorio Cruz del Sur, San Justo
I40	289.260600	5571.12942	-3099.68284	-	La Silla--TRAPPIST
I41	243.140200	5334.18136	3488.03891	-	Palomar Mountain--ZTF
I42	288.908100	4776.91433	4212.18237	-	Westport Observatory
I43	261.902400	5401.65000	3380.95676	-	Tarleton St. Univ. Obs., Stephenville
I44	273.517600	5498.02094	3222.29326	-	NW Florida St. College., Niceville
I45	301.428100	5250.87030	-3608.55496	-	Observatorio W Crucis, San Justo
I46	281.610800	4859.62699	4117.60659	-	The Cottage Observatory, Altoona
I47	290.550300	5199.84247	-3683.56333	-	Pierre Auger Observatory, Malargue
I48	295.675700	5124.19082	-3785.30484	-	Observatorio El Catalejo, Santa Rosa
I49	253.986200	5186.58810	3703.25041	-	Sunflower Observatory, Santa Fe
I50	254.471400	5362.18608	3446.16647	-	P2 Observatory, Mayhill
I51	283.054700	4983.43419	3967.39537	-	Clinton
I52	249.211100	5390.22072	3403.42636	-	Steward Observatory, Mt. Lemmon Station
I53	356.378300	5091.15962	3830.19916	-	Armillar
I54	353.030800	4974.00952	3979.39312	-	UNNAMED OBSERVATORY I54
I55	359.642100	4928.83097	4034.59473	-	Valencia
I56	357.710700	5110.05383	3804.10929	-	Obs. Astro. John Beckman, Almeria
I57	359.325600	5011.87274	3931.86588	-	Elche
I58	359.537400	4924.31311	4040.23457	-	Betera
I59	356.155800	4640.34643	4361.18185	-	Observatorio Antares, Muriedas
I60	357.178100	4298.67985	4696.22124	-	Guernanderf
I61	352.149400	4722.81974	4272.64983	-	Ourense
I62	356.426400	4892.49364	4079.20482	-	Observatorio Helios Ontigola
I63	358.833000	4014.65334	4939.61697	-	Cygnus Observatory, New Airesford
I64	359.293900	3976.96963	4969.73102	-	Maidenhead
I65	355.079600	5118.13211	3794.41535	-	Yunqueira
I66	312.000000	6138.00063	-1731.84967	-	Taurus Australis Obs., Brasilia
I67	359.087500	3995.51977	4954.98067	-	Hartley Wintney
I68	312.498100	6182.40128	-1567.30697	-	Pousada dos Anoes Observatory
I69	352.006900	5436.22206	3325.56067	-	AGM Observatory, Marrakech
I70	359.941600	3853.20732	5065.62326	-	Gedney House Observatory, Kirton
I71	353.669800	4932.21188	4031.30358	-	Observatorio Los Milanos, Caceres
I72	355.984900	4842.46811	4138.96917	-	Observatorio Carpe-Noctem, Madrid
I73	359.587100	4277.25744	4715.69888	-	Salvia Observatory, Saulges
I74	358.187400	4015.59580	4938.82410	-	Baxter Garden Observatory, Salisbury
I75	359.965000	4894.25890	4076.27270	-	Observatorio Castellon
I76	355.936800	4857.41294	4120.95758	-	Observatorio Tesla, Valdemorillo
I77	316.002500	6003.04840	-2150.31979	-	CEAMIG-REA Obs., Belo Horizonte
I78	355.572100	5117.81796	3793.78704	-	Observatorio Principia, Malaga
I79	357.673300	5022.34459	3920.90035	-	AstroCamp, Nerpio
I80	358.133300	3767.96645	5129.18739	-	Rose Cottage Observatory, Keighley
I81	356.201100	3402.79805	5376.56243	-	Tarbatness Observatory, Portmahomack
I82	343.579700	5619.46450	3007.68015	-	Guimar
I83	353.190000	3803.28651	5103.02273	-	Cherryvalley Observatory, Rathmolyon
I84	353.021200	4972.84266	3980.91902	-	Cerro del Viento, Badajoz
I85	357.984800	5108.00434	3806.86190	-	Las Negras

04/07/2024	Fwd: NASA JPL Horizons API location codes - 2300+				
I86	356.273900	4860.83873	4116.64917	-	Observatorio UCM, Madrid
I87	352.959300	3834.59734	5079.74530	-	Astroshot Observatory, Monasterevin
I88	356.082300	5057.03634	3874.91397	-	Fuensanta de Martos
I89	357.673900	5022.40443	3920.90035	-	Nerpio
I90	351.597600	3943.69907	4995.98545	-	Blackrock Castle Observatory
I91	357.692500	5110.11367	3803.97466	-	Retamar
I92	353.952900	5076.91790	3848.03123	-	Mairena del Aljarafe
I93	359.797000	4552.18841	4452.58614	-	St Pardon de Conques
I94	356.136700	4857.71214	4120.46391	-	Obs.Rho Ophiocus,Las Rozas de Madrid
I95	356.813900	4923.87928	4041.61087	-	Observatorio de la Hita
I96	356.503800	4836.11021	4145.53651	-	Hyperion Obs., Urbanizacion Caraquiz
I97	359.501800	3966.49778	4978.09354	-	Penn Heights Obs., Rickmansworth
I98	356.413400	4829.88693	4153.33056	-	El Berrueco
I99	356.460400	4867.92967	4108.28664	-	Observatorio Blanquita, Vaciamadrid
J00	359.505600	4903.51901	4065.68117	-	Segorbe
J01	354.284500	4719.42387	4277.24248	-	Observatorio Cielo Profundo, Oviedo
J02	359.555000	4999.88995	3947.05006	-	Busot
J03	355.132500	4074.26809	4890.96774	-	Gothers Observatory, St. Dennis
J04	343.488200	5622.09742	3007.03688	-	ESA Optical Ground Station, Tenerife
J05	355.296400	4781.16291	4208.44242	-	Bootes Observatory, Boecillo
J06	358.812500	3854.77809	5064.48631	-	Trent Astronomical Obs., Clifton
J07	353.895400	4897.65477	4072.74219	-	Obs.SPAG Monfrague,Palazuelo-Empalme
J08	359.654900	4919.27166	4046.23345	-	Observatorio Zonalunar, Puzol
J09	353.791700	3791.79739	5111.50493	-	Balbriggan
J10	359.598400	5003.25591	3942.65188	-	Alicante
J11	351.317700	4764.36307	4226.25953	-	Matosinhos
J12	356.510600	4836.21492	4145.46172	-	Awaiting name...
J13	342.120800	5597.65313	3052.00600	-	La Palma-Liverpool Telescope
J14	345.992800	5614.69232	3016.16235	-	La Corte
J15	352.830600	4818.17342	4165.71727	-	Muxagata
J16	354.203600	3726.69240	5158.80777	-	An Carraig Obs., Loughinisland
J17	357.203100	3888.90137	5038.84524	-	Ragdon
J18	356.906000	3890.15799	5037.73822	-	Churchstoke
J19	359.830400	4877.17482	4097.05184	-	El Maestrat
J20	356.219300	4860.27026	4117.35228	-	Aravaca
J21	356.080000	4841.42093	4139.80692	-	El Boalo
J22	342.132300	5602.64969	3039.45474	-	Tacande Observatory, La Palma
J23	358.493600	4284.61765	4708.98193	-	La Couyere
J24	343.557200	5623.35404	3000.90337	-	Observatorio Altamira
J25	354.488800	4644.81941	4356.75375	-	Observatorio de Nava
J26	356.981200	3906.65863	5025.32159	-	The Spaceguard Center, Knighton
J27	355.969000	4849.76849	4130.02322	-	El Guijo
J28	356.213800	5047.71639	3886.62748	-	Jaen
J29	346.342100	5585.31130	3069.91286	-	Observatorio Nira, Tias
J30	356.293000	4859.65691	4118.14514	-	Observatorio Ventilla, Madrid
J31	355.774100	5118.10219	3793.45793	-	La Axarquia
J32	352.977700	5081.89951	3841.34420	-	Aljaraque
J33	359.906000	3954.69451	4987.39853	-	Univ. of Hertfordshire Obs.,Bayfordb
J34	355.227100	4775.28371	4215.03969	-	La Fecha
J35	356.029100	5052.54840	3880.65852	-	Tucci Observatory, Martos
J36	356.945200	4880.42109	4092.59383	-	Observatorio El Olivo, Illana
J37	353.064700	5082.69238	3840.29702	-	Huelva
J38	353.609200	4636.18761	4365.95402	-	Observatorio La Vara, Valdes
J39	344.563600	5640.12396	2968.82958	-	Ingenio
J40	355.558500	5118.74546	3792.45562	-	Malaga
J41	353.818900	3812.78597	5095.94675	-	Raheny
J42	359.698900	4919.97477	4045.33586	-	Puzol
J43	352.133500	5462.50641	3286.90458	-	Oukaimeden Observatory
J44	357.655200	4688.32247	4311.36575	-	Observatorio Iturrieta, Alava
J45	344.467400	5635.89034	2978.05977	-	Observatorio Montana Cabreja, Vega de San Mateo
J46	346.359400	5585.26642	3069.86799	-	Observatorio Montana Blanca, Tias
J47	346.444000	5580.94304	3078.09587	-	Observatorio Nazaret
J48	343.696000	5611.29645	3022.78954	-	Observatory Mackay, La Laguna
J49	359.448200	5019.27784	3922.30657	-	Santa Pola
J50	342.117600	5597.71297	3051.75168	-	La Palma-NEON
J51	343.729000	5611.41613	3022.02659	-	Observatorio Atlante, Tenerife
J52	358.660800	4732.45384	4262.25277	-	Observatorio Pinsoro
J53	354.892800	5046.01098	3888.15338	-	Posadas
J54	343.490600	5622.26198	3006.78256	-	Bradford Robotic Telescope
J55	344.314400	5647.78337	2953.91468	-	Los Altos de Arguineguin Observatory
J56	344.453600	5639.30117	2973.75135	-	Observatorio La Avejerilla



J57	358.890900	4897.25086	4074.56728	-	Valencia
J58	356.664400	3973.84304	4972.33403	-	Llantwit
J59	356.202600	4636.62144	4365.11627	-	Observatorio Linceo, Santander
J60	354.340600	4769.12028	4222.39990	-	Tocororo Observatory, Arquillos
J61	353.426400	3808.95627	5098.81903	-	Brownstown Observatory, Kilcloon
J62	351.634500	3764.18162	5131.79040	-	Kingsland Observatory, Boyle
J63	359.483100	5009.89805	3934.22952	-	San Gabriel
J64	359.345900	5030.49768	3907.94518	-	La Mata
J65	353.449700	3816.04720	5093.58310	-	Celbridge
J66	357.783300	3895.19944	5033.75891	-	Kinver
J67	359.466700	4918.43391	4047.37039	-	Observatorio La Puebla de Vallbona
J68	357.705500	3942.51724	4996.95784	-	Tweenhills Observatory, Hartpury
J69	358.980300	4027.42900	4929.42936	-	North Observatory, Clanfield
J70	358.840400	5036.69103	3900.16609	-	Obs.Astro. Vega del Thader,El Palmar
J71	357.894700	3785.42452	5116.35190	-	Willow Bank Observatory
J72	358.966400	5042.86942	3892.44684	-	Valle del Sol
J73	359.083300	3946.15247	4994.08556	-	Quainton
J74	357.096100	4652.85281	4347.91251	-	Bilbao
J75	357.434700	5034.82106	3904.83354	-	OAM Observatory, La Sagra
J76	358.797200	5043.64733	3891.69885	-	La Murta
J77	357.594700	4028.05731	4928.77113	-	Golden Hill Obs., Stourton Caundle
J78	358.824400	5031.52990	3906.80823	-	Murcia
J79	358.380700	5073.91098	3851.81606	-	Observatorio Calarreona, Aguilas
J80	359.108300	4519.68079	4485.30320	-	Sainte Helene
J81	358.134900	4694.20167	4304.46929	-	Guirguillano
J82	357.306700	3785.42452	5115.90310	-	Leyland
J83	357.388300	3780.57755	5119.73281	-	Olive Farm Observatory, Hoghton
J84	358.980300	4027.41404	4929.33960	-	Clanfield
J85	357.483300	3613.85072	5238.36392	-	Makerstoun
J86	356.615300	5098.04112	3824.84356	-	Sierra Nevada Observatory
J87	355.506700	4850.38184	4130.03818	-	La Canada
J88	358.559200	4028.74546	4928.12786	-	Strawberry Field Obs., Plymouth
J89	356.286100	4850.26216	4129.14059	-	Tres Cantos Observatory
J90	358.531700	3970.46213	4974.95199	-	West Challow
J91	357.048300	4726.84392	4268.25165	-	Alt emporda Observatory, Figueres
J92	359.348700	3968.09848	4976.92668	-	Beaconsfield
J93	357.742600	3949.78770	4991.21328	-	Mount Tuffley Observatory,Gloucester
J94	357.788600	3948.63580	4992.17070	-	Abbeydale
J95	358.553000	3980.93398	4966.75403	-	Great Shefford
J96	356.056700	4690.01292	4309.64538	-	Aras
J97	359.533300	4945.61585	4013.77071	-	Alginet
J98	359.534400	4928.71129	4034.74433	-	Observatorio Manises
J99	359.578100	4927.67906	4036.01591	-	Burjassot
K00	8.948400	4098.78718	4870.59251	-	Hanau
K01	0.620900	3945.74856	4994.45955	-	Astrognosis Observatory, Bradwell
K02	0.667600	3972.67617	4973.15681	-	Eastwood Observatory, Leigh on Sea
K03	0.744100	4746.18693	4247.71186	-	Observatori AAS Montsec
K04	0.744200	4746.17197	4247.72682	-	Lo Fossil Observatory, Ager
K05	1.023100	3895.06480	5033.83371	-	Eden Observatory, Banham
K06	1.999500	4781.41722	4207.67947	-	Observatorio Montagut, Can Sola
K07	2.461400	4207.84403	4777.34816	-	Obs. de Gravelle, St. Maurice
K08	1.880000	4792.66698	4195.09829	-	Observatorio Lledoner, Vallirana
K09	2.240000	4776.52537	4212.82564	-	Llica d'Amunt
K10	5.421400	4582.75125	4422.09810	-	Micro Palomar, Reilhanette
K11	2.880800	4448.48716	4556.48187	-	Observatoire de Pommier
K12	2.726700	4918.88271	4046.74208	-	Obsevatorio Astronomico de Marratxi
K13	2.912400	4912.12088	4054.89516	-	Albireo Observatory, Inca
K14	2.913100	4916.90802	4049.16557	-	Observatorio De Sencelles
K15	3.755200	4625.11737	4377.38329	-	Murviel-les-Montpellier
K16	5.421100	4582.94573	4421.85874	-	Reilhanette
K17	7.026800	4418.79199	4584.65114	-	Observatoire des Valentines, Bex
K18	7.524200	4310.85712	4685.37539	-	Hesingue
K19	5.647300	4595.97570	4408.48469	-	PASTIS Observatory
K20	4.680200	4096.42353	4872.61209	-	Romeree
K21	4.929200	4598.69838	4404.80458	-	Saint-Saturnin-les-Avignon
K22	5.076100	4619.19329	4383.59161	-	Les Barres Observatory, Lamanon
K23	9.402300	4475.41478	4529.37473	-	Gorgonzola
K24	6.860700	4155.27534	4822.94559	-	Schmelz
K25	5.713600	4602.27377	4401.81263	-	Haute Prov. Sud,Saint-Michel-l'Obs.
K26	6.220100	4143.56182	4833.02849	-	Contern
K27	6.209400	4356.02072	4644.31078	-	St-Martin Obs., Amathay Vesigneux

K28	6.894700	4039.02283	4919.89997	- Sternwarte Eckdorf
K29	7.783500	4441.83006	4566.22069	- Stellarium Gornergrat
K30	7.148400	4354.19562	4645.61228	- Luscherz
K31	7.003600	4551.79945	4455.42850	- Osservatorio Astronomico di Bellino
K32	7.529600	4567.71667	4437.47676	- Maritime Alps Observatory, Cuneo
K33	7.497600	4565.30814	4439.93016	- San Defendente
K34	7.700500	4509.14910	4496.07425	- Turin
K35	8.163700	4081.26927	4885.25311	- UNNAMED OBSERVATORY K35
K36	8.248900	4114.95871	4857.09879	- Ebersheim
K37	8.314800	4511.76706	4493.33660	- Cereseto
K38	8.918200	4448.78636	4555.88347	- M57 Observatory, Saltrio
K39	8.955600	4554.50717	4450.94057	- Serra Observatory
K40	9.013500	4224.12028	4763.51036	- Altdorf
K41	8.793000	4535.68776	4469.47574	- Novi Ligure
K42	8.333200	4189.48837	4793.23546	- Knielingen
K43	9.838900	4414.63316	4590.35082	- OVM Obs., Chiesa in Valmalencom
K44	9.973300	3923.57815	5011.81290	- Marienburg Sternwarte, Hildesheim
K45	10.498100	4677.08767	4322.07696	- Oss.Astro. di Punta Falcone,Piombino
K46	10.911400	4117.78611	4854.72018	- Bamberg
K47	10.688200	4619.41769	4383.20265	- BSCR Obs., Santa Maria a Monte
K48	10.838800	4501.14561	4503.77854	- Keyhole Obs., San Giorgio di Mantova
K49	11.185800	4620.21056	4382.70898	- Carpione Observatory, Spedaletto
K50	11.133000	4126.04391	4848.12291	- Sternwarte Feuerstein, Ebermannstadt
K51	11.657900	4436.86341	4568.46465	- Osservatorio del Celado, Castello Tesino
K52	7.647800	4499.64963	4505.64851	- Gwen Obs., San Francesco al Campo
K53	12.045600	4748.38601	4244.07663	- UNNAMED OBSERVATORY K53
K54	11.336800	4648.40976	4353.04372	- Astro. Obs. University of Siena
K55	7.765000	4117.63651	4854.85482	- Wallhausen
K56	12.705000	4675.12794	4324.42565	- Osservatorio di Foligno
K57	13.044400	4455.38362	4548.70278	- Fiore Observatory
K58	7.449700	3996.22288	4954.86100	- Gevelsberg
K59	13.277400	3957.07312	4985.55848	- Elsterland Observatory, Jessnigk
K60	13.510700	3626.76102	5229.10381	- Lindby
K61	13.602600	4129.27523	4845.28055	- Rokycany Observatory
K62	13.846800	4053.39919	4908.33606	- Teplice Observatory
K63	10.462500	4589.30364	4414.91740	- G. Pascoli Observatory, Barga (before June 2023)
K64	11.744000	4113.65721	4858.53493	- Waizenreuth
K65	12.233900	4584.54643	4419.42030	- Cesena
K66	12.628600	4786.74291	4201.17196	- Osservatorio Astronomico di Anzio
K67	13.361000	4199.04767	4785.90516	- Bayerwald Sternwarte, Spiegelau
K68	14.905100	4845.53487	4133.73324	- Osservatorio Elianto, Pontecagnano
K69	10.994100	4014.27934	4939.99097	- Riethnordhausen
K70	15.973600	4998.87269	3948.12716	- Rosarno
K71	12.215900	4193.49759	4790.04902	- Neutraubling
K72	16.339600	4942.10030	4019.56015	- Celico
K73	16.415800	4833.92608	4147.64584	- Gravina in Puglia
K74	10.236400	4124.54793	4848.97562	- Muensterschwarzach Obs., Schwarzach
K75	11.728900	4394.34769	4609.42455	- Astro Dolomites,Santa Cristina Valga
K76	7.629000	4550.72235	4454.56084	- BSA Osservatorio, Savigliano
K77	11.290300	4125.38568	4848.60163	- EHB01 Observatory, Engelhardsberg
K78	9.853600	4585.80305	4418.25343	- iota Scorpii Observatory, La Spezia
K79	11.057900	4025.72358	4930.92534	- Erfurt
K80	16.637300	3896.14190	5033.05580	- UNNAMED OBSERVATORY K80
K81	13.785100	4775.08923	4214.80033	- P.M.P.H.R. Deep Sky Obs., Atina
K82	17.589400	4843.36570	4136.48584	- Alphard Observatory, Ostuni
K83	11.043200	4614.49592	4388.67793	- Beppe Forti Astro. Obs., Montelupo
K84	10.758600	4581.67415	4423.75863	- Felliscopio Observatory, Fellicarolo
K85	6.031600	4045.99409	4914.34989	- Kelmis
K86	10.181900	4474.36759	4530.43688	- Brescia
K87	10.170100	4124.39834	4849.22994	- Dettelbach Vineyard Observatory
K88	19.893700	4283.19648	4711.46526	- GINOP-KHK, Piszkesteto
K89	11.563400	4711.31566	4285.21605	- Digital Stargate Obs., Manciano
K90	20.545800	4554.58197	4450.50673	- Sopot Astronomical Observatory
K91	20.810200	5393.10796	-3397.11333	- Sunderland-LCOGT A
K92	20.810000	5393.10796	-3397.11333	- Sunderland-LCOGT B
K93	20.810100	5393.09300	-3397.12829	- Sunderland-LCOGT C
K94	20.811000	5393.10796	-3397.03853	- Elizabeth Telescope, Sutherland
K95	20.811100	5393.06308	-3397.08341	- MASTER-II Observatory, Sutherland
K96	16.751200	4942.23493	4020.15854	- Savelli Observatory
K97	7.180300	4237.38961	4752.03620	- Freconrupt
K98	17.072200	3879.22239	5046.01098	- 6ROADS Observatory 1, Wojnowko

K99	22.453500	4229.11684	4758.73819	-	ISON-Uzhgorod Observatory
L00	12.537500	4753.95105	4238.01792	-	ast Rome Observatory, Rome
L01	13.749300	4494.93730	4510.42068	-	Visnjan Observatory, Tican
L02	20.816600	4917.86544	4048.71677	-	NOAK Observatory, Stavraki
L03	14.730800	4284.61765	4709.58033	-	SGT Observatory, Gaflenz
L04	23.596400	4372.49144	4628.45340	-	ROASTERR-1 Observatory, Cluj-Napoca
L05	10.069900	4470.62765	4534.16186	-	Dridri Observatory, Franciacorta
L06	9.254000	4440.97735	4563.21377	-	Sormano 2 Obs., Bellagio Via Lattea
L07	14.564100	4848.45203	4131.29480	-	Oss. Salvatore di Giacomo, Agerola
L08	24.394500	3175.84312	5512.78625	-	Metsahovi Opt. Telescope, Metsahovi
L09	20.809900	5393.09300	-3397.11333	-	Sutherland-LCO Aqawan A #1
L10	22.618600	5035.09033	3903.60684	-	Kryoneri Observatory
L11	17.209200	3215.92039	5489.65842	-	Sandvreten Observatory
L12	2.677900	4012.28969	4941.48695	-	Koksijde
L13	25.621900	4467.30657	4537.91677	-	Stardust Observatory, Brasov
L14	4.922500	4456.20641	4548.22406	-	Planetarium de Vaulx-en-Velin Obs.
L15	25.978400	4517.21242	4488.07076	-	St. George Observatory, Ploiesti
L16	26.045600	4501.81880	4503.59902	-	Stardreams Obs., Valenii de Munte
L17	2.711400	4724.34564	4271.06409	-	Observatori Astronomic Albanya
L18	26.718300	4205.42054	4779.77165	-	QOS Observatory, Zalistci
L19	11.152600	4568.38986	4436.96813	-	Oss. Felsina AAB, Montepastore
L20	18.320700	4607.82385	4396.06807	-	AG_Sarajevo Observatory, Sarajevo
L21	27.421300	4593.40262	4410.35467	-	Ostrov Observatory, Constanta
L22	27.669500	4419.80925	4583.15517	-	Barlad Observatory
L23	27.831900	4478.15242	4526.44261	-	Schela
L24	27.928900	5732.79984	-2789.98533	-	Gauteng
L25	14.437400	3815.23938	5094.22637	-	Smolecin
L26	11.810200	4741.31003	4252.00532	-	Sanderphil Urban Obs., Civitavecchia
L27	5.647000	4595.97570	4408.54453	-	29PREMOTE Obs., Dauban {Soulier}
L28	15.463400	4834.85358	4147.96000	-	ISON-Castelgrande Observatory
L29	18.016900	5855.26066	-2524.09007	-	Drebach-South Observatory, Windhoek
L30	7.514700	3980.76942	4966.88866	-	Lohbach Observatory, Benninghofen
L31	12.856100	4034.32546	4924.04383	-	RaSo Observatory, Chemnitz
L32	20.810400	5393.19772	-3396.94877	-	Korea Microlensing Tel. Net.-SAAO
L33	29.954600	4297.52795	4697.23850	-	Ananjev
L34	14.020600	5037.07998	3900.54008	-	Galhassin Robotic Telescope, Isnello
L35	30.508600	4085.51785	4881.63284	-	DreamSky Observatory, Lisnyky
L36	14.780100	4115.93110	4856.73975	-	Ondrejov-BlueEye600 Telescope
L37	353.738800	5127.61662	3780.57755	-	Obs. Alnitak,El Puerto de Santa Mari
L38	9.700000	3926.68979	5009.43430	-	Gartensternwarte Schafsweide,Schelde
L39	11.040300	4611.78820	4391.28094	-	Osservatorio Spica, Signa
L40	6.956800	4171.37207	4809.18259	-	Sternwarte Saarbruecken Rastpfuhl
L41	12.301800	4596.61897	4407.43751	-	Ponte Uso
L42	11.563300	4698.77936	4298.85937	-	zObservatory-Astrocamp Manciano
L43	0.744400	4746.17197	4247.72682	-	Ager, Leida
L44	6.221100	4389.33616	4613.68809	-	AstroVal, Le Chenit
L45	15.062400	5064.08240	3865.02555	-	ObsCT, Catania
L46	356.119400	4860.25530	4117.56171	-	Observatorio Majadahonda
L47	12.507100	4627.61565	4375.15429	-	Osservatorio Astronomico, Piobbico
L48	23.568700	4304.06538	4691.53882	-	Baia Mare
L49	13.007300	4282.56816	4711.83925	-	VEGA-Sternwarte, Dorfleiten
L50	34.011400	4538.50020	4467.18690	-	GenShtab Observatory, Nauchnij
L51	34.016400	4539.26315	4466.48379	-	MARGO, Nauchnij
L52	34.016900	4539.18835	4466.52867	-	MASTER-Tavrida
L53	9.033800	4462.07065	4542.67398	-	Lomazzo Observatory, Como
L54	22.888800	4469.19151	4535.85232	-	Berthelot Observatory, Hunedoara
L55	35.087500	4249.25272	4740.75652	-	Sura Gardens, Dnipro
L56	8.058600	4075.37511	4890.10008	-	Sternwarte Limburg, Limburg
L57	26.904200	4393.01627	4608.85608	-	Bacau Observatory, Bacau
L58	30.571100	4411.82072	4590.79962	-	Heavenly Owl observatory
L59	1.226100	4155.64933	4822.55664	-	Compustar Observatory, Rouen
L60	30.697200	4113.65721	4858.19085	-	Popovich Observatory, Ivanivka
L61	20.810300	5393.19772	-3396.94877	-	MONET South, Sutherland
L62	12.528900	4588.85484	4415.00716	-	Hypatia Observatory, Rimini
L63	11.009100	4615.67774	4387.19691	-	HOB Observatory, Capraia Fiorentina
L64	9.363100	4476.31237	4528.50706	-	Martesana Obs., Cassina de Pecchi
L65	8.828300	3840.01278	5075.61640	-	Bredenkamp Observatory, Bremen
L66	20.811200	5393.21268	-3397.09837	-	MeerLICHT-1, Sutherland
L67	37.798900	3578.50075	5262.17990	-	Cherkizovo Obs., Moscow Oblast
L68	25.536800	5294.16393	-3545.43962	-	PESCOPE, Port Elizabeth
L69	28.214200	5745.68022	-2763.20731	-	LaCaille Observatory, Pretoria



L70	15.923300	4452.87038	4551.44042	-	Zvezdarnica Graberje, Zagreb
L71	38.583900	4534.16186	4471.13628	-	Vedrus Observatory, Azovskaya
L72	38.692800	3570.42246	5267.64022	-	Melezhy Astrophoto Observatory
L73	11.261800	4620.70423	4382.30506	-	Beato Ermmano Observatory, Impruneta
L74	14.211100	4829.60270	4152.47786	-	AstroColauri, Naples
L75	26.463900	3363.13965	5401.35080	-	Tartu Obs. of Tartu University
L76	39.651600	4359.65595	4639.98740	-	Nomad Observatory, Kochevanchik
L77	39.820300	4330.28988	4667.30397	-	RDSS, Kovalevka
L78	14.780000	4843.75466	4135.84257	-	San Marco Observatory, Salerno
L79	18.220400	4442.23397	4561.79259	-	BOSZA Observatory, Szalanta
L80	18.017500	5855.26066	-2524.09007	-	SpringBok Observatory, Tivoli
L81	16.361700	5865.53803	-2501.53071	-	Skygems Namibia Remote Observatory
L82	352.679500	4944.50882	4016.47843	-	Crow Observatory, Portalegre
L83	356.222300	5047.37232	3887.16603	-	UJA Observatory, Jaen
L84	41.279900	4435.63671	4567.91114	-	Letnik, Rostov Oblast
L85	15.863300	4891.22206	4080.92519	-	BiAnto Observatory, Lauria
L86	9.263100	4537.40814	4468.65296	-	Giordano Bruno Observatory, Brallo
L87	16.361900	5865.53803	-2501.53071	-	Moonbase South Observatory, Hakos
L88	16.542200	4957.14984	4002.02728	-	Stazione Astro. Le Pleiadi, Pantane
L89	11.144400	4605.95388	4397.36957	-	PAO, Prato
L90	15.979500	5001.22138	3945.25489	-	ABObservatory, Rosarno
L91	13.807800	4769.31476	4221.62199	-	Antares MTM Observatory, S. Donato
L92	16.002100	4984.03258	3966.99146	-	San Costantino
L93	1.772200	4801.74757	4184.11781	-	Garraf Obs., Sant Pere de Ribes
L94	354.145600	4644.47533	4357.20254	-	Observatorio MOMA, Oviedo
L95	358.951600	5058.90631	3871.53305	-	Canteras, Murcia
L96	44.274500	4869.06662	4108.54096	-	ISON-Byurakan Observatory
L97	357.991600	3984.21017	4964.09118	-	Castle Fields Observatory, Calne
L98	357.434300	5034.86594	3904.90834	-	La Sagra Observatory, Don Domingo
L99	30.602800	4055.94235	4906.07713	-	Novoselki
M02	0.863900	4811.92023	4173.03260	-	Astropriorat Observatory
M03	2.258200	4787.22162	4200.58853	-	Badalona Boreal
M04	1.425600	4768.55181	4222.77390	-	Pujalt Observatory, Barcelona
M05	1.331600	4655.90461	4345.21975	-	Observatoire de la Nine, Canens
M06	0.743800	4746.17197	4247.72682	-	PeLe's Observatory, Ager
M07	10.294500	3789.89750	5112.98594	-	Siek
M08	4.038100	4004.58540	4947.71022	-	CHON, Stekene
M09	5.600900	4019.27591	4935.92190	-	Observatory Gromme - Oudsbergen
M10	6.854100	4619.71689	4383.96560	-	CPF Observatory, St Vallier de Thiey
M11	5.647200	4596.02058	4408.51461	-	Novaastro Observatory, Banon
M13	7.742500	4227.84526	4759.80033	-	Lucie Berger Observatory, Strasbourg
M14	8.789400	4464.58389	4540.16074	-	Schiaparelli Gallarate Station
M15	9.150600	4467.18690	4537.54277	-	Virgo Oservatory, Seveso
M16	9.773200	4588.43597	4415.94963	-	Osservatorio Il Coreggiolo
M17	9.809200	4586.92503	4417.02673	-	SN1572 Tycho Observatory, La Spezia
M18	11.839400	4079.57881	4887.18292	-	Koeditz
M19	13.883300	4528.32755	4476.70132	-	Osservatorio Explorer, Pula
M20	13.011700	4401.19928	4601.92970	-	Polse di Coughes Observatory, Zuglio
M21	16.361400	5865.52307	-2501.54567	-	Schiaparelli Southern Obs., Hakos
M22	20.810600	5393.12292	-3397.06845	-	ATLAS South Africa, Sutherland
M23	16.603500	4336.84227	4661.46965	-	ELTE Gothard Obs., Szombathely
M24	16.200500	5020.83366	3920.31692	-	Ardore Marina
M25	23.828300	3051.87136	5581.96031	-	Einarin Observatory, Tampere
M26	11.134900	4612.89522	4390.09911	-	Zen Observatory, Scandicci
M27	10.717500	4639.64332	4362.58807	-	Elijah Observatory, Lajatico
M28	20.810600	5393.15284	-3397.03853	-	Lesedi Telescope-SAAO Observatory, Sutherland
M29	12.248600	4584.12755	4419.94389	-	O.M.Ni.A. Observatory, Cesena
M30	25.620000	4467.12706	4538.15613	-	Zeta Aquarii Observatory, Brasov
M31	26.212800	3126.11678	5540.97049	-	Ursa Havaintokeskus, Artjarvi
M32	22.709200	4244.42071	4745.10982	-	Sunny Transcarpathian, Mukachevo
M33	34.763300	5495.61242	3228.05277	-	OWL-Net, Mitzpe Ramon
M34	17.273600	4245.22854	4744.93030	-	AGO70, Astronomical Obs., Modra
M35	26.616700	4392.32812	4609.69383	-	PS Observatory, Parjol
M36	13.796500	4462.98320	4541.80631	-	Opicina, Trieste
M37	13.912400	4445.28577	4559.68326	-	Astro. drustvo Nanos, Ajdovscina
M38	21.767200	4280.29428	4712.96124	-	Harsona Observatory, Nyiregyhaza
M39	22.958900	4847.46468	4131.44440	-	AUTH Observatory, Thessaloniki
M40	31.827100	5532.21902	3164.47368	-	OSTS-NRIAG, Kottamia
M41	39.258300	5936.17815	2325.25954	-	Jeddah
M42	54.670800	5803.46988	2636.91679	-	Emirates Observatory, Al Rahba
M43	54.684800	5822.00505	2596.12145	-	Al Sadeem Observatory, Abu Dhabi

M44	54.920300	5820.06028	2600.50467	-	Al-Khatim Observatory, Abu Dhabi
M45	25.768900	4449.45955	4555.27012	-	Starhopper Obs., Sfantu Gheorghe
M46	55.450300	5773.99910	2700.49588	-	Althuraya Astronomy Center, Dubai
M47	55.462000	5770.70794	2707.42226	-	Sharjah Observatory, Sharjah
M48	15.092200	5066.01221	3862.18319	-	GAC - Via L. Sturzo Obs., Catania
M49	16.361700	5865.52307	-2501.54567	-	IAS Remote Observatory, Hakos
M50	11.563800	4711.30070	4285.23101	-	Virtual Telescope Project, Manciano
M51	9.227000	4180.87153	4800.87991	-	Robert Mayer Sternwarte, Heilbronn
M52	8.578500	4840.62806	4139.74708	-	Sassari
M53	10.282200	3737.44848	5151.13340	-	CAS Observatory, Preetz
M54	7.077800	4625.04257	4377.54785	-	Observatoire Albireo de Biot
M55	19.987000	4188.42622	4795.18023	-	Luckystar Observatory, Vazec
M56	9.174800	4470.01430	4534.76025	-	Varedo
M57	14.020200	5042.88438	3895.13960	-	Wide-field Mufara Telescope, Isnello
M58	16.361300	5865.52307	-2501.54567	-	VdS Remote Observatory, Hakos
M59	7.228800	4339.26576	4659.97367	-	Rondchamp Observatory, Reconvilier
M60	11.325500	4575.75007	4429.56303	-	Virgil Observatory, Loiano
M61	6.585800	3985.66127	4962.87944	-	Observatory Moers Kapellen
M62	7.134200	4335.48093	4663.78842	-	Lajoux Observatory
M63	18.369700	4904.05756	4064.69383	-	RPF Observatory, Gagliano del Capo
M64	0.239600	4025.02047	4931.38909	-	Holbrook, Heathfield
M65	28.324900	3093.86348	5558.92224	-	Mustola Observatory, Lappeenranta
M90	65.428600	3487.05157	5322.69224	-	Chervishevo
N27	73.725300	3689.56220	5185.30156	-	Omsk-Yogik Observatory
N30	74.369400	5444.95858	3310.82528	-	Zeds Astronomical Obs., Lahore
N31	74.444200	5442.59493	3314.65498	-	Eden Astronomical Obs., Lahore
N42	76.971800	4669.60778	4334.01487	-	Tien-Shan Astronomical Observatory
N43	77.116700	1065.91475	-6271.50177	-	Plateau Obs. for Dome A, Kunlun Stn.
N44	77.139300	5006.98089	3939.73472	-	Shache Station, Langan Village
N50	78.963800	5371.52098	3435.85918	-	Himalayan Chandra Telescope,IAO,Hanl
N51	78.964600	5371.53594	3435.81430	-	GROWTH India Telescope, IAO, Hanle
N54	80.026700	5399.12179	3393.62770	-	Purple Mountain Obs., Jiama'erdeng
N55	80.026200	5399.07691	3393.73242	-	Corona Borealis Observatory, Ngari
N56	80.026800	5399.12179	3393.64266	-	Zijinshan-Beimian Survey, Ali
N57	80.046000	5400.52801	3392.02700	-	YLT, NAOC
N82	85.954900	4093.77565	4875.76860	-	Multa Observatory
N83	86.235000	4780.72907	4209.10065	-	LW-1, Korla Station
N86	87.178500	4637.35447	4367.24056	-	Xingming Observatory-KATS, Nanshan
N87	87.175000	4637.39935	4367.24056	-	Nanshan Station, Xinjiang Observatory
N88	87.173200	4637.53399	4367.09096	-	Xingming Observatory, Nanshan
N89	87.179100	4637.59383	4367.00120	-	Xingming Observatory #2, Nanshan
O02	90.526100	5526.23510	3182.42542	-	Galaxy Tibet YBJ Obs.,Yangbajing
O17	93.886700	4994.89339	3959.10765	-	Purple Mountain Obs., Lenghu-1
O18	93.895200	4993.86116	3960.96266	-	WFST, Lenghu
O37	98.485500	6049.79773	2021.17195	-	TRT-NEO, Chiangmai
O40	100.228600	5585.50578	3077.03372	-	Xingyuan, Daocheng
O41	99.465600	6056.48476	1993.88530	-	Choakanan Observatory, Lampang
O42	100.029000	5703.58338	2852.20308	-	Gaomeigu Gemini Observatory, LiJiang
O43	99.781100	6339.89792	696.03401	-	Observatori Negara, Langkawi
O44	100.031000	5704.28649	2850.90158	-	Lijiang Station, Yunnan Observatory
O45	100.032600	5704.88488	2849.80952	-	Yunnan-HK Observatory, Gaomeigu
O46	100.226600	5585.58058	3076.91404	-	Daocheng Glacier Observatory
O47	101.134200	5756.49614	2742.59272	-	Yunling Observatory, Yunnan
O48	101.181500	5760.87936	2732.65942	-	Purple Mountain Obs., Yaoan (0.8-m)
O49	101.181100	5760.77464	2732.86886	-	Purple Mountain Obs., Yaoan Station
O50	101.439400	6369.32382	335.26379	-	Hin Hua Observatory, Klang
O51	101.278700	6222.23920	1396.78036	-	Akin Observatory, Rayong
O52	100.729700	6200.98134	1487.70594	-	Astro820, Samut Prakan
O53	101.404000	6171.83967	1604.81116	-	Pakchong, Nachonratchasima
O54	100.949400	6208.29667	1457.14310	-	TSky Observatory, Chonburi
O68	105.330900	5058.63704	3873.74710	-	LW-2, Zhongwei Station
O72	106.334800	4286.21835	4709.61025	-	OWL-Net, Songino
O75	107.051800	4287.92377	4708.02451	-	ISON-Hureltogoot Observatory
O85	109.213000	5272.06832	3579.29361	-	LiShan Observatory, Lintong
P07	114.089900	5920.85933	-2363.72116	-	Space Surveillance Telescope,HEH Stn
P13	115.573300	4905.16458	4064.88830	-	Baihuashan Observatory, Beijing
P14	115.811700	5414.96421	-3358.96587	-	Nedlands Observatory, Perth
P18	116.610800	4828.31616	4154.25807	-	Birch Forest Observatory, LaBaGouMen
P21	117.281500	5424.86759	-3343.72185	-	6R-AUS1, Youndegin
P22	117.575900	4865.13219	4111.99667	-	LW-3, NAOC-Xinglong
P25	118.312700	5810.33642	2621.98692	-	Kinmen Educational Remote Obs.,Jinch



P30	119.597100	5502.89783	3215.74087	- Jiangnantianchi Observatory, Anji
P31	119.597400	5502.88287	3215.78575	- Starlight Observatory, Tianhuangping
P34	120.320300	5453.56046	3296.38908	- Lvye Observatory
P35	120.557000	5825.77492	2587.75893	- Cuteip Remote Observatory, Changhua
P36	120.626700	5454.62260	3294.65375	- ULTRA Observatory,Suzhou
P37	120.639700	5823.11208	2593.81764	- HuiWen High School Obs.,Taichung Cit
P40	121.539600	5778.05320	2692.76167	- Chinese Culture University, Taipei
P48	123.324000	1645.96553	-6144.77742	- ASTEP, Concordia Station
P61	126.330500	4609.24503	4394.27289	- Jilin Observatory
P63	126.847500	5215.90928	3658.64032	- GSA Observatory, Gwangju
P64	127.004900	5079.37130	3844.77000	- GSHS Observatory, Suwon
P65	127.375700	5140.07812	3763.89739	- OWL-Net, Daedeok
P66	127.446700	5260.45953	3594.73211	- Deokheung Optical Astronomy Obs.
P67	127.741500	5041.28368	3894.30185	- Kangwon National University Obs.
P68	127.474400	5144.32670	3758.13787	- DSHS Biryong Observatory
P71	128.761100	5198.34649	3683.50349	- Miryang Arirang Astronomical Obs.
P72	128.976000	5156.23469	3743.58200	- OWL-Net, Mt. Bohyun
P73	129.082000	5213.74011	3661.81180	- BSH Byulsem Observatory, Busan
P87	132.094200	5296.13862	3542.25318	- Hirao Observatory, Yamaguchi
P93	133.544300	5251.57341	3608.30064	- Space Tracking and Comm. Ctr., JAXA
Q02	135.493400	5263.97508	3589.67571	- Sakai Observatory, Osaka
Q06	136.495500	5205.30279	3673.74971	- Tarui Observatory, Tarui
Q10	137.329400	5240.42837	3623.69426	- Toyokawa Observatory
Q11	137.520700	5231.58714	3636.54472	- Shinshiro
Q12	137.825400	5135.33587	3771.34736	- Nagano Observatory
Q19	139.439000	5193.72392	3689.87636	- Machida
Q20	139.570100	5259.32258	-3596.34777	- Swan Reach Imaging, Glenalta
Q21	139.853400	5132.79270	3773.65117	- Southern Utsunomiya
Q23	140.386400	5080.44841	3843.72281	- Sukagawa
Q24	140.523500	5172.61566	3719.13770	- Katori
Q33	142.482800	4566.68444	4438.00035	- Nayoro Obs., Hokkaido University
Q38	143.550600	5208.01051	-3669.86017	- Swan Hill
Q54	147.287700	4715.29496	-4281.50602	- Harlinton Telescope, Greenhill Obs.
Q55	149.061400	5457.40512	-3292.33498	- SkyMapper, Siding Spring
Q56	148.976400	5239.51582	-3625.83351	- Heaven's Mirror Observatory, Yass
Q57	149.061700	5457.45000	-3292.23026	- Korea Microlensing Tel. Net.-SSO
Q58	149.070900	5457.34528	-3292.39482	- Siding Spring-LCO Clamshell #1
Q59	149.070800	5457.30040	-3292.37986	- Siding Sprint-LCOGT Clamshell #2
Q60	149.069000	5457.30040	-3292.37986	- ISON-SSO Observatory, Siding Spring
Q61	149.061900	5457.39016	-3292.27514	- PROMPT, Siding Spring
Q62	149.064400	5457.31536	-3292.43970	- iTelescope Obs., Siding Spring
Q63	149.070600	5457.34528	-3292.40978	- Siding Spring-LCOGT A
Q64	149.070800	5457.34528	-3292.40978	- Siding Spring-LCOGT B
Q65	149.193100	5456.62721	-3292.39482	- Warrumbungle Observatory
Q66	149.064200	5457.31536	-3292.42474	- Siding Spring-Janess-G, JAXA
Q67	149.492300	5330.95004	-3491.19543	- JBL Observatory, Bathurst
Q68	150.337400	5312.45975	-3519.54422	- Blue Mountains Observatory, Leura
Q69	150.449300	5311.56216	-3520.38197	- Hazelbrook (O'Day)
Q70	150.500400	5862.48624	-2504.20852	- Glenlee Observatory, Glenlee
Q78	152.947900	5656.17581	-2937.89274	- Woogaroo Observatory, Forest Lake
Q79	152.848100	5668.32316	-2914.55548	- Samford Valley Observatory
Q80	153.216000	5661.36686	-2927.82481	- Birkdale
Q81	153.096200	5696.91131	-2858.56099	- Caloundra West
R56	170.483900	4595.27259	-4409.36732	- Scott Street Obs., Lake Tekapo
R57	170.472800	4595.37731	-4409.26260	- Aorangi Iti Observatory, Lake Tekapo
R58	170.490400	4449.25011	-4554.86621	- UNNAMED OBSERVATORY R58
R65	172.349800	4634.07828	-4367.94367	- Christchurch Observatory
R66	172.587600	4634.27276	-4367.59959	- Mooray Observatory, Christchurch
R78	175.091000	5026.11446	-3913.79445	- Crystal Lake Observatory, Ngutunui
T03	203.742500	5971.46829	2242.15793	- Haleakala-LCO Clamshell #3
T04	203.742500	5971.48324	2242.15793	- Haleakala-LCOGT OGG B #2
T05	203.743000	5971.43837	2242.21777	- ATLAS-HKO, Haleakala
T07	204.423900	6016.43741	2120.51990	- ATLAS-MLO Auxiliary Camera, Mauna Loa
T08	204.423900	6016.43741	2120.51990	- ATLAS-MLO, Mauna Loa
T09	204.524000	6006.36947	2150.96306	- Subaru Telescope, Maunakea
T10	204.522400	6006.33955	2150.78355	- Submillimeter Array, Mauna Kea (SMA)
T11	204.529700	6006.50411	2150.64891	- United Kingdom Infrared Telescope, Maunakea
T12	204.530500	6006.50411	2150.70875	- University of Hawaii 88-inch telescope, Maunakea
T13	204.528000	6006.33955	2151.03786	- NASA Infrared Telescope Facility, Maunakea
T14	204.531100	6006.39939	2150.96306	- Canada-France-Hawaii Telescope, Maunakea
T15	204.530900	6006.47419	2150.79851	- Gemini North Observatory, Maunakea



T16	204.525300	6006.33955	2151.00794	- W. M. Keck Observatory, Keck 1, Maunakea
T17	204.525700	6006.32459	2151.06778	- W. M. Keck Observatory, Keck 2, Maunakea
T35	210.390200	6082.73918	-1912.39934	- Astronomical Society of Tahiti
U52	237.451000	4778.75438	4211.29974	- Shasta Valley Observatory, Grenada
U53	237.160300	4482.17660	4522.67275	- Murray Hill Observatory, Beaverton
U54	237.312900	4993.77140	3954.96379	- Hume Observatory, Santa Rosa
U55	237.414600	4171.16263	4809.01803	- Golden Ears Obseravtory, Maple Ridge
U56	237.869200	5070.90406	3855.66072	- Palo Alto
U57	237.841300	5075.57152	3849.94608	- Black Mountain Obs., Los Altos
U63	239.194600	4344.89064	4654.57319	- Burnt Tree Hill Obs., Cle Elum
U64	239.461500	4358.01037	4642.14161	- CWU-Lind Observatory, Ellensburg
U65	239.459800	4357.84581	4642.27624	- CWU Observatory, Ellensburg
U67	240.203600	4951.51000	4009.26781	- Jack C. Davis Obs., Carson City
U68	240.587000	5096.39554	3824.45460	- JPL SynTrack Robotic Tele., Auberry
U69	240.587000	5096.39554	3824.45460	- iTelescope SRO Observatory, Auberry
U70	240.586900	5096.39554	3824.45460	- RASC Observatory, Alder Springs
U71	241.363300	5263.24205	3591.21656	- HS Observatory, Castaic
U72	241.460000	5282.06146	3563.39136	- Tarzana, California
U73	241.617200	5304.32162	3530.04600	- Redondo Beach
U74	240.587200	5096.39554	3824.45460	- JPL SynTrack Robotic Telescope 2,Aub
U75	242.183700	5317.68071	3510.41875	- Newport Beach
U76	242.127900	5284.60462	3559.63645	- Glendora
U77	242.918100	5357.75798	3449.03875	- Rani Observatory, San Diego
U78	242.844900	5278.42623	3571.05077	- Cedar Glen Observatory
U79	242.791900	5350.21825	3460.76722	- Encinitas
U80	243.615100	5277.07985	3572.00820	- CS3-DanHenge Observatory, Landers
U81	243.615100	5277.06489	3571.99324	- CS3-Trojan Station, Landers
U82	243.615200	5277.06489	3571.99324	- CS3-Palmer Divide Station, Landers
U83	243.573100	5365.53707	3440.24239	- Mount Laguna Observatory
U93	246.287600	5049.82572	3885.62517	- Skygems Dreamscope Utah, Beryl JCT
U94	246.302500	5051.53114	3883.42609	- iTelescope Obs.,Beryl Junc. (Sato)
U96	246.686000	3692.98800	5183.50638	- Athabasca Univ. Geophysical Obs.
U97	248.332900	5219.27523	3657.56322	- JPL SynTrack Robotic Telescope 3,Fla
U98	249.743000	5418.41992	3355.48024	- NAC Observatory, Benson
V00	248.399800	5417.95616	3358.03836	- Kitt Peak-Bok
V01	248.239100	4861.69144	4117.03812	- Mountainville Observatory, Alpine
V02	248.057900	5330.48629	3491.24031	- Command Module, Tempe
V03	248.331400	5095.43811	3825.54667	- Big Water
V04	248.463300	5226.11185	3647.82440	- FRoST, Anderson Mesa
V05	248.631900	5336.15605	3483.10218	- Golden Canyon
V06	249.267400	5391.52222	3400.88319	- Catalina Sky Survey-Kuiper
V07	249.121900	5434.68121	3331.55954	- Whipple Obs., Mount Hopkins-PAIRITEL
V08	249.339000	5410.25187	3368.46533	- Mountain Creek Ranch, Vail
V09	249.742000	5418.46480	3355.40544	- Moka Observatory, Benson
V10	248.327700	5221.29480	3654.52638	- Sierra Sinagua Obs., Flagstaff
V11	249.211200	5402.44286	3380.47804	- Saguaro Observatory, Tucson
V12	249.398200	5434.87568	3329.70453	- Elgin, Arizona
V13	248.782800	4862.27487	4117.99555	- Little Moose Obs., Timber Lakes
V14	248.783400	4862.00560	4118.30970	- Moose Springs Obs., Timber Lakes
V15	249.210700	5390.23568	3403.38148	- OWL-Net, Mt. Lemmon
V16	251.102900	5418.30024	3356.13847	- Dark Sky New Mexico, Animas
V17	248.983200	5392.56940	3395.90158	- Leo Observatory, Tucson
V18	249.618100	5470.91381	3272.49830	- MASTER-OAGH observatory, Sonora
V19	251.790900	5366.37482	3439.19521	- Whiskey Creek Observatory
V20	251.778200	5274.74612	3577.76772	- Killer Rocks Observatory, Pie Town
V21	251.102300	5418.30024	3356.09359	- Cewanee Observatory at DSNM
V22	251.815500	5274.77604	3577.75276	- Insight Remote Observatory, Pie Town
V23	252.764100	5285.71165	3561.11747	- FOAH Observatory, Magdalena
V24	250.484000	5423.08737	3348.64362	- Sonoran Desert Skies Obs., Pearce
V25	253.301900	5398.01477	3388.73585	- Tortugas Mountain Obs., Las Cruces
V26	253.390200	5812.29615	2619.11464	- UAS-ISON Observatory, Coasla
V27	253.718200	5174.93442	3719.60146	- North Mesa Observatory, Los Alamos
V28	254.346500	5211.06231	3669.15706	- Deep Sky West Obs., New Mexico
V29	254.266600	5358.02726	3453.54164	- Tzec Maun Cloudcroft Facility
V30	254.471000	5362.17112	3446.19639	- Heaven on Earth Observatory, Mayhill
V31	254.475000	5361.52785	3447.12390	- Hazardous Observatory, Mayhill
V32	254.471300	5362.15616	3446.16647	- Canvas View New Mexico Skies,Mayhill
V33	254.720400	5143.21967	3763.82259	- Finlaystone Observatory, Angel Fire
V34	255.369900	4964.74941	3994.12851	- Black Forest, Colorado
V35	255.918800	5496.92888	3227.63390	- Deep Sky Obs. Collaborative, Pier 5
V36	255.617400	5377.04115	3420.80963	- The Ranch Observatory, Lakewood

V37	255.984800	5491.91735	3236.44521	- McDonald Observatory-LCOGT ELP
V38	255.984900	5491.90239	3236.46017	- McDonald Obs.-LCO ELP Aqawan A #1
V39	255.984800	5491.91735	3236.44521	- McDonald Observatory-LCO ELP B
V40	255.918700	5496.92888	3227.63390	- Dark Sky Observatory, Fort Davis
V41	256.725800	4592.20584	4412.97263	- Rapid City
V42	254.474700	5361.55777	3447.04910	- Dimension Point, Mayhill
V43	250.484200	5423.07241	3348.64362	- Chiricahua Skies Obs., Sunizona
V54	259.692200	5974.63976	2230.78849	- Observatoire LAURIER, El Marques
V58	260.735000	5540.91065	3149.28949	- Medina Dome, Medina
V59	261.073400	5526.14534	3175.09513	- Millwood Observatory, Comfort
V60	261.094700	5498.84373	3221.76966	- Putman Mountain Observatory
V61	261.057100	5473.81601	3263.85154	- Shed of Science South, Pontotoc
V62	261.056600	5473.81601	3263.86650	- Live Oak Observatory, Pontotoc
V63	261.057300	5473.84593	3263.82162	- Tara Observatory, Cherokee
V70	263.335700	5549.33301	3133.79116	- Starry Night Observatory, Columbus
V72	263.890100	4800.80511	4185.55394	- Omaha
V74	264.156900	5544.65060	3141.85448	- Katy Observatory, Katy
V78	265.107800	4465.60116	4539.24819	- Sauk Centre
V81	265.760400	5160.04943	3736.95481	- Fayetteville
V83	266.257300	4986.00727	3964.58293	- Rolling Hills Obs., Warrensburg
V86	266.892700	4989.04411	3960.76818	- Rattle Snake Observatory, Sedalia
V88	267.428100	5234.01062	3633.10397	- River Ridge Observatory, Conway
V92	268.349800	5215.47545	3659.20880	- White County Observatory, Searcy
V93	268.616100	4845.89391	4133.40413	- Pin Oak Observatory, Fort Madison
V94	268.661700	4846.59702	4132.61126	- Cherokeeidge Obs., Fort Madison
W04	271.009400	4857.62238	4119.80568	- Mark Evans Observatory, Bloomington
W08	271.883300	4765.02130	4225.81073	- Jimginny Observatory, Naperville
W09	272.147500	4802.01685	4183.96821	- Willowed Plains Observatory, Manteno
W11	272.624700	4800.95471	4185.20987	- Calumet Astronomy Center, Lowell
W13	273.473600	4965.04861	3990.43344	- Star Quarry Observatory, Bedford
W14	273.245100	5242.28338	3621.34558	- Harvest
W15	273.190800	5171.86767	3720.45416	- Wayne Observatory, Franklin
W16	273.768700	5249.06017	3611.89099	- Pleasant Groves Observatory, Alabama
W17	273.771200	4883.74217	4089.04836	- Arrowhead, Sheridan
W18	274.249600	4892.28421	4078.84578	- Red Fox Observatory, Pendleton
W19	274.372800	4724.82435	4270.54050	- Kalamazoo
W22	275.004500	5386.94452	3403.60587	- Mead WestVaco Observatory, Columbus
W23	275.380200	4928.93568	4034.77425	- Hevonen Farm Observatory, Oxford
W24	275.238200	4608.67656	4394.69177	- Shamrock Banks Observatory, Clare
W25	275.635100	4952.09343	4006.53017	- RMS Observatory, Cincinnati
W28	276.388300	5294.55288	3545.03570	- Ex Nihilo Observatory, Winder
W29	276.993900	4889.41193	4082.27158	- Adena Brook Observatory, Columbus
W30	276.771200	5349.57498	3461.72465	- Georgia College Obs., Milledgeville
W31	277.237400	5320.80731	3505.51194	- Deerlick Observatory, Crawfordville
W32	277.237500	5320.77739	3505.54186	- Crawfordville Observatory
W33	277.834500	5225.70794	3645.10172	- Transit Dreams Obs., Campobello
W34	277.845300	5216.29823	3658.50569	- Squirrel Valley Obs., Columbus
W35	278.039100	5463.58351	3279.82860	- Buffalo Creek Observatory, Nahunta
W38	278.585300	5150.22085	3751.39100	- Dark Sky Observatory, Boone
W42	279.465700	5647.91801	2953.43596	- Mind's Eye Observatory, Vero Beach
W46	280.411900	5221.23496	3651.16043	- Foxfire Village
W48	280.887000	5177.08863	3713.07899	- BKH Observatory, Chapel Hill
W49	281.067600	4967.26266	3988.75795	- CBA-MM Observatory, Mountain Meadows
W50	281.254000	5186.24402	3700.39309	- Apex
W51	287.565400	4816.79712	4166.74949	- Custer Institute and Observatory
W52	283.514200	4964.33054	3991.03183	- US Naval Academy Hopper Hall Obs.
W53	282.315200	4918.43391	4047.31055	- Hagerstown
W54	282.289400	5009.58390	3934.60352	- Mark Slade Remote Obs., Wilderness
W55	282.583900	4934.78496	4027.45892	- Natelli Observatory, Frederick
W56	282.525800	4931.20957	4031.96181	- Pineapple Observatory, Frederick
W57	289.260900	5571.17430	-3099.78756	- ESA TBT La Silla Observatory
W58	283.149600	4960.06700	3996.37248	- ALPHA Observatory, South Laurel
W59	284.107600	4828.28624	4154.09351	- The Dark Side Observatory, Weatherly
W60	286.366300	6349.90602	619.66430	- AstroExplor Observatory, Tinjaca
W61	283.744900	4550.03420	4454.80019	- Leaside Observatory,Elgin
W62	284.137600	4839.28168	4141.16826	- Comet Hunter Observatory2,New Ringgo
W63	284.309600	6357.52055	529.23239	- Obs. Astronomico UTP, Pereira
W64	285.270000	4900.73649	4068.37393	- Red Lion Obs., Southampton Twsp
W65	284.791700	4450.41698	4553.77414	- Observatoire Montpellier
W66	285.053800	4823.64870	4159.23968	- Blairstown
W67	285.102100	4843.90425	4135.87249	- Paul Robinson Obs.,Voorhees St. Park



W68	289.235000 5503.34663 -3216.29438	- ATLAS Chile, Rio Hurtado
W69	285.985000 4846.82141 4132.10263	- OLPH Observatory, Brooklyn
W70	285.913900 4454.96475 4549.30117	- Loose Goose Obs., Saint-Jerome
W71	285.993000 4575.70519 4429.33864	- Rand II Observatory, Lake Placid
W72	286.821100 4802.86956 4182.78638	- Trumbull Observatory, Trumbull
W73	289.321600 6109.93607 -1835.61075	- Observatorio Astronomico de Moquegua, Carumas
W74	289.262500 5570.99479 -3100.02692	- Danish Telescope, La Silla
W75	289.609400 5804.11315 -2641.50944	- SPECULOOS-South Observatory, Paranal
W76	289.236900 5503.22695 -3216.41406	- CHILESCOPE Observatory, Rio Hurtad
W77	287.401000 4796.10773 4190.56547	- Skyledge Observatory, Killingworth
W78	288.883200 4718.93019 4276.59921	- Clay Telescope, Harvard University
W79	289.195400 5520.83462 -3187.55663	- Cerro Tololo-LCO Aqawan B #1
W80	288.767800 4728.62414 4266.02264	- Westwood
W81	288.999700 4621.33254 4381.45236	- Nebula Knoll Obs., Belleau Lake
W82	288.878000 4696.98419 4300.60967	- Mendel Obs., Merrimack College
W83	288.697500 4725.06371 4269.91218	- Whitin Observatory, Wellesley
W84	289.193600 5520.74486 -3187.75111	- Cerro Tololo-DECam
W85	289.195200 5520.86454 -3187.54167	- Cerro Tololo-LCOGT A
W86	289.195300 5520.86454 -3187.52671	- Cerro Tololo-LCOGT B
W87	289.195300 5520.86454 -3187.54167	- Cerro Tololo-LCOGT C
W88	289.465700 5339.37240 -3479.75119	- Slooh.com Chile Obs., La Dehesa
W89	289.195300 5520.84958 -3187.57159	- Cerro Tololo-LCOGT Aqawan A #1
W90	289.058100 4673.51228 4325.84683	- Phillips Exeter Academy Grainger Obs
W91	289.602600 5804.15803 -2641.49448	- VHS-VISTA, Cerro Paranal
W92	290.673600 5427.70994 -3343.10850	- MASTER-OAFA Observatory, San Juan
W93	289.196000 5520.84958 -3187.51175	- Korea Microlensing Tel. Net.-CTIO
W94	291.820200 5878.38849 -2472.88272	- UNNAMED OBSERVATORY W94
W95	291.820100 5878.34361 -2472.88272	- Obs. Panameno, San Pedro de Atacama
W96	291.820100 5878.32865 -2472.91264	- CAO, San Pedro de Atacama
W97	291.820200 5878.34361 -2472.91264	- Atacama Desert Obs.,San Pedro de Ata
W98	291.820300 5878.34361 -2472.88272	- SDA Obs., San Pedro de Atacama
W99	291.820200 5878.34361 -2472.91264	- SON San Pedro de Atacama Station
X00	292.601200 5806.32720 -2639.28043	- Observatorio Astronomico Tolar
X01	289.235000 5503.34663 -3216.30934	- Observatory Hurtado, El Sauce
X02	289.235200 5503.27183 -3216.20462	- Telescope Live, El Sauce
X03	289.203600 5499.78620 -3222.29326	- Observatoire SADR, Poroto
X04	291.567500 4236.77626 4751.70709	- MCD Observatory, Saint-Anaclet
X05	289.250600 5516.97499 -3195.18612	- Simonyi Survey Telescope, Rubin Obs.
X06	289.146500 5500.33971 -3221.66494	- Skygems Chile, Rio Hurtado
X07	289.146400 5500.33971 -3221.64998	- iTelescope DeepSky Chile,Rio Hurtado
X08	289.235000 5503.39151 -3216.20462	- ShAO Chile station, El Sauce
X09	289.146700 5500.35467 -3221.64998	- Deep Random Survey, El Sauce
X10	291.820400 5878.37353 -2472.91264	- OVTLN, San Pedro de Atacama
X11	289.596000 5803.81395 -2642.61647	- VLT Survey Telescope, Paranal
X12	295.712000 5124.38530 -3785.14028	- Observatorio Los Cabezones
X13	295.449800 5438.57075 -3323.19702	- Observatorio Remoto Bosque Alegre
X14	295.832200 5449.95515 -3303.10603	- Observatorio Orbis Tertius, Cordoba
X15	291.820500 5878.38849 -2472.86776	- Atacama Desert O.,San Pedro de Ataca
X16	293.849700 6091.81977 -1892.20363	- Astronomia Sigma Octante, Cochabamba
X17	289.262100 5571.02470 -3099.98204	- BlackGEM
X18	291.820500 5878.38849 -2472.86776	- 6R-POL2, San Pedro de Atacama
X31	299.479300 5424.50855 -3343.82657	- Galileo Galilei Obs., Oro Verde
X33	299.990400 6369.50334 -331.28448	- OARU, Manaus
X38	301.137100 5266.09937 -3586.41447	- Observatorio Pueyrredon, La Lonja
X39	301.137800 5269.30076 -3581.83678	- Observatorio Antares, Pilar
X40	301.616900 5246.47212 -3614.88295	- Lomas de Zamora, Banfield
X50	303.824200 5236.61362 -3629.15458	- Obs. Astronomico de Montevideo
X57	305.406300 5763.66188 -2722.72613	- Foz do Iguacu
X60	306.425600 5709.91137 -2833.92222	- Guaraciaba Observatory
X70	308.433200 5942.02742 -2311.27214	- Observatorio OATU, Tupi Paulista
X72	308.878900 5541.16497 -3147.98799	- Waccobs, Sao Leopoldo
X74	309.494200 5941.68335 -2312.22957	- Observatorio Campo dos Amarais
X77	309.924800 5741.50644 -2770.31321	- Centro Ast. Nevoeiro,Antonio Olinto
X87	312.088900 6136.92353 -1735.48490	- Dogsheaven Observatory, Brasilia
X88	312.491300 5855.21578 -2522.27994	- Observatorio Adhara, Sorocaba
X89	312.217900 6138.32975 -1730.45841	- Rocca Observatory, Brasilia
X90	312.132100 6144.20895 -1710.54693	- Carina Observatory, Brasilia
X93	313.604700 5891.04447 -2439.25312	- Munhoz Observatory
Y00	315.215000 5969.34400 -2242.30752	- SONEAR Observatory, Oliveira
Y01	316.015800 6001.13354 -2155.72028	- SONEAR 2 Observatory, Belo Horizonte
Y05	316.310000 6003.87118 -2149.91588	- SONEAR Wykrota-CEAMIG, Serra da Piedade



Y16	318.687900	5927.00780	-2348.23778	-	ROCG, Campos dos Goytacazes
Y28	321.312600	6304.15899	-968.13758	-	OASI, Nova Itacuruba
Y40	324.038900	6312.47663	-913.45956	-	Discovery Observatory, Caruaru
Y64	343.489600	5622.23206	3006.87232	-	ATLAS-TDO, Teide
Y65	343.490400	5622.23206	3006.84240	-	Two-Meter Twin Telescope, Teide
Y66	343.490500	5622.23206	3006.84240	-	Two-Meter Twin Telescope,TTT2,Teide
Y67	352.132900	5462.56625	3286.87466	-	High Atlas Window to the Kosmos,Ouka
Y70	353.372400	5018.11097	3924.65526	-	ApolloIV5, Fregenal de la Sierra
Y75	354.581300	5014.96942	3928.75424	-	Abraham Zacut, Salamanca
Y81	356.573300	3582.91388	5259.15802	-	Forthimage, Edinburgh
Y82	358.065500	4019.87430	4935.47311	-	LPMR Observatory, Broad Chalke
Y83	359.047600	4775.31363	4214.47121	-	Observatorio Arcosur, Zaragoza
Y84	358.119700	4244.67502	4744.75079	-	Observatoire de Saint Domineuc
Y85	351.853900	4637.44423	4364.69740	-	Magalofes Observatory, Fene
Y86	357.480000	5077.06750	3849.00362	-	Observatorio de Seron
Y87	353.011900	4731.43658	4264.78098	-	Trevinca Skies-Amalthea, Trevinca
Y88	353.011900	4731.42162	4264.79594	-	ASERO, Valdin
Y89	353.011900	4731.46649	4264.87074	-	Proxima Centauri Observatory, Valdin
Y90	354.555300	4656.99667	4344.47176	-	Observatorio ESTELIA, Ladines
Y91	354.833500	5118.43131	3794.05632	-	Ras Algethi, Ronda
Y92	354.534800	5020.75886	3921.27435	-	JD Cassini, Piconcillo
Y93	355.433200	4762.55293	4229.41604	-	Obs. Azahar, Voloria la Buena
Y94	354.585700	4674.11067	4327.02865	-	LCB Lugueros obs., Valdelugueros
Y95	357.998600	5009.10518	3936.30893	-	Pradillos Ferez
Y96	358.089300	4864.01021	4114.40520	-	Observatorio de Vega del Codorno
Y97	359.643000	4552.86160	4451.89799	-	Bommes Observatory, Bommes
Y98	358.686900	3941.39526	4997.99006	-	Southside Observatory, Steeple Aston
Y99	359.073000	4773.74285	4216.17663	-	Observatorio del Lucero del Alba
Z00	353.265900	5093.11935	3826.68361	-	BOOTES-1, Mazagon
Z01	352.133200	5462.64105	3286.93450	-	OWL-Net, Oukaimeden
Z02	352.133300	5462.55129	3286.90458	-	HAO observatory, Oukaimeden
Z03	355.733500	4855.87208	4122.99212	-	Rio Cofio, Robledo de Chavela
Z04	352.982000	5318.14446	3509.91012	-	MAO, Ain Laqsab
Z05	355.363900	5119.37377	3791.76747	-	Observatorio Horus, Cartama
Z06	357.673200	5022.38947	3920.93027	-	Marina Sky, Nerpio
Z07	356.360500	5093.17919	3827.73080	-	Ad Astra Sangos Obs., Alhendin
Z08	357.591400	5067.28379	3862.37766	-	Telescope Live, Oria
Z09	356.878600	4008.28047	4944.77810	-	Old Orchard Observatory, Fiddington
Z10	353.372300	5018.11097	3924.65526	-	PGC, Fregenal de la Sierra
Z11	358.966700	3837.30506	5077.72573	-	Appledorne Observatory, Farnsfield
Z12	359.096100	5006.45730	3939.27097	-	La Romaneta, Monovar
Z13	355.545200	5118.55099	3792.84457	-	Observatorio AGP GUAM 4, Malaga
Z14	353.372300	5018.14089	3924.70014	-	Fregenal de la Sierra
Z15	359.653300	4020.47269	4934.91960	-	Southwater
Z16	358.951900	5058.92127	3871.53305	-	Canteras,Cartagena
Z17	343.488300	5622.17222	3007.00696	-	Tenerife-LCO Aqawan A #2
Z18	342.108100	5597.90744	3051.39265	-	Gran Telescopio Canarias,Roque de lo
Z19	342.110900	5598.10192	3051.16825	-	La Palma-TNG
Z20	342.121700	5597.65313	3051.94616	-	La Palma-MERCATOR
Z21	343.488300	5622.17222	3007.00696	-	Tenerife-LCO Aqawan A #1
Z22	343.489400	5622.20214	3006.84240	-	MASTER-IAC Observatory, Tenerife
Z23	342.114900	5597.95232	3051.51233	-	Nordic Optical Telescope, La Palma
Z24	343.488500	5622.17222	3007.03688	-	Tenerife Observatory-LCO B, Tenerife
Z25	343.490300	5622.17222	3006.97704	-	Artemis Observatory, Teide
Z26	343.389700	5631.95592	2984.32792	-	Las Zocas
Z27	343.699800	5611.23661	3022.78954	-	Observatorio Coralito, La Laguna
Z28	357.673300	5022.38947	3920.94523	-	Northern Skygems Observatory, Nerpio
Z29	354.119400	4794.02832	4194.11094	-	Observatorio Astronomico Sobradillo
Z30	355.525000	3741.23331	5148.53040	-	Glyn Marsh Observatory, Douglas
Z31	343.488400	5622.15726	3007.02192	-	Tenerife Observatory-LCO A, Tenerife
Z32	358.983700	4891.26694	4082.84005	-	Obs. Astrofisico de Javalambre
Z33	357.673300	5022.38947	3920.94523	-	6ROADS Observatory 2, Nerpio
Z34	359.112300	3908.52861	5023.55634	-	NNHS Drummonds Observatory
Z35	358.898500	4897.63981	4074.16337	-	OAO University Obs. Station Aras
Z36	354.945500	5135.82954	3769.50731	-	Cancelada
Z37	357.804300	4036.01591	4922.35338	-	Northolt Brch Obs. 3,Blandford Forum
Z38	351.152900	4903.01037	4065.78589	-	Picoto Observatory, Leiria
Z39	346.498900	5583.11221	3073.56305	-	Observatorio Costa Teguisse
Z40	355.512700	5117.81796	3793.84688	-	El Manzanillo Obs.,Puerto de la Torr
Z41	356.626400	4852.93997	4125.95415	-	Irydeo Obs., Camarma de Esteruelas
Z42	357.665800	4027.75811	4929.04040	-	UNNAMED OBSERVATORY Z42

Z43	357.462200	4239.81309	4749.14896	-	Landehehen
Z44	351.672500	4647.90112	4353.38780	-	Observatorio Termius, A Coruna
Z45	355.142600	5132.20927	3774.44404	-	Cosmos Observatory, Marbella
Z46	356.807000	3977.47827	4969.40191	-	Cardiff
Z47	357.292500	3817.06447	5092.87999	-	Runcorn
Z48	359.749100	3978.67505	4968.41456	-	Northolt Br. Obs. 2,Shepherd's Bush
Z49	357.406300	3775.17707	5123.78691	-	UNNAMED OBSERVATORY Z49
Z50	355.284300	4745.67829	4248.28033	-	Mazariegos
Z51	356.448600	4867.34624	4108.98975	-	Anunaki Obs., Rivas Vaciamadrid
Z52	359.339000	3854.29938	5064.96503	-	The Studios Observatory, Grantham
Z53	352.133600	5462.55129	3286.90458	-	TRAPPIST-North, Oukaimeden
Z54	358.922100	3976.26652	4970.52389	-	Greenmoor Observatory, Woodcote
Z55	354.915000	5063.66353	3865.41450	-	Uraniborg Observatory, Ecija
Z56	350.211900	3927.46770	5008.68631	-	Knocknaboola
Z57	355.425900	5122.96412	3787.04018	-	Obs. Zuben, Alhaurin de la Torre
Z58	355.630700	4860.73401	4116.97828	-	ESA Cebreros TBT Obs., Cebreros
Z59	357.715400	3822.37519	5088.93061	-	Chelford Observatory
Z60	357.850600	4669.11410	4330.75364	-	Observatorio Zaldibia
Z61	359.064000	4774.64044	4215.03969	-	Montecanal Observatory, Zaragoza
Z62	351.629100	4701.84612	4296.22645	-	Observatorio Forcarei
Z63	358.470000	4759.94993	4231.86945	-	Skybor Observatory, Borja
Z64	352.142400	4720.84505	4274.69932	-	Observatorio el Miron del Cielo
Z65	352.172500	4728.66901	4266.38167	-	Observatorio Astronomico Corgas
Z66	355.591600	4995.89569	3953.48277	-	DeSS Deimos Sky Survey,Niefla Mtn.
Z67	353.523100	3809.79401	5098.22063	-	Dunboyne Castle Observatory
Z68	353.400300	4972.64818	3981.11349	-	Obs. Torre\'aguila, Barba\'~no
Z69	353.187000	5091.21945	3829.04726	-	Observatorio Mazagon Huelva
Z70	353.357100	4704.40424	4293.20457	-	Ponferrada
Z71	353.609700	4932.03236	4031.39334	-	Obs. Norba Caesarina, Aldea Moret
Z72	353.888600	3822.39015	5088.84085	-	Cademuir Observatory, Dalkey
Z73	353.967300	5072.95355	3853.04276	-	Obs. Nuevos Horizontes, Camas
Z74	354.156200	5077.63597	3846.96908	-	Amanecer de Arrakis
Z75	354.467600	4702.98306	4295.41862	-	Observatorio Sirius, Las Lomas
Z76	354.564400	4635.31994	4366.47761	-	Observatorio Carda, Villaviciosa
Z77	354.889600	5084.72691	3837.97825	-	Osuna
Z78	358.324200	5026.17430	3914.19837	-	Arroyo Observatory, Arroyo Hurtado
Z79	357.453300	5086.92600	3838.26249	-	Calar Alto TNO Survey
Z80	359.628100	3973.93280	4972.19939	-	Northolt Branch Observatory
Z81	355.732400	5118.65570	3792.62018	-	Observatorio Estrella de Mar
Z82	355.959000	5116.12750	3796.09085	-	Bootes 2 Observatory, Algarrobo
Z83	356.288100	4849.48425	4130.15785	-	Chicharronian 3C Obs., Tres Cantos
Z84	357.451800	5086.71656	3838.53176	-	Calar Alto-Schmidt
Z85	356.750300	5109.26096	3807.31069	-	Observatorio Sierra Contraviesa
Z86	356.890000	3976.58068	4970.04518	-	St. Mellons
Z87	357.102100	3877.93584	5046.98336	-	Stanley Laver Obs., Pontesbury
Z88	357.510100	4000.11242	4951.48008	-	Fosseway Obs., Stratton-on-the-Fosse
Z89	357.828100	3823.18302	5088.28734	-	Macclesfield
Z90	357.848200	5073.17795	3853.55139	-	Albox
Z91	358.750000	4029.26905	4927.72394	-	Curdridge
Z92	358.392200	3771.88591	5126.19544	-	Almalex Observatory, Leeds
Z93	359.855900	4990.13617	3959.34700	-	Observatorio Polop
Z94	358.856500	4000.68090	4950.89665	-	Kempshott
Z95	358.890900	4897.26581	4074.55232	-	Astronomia Para Todos Remote Obs.
Z96	359.193700	4769.68875	4220.61969	-	Observatorio Cesaraugusto
Z97	359.416500	4493.83028	4511.06395	-	OPERA Observatory, Saint Palais
Z98	359.521600	4921.11172	4044.06428	-	Observatorio TRZ, Betera
Z99	359.978700	3797.97578	5106.89731	-	Clixby Observatory, Cleethorpes

Multiple matching stations found.