SLR Satellite Information

10/21/05

Satellite	Full Name	Sponsor	Primary Application	COSPAR ID	SIC	Launch Date	ILRS Tracking Status	Diameter/Size of Satellite and/or Array	Reflectors	Shape of Array	Mass (kg)
ADEOS/RIS	ADvanced Earth Observing Satellite/ Reflector In Space	NASDA	Earth Sensing	9604601	1555	17-Aug-96	Past	356 mm edge	1 corner cube	Hollow cube	3,500
ADEOS-2	ADvanced Earth Observing Satellite 2	NASDA	Earth Sensing	0205601	1556	14-Dec-02	Past	16 cm	9 corner cubes	Hemisphere array	1,200
AJISAI		NASDA	Geodynamics	8606101	1500	12-Aug-86	Current	214 cm diameter sphere	1,436 corner cubes	Sphere	685
ANDE	Atmospheric Neutral Density Experiment	NRL	Earth Sensing			2006	Future	12.7 mm	30 corner cubes	Sphere	50
ALOS	Advanced Land Observing Satellite	NASDA	Earth Sensing			2004	Future	16 cm	9 corner cubes	Hemisphere array	3,750
Apollo 11 Sea of Tranquility		NASA	Lunar Science	0000100	0100	21-Jul-69	Current	46x46 cm	100 corner cubes	Planar square array	
Apollo 14 Fra Mauro		NASA	Lunar Science	0000102	0102	5-Feb-71	Current	46x46 cm	100 corner cubes	Planar square array	
Apollo 15 Hadley Rille		NASA	Lunar Science	0000103	0103	31-Jul-71	Current	104x61 cm	300 corner cubes	Planar rectangular array	
ATEx	Advanced Tether Experiment	U.S. Navy	Tether Science			2002	Future		43 corner cubes/end mass		
BE-C	Beacon Explorer C	NASA	Earth Sensing	6503201	0317	29-Apr-65	Current		160 corner cubes	Pyramid	32
CHAMP	CHAllenging Microsatellite Payload	GFZ	Geoscience	0003902	8002	15-Jul-00	Current	4x1x1.6 m	4 corner cubes	Trapezoid	400
CryoSat		ESA	Earth Sensing	N/A	N/A	08-Oct-05	Past	16 cm	7 corner cubes	Hemisphere array	711
DIADEM-1C		CNES	Geodynamics	6701101	6703	8-Feb-67	Past	50 cm	144 corner cubes	2 flattened cones	23
DIADEM-1D		CNES	Geodynamics	6701401	6704	15-Feb-67	Past	50 cm	144 corner cubes	2 flattened cones	23
Envisat	ENVironmental SATellite	ESA	Earth Sensing	0200901	6179	01-Mar-02	Current	20 cm	9 corner cubes	Hemisphere array	8211
ERS-1	Earth Remote Sensing Satellite 1	ESA	Earth Sensing	9105001	6177	17-Jul-91	Past	20 cm diameter array	9 corner cubes	Half sphere array	2,400
ERS-2	Earth Remote Sensing Satellite 2	ESA	Earth Sensing	9502101	6178	21-Apr-95	Current	20 cm diameter array	9 corner cubes	Half sphere array	2,516
ETALON-1		Russia	Geodynamics	8900103	0525	10-Jan-89	Current	1.294 m diameter sphere	2,134 corner cubes	Sphere	1,415
ETALON-2		Russia	Geodynamics	8903903	4146	31-May-89	Current	1.294 m diameter sphere	2,134 corner cubes	Sphere	1,415
ETS-VIII	Engineering Test Satellite VIII	JAXA	Space Experiments			2006	Future	6x6 honeycomb	36 corner cubes	Square	2,800
FIZEAU	METEOR 2-21	Russia	Earth Sensing	9305501	5050	31-Aug-93	Past		3 corner cubes	Linear array	
Galileo		EU/ESA	Positioning			2007	Future	435mm x 540mm x 53mm	100 corner cubes	Trapezoid	
GSTB-V2/A	Galileo System Test Bed V2/A	EU/ESA	Positioning			2005	Future	308mm x 408mm x 48mm	76 corner cubes	Trapezoid	
GSTB-V2/B	Galileo System Test Bed V2/B	EU/ESA	Positioning			2005	Future	305mm x 305mm x 42mm	67 corner cubes	Trapezoid	
GEOS-1	Geodetic Earth Orbiting Satellite 1	NASA	Earth Sensing	6508901		6-Nov-65	Past				172.5
GEOS-2	Geodetic Earth Orbiting Satellite 2	NASA	Earth Sensing	6800201		28-Apr-68	Past				211.8
GEOS-3	Geodetic Earth Orbiting Satellite 3	NASA	Earth Sensing	7502701	1127	9-Apr-75	Current				345.9
GFO-1	Geosat Follow-On 1	U.S. Navy	Earth Sensing	9800701	8501	10-Feb-98	Current	3 m long	9 corner cubes	Hemisphere array	300
GFZ-1	GeoForschungsZentrum1	GFZ	Geodynamics	8601795	8001	19-Apr-95	Past	20 cm diameter sphere	60 corner cubes	Sphere	20.63
GLONASS-49	GLObal NAvigation Satellite System 49	Russia	Positioning	9001103	9049	8-Dec-90	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-56	GLObal NAvigation Satellite System 56	Russia	Positioning	9204701	9056	30-Jul-92	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-57	GLObal NAvigation Satellite System 57	Russia	Positioning	9204702	9057	30-Jul-92	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-62	GLObal NAvigation Satellite System 63	Russia	Positioning	9402101	9062	11-Apr-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-63	GLObal NAvigation Satellite System 63	Russia	Positioning	9402102	9063	11-Apr-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-64	GLObal NAvigation Satellite System 65	Russia	Positioning	9402103	9064	11-Apr-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-65	GLObal NAvigation Satellite System 65	Russia	Positioning	9405001	9065	11-Aug-94	Past	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-66	GLObal NAvigation Satellite System 66	Russia	Positioning	9405002	9066	11-Aug-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-67	GLObal NAvigation Satellite System 67	Russia	Positioning	9405003	9067	11-Aug-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-68	GLObal NAvigation Satellite System 68	Russia	Positioning	9407601	9068	15-Dec-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-69	GLObal NAvigation Satellite System 69	Russia	Positioning	9407602	9069	15-Dec-94	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-70	GLObal NAvigation Satellite System 70	Russia	Positioning	9407603	9070	15-Dec-94	Past	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-71	GLObal NAvigation Satellite System 71	Russia	Positioning	9500901	9071	7-Mar-95	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-72	GLObal NAvigation Satellite System 72	Russia	Positioning	9500902	9072	7-Mar-95	Past	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-74	GLObal NAvigation Satellite System 74	Russia	Positioning	9503701	9074	24-Jul-95	Past	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-75	GLObal NAvigation Satellite System 75	Russia	Positioning	9503702	9075	24-Jul-95	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-76	GLObal NAvigation Satellite System 76	Russia	Positioning	9503703	9076	24-Jul-95	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-77	GLObal NAvigation Satellite System 77	Russia	Positioning	9506801	9077	14-Dec-95	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-78	GLObal NAvigation Satellite System 78	Russia	Positioning	9506802	9078	14-Dec-95	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-79	GLObal NAvigation Satellite System 79	Russia	Positioning	9506803	9079	14-Dec-95	Past	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-80	GLObal NAvigation Satellite System 80	Russia	Positioning	9807701	9080	30-Dec-98	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-81	GLObal NAvigation Satellite System 81	Russia	Positioning	9807702	9081	30-Dec-98	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-82	GLObal NAvigation Satellite System 82	Russia	Positioning	9807703	9082	30-Dec-98	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-83	GLObal NAvigation Satellite System 83	Russia	Positioning	0006301	9083	13-Oct-00	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-84	GLObal NAvigation Satellite System 84	Russia	Positioning	0006302	9084	13-Oct-00	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-85	GLObal NAvigation Satellite System 85	Russia	Positioning	0006303	9085	13-Oct-00	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-86	GLObal NAvigation Satellite System 86	Russia	Positioning	0105303	9086	1-Dec-01	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-87	GLObal NAvigation Satellite System 87	Russia	Positioning	0105302	9087	1-Dec-01	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-88	GLObal NAvigation Satellite System 88	Russia	Positioning	0105301	9088	1-Dec-01	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-89	GLObal NAvigation Satellite System 89	Russia	Positioning	0206001	9089	25-Dec-02	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-90	GLObal NAvigation Satellite System 90	Russia	Positioning	0206003	9090	25-Dec-02	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-91	GLObal NAvigation Satellite System 91	Russia	Positioning	0206002	9091	25-Dec-02	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-92	GLObal NAvigation Satellite System 92	Russia	Positioning	0305601	9092	10-Dec-03	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-93	GLObal NAvigation Satellite System 93	Russia	Positioning	0305602	9093	10-Dec-03	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-94	GLObal NAvigation Satellite System 94	Russia	Positioning	0305603	9094	10-Dec-03	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-95	GLObal NAvigation Satellite System 95	Russia	Positioning	0405302	9095	26-Dec-04	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GLONASS-96	GLObal NAvigation Satellite System 96	Russia	Positioning	0405303	9096	26-Dec-04	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400

SLR Satellite Information

10/21/05

Satellite	Full Name	Sponsor	Primary Application	COSPAR ID	SIC	Launch Date	ILRS Tracking Status	Diameter/Size of Satellite and/or Array	Reflectors	Shape of Array	Mass (kg)
GLONASS-97	GLObal NAvigation Satellite System 97	Russia	Positioning	0405301	9097	26-Dec-04	Current	1.2x1.2 m array	396 corner cubes	Planar square array	1,400
GOCE	Gravity Field and Steady-State Ocean Circulation	ESA	Earth Sensing			2006	Future				1000
GP-B	Gravity Probe B	NASA, Stanford	Geoscience	0401401	8603	20-Apr-04	Current		9 corner cubes	Hemisphere array	3334
GPS-35	Global Positioning System 35	U.S. DOD	Positioning	9305401	3535	30-Aug-93	Current	239x194 mm array	32 corner cubes	Planar rectangular array	930
GPS-36	Global Positioning System 36	U.S. DOD	Positioning	9401601	3636	10-Mar-94	Current	239x194 mm array	32 corner cubes	Planar rectangular array	930
GRACE	Gravity Recovery and Climate Experiment	NASA, GFZ	Earth Sensing	0201201 (-A) 0201202 (-B)	8003 8004	16-Mar-02	Current		4 corner cubes	Trapezoid	
H2A-LRE	Laser Retroreflector Experiment	NASDA	Satellite Testing	0103801	1577	24-Aug-01	Past	470 mm	126 corner cubes	Sphere	86.1
ICESat	Ice, Cloud, and land Elevation Satellite	NASA	Earth Sensing	0300201	8201	14-Jan-03	Current	16 cm	9 corner cubes	Hemisphere array	970
IRS-P5	Indian Remote Sensing Satellite P5	ISRO	Earth Sensing			2001	Future				
Jason-1	TOPEX Follow-On	NASA, CNES	Earth Sensing	0105501	4378	07-Dec-01	Current				
LAGEOS-1	LAser GEOdynamics Satellite 1	NASA	Geodynamics	7603901	1155	4-May-76	Current	60 cm (24 in) diameter sphere	426 corner cubes	Sphere	411
LAGEOS-2	LAser GEOdynamics Satellite 2	NASA, ASI	Geodynamics	9207002	5982	22-Oct-92	Current	60 cm (24 in) diameter sphere	426 corner cubes	Sphere	405
Larets		IPIE	Geodynamics	0304206	5557	27-Sep-03	Current	215 mm	60 corner cubes	Sphere	23.28
Luna 17 Sea of Rains		Russia, France	Lunar Science	0000101	0101	11-Nov-70	Current		14 corner cubes	Planar rectangular array	
Luna 21 Sea of Serenity		Russia, France	Lunar Science	0000104	0104	15-Jan-73	Current		14 corner cubes	Planar rectangular array	
Meteor-3		Russia	Earth Sensing	9400301	0307	24-Jan-94	Past	28 cm	24 corner cubes	Annulus array	
Meteor-3M		Russia	Earth Sensing	0105601	5555	10-Dec-01	Current				76
MSTI-2	Miniature Sensor Technology Integration 2	U.S. Air Force	Satellite Testing	9402801	9009	8-May-94	Past	18 cm	9 corner cubes	Hemisphere array	170
NPOESS	National Polar-orbiting Operational Environmental Satellite	NOAA, NASA, DoD	Earth Sensing			2013	Future				550
OICETS	Optical Inter-orbit Communications Engineering Satellite	JAXA	Technology	0503101		23-Aug-05	Current	16 cm	6 corner cubes	Annulus array	550
Reflector		Russia	Technology	0105604	5556	10-Dec-01	Past		32 corner cubes		8
RESURS-01-3		Russia	Earth Sensing	9407401	1333	4-Nov-94	Past		2 corner cubes	Linear array	1,950
SEASAT		NASA	Earth Sensing	7806401		28-Jun-78	Past				2213.6
Starlette		CNES	Geodynamics	7501001	1134	6-Feb-75	Current	24 cm diameter sphere	60 corner cubes	Sphere	47.25
STARSHINE-2	Student-Tracked Atmospheric Research Satellite for Heuristic International Networking Experiment-2	NRL, NASA, U. of Utah	Geoscience			05-Dec-01	Past	18.7 in diameter sphere	20 corner cubes	Sphere	150 lbs
STARSHINE-3	Student-Tracked Atmospheric Research Satellite for Heuristic International Networking Experiment-3	NRL, NASA, U. of Utah	Geoscience	0104301	4903	29-Sep-01	Past	37 in diameter sphere	31 corner cubes	Sphere	90
STARSHINE-4	Student-Tracked Atmospheric Research Satellite for Heuristic International Networking Experiment-4	NRL, NASA, U. of Utah	Geoscience			Jan-03	Future		31 corner cubes	Sphere	
STARSHINE-5	Student-Tracked Atmospheric Research Satellite for Heuristic International Networking Experiment-5	NRL, NASA, U. of Utah	Geoscience			Jan-03	Future	4 in diameter sphere	31 corner cubes	Sphere	
Stella		CNES	Geodynamics	9306102	0643	26-Sep-93	Current	24 cm diameter sphere	60 corner cubes	Sphere	48
SUNSAT	Stellenbosch UNiversity SATellite	South Africa	Earth Sensing	9900803	2301	23-Feb-99	Past	45x45x40 cm	8 corner cubes	Ring	60
TiPS	Tether Physics and Survivability Mission	U.S. Navy	Tether Science	9602901 (tether) 9602902 (Ralph) 9602903 (Norton)	6000 6001 6002	20-Jun-96	Past		18 corner cubes/end mass		54
TOPEX/Poseidon	TOPography EXperiment	NASA, CNES	Earth Sensing	9205201	4377	10-Aug-92	Current	150 cm diameter array	192 corner cubes	Annulus array	2,400
VCL	Vegitation Canopy Lidar	NASA	Earth Sensing			2002	Future	16 cm	9 corner cubes	Hemisphere array	
WESTPAC-1	WESTern PACific Laser Satellite 1	WPLTN	Geodynamics	9804301	8801	10-Jul-98	Past	24.5 cm	60 corner cubes	Sphere	23.5
ZEYA		Russia	Satellite Testing	9701001	8888	4-Mar-97	Past		20 corner cubes	Box array	

SLR Satellite Information

10/21/05

Satellite	Orbit	Inclination	Eccentricity	Perigee Height (km)	Apogee Height (km)	Period (min)	Npt. Bin Size (sec)	Npt. Fmt Ind.	Other Instruments	Link ?	Photo ?
ADEOS/RIS	Circular	98.6°	0.000	815	815	101	30	5	radimoeter, ozone mapping spectrometer	Y	Y
ADEOS-2	Circular	98.62°	0.000	803		101			radiometer, spectrometer, GPS	Y	Y
AJISAI	Circular	50°	0.001	1,485	1,505	116	30	5		Y	Y
ANDE	Circular	51.6°	0.0007	400			5	1		Y	Y
ALOS	Circular	98°	0.001	720		99	15	3	radiometer, SAR	Y	Y
Apollo 11 Sea of Tranquility	Elliptical	5.145°	0.0549	356,400	406,700	29.53 days	1-3600 (600)	2		Y	Y
Apollo 14 Fra Mauro	Elliptical	5.145°	0.0549	356,400	406,700	29.53 days	1-3600 (600)	2		Y	Y
Apollo 15 Hadley Rille	Elliptical	5.145°	0.0549	356,400	406,700	29.53 days	1-3600 (600)	2		Y	Y
ATEx	Circular	85°	0.000	787		3 days 100.6 min				Y	Y
BE-C	Elliptical	41.2°	0.025	927	1,320		15	3	electrostatic probe, radiobeacon, doppler		Y
CHAMP	Circular	87.27°	0.00396	474		94	5	1	accelerometer, magnetometer, GPS receiver	Y	Y
CryoSat	Circular	92°	0.0	720		100	15	3	DORIS	Y	Y
DIADEM-1C	Elliptical	39.9°	0.037	545	1,085	101	15	3	doppler		Y
DIADEM-1D	Elliptical	39.5°	0.076	585	1,735	108	15	3	doppler		Y
Envisat	Circular	98.5°	0.001	800		100.59	15	3	spectrometer, altimeter, SAR, radiometer, ozone mapper, DORIS	Y	Y
ERS-1	Circular	98.5°	0.001	780		100	15	3	SAR, altimeter, radiometer	Y	Y
ERS-2	Circular	98.6°	0.0018	800	800	101	15	3	SAR, altimeter, radiometer, PRARE	Y	Y
ETALON-1	Circular	65.3°	0.00061	19,105	19,170	676	300	9			Y
ETALON-2	Circular	65.2°	0.00066	19,135	19,135	675	300	9			Y
ETS-VIII	Geostationary			36,000		1,440	30	5	GPS receiver	Y	Y
FIZEAU	Circular	82.6°	0.002	950	985	104	15	3			
Galileo	Near-circular	56°	0.002	29,601			300	9		Y	Y
GSTB-V2/A	Near-circular	56°	0.002	29,601			300	9		Y	Y
GSTB-V2/B	Near-circular	56°	0.002	29,601			300	9		Y	Y
GEOS-1	Elliptical	59.4°	0.073	1,108	2,277	120					
GEOS-2	Elliptical	105.8°	0.033	1,077	1,569	112					
GEOS-3	Elliptical	115.0°	0.001	841	856	102	30	5	radar a贈timeter, Doppler beacon		Y
GFO-1	Circular	107.9846°	0.001	800	800	100	15	3	altimeter, radiometer, GPS receiver	Y	Y
GFZ-1	Circular	51.6°	0.000	385	385	92	5	1		Y	Y
GLONASS-49	Circular	65.3°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-56	Circular	64.6°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-57	Circular	64.7°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-62	Circular	64.5°	0.003	19,065	19,215	676	300	9		Y	Y
GLONASS-63	Circular	64°	0.003	19,065	19,215	676	300	9		Y	Y
GLONASS-64	Circular	64.8°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-65	Circular	64.8°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-66	Circular	64.7°	0.001	19,105	19,180	676	300	9		Y	Y
GLONASS-67	Circular	64.8°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-68	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-69	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-70	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-71	Circular	64.8°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-72	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-74	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-75	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-76	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-77	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-78	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-79	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-80	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-81	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-82	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-83	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-84	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-85	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-86	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-87	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-88	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-89	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-90	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-91	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-92	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-93	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-94	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-95	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
GLONASS-96	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y

SLR Satellite Information

10/21/05

Satellite	Orbit	Inclination	Eccentricity	Perigee Height (km)	Apogee Height (km)	Period (min)	Npt. Bin Size (sec)	Npt. Fmt Ind.	Other Instruments	Link ?	Photo ?
GLONASS-97	Circular	64°	0.000	19,140	19,140	676	300	9		Y	Y
~~GOCE~~	Circular	96.5°		250					GPS receiver, gravimeter	Y	Y
GP-B	Circular	90°	0.000	650			15	3	GPS receiver, gyroscopes	Y	Y
GPS-35	Circular	54.2°	0.000	20,195	20,195	718	300	9		Y	Y
GPS-36	Circular	55.0°	0.006	20,030	20,355	718	300	9		Y	Y
GRACE	Circular			450	450		5	1	GPS	Y	Y
H2A-LRE	Geostationary	28.49°		251	36,198.30		15	3		Y	Y
ICESat	Circular	94°	0.001	600		101	30	5	GLAS, star tracker, GPS receiver	Y	Y
IRS-P5	Circular			619	619				high resolution panchromatic camera		
Jason-1	Circular	66°	0.000	1,336		112	15	3	microwave radiometer, altimeter, GPS receiver, DORIS	Y	Y
LAGEOS-1	Circular	109.84°	0.0045	5,850	5,960	225	120	7			Y
LAGEOS-2	Circular	52.64°	0.0135	5,625	5,960	222	120	7			Y
Larets	Circular	98.204°	0.0002	691			30	5			Y
Luna 17 Sea of Rains	Elliptical	5.145°	0.0549	356,400	406,700	29.53 days	1-3600 (600)	2			
Luna 21 Sea of Serenity	Elliptical	5.145°	0.0549	356,400	406,700	29.53 days	1-3600 (600)	2			
Meteor-3	Circular	82.5°	0.001	1,200		109	30	5	ozone mapper, PRARE	Y	Y
Meteor-3M	Circular	99.64°		1,020			30	5	ozone mapper, GPS/GLONASS		Y
MSTI-2	Circular	97.13°	0.000	432		94	15	3		Y	Y
NPOESS	Polar	98.7°	0.0011	833			30	5	GPS	Y	Y
OICETS	Polar	97.83°	0.0000	610			5	1		Y	Y
Reflector	Circular	99.64°	0.0008	1,019			30	5			
RESURS-01-3	Circular	97.9°	0.000	675	675	98	15	3	multispectral scanner	Y	Y
SEASAT	Elliptical	108°	0.001	793	805	100			radar altimeter, SAR, microwave radiometer, scatterometer, Doppler TRANET and USB beacons	Y	Y
Starlette	Circular	49.83°	0.0206	815	1,115	104	30	5			Y
STARSHINE-2	Circular	39°		360			5	1	858 student ground and polished mirrors	Y	Y
STARSHINE-3	Circular	67.048°	0.000066	470			5	1	1000 student ground and polished mirrors	Y	Y
STARSHINE-4	Circular						5	1	1000 student ground and polished mirrors	Y	N
STARSHINE-5	Circular	67.048°					5	1		Y	Y
Stella	Circular	98.6°	0.000	815	815	101	30	5			Y
SUNSAT	Elliptical	96.5°	0.015	400	830	100	15	3	magnetometer, radio communications, CCD cameras, GPS receiver	Y	Y
TiPS	Circular	63.4°	0.001	1,025	1,045	106	30	5		Y	Y
TOPEX/Poseidon	Circular	66.0°	0.000	1,350	1,350	112	15	3	microwave radiometer, altimeter, GPS receiver, DORIS	Y	Y
VCL	Circular	65°		410					Laser altimeter	Y	Y
WESTPAC-1	Ciruclar	98°	0.0	835	835	101	15	3		Y	Y
ZEYA	Circular	97.27°	0.000	471	499	94	5	1	navigation radio equipment, GPS/GLONASS receiver		