

## List of Satellite Missions (alphabetical)

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Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
3D Winds Three Dimensional Tropospheric Winds from Space Based Lidar  NASA	Considered	01 Jan 30	01 Jan 33	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Tropospheric winds for weather forecasting and pollution transport	HDWL (3D Winds)	Type: Sun-synchronous Altitude: 400 km Period: Inclination: 97.03 deg Repeat cycle: 12 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://decadal.gsfc.nasa.gov/3dwinds.html">http://decadal.gsfc.nasa.gov/3dwinds.html</a>
ACE Aerosol Clouds and Ecosystem Mission  NASA	Considered	01 Jan 20	01 Jan 23	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Aerosol and cloud profiles for climate and water cycle; ocean color for open ocean biogeochemistry	Cloud radar (ACE), Next Gen APS (ACE), Multi-band UV/VIS Spectrometer (ACE), HSRL (ACE)	Type: Sun-synchronous Altitude: 650 km Period: Inclination: 98.2 deg Repeat cycle: LST: 13:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dsm.gsfc.nasa.gov/ace/science.html">http://dsm.gsfc.nasa.gov/ace/science.html</a>
ACRIMSAT Active Cavity Radiometer Irradiance Monitor  NASA	Currently being flown	20 Dec 99	20 Sep 11	5-year nominal mission life, currently in extended operations. Will sustain long-term solar luminosity database by providing measurements of total solar irradiance and the solar constant	ACRIM III	Type: Sun-synchronous Altitude: 716 km Period: 90 mins Inclination: 98.13 deg Repeat cycle: LST: 10:50 Longitude (if geo): Asc/desc: Descending URL: <a href="http://acrim.jpl.nasa.gov">http://acrim.jpl.nasa.gov</a>
ADM-Aeolus Atmospheric Dynamics Mission (Earth Explorer Core Mission)  ESA	Approved	01 Nov 11	01 Nov 14	Will provide wind profile measurements for global 3D wind field products used for study of atmospheric dynamics, including global transport of energy, water, aerosols, and chemicals	ALADIN	Type: Sun-synchronous Altitude: 408 km Period: 92.5 mins Inclination: 97.01 deg Repeat cycle: 7 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/export/esaLP/aeolus.html">www.esa.int/export/esaLP/aeolus.html</a>
AISSat-1 Automatic Identification System Satellite-1  NSC	Approved	01 Oct 09	01 Oct 12	Demonstrate and extend access to AIS (Automatic Identification System) signals beyond the land-based AIS system operated by the Norwegian Coastal Administration today. Observe ship traffic in the High North.	SDR	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: Descending URL:
ALOS Advanced Land Observing Satellite  JAXA	Currently being flown	24 Jan 06	01 Sep 10	Cartography, digital terrain models, environmental monitoring, disaster monitoring, civil planning, agriculture and forestry, Earth resources, land surface	AVNIR-2, PALSAR, PRISM	Type: Sun-synchronous Altitude: 692 km Period: 98.7 mins Inclination: 98.16 deg Repeat cycle: 46 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.jaxa.jp/projects/sat/alos/index_e.html">www.jaxa.jp/projects/sat/alos/index_e.html</a>
ALOS-2 Advanced Land Observing Satellite-2  JAXA	Planned	01 Jan 12	01 Jan 17	environmental monitoring, disaster monitoring, civil planning, agriculture and forestry, Earth resources, land surface	PALSAR	Type: Sun-synchronous Altitude: 628 km Period: 100 mins Inclination: 97.9 deg Repeat cycle: 14 days LST: 12:00 Longitude (if geo): Asc/desc: Descending

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ALOS-3 Advanced Land Observing Satellite-3  JAXA	Planned	01 Jan 13	01 Jan 18	Cartography, digital terrain models, environmental monitoring, disaster monitoring, civil planning, agriculture and forestry, Earth resources, land surface	Optical or HyperSpectral (TBD)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Descending URL:
AMAZÔNIA-1 Remote Sensing Satellite 1  INPE	Approved	01 Dec 11	01 Dec 15	Earth resources, environmental monitoring, land surface	OBA	Type: Inclined, non-sunsynchronous Altitude: 905 km Period: 103.2 mins Inclination: 0 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.inpe.br/programas/meceb/default.htm">www.inpe.br/programas/meceb/default.htm</a>
Aqua Aqua (formerly EOS PM-1)  NASA / JAXA / BNIS / INPE	Currently being flown	04 May 02	30 Sep 11	6-year nominal mission life, currently in extended operations. Atmospheric dynamics/water and energy cycles, cloud formation, precipitation and radiative properties, air/sea fluxes of energy and moisture, sea ice extent and heat exchange with the atmosphere. Option of 705 km or 438 km orbit altitude.	AIRS, MODIS, CERES, HSB, AMSR-E, AMSU-A	Type: Sun-synchronous Altitude: 705 km Period: 98.8 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.gsfc.nasa.gov">www.gsfc.nasa.gov</a>
ASCENDS Active Sensing of CO <sub>2</sub> Emissions over Nights, Days, and Seasons  NASA	Considered	01 Jan 20	01 Jan 23	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Day/night, all-latitude, all-season CO <sub>2</sub> column integrals for climate emissions	CO <sub>2</sub> LIDAR (ASCENDS)	Type: Sun-synchronous Altitude: 450 km Period: 97.3 mins Inclination: Repeat cycle: LST: 10:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://cce.nasa.gov/ascends/index.htm">http://cce.nasa.gov/ascends/index.htm</a>
Aura Aura (formerly EOS Chemistry)  NASA / NSO / FMI / BNSC	Currently being flown	15 Jul 04	30 Sep 11	5-year nominal mission life, currently in extended operations. Chemistry and dynamics of Earth's atmosphere from the ground through the mesosphere.	MLS (EOS-Aura), TES, HiRDLS, OMI	Type: Sun-synchronous Altitude: 705 km Period: 98.8 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 13:38 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://aura.gsfc.nasa.gov">http://aura.gsfc.nasa.gov</a>
BJ-1 Beijing-1 Small Satellite  NRSCC	Currently being flown	27 Oct 05	27 Oct 10	Earth Observation	MSI (BJ-1), PAN (BJ-1)	Type: Sun-synchronous Altitude: 686 km Period: Inclination: 98.17 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://www.blmit.com.cn">www.blmit.com.cn</a>

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<b>CALIPSO</b> Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations  NASA / CNES	Currently being flown	28 Apr 06	30 Sep 11	3-year nominal mission life, currently in extended operations. Measurements of aerosol & cloud properties for climate predictions, using a 3 channel lidar and passive instruments in formation with Aqua and CloudSat for coincident observations of radiative fluxes and atmospheric state.	WFC, IIR, CALIOP	Type: Sun-synchronous Altitude: 705 km Period: 98.8 mins Inclination: 98.2 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www-calipso.larc.nasa.gov">www-calipso.larc.nasa.gov</a>
<b>CARTOSAT-1</b> Cartography Satellite - 1 (IRS P5)  ISRO	Currently being flown	05 May 05	31 Dec 09	High precision large-scale cartographic mapping of 1:10000 scale and thematic applications (with merged XS data) at 1:4000 scales	PAN (Cartosat-1)	Type: Sun-synchronous Altitude: 618 km Period: 97 mins Inclination: 97.87 deg Repeat cycle: 5 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
<b>CARTOSAT-2</b> Cartography Satellite - 2  ISRO	Currently being flown	10 Jan 07	01 Jan 11	High precision large-scale cartographic mapping of 1:10000 scale and thematic applications (with merged XS data) at 1:4000 scales	PAN (Cartosat-2)	Type: Sun-synchronous Altitude: 635 km Period: 97.4 mins Inclination: 97.87 deg Repeat cycle: 5 days LST: 9:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
<b>CARTOSAT-3</b> Cartography Satellite - 3  ISRO	Planned	01 Jan 11	01 Jan 15	Suitable for cadastral and infrastructure mapping and analysis	PAN (Cartosat-3)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
<b>CBERS-2B</b> China Brazil Earth Resources Satellite - 2B  CRESDA / INPE	Currently being flown	19 Sep 07	20 Oct 10	Earth resources, environmental monitoring, land surface (joint with INPE)	WFI, CCD, DCS (CAST), HRC	Type: Sun-synchronous Altitude: 778 km Period: Inclination: 98.5 deg Repeat cycle: 26 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.cast.cn/">www.cast.cn/</a> & <a href="http://www.cbers.inpe.br/en/programas/cbers1-2.htm">www.cbers.inpe.br/en/programas/cbers1-2.htm</a>
<b>CBERS-3</b> China Brazil Earth Resources Satellite - 3  CRESDA / INPE	Approved	20 Oct 10	21 Oct 13	Earth resources, environmental monitoring, land surface (joint with INPE)	WFI-2, MUX, DCS (CAST), IRS, PAN	Type: Sun-synchronous Altitude: 778 km Period: 100.26 mins Inclination: 98.5 deg Repeat cycle: 26 days LST: 11:50 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.cast.cn/">www.cast.cn/</a> & <a href="http://www.cbers.inpe.br/en/programas/cbers3-4.htm">www.cbers.inpe.br/en/programas/cbers3-4.htm</a>

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<b>CBERS-4</b> China Brazil Earth Resources Satellite - 4  <b>CRESDA / INPE</b>	Approved	20 Oct 13	20 Oct 16	Earth resources, environmental monitoring, land surface (joint with INPE)	WFI-2, MUX, IRS, PAN	Type: Sun-synchronous Altitude: 778 km Period: 100.26 mins Inclination: 98.5 deg Repeat cycle: 26 days LST: 12:50 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.cast.cn/">www.cast.cn/</a> & <a href="http://www.cbers.inpe.br/en/programas/cbers3-4.htm">www.cbers.inpe.br/en/programas/cbers3-4.htm</a>
<b>CHAMP</b> Challenging Mini-Satellite Payload for Geophysical Research and Application  <b>DLR</b>	Currently being flown	15 Jul 00	31 May 10	Gravity field, precise geoid, magnetic field, atmospheric physics	CHAMP Gravity Package (Accelerometer+GPS), CHAMP Magnetometry Package (1 Scalar + 2 Vector Magnetometer), CHAMP GPS Sounder	Type: Inclined, non-sunsynchronous Altitude: 315 km Period: Inclination: 87 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://op.gfz-potsdam.de/champ/index_CHAMP.html">http://op.gfz-potsdam.de/champ/index_CHAMP.html</a>
<b>CHINOOK</b>  <b>CSA</b>	Considered	01 Dec 10	01 Dec 15	Stratospheric wind measurements and ozone flux	SWIFT	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL:
<b>CLARREO</b> Climate Absolute Radiance and Refractivity Observatory  <b>NASA / NOAA</b>	Considered	01 Jan 17	01 Jan 20	Phase-1 DS Mission (follows SMAP and ICESAT-2), 3-year nominal mission. Solar radiation: spectrally resolved forcing and response of the climate system	Occultation GNSS Receiver (CLARREO), IR spectrometer (CLARREO), Solar reflected spectrometer (CLARREO)	Type: Inclined, non-sunsynchronous Altitude: 650 km Period: Inclination: 90 deg Repeat cycle: 365 days LST: Longitude (if geo): Asc/desc: URL: <a href="http://nasascience.nasa.gov/missions/clarreo">http://nasascience.nasa.gov/missions/clarreo</a>
<b>CloudSat</b>  <b>NASA / CSA</b>	Currently being flown	28 Apr 06	30 Sep 11	3-year nominal mission life, currently in extended operations. CloudSat will use advanced radar to "slice" through clouds to see their vertical structure, providing a completely new observational capability from space. One of first satellites to study clouds on global basis. Will fly in formation with Aqua and CALIPSO.	CPR (CloudSat)	Type: Sun-synchronous Altitude: 705 km Period: 98.8 mins Inclination: 98.2 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://cloudsat.atmos.colostate.edu">http://cloudsat.atmos.colostate.edu</a>
<b>COMS</b> Communication, Oceanographic, Meteorological Satellite  <b>KARI</b>	Approved	30 Nov 09	01 Nov 16	Korea's geostationary meteorological satellite series	GOCI, MI	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL:

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<b>CORIOLIS</b>  DoD (USA) / NASA	Currently being flown	06 Jan 03	01 Jan 09	Validating space borne multi-channel polarimetric radiometry for wind vector measurements	WindSat	Type: Sun-synchronous Altitude: 840 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.nrl.navy.mil/WindSat">www.nrl.navy.mil/WindSat</a>
<b>COSMIC-1/ FORMOSAT-3 FM1</b>  Constellation Observing System for Meteorology, Ionosphere and Climate-1  NSPO / NOAA / UCAR	Currently being flown	14 Apr 06	15 Mar 11	Meteorology, Ionosphere and climate	GOX	Type: Inclined, non-sunsynchronous Altitude: 800 km Period: 100 mins Inclination: 72 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cosmic.ucar.edu">www.cosmic.ucar.edu</a>
<b>COSMIC-2/ FORMOSAT-3 FM2</b>  Constellation Observing System for Meteorology, Ionosphere and Climate-2  NSPO / NOAA / UCAR	Currently being flown	14 Apr 06	15 Mar 11	Meteorology, Ionosphere and climate	GOX	Type: Inclined, non-sunsynchronous Altitude: 800 km Period: 100 mins Inclination: 72 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cosmic.ucar.edu">www.cosmic.ucar.edu</a>
<b>COSMIC-3/ FORMOSAT-3 FM3</b>  Constellation Observing System for Meteorology, Ionosphere and Climate-3  NSPO / NOAA / UCAR	Currently being flown	14 Apr 06	15 Mar 11	Meteorology, Ionosphere and climate	GOX	Type: Inclined, non-sunsynchronous Altitude: 711 km Period: 100 mins Inclination: 72 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cosmic.ucar.edu">www.cosmic.ucar.edu</a>
<b>COSMIC-4/ FORMOSAT-3 FM4</b>  Constellation Observing System for Meteorology, Ionosphere and Climate-4  NSPO / NOAA / UCAR	Currently being flown	14 Apr 06	15 Mar 11	Meteorology, Ionosphere and climate	GOX	Type: Inclined, non-sunsynchronous Altitude: 800 km Period: 100 mins Inclination: 72 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cosmic.ucar.edu">www.cosmic.ucar.edu</a>
<b>COSMIC-5/ FORMOSAT-3 FM5</b>  Constellation Observing System for Meteorology, Ionosphere and Climate-5  NSPO / NOAA / UCAR	Currently being flown	14 Apr 06	15 Mar 11	Meteorology, Ionosphere and climate	GOX	Type: Inclined, non-sunsynchronous Altitude: 800 km Period: 100 mins Inclination: 72 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cosmic.ucar.edu">www.cosmic.ucar.edu</a>

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<b>COSMIC-6/ FORMOSAT-3 FM6 Constellation Observing System for Meteorology, Ionosphere and Climate-6</b>  NSPO / NOAA / UCAR	Currently being flown	14 Apr 06	15 Mar 11	Meteorology, Ionosphere and climate	GOX	Type: Inclined, non-sunsynchronous Altitude: 800 km Period: 100 mins Inclination: 72 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cosmic.ucar.edu">www.cosmic.ucar.edu</a>
<b>COSMO-SkyMed 1 COntellation of small Satellites for Mediterranean basin Observation 1</b>  ASI / MiD (Italy)	Currently being flown	08 Jun 07	08 Jun 14	Environmental monitoring, surveillance and risk management applications, environmental resources management, maritime management, earth topographic mapping, law enforcement, informative / science applications	SAR 2000	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra">www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra</a>
<b>COSMO-SkyMed 2 COntellation of small Satellites for Mediterranean basin Observation 2</b>  ASI / MiD (Italy)	Currently being flown	09 Dec 07	09 Dec 14	Environmental monitoring, surveillance and risk management applications, environmental resources management, maritime management, earth topographic mapping, law enforcement, informative / science applications	SAR 2000	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra">www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra</a>
<b>COSMO-SkyMed 3 COntellation of small Satellites for Mediterranean basin Observation 3</b>  ASI / MiD (Italy)	Currently being flown	27 Oct 08	27 Oct 15	Environmental monitoring, surveillance and risk management applications, environmental resources management, maritime management, earth topographic mapping, law enforcement, informative / science applications	SAR 2000	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra">www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra</a>
<b>COSMO-SkyMed 4 COntellation of small Satellites for Mediterranean basin Observation 4</b>  ASI / MiD (Italy)	Approved	08 Sep 10	08 Sep 16	Environmental monitoring, surveillance and risk management applications, environmental resources management, maritime management, earth topographic mapping, law enforcement, informative / science applications	SAR 2000	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra">www.asi.it/SiteEN/ContentSite.aspx?Area=Osservare+la+Terra</a>
<b>CryoSat-2 CryoSat-2 (Earth Explorer Opportunity Mission)</b>  ESA	Approved	28 Feb 10	28 Feb 13	To determine fluctuations in the mass of the Earth's major land and marine ice fields.	DORIS-NG, SIRAL, Laser Reflectors (ESA)	Type: Inclined, non-sunsynchronous Altitude: 717 km Period: 100 mins Inclination: 92 deg Repeat cycle: 369 days LST: 0.25 degree nodal regression per day Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.esa.int/export/esaLP/cryosat.html">www.esa.int/export/esaLP/cryosat.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
CSG-1 COSMO-SkyMed Seconda Generazione - 1  ASI / MiD (Italy)	Approved	30 Apr 14	30 Oct 21	Dual System for environment and resources, surveillance and risk management	CSG-SAR	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.asi.it/it/press_room/comunicati_stampa/difesa_e_asi_insieme_per_il_nuovo_cosmoskymed">www.asi.it/it/press_room/comunicati_stampa/difesa_e_asi_insieme_per_il_nuovo_cosmoskymed</a>
CSG-2 COSMO-SkyMed Seconda Generazione - 2  ASI / MiD (Italy)	Approved	30 Apr 15	30 Oct 22	Dual System for environment and resources, surveillance and risk management	CSG-SAR	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.asi.it/it/press_room/comunicati_stampa/difesa_e_asi_insieme_per_il_nuovo_cosmoskymed">www.asi.it/it/press_room/comunicati_stampa/difesa_e_asi_insieme_per_il_nuovo_cosmoskymed</a>
DEMETER Detection of Electro-Magnetic Emissions Transmitted from Earthquake Regions  CNES	Currently being flown	24 Jun 04	31 Dec 09	Micro-satellite to study; ionospheric disturbances related to seismic activity, ionospheric disturbances related to human activity, pre and post-seismic effects in the ionosphere, global information on the Earth's electromagnetic environment	ICE, IMSC, IAP, ISL, IDP	Type: Sun-synchronous Altitude: 800 km Period: Inclination: Repeat cycle: LST: 10:30 Longitude (if geo): Asc/desc: TBD URL: <a href="http://smc.cnes.fr/DEMETER/index.htm">http://smc.cnes.fr/DEMETER/index.htm</a>
DESdynI Deformation, Ecosystem, Structure, and Dynamics of Ice  NASA	Considered	01 Jan 17	01 Jan 20	Phase-1 DS Mission (follows SMAP and ICESAT-2), 3-year nominal mission. Surface and ice sheet deformation for understanding natural hazards and climate; vegetation structure for ecosystem health	Multi-beam LIDAR (Desdyni), L-band INSAR (DESdynI)	Type: Sun-synchronous Altitude: 400 km Period: Inclination: 97 deg Repeat cycle: 8 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://desdyni.jpl.nasa.gov">http://desdyni.jpl.nasa.gov</a>
Diademe 1&2  CNES	Currently being flown	15 Feb 67	31 Dec 50	Geodetic measurements using satellite laser ranging	RRA	Type: Inclined, non-sunsynchronous Altitude: 1200 km Period: 108 mins Inclination: 40 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://galileo.crl.go.jp/ilrs/diademe.html">http://galileo.crl.go.jp/ilrs/diademe.html</a>
DMSP F-14 Defense Meteorological Satellite Program F-14  NOAA	Currently being flown	04 Apr 97	01 May 10	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide atmospheric, oceanographic, solar-geophysical, and cloud cover data on a daily basis.	OLS, SSM/I, SSM/T-1, SSM/T-2, SSB/X-2, SSI/ES-2, SSJ/4, SSM	Type: Sun-synchronous Altitude: 833 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: 20:29 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmisp.ngdc.noaa.gov/dmisp.html">http://dmisp.ngdc.noaa.gov/dmisp.html</a>

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DMSP F-15 Defense Meteorological Satellite Program F-15  NOAA	Currently being flown	19 Dec 99	01 May 13	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide atmospheric, oceanographic, solar-geophysical, and cloud cover data on a daily basis.	OLS, SSM/I, SSM/T-1, SSM/T-2, SSB/X-2, SSI/ES-2, SSJ/4, SSM	Type: Sun-synchronous Altitude: 833 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: 20:29 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmsp.ngdc.noaa.gov/dmsp.html">http://dmsp.ngdc.noaa.gov/dmsp.html</a>
DMSP F-16 Defense Meteorological Satellite Program F-16  NOAA	Currently being flown	18 Oct 03	01 Jan 10	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide cloud cover data on a daily basis.	OLS, SSM/IS, SSM, SSI/ES-3, SSJ/5, SSULI, SSUSI	Type: Sun-synchronous Altitude: 833 km Period: 101 mins Inclination: 98.9 deg Repeat cycle: LST: 21:32 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmsp.ngdc.noaa.gov/dmsp.html">http://dmsp.ngdc.noaa.gov/dmsp.html</a>
DMSP F-17 Defense Meteorological Satellite Program F-17  NOAA	Currently being flown	04 Nov 06	01 Jan 18	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide cloud cover data on a daily basis.	OLS, SSM/IS, SSM, SSI/ES-3, SSULI, SSUSI	Type: Sun-synchronous Altitude: 850 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmsp.ngdc.noaa.gov/dmsp.html">http://dmsp.ngdc.noaa.gov/dmsp.html</a>
DMSP F-18 Defense Meteorological Satellite Program F-18  NOAA	Approved	01 Aug 09	01 Aug 12	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide cloud cover data on a daily basis.	OLS, SSM/IS, SSM, SSI/ES-3, SSULI, SSUSI	Type: Sun-synchronous Altitude: 850 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmsp.ngdc.noaa.gov/dmsp.html">http://dmsp.ngdc.noaa.gov/dmsp.html</a>
DMSP F-19 Defense Meteorological Satellite Program F-19  NOAA	Approved	01 Jan 11	01 Jan 14	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide cloud cover data on a daily basis.	OLS, SSM/IS, SSM, SSI/ES-3, SSULI, SSUSI	Type: Sun-synchronous Altitude: 833 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmsp.ngdc.noaa.gov/dmsp.html">http://dmsp.ngdc.noaa.gov/dmsp.html</a>
DMSP F-20 Defense Meteorological Satellite Program F-20  NOAA	Approved	15 Oct 11	15 Oct 14	The long-term meteorological programme of the US Department of Defense (DoD) - with the objective to collect and disseminate worldwide cloud cover data on a daily basis.	OLS, SSM/IS, SSM, SSI/ES-3, SSULI, SSUSI	Type: Sun-synchronous Altitude: 850 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://dmsp.ngdc.noaa.gov/dmsp.html">http://dmsp.ngdc.noaa.gov/dmsp.html</a>



Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
EarthCARE ESA / JAXA	Approved	01 Jun 13	01 Jun 16	Clouds-aerosol-radiation interactions	CPR (EarthCARE), ATLID, BBR (EarthCARE), MSI (EarthCARE)	Type: Sun-synchronous Altitude: 450 km Period: Inclination: 97 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.esa.int/export/esaLP/earthcare.html">www.esa.int/export/esaLP/earthcare.html</a>
Elektro-L N1 Geostationary Operational Meteorological Satellite - 1 ROSHYDROMET / ROSKOSMOS	Approved	31 Dec 09	31 dec 16	Hydrometeorology, heliogeophysics, climatology, DCS, S&R	MSU-GS, DCS (ROSHYDROMET), GGAK-E, S&R (ROSKOSMOS)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -76 Asc/desc: N/A URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
Elektro-L N2 Geostationary Operational Meteorological Satellite - 2 ROSHYDROMET / ROSKOSMOS	Approved	31 Dec 11	31 dec 18	Hydrometeorology, heliogeophysics, climatology, DCS, S&R	MSU-GS, DCS (ROSHYDROMET), GGAK-E, S&R (ROSKOSMOS)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 14.5 Asc/desc: N/A URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
Elektro-L N3 Geostationary Operational Meteorological Satellite - 3 ROSHYDROMET / ROSKOSMOS	Planned	31 Dec 14	31 dec 21	Hydrometeorology, heliogeophysics, climatology, DCS, S&R	MSU-GS, DCS (ROSHYDROMET), GGAK-E, S&R (ROSKOSMOS)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
EnMAP Environmental Mapping & Analysis Program DLR	Planned	01 Jan 12	01 Jan 17	Hyperspectral imaging, land surface, geological and environmental investigation.	HSI	Type: Sun-synchronous Altitude: 650 km Period: 97.5 mins Inclination: Repeat cycle: 21 days LST: 11:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.enmap.org">www.enmap.org</a>
Envisat Environmental Satellite ESA	Currently being flown	01 Mar 02	31 Dec 13	Physical oceanography, land surface, ice and snow, atmospheric chemistry, atmospheric dynamics/water and energy cycles	DORIS-NG, MWR, ASAR (image mode), ASAR (wave mode), ENVISAT Comms, MERIS, MIPAS, ASAR, GOMOS, SCIAMACHY, RA-2, AATSR	Type: Sun-synchronous Altitude: 782 km Period: 100.5 mins Inclination: 98.52 deg Repeat cycle: 35 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://envisat.esa.int">http://envisat.esa.int</a>
ERS-2 European Remote Sensing satellite - 2 ESA	Currently being flown	21 Apr 95	31 Dec 11	Earth resources plus physical oceanography, ice and snow, land surface, meteorology, geodesy/gravity, environmental monitoring, atmospheric chemistry	MWR, ERS Comms, GOME, RA, ATSR/M, ATSR-2, AMI/SAR/Image, AMI/SAR/Wave, AMI/Scatterometer	Type: Sun-synchronous Altitude: 782 km Period: 100.5 mins Inclination: 98.52 deg Repeat cycle: 35 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.esa.int/ers">www.esa.int/ers</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
FORMOSAT-2 FORMOSA Satellite No. 2  NSPO	Currently being flown	21 May 04	21 May 10	Providing 2 meter resolution of image in panchromatic band and 8 meter resolution in multispectral bands with swath of 24 km with daily revisit capability for and large ground coverage for applications including disaster investigation, environment monitoring, and vegetation evaluation.		Type: Altitude: 891 km Period: 103 mins Inclination: 97.7 deg Repeat cycle: 1 days LST: 10:00 Longitude (if geo): Asc/desc: URL: <a href="http://www.nspo.org.tw/2005e/projects/project2/intro.htm">www.nspo.org.tw/2005e/projects/project2/intro.htm</a>
FY-1D FY-1D Polar-orbiting Meteorological Satellite  NRSCC / CMA	Currently being flown	15 May 02	31 Dec 09	Meteorology, Environmental monitoring	MVISR (10 channels)	Type: Sun-synchronous Altitude: 863 km Period: 102.3 mins Inclination: 98.8 deg Repeat cycle: LST: 9:00 Longitude (if geo): Asc/desc: Descending URL:
FY-2C FY-2C Geostationary Meteorological Satellite  NRSCC / CMA	Currently being flown	19 Oct 04	31 Dec 09	Meteorology and environmental monitoring Data collection and redistribution	IVISSR (FY-2)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-2D FY-2D Geostationary Meteorological Satellite  NRSCC / CMA	Currently being flown	08 Dec 06	08 Dec 09	Meteorology and environmental monitoring Data collection and redistribution	IVISSR (FY-2)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-2E FY-2E Geostationary Meteorological Satellite  NRSCC / CMA	Currently being flown	26 Dec 08	31 Dec 11	Meteorology and environmental monitoring Data collection and redistribution	IVISSR (FY-2)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-2F FY-2F Geostationary Meteorological Satellite  NRSCC	Approved	31 Dec 11	31 Dec 16	Meteorology and environmental monitoring Data collection and redistribution	IVISSR (FY-2)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-3A FY-3A Polar-orbiting Meteorological Satellite  NRSCC / CMA	Currently being flown	27 May 08	31 May 11	Meteorology and environmental monitoring data collection and redistribution.	IRAS, MWAS, MWHS, MWRI, VIRR, ERM, MERSI, MWTS, TOU/SBUS, SEM, SIM	Type: Sun-synchronous Altitude: 830 km Period: 101 mins Inclination: 98.753 deg Repeat cycle: LST: 10:10 Longitude (if geo): Asc/desc: Descending URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
FY-3B FY-3B Polar-orbiting Meteorological Satellite  NRSCC / CMA	Planned	31 Dec 10	31 Dec 12	Meteorology and environmental monitoring data collection and redistribution. (Experimental pre-cursor to FY-3C)	IRAS, MWAS, MWHS, MWRI, VIRR, ERM, MERSI, MWTS, TOU/SBUS, SEM, SIM	Type: Sun-synchronous Altitude: 830 km Period: 101 mins Inclination: 98.753 deg Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: Descending URL:
FY-3C FY-3C Polar-orbiting Meteorological Satellite  NRSCC / CMA	Approved	31 Dec 12	31 Dec 16	Meteorology and environmental monitoring data collection and redistribution. (Operational follow-on to FY-3B)	IRAS, IMWAS, MWHS, MIRAS, MWRI, VIRR, ERM, MERSI, MWTS, TOU/SBUS, SIM	Type: Sun-synchronous Altitude: 830 km Period: 101 mins Inclination: 98.753 deg Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: Descending URL:
FY-3D FY-3D Polar-orbiting Meteorological Satellite  NRSCC / CMA	Approved	31 Dec 14	31 Dec 18	Meteorology and environmental monitoring data collection and redistribution.	IRAS, IMWAS, MWHS, MIRAS, MWRI, VIRR, MERSI, MWTS, TOU/SBUS	Type: Sun-synchronous Altitude: 830 km Period: 101 mins Inclination: 98.753 deg Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: Ascending URL:
FY-3E FY-3E Polar-orbiting Meteorological Satellite  NRSCC / CMA	Planned	31 Dec 16	31 Dec 20	Meteorology and environmental monitoring data collection and redistribution.	IRAS, IMWAS, MWHS, MIRAS, MWRI, VIRR, ERM, MERSI, MWTS, TOU/SBUS, SIM	Type: Sun-synchronous Altitude: 830 km Period: 101 mins Inclination: 98.753 deg Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: Descending URL:
FY-3F FY-3F Polar-orbiting Meteorological Satellite  NRSCC / CMA	Planned	31 Dec 18	31 Dec 22	Meteorology and environmental monitoring data collection and redistribution.	IRAS, IMWAS, MWHS, MIRAS, MVIRS, MWRI, VIRR, MERSI, MWTS, TOU/SBUS	Type: Sun-synchronous Altitude: 830 km Period: 101 mins Inclination: 98.753 deg Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: Ascending URL:
FY-3G FY-3G Polar-orbiting Meteorological Satellite  NRSCC / CMA	Planned	31 Dec 20	31 Dec 24	Meteorology and environmental monitoring data collection and redistribution.	IRAS, IMWAS, MWHS, MIRAS, MVIRS, MWRI, VIRR, MERSI, MWTS, TOU/SBUS	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: TBD Longitude (if geo): Asc/desc: TBD URL:
FY-4 M/A FY-4A Microwave Geostationary Meteorological Satellite  NRSCC / CMA	Planned	31 Dec 15	31 Dec 20	Meteorology and environmental monitoring data collection and redistribution.	TBD	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
FY-4 M/B FY-4B Microwave Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 18	31 Dec 23	Meteorology and environmental monitoring data collection and redistribution.	TBD	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-4 M/C FY-4C Microwave Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 22	31 Dec 27	Meteorology and environmental monitoring data collection and redistribution.	TBD	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-4 O/A FY-4A Optical Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 12	31 Dec 17	Meteorology and environmental monitoring data collection and redistribution.	LM, MCSI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-4 O/B FY-4B Optical Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 15	31 Dec 20	Meteorology and environmental monitoring data collection and redistribution.	LM, MCSI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-4 O/C FY-4C Optical Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 15	31 Dec 20	Meteorology and environmental monitoring data collection and redistribution.	LM, MCSI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-4 O/D FY-4D Optical Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 19	31 Dec 24	Meteorology and environmental monitoring data collection and redistribution.	LM, MCSI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:
FY-4 O/E FY-4E Optical Geostationary Meteorological Satellite NRSCC / CMA	Planned	31 Dec 19	31 Dec 24	Meteorology and environmental monitoring data collection and redistribution.	LM, MCSI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -105 Asc/desc: N/A URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
GACM Global Atmospheric Composition Mission NASA	Considered	01 Jan 30	01 Jan 33	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Ozone and related gases for intercontinental air quality and stratospheric ozone layer prediction	UV Spectrometer (GACM), IR Spectrometer(GACM), Microwave limb sounder (GACM)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL: <a href="http://decadal.gsfc.nasa.gov/gacm.html">http://decadal.gsfc.nasa.gov/gacm.html</a>
GCOM-C1 Global Change Observation Mission-C1 JAXA	Planned	01 Feb 14	01 Feb 19	Understanding of climate change mechanism	SGLI	Type: Sun-synchronous Altitude: 800 km Period: 98 mins Inclination: 98.6 deg Repeat cycle: LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.jaxa.jp/projects/sat/gcom/index_e.html">www.jaxa.jp/projects/sat/gcom/index_e.html</a>
GCOM-C2 Global Change Observation Mission-C2 JAXA	Planned	01 Feb 18	01 Feb 23	Understanding of climate change mechanism	SGLI	Type: Sun-synchronous Altitude: 800 km Period: 98 mins Inclination: 98.6 deg Repeat cycle: LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.jaxa.jp/projects/sat/gcom/index_e.html">www.jaxa.jp/projects/sat/gcom/index_e.html</a>
GCOM-C3 Global Change Observation Mission-C3 JAXA	Planned	01 Feb 22	01 Feb 27	Understanding of climate change mechanism	SGLI	Type: Sun-synchronous Altitude: 800 km Period: 98 mins Inclination: 98.6 deg Repeat cycle: LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.jaxa.jp/projects/sat/gcom/index_e.html">www.jaxa.jp/projects/sat/gcom/index_e.html</a>
GCOM-W1 Global Change Observation Mission-W1 JAXA	Approved	01 Feb 12	01 Feb 17	Understanding of climate change mechanism	AMSR-2	Type: Sun-synchronous Altitude: 700 km Period: 98 mins Inclination: 98.2 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.jaxa.jp/projects/sat/gcom/index_e.html">www.jaxa.jp/projects/sat/gcom/index_e.html</a>
GCOM-W2 Global Climate Observation Mission-W2 JAXA	Planned	01 Feb 16	01 Feb 21	Understanding of climate change mechanism	AMSR-2	Type: Sun-synchronous Altitude: 700 km Period: 98 mins Inclination: 98.2 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.jaxa.jp/projects/sat/gcom/index_e.html">www.jaxa.jp/projects/sat/gcom/index_e.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>GCOM-W3</b> Global Change Observation Mission-W3  JAXA	Planned	01 Feb 20	01 Feb 25	Understanding of water circulation mechanism	AMSR-2	Type: Sun-synchronous Altitude: 700 km Period: 98 mins Inclination: 98.2 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.jaxa.jp/projects/sat/gcom/index_e.html">www.jaxa.jp/projects/sat/gcom/index_e.html</a>
<b>GEO-CAPE</b> Geostationary Coastal and Air Pollution Events  NASA	Considered	01 Jan 20	01 Jan 23	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Atmospheric gas columns for air quality forecasts; ocean color for coastal ecosystem health and climate emissions	UV/Vis Near IR Wide Imaging Spectrometer (Geo-Cape), Event Imaging Spectrometer from GEO (GeoCape), IR Correlation Radiometer (GeoCape)	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: 1 days LST: Longitude (if geo): 80 Asc/desc: N/A URL: <a href="http://geo-cape.larc.nasa.gov">http://geo-cape.larc.nasa.gov</a>
<b>GFO (GEOSAT Follow On)</b>  DoD (USA) / US Naval Research Lab / CNES	Currently being flown	10 Feb 98	31 Dec 08	Physical oceanography, geodesy/gravity, climate monitoring, marine meteorology	Radar Altimeter, Water Vapor Radiometer	Type: Inclined, non-synchronous Altitude: 1336 km Period: 122.4 mins Inclination: 66 deg Repeat cycle: 10 days LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://gfo.wff.nasa.gov">http://gfo.wff.nasa.gov</a>
<b>Glory</b>  NASA	Approved	23 Jan 10	23 Jan 15	3-year nominal mission life, 5-year goal. Concentration and nature of both natural and anthropogenic aerosols (BC, sulfates, etc.) with accuracy and coverage sufficient for quantification of the aerosol effect on climate, the anthropogenic component of this effect, and the long-term change of this effect caused by natural and anthropogenic factors	TIM, APS	Type: Sun-synchronous Altitude: 705 km Period: 98.8 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 10:33 Longitude (if geo): Asc/desc: Descending URL: <a href="http://glory.gsfc.nasa.gov">http://glory.gsfc.nasa.gov</a>
<b>GOCE</b> Gravity Field and Steady-State Ocean Circulation Explorer  ESA	Currently being flown	17 Mar 09	30 Nov 10	Research in steady-state ocean circulation, physics of Earth's interior and levelling systems (based on GPS). Will also provide unique data set required to formulate global and regional models of the Earth's gravity field and geoid.	EGG, Laser Reflectors (ESA), GPS (ESA), SSTI, LRR	Type: Sun-synchronous Altitude: 270 km Period: 90 mins Inclination: 96.7 deg Repeat cycle: 60 days LST: 6:00 Longitude (if geo): Asc/desc: TBD URL: <a href="http://www.esa.int/export/esaLP/goce.html">www.esa.int/export/esaLP/goce.html</a>
<b>GOES-11</b> Geostationary Operational Environmental Satellite - 11  NOAA	Currently being flown	03 May 00	15 Jul 11	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX	DCS (NOAA), S&R (GOES), WEFAX, Sounder, Imager, GOES Comms, SEM (GOES), LRIT	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 103 Asc/desc: N/A URL: <a href="http://www.oso.noaa.gov/goes">www.oso.noaa.gov/goes</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>GOES-12</b> Geostationary Operational Environmental Satellite - 12  NOAA	Currently being flown	23 Jul 01	15 Jan 11	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX	DCS (NOAA), S&R (GOES), WEFAX, SXI, Sounder, Imager, GOES Comms, SEM (GOES), LRIT	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 75 Asc/desc: N/A URL: <a href="http://www.oso.noaa.gov/goes">www.oso.noaa.gov/goes</a>
<b>GOES-13</b> Geostationary Operational Environmental Satellite - 13  NOAA	Currently being flown	24 May 06	24 May 11	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX. On-orbit spare.	S&R (GOES), SXI, Sounder, Imager, GOES Comms, SEM (GOES), A-DCS4, LRIT	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://www.oso.noaa.gov/goes/http://www.oso.noaa.gov/goes">www.oso.noaa.gov/goes/http://www.oso.noaa.gov/goes</a>
<b>GOES-14</b> Geostationary Operational Environmental Satellite - 14  NOAA	Currently being flown	27 Jun 09	26 Jun 14	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX	S&R (GOES), Sounder, Imager, GOES Comms, SEM (GOES), A-DCS4, LRIT	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 75 Asc/desc: N/A URL: <a href="http://www.oso.noaa.gov/goes">www.oso.noaa.gov/goes</a>
<b>GOES-P</b> Geostationary Operational Environmental Satellite - P  NOAA	Approved	09 Dec 09	09 Dec 14	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX	S&R (GOES), SXI, Sounder, Imager, GOES Comms, SEM (GOES), A-DCS4, LRIT	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 135 Asc/desc: N/A URL: <a href="http://www.oso.noaa.gov/goes">www.oso.noaa.gov/goes</a>
<b>GOES-R</b> Geostationary Operational Environmental Satellite - R  NOAA	Approved	15 Apr 15	31 Oct 20	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX	ABI, GLM, Magnetometer (NOAA), EXIS, SEISS, SUVI, DCS (GOES-R)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 135 Asc/desc: N/A URL: <a href="http://www.osd.noaa.gov/goes_R/index.htm">www.osd.noaa.gov/goes_R/index.htm</a>
<b>GOES-S</b> Geostationary Operational Environmental Satellite - S  NOAA	Approved	01 Sep 16	01 Sep 23	Meteorology (primary mission), search and rescue, space environment monitoring, data collection platform, data gathering, WEFAX	ABI, GLM, Magnetometer (NOAA), EXIS, SEISS, SUVI, DCS (GOES-R)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 135 Asc/desc: N/A URL: <a href="http://www.osd.noaa.gov/goes_R/index.htm">www.osd.noaa.gov/goes_R/index.htm</a>
<b>GOSAT</b> Greenhouse gases Observing Satellite  JAXA / MOE (Japan) / NIES (Japan)	Currently being flown	23 Jan 09	01 Jan 14	Observation of greenhouse gases	TANSO-CAI, TANSO-FTS	Type: Sun-synchronous Altitude: 666 km Period: 98 mins Inclination: 98.05 deg Repeat cycle: 3 days LST: 13:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.jaxa.jp/projects/sat/gosat/index_e.html">www.jaxa.jp/projects/sat/gosat/index_e.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>GPM Constellation</b> Global Precipitation Measurement Mission Constellation spacecraft  NASA / JAXA	Approved	01 Nov 14	01 Nov 19	3-year nominal mission life, 5-year goal. Study of global precipitation, evaporation, and cycling of water are changing. The mission comprises a primary spacecraft with active and passive microwave instruments, and a number of 'constellation spacecraft with passive microwave instruments.	GMI	Type: Inclined, non-sunsynchronous Altitude: 630 km Period: Inclination: 40 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://gpm.gsfc.nasa.gov">http://gpm.gsfc.nasa.gov</a>
<b>GPM Core</b> Global Precipitation Measurement Mission Core spacecraft  NASA / JAXA	Approved	21 Jul 13	21 Jul 18	3-year nominal mission life, 5-year goal. Study of global precipitation, evaporation, and cycling of water are changing. The mission comprises a primary spacecraft with active and passive microwave instruments, and a number of 'constellation spacecraft with passive microwave instruments	GMI, DPR	Type: Inclined, non-sunsynchronous Altitude: 407 km Period: 95 mins Inclination: 65 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://gpm.gsfc.nasa.gov">http://gpm.gsfc.nasa.gov</a>
<b>GPM-Br</b> Global Precipitation Measurement Satellite  INPE	Approved	01 Dec 14	01 Sep 18	Global precipitation measurements	GMI, LIS, DCS	Type: Inclined, non-sunsynchronous Altitude: 600 km Period: Inclination: 30 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL:
<b>GRACE</b> Gravity Recovery and Climate Experiment  NASA / DLR	Currently being flown	17 Mar 02	30 Sep 11	5-year nominal mission life, currently in extended operations. Extremely high precision gravity measurements for use in construction of gravity field models. GRACE consists of two satellites (A, B) serving one mission.	HAIRS (aka KBR), BlackJack GPS (TRSR)	Type: Inclined, non-sunsynchronous Altitude: 400 km Period: 94 mins Inclination: 89 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://www.csr.utexas.edu/grace">www.csr.utexas.edu/grace</a>
<b>GRACE-II</b> Gravity Recovery and Climate Experiment  NASA	Considered	01 Jan 30	01 Jan 33	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. High temporal resolution gravity fields for tracking large scale water movement	Ranging System (GRACE II), GPS Receiver (GRACE II)	Type: Inclined, non-sunsynchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL: <a href="http://eosps.gsfc.nasa.gov/eos_homepage/mission_profiles/show_mission.php?id=83">http://eosps.gsfc.nasa.gov/eos_homepage/mission_profiles/show_mission.php?id=83</a>
<b>HJ-1A</b> Disaster and Environment Monitoring and Forecast Small Satellite Constellation A  CAST	Currently being flown	06 Sep 08	06 Sep 11	Disaster and environment monitoring and forecasting	CCD (HJ, HY), HSI (HJ-1A)	Type: Sun-synchronous Altitude: 649 km Period: Inclination: 97.9 deg Repeat cycle: 31 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.cast.cn">www.cast.cn</a>



Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
HJ-1B Disaster and Environment Monitoring and Forecast Small Satellite Constellation B  CAST	Currently being flown	06 Sep 08	06 Sep 11	Disaster and environment monitoring and forecasting	CCD (HJ, HY), IR (HJ-1B)	Type: Sun-synchronous Altitude: 649 km Period: Inclination: 97.9 deg Repeat cycle: 31 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: www.cast.cn
HJ-1C Disaster and Environment Monitoring and Forecast Small Satellite Constellation C  CAST	Approved	01 Sep 10	01 Sep 13	Disaster and environment monitoring and forecasting	S-Band SAR	Type: Sun-synchronous Altitude: 499 km Period: Inclination: 97.3 deg Repeat cycle: 31 days LST: 6:00 Longitude (if geo): Asc/desc: Descending URL: www.cast.cn
HY-1B Ocean color satellite B  NSOAS / CAST	Currently being flown	11 Apr 07	01 May 10	Detecting ocean colour and sea surface temperature	COCTS, CZI	Type: Sun-synchronous Altitude: 798 km Period: Inclination: 98.6 deg Repeat cycle: 7 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: www.cast.cn
HY-1C Ocean color and temperature satellite C  NSOAS / CAST	Planned	01 Jun 10	01 Jan 13	Detecting ocean colour and sea surface temperature	COCTS, CZI	Type: Sun-synchronous Altitude: 798 km Period: Inclination: 98.6 deg Repeat cycle: 7 days LST: 10:31 Longitude (if geo): Asc/desc: Descending URL: www.cast.cn
HY-1D Ocean color and temperature satellite D  NSOAS / CAST	Planned	01 Dec 10	01 Jan 13	Detecting ocean colour and sea surface temperature	COCTS, CZI	Type: Sun-synchronous Altitude: 798 km Period: Inclination: 98.6 deg Repeat cycle: 7 days LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: www.cast.cn
HY-2A Ocean dynamics satellite A  NSOAS / CAST	Planned	01 Jan 10	01 Jan 11	Detecting ocean surface temperature, wind field, wave and topography	RAD, SCAT, ALT	Type: Sun-synchronous Altitude: 963 km Period: Inclination: 99.3 deg Repeat cycle: 14 days LST: 6:00 Longitude (if geo): Asc/desc: Descending URL: www.naoas.gov.cn
HY-3A  NSOAS / CAST	Planned	06 Jan 12	06 Jan 17	Ocean monitoring, environmental protection, coastal zone survey, etc.	WSAR	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
HY-3B  NSOAS / CAST	Planned	06 Jan 17	06 Jan 22	Ocean monitoring, environmental protection, coastal zone survey, etc.	WSAR	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
HY-3C  NSOAS / CAST	Planned	06 Jan 22	06 Jan 27	Ocean monitoring, environmental protection, coastal zone survey, etc.	WSAR	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
HypIRI Hyperspectral Infrared Imager  NASA	Considered	01 Jan 20	01 Jan 23	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Land surface composition for agriculture and mineral characterization; vegetation types for ecosystem health	Visible imaging spectrometer (HypIRI), Multi-spectral thermal infrared imager (HypIRI)	Type: Sun-synchronous Altitude: 626 km Period: Inclination: 98 deg Repeat cycle: 19 days LST: 11:00 Longitude (if geo): Asc/desc: URL: <a href="http://hyspiri.jpl.nasa.gov">http://hyspiri.jpl.nasa.gov</a>
ICESat Ice, Cloud, and Land Elevation Satellite  NASA	Currently being flown	12 Jan 03	30 Sep 10	3-year nominal mission life, currently in extended operations. Monitors mass balance of polar ice sheets and their contribution to global sea level change. Secondary goals: cloud heights and vertical structure of clouds/aerosols; roughness, reflectivity, vegetation heights, snow-cover.	GLAS	Type: Inclined, non-sunsynchronous Altitude: 600 km Period: 97 mins Inclination: 94 deg Repeat cycle: 183 days LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://icesat.gsfc.nasa.gov">http://icesat.gsfc.nasa.gov</a>
ICESat-II Ice, Cloud, and Land Elevation Satellite II  NASA	Planned	01 Jan 15	01 Jan 18	Early 2015 launch expected (after SMAP), 3-year nominal mission life. Continue the assessment of polar ice changes and measure vegetation canopy heights, allowing estimates of biomass and carbon in aboveground vegetation in conjunction with related missions, and allow measurements of solid earth properties.	GLAS Follow-on	Type: Inclined, non-sunsynchronous Altitude: 600 km Period: 97 mins Inclination: 94 deg Repeat cycle: 183 days LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://icesat.gsfc.nasa.gov/index.php">http://icesat.gsfc.nasa.gov/index.php</a>
IMS-1 Indian Mini Satellite-1  ISRO	Currently being flown	28 Apr 08	28 Apr 10	Micro-satellite for Third World countries for natural resources monitoring & management	MxT, HySI (IMS-1)	Type: Sun-synchronous Altitude: 632 km Period: 97 mins Inclination: 97.92 deg Repeat cycle: 22 days LST: 9:30 Longitude (if geo): Asc/desc: Descending URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Ingenio CDTI / ESA	Approved	31 Dec 12	31 Dec 19	Cartography, land use, urban management, water management, environmental monitoring, risk management and security.	PAN+MS (RGB+NIR), UVAS	Type: Sun-synchronous Altitude: 668 km Period: 98 mins Inclination: 98 deg Repeat cycle: 43 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL:
INSAT-2E Indian National Satellite - 2E ISRO	Currently being flown	03 Apr 99	04 Mar 11	Meteorology, data collection and communication, search and rescue	VHRR, CCD camera	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -83 Asc/desc: N/A URL: www.isro.org
INSAT-3A Indian National Satellite - 3A ISRO	Currently being flown	04 Apr 03	10 Apr 13	Meteorology, data collection and communication, search and rescue	VHRR, DRT-S&R, CCD camera	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -94 Asc/desc: N/A URL: www.isro.org
INSAT-3D Indian National Satellite - 3D ISRO	Approved	01 Jun 10	01 Jul 17	Meteorology, data collection and communication, search and rescue	Imager (INSAT), Sounder (INSAT)	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -93.5 Asc/desc: N/A URL: www.isro.org
IRS-1D Indian Remote Sensing Satellite - 1D ISRO	Currently being flown	29 Sep 97	31 Dec 09	Land surface, agriculture and forestry regional geology, land use studies, water resources, vegetation studies, coastal studies and soils	LISS-III (IRS), PAN (IRS-1C/1D), WiFS	Type: Sun-synchronous Altitude: 817 km Period: 101 mins Inclination: 98.6 deg Repeat cycle: 24 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: www.isro.org/insat2b.htm
ISTAG Indian Satellite for Aerosol and Gases ISRO	Planned	01 Jan 11	01 Jan 15	Study of changes in atmospheric aerosol and trace gases	MAPI, MAVELI, MAGIS	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL:
Jason Ocean surface topography NASA / CNES	Currently being flown	07 Dec 01	30 Sep 11	3-year nominal mission life, currently in extended operations. Physical oceanography, geodesy/gravity, climate monitoring, marine meteorology	LRA, JMR, DORIS-NG, POSEIDON-2 (SSALT-2), TRSR	Type: Inclined, non-sunsynchronous Altitude: 1336 km Period: 112.4 mins Inclination: 66 deg Repeat cycle: 10 days LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://sealevel.jpl.nasa.gov/mission/jason-1.html">http://sealevel.jpl.nasa.gov/mission/jason-1.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Jason-3  NOAA / CNES / EUMETSAT	Considered	30 Jun 13	31 Dec 18	Meteorology, climatology, oceanography	FJP	Type: Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
Jason-CS  ESA / EUMETSAT / EC	Considered	31 Dec 16	31 Dec 20	Meteorology, climatology, oceanography	FJP	Type: Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
KALPANA-1 Meteorological Satellite  ISRO	Currently being flown	12 Sep 02	09 Dec 12	Meteorological applications	VHRR, DRT-S&R	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -83 Asc/desc: N/A URL: <a href="http://www.isro.org/insat2b.htm">www.isro.org/insat2b.htm</a>
Kanopus-V N1 Kanopus-V Environmental Satellite N1  ROSKOSMOS / ROSHYDROMET	Approved	31 Dec 10	31 Dec 15	Land surface, disaster monitoring	PSS, MSS (Roskosmos), MSU-200	Type: Sun-synchronous Altitude: 600 km Period: 98 mins Inclination: 98 deg Repeat cycle: 17 days LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
Kanopus-V N2 Kanopus-V Environmental Satellite N2  ROSKOSMOS / ROSHYDROMET	Planned	31 Dec 11	31 Dec 16	Land surface, disaster monitoring	PSS, MSS (Roskosmos), MSU-200	Type: Sun-synchronous Altitude: 600 km Period: Inclination: 98 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
KOMPSAT-2 Korea Multi-Purpose Satellite 2  KARI	Currently being flown	27 Jul 06	27 Jun 11	Cartography, land use and planning, disaster monitoring	MSC	Type: Sun-synchronous Altitude: 685 km Period: 98.5 mins Inclination: Repeat cycle: 28 days LST: 10:50 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://komsat.kari.re.kr/english/index.asp">http://komsat.kari.re.kr/english/index.asp</a>
KOMPSAT-3 Korea Multi-Purpose Satellite 3  KARI	Approved	30 May 11	30 Apr 14	Cartography, land use and planning, disaster monitoring	AEISS	Type: Sun-synchronous Altitude: 685 km Period: 98.5 mins Inclination: Repeat cycle: 28 days LST: 10:50 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://komsat.kari.re.kr/english/index.asp">http://komsat.kari.re.kr/english/index.asp</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
KOMPSAT-5 Korea Multi-Purpose Satellite 5  KARI	Approved	30 May 10	30 Apr 13	Cartography, land use and planning, disaster monitoring.	COSI	Type: Sun-synchronous Altitude: 685 km Period: 98.5 mins Inclination: Repeat cycle: 28 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://kompsat.kari.re.kr/english/index.asp">http://kompsat.kari.re.kr/english/index.asp</a>
LAGEOS-1 Laser Geodynamics Satellite - 1  ASI	Currently being flown	04 May 76	04 May 16	Geodesy, crustal motion and gravity field measurements by laser ranging	LRA (LAGEOS)	Type: Inclined, non-sunsynchronous Altitude: 6000 km Period: 225 mins Inclination: 110 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://ilrs.gsfc.nasa.gov/satellite_missions/list_of_satellites/lagoes.html">http://ilrs.gsfc.nasa.gov/satellite_missions/list_of_satellites/lagoes.html</a>
LAGEOS-2 Laser Geodynamics Satellite - 2  ASI	Currently being flown	22 Oct 92	22 Oct 32	Geodesy, crustal motion and gravity field measurements by laser ranging	LRA (LAGEOS)	Type: Inclined, non-sunsynchronous Altitude: 5900 km Period: 223 mins Inclination: 52 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://ilrs.gsfc.nasa.gov/satellite_missions/list_of_satellites/lagoes.html">http://ilrs.gsfc.nasa.gov/satellite_missions/list_of_satellites/lagoes.html</a> NASANASA_Agency_Missions1x2.doc
Landsat-5  USGS / NASA	Currently being flown	01 Mar 84	31 Dec 12	Earth resources, land surface, environmental monitoring, agriculture and forestry, disaster monitoring and assessment, ice and snow cover	MSS, TM	Type: Sun-synchronous Altitude: 705 km Period: 98.9 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://landsat.usgs.gov">http://landsat.usgs.gov</a>
Landsat-7  NASA / USGS	Currently being flown	15 Apr 99	31 Dec 12	5-year nominal mission life, currently in extended operations. Earth resources, land surface, environmental monitoring, agriculture and forestry, disaster monitoring and assessment, ice and snow cover	ETM+	Type: Sun-synchronous Altitude: 705 km Period: 98.9 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 10:05 Longitude (if geo): Asc/desc: Descending URL: <a href="http://landsat.usgs.gov">http://landsat.usgs.gov</a>
LARES Laser Geodynamics Satellite - 3  ASI	Approved	30 Oct 10	01 Jan 50	Lense-Thirring measurement accuracy improvement, crustal motion and gravity field measurements by laser ranging	LCCRA	Type: Inclined, non-sunsynchronous Altitude: 1450 km Period: 115 mins Inclination: 71 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://ilrs.gsfc.nasa.gov/satellite_missions/list_of_satellites/lag1_general.html">http://ilrs.gsfc.nasa.gov/satellite_missions/list_of_satellites/lag1_general.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
LDCM Landsat Data Continuity Mission  NASA / USGS	Approved	19 Dec 12	19 Dec 17	5-year nominal mission life. Earth resources, land surface, environmental monitoring, agriculture and forestry, disaster monitoring and assessment, ice and snow cover	OLI, TIRS	Type: Sun-synchronous Altitude: 705 km Period: 99 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://ldcm.nasa.gov">http://ldcm.nasa.gov</a>
LIST Lidar Surface Topography  NASA	Considered	01 Jan 30	01 Jan 33	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Land surface topography for landslide hazards and water runoff	Laser altimeter (LIST)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: 365 days LST: Longitude (if geo): Asc/desc: URL: <a href="http://decadal.gsfc.nasa.gov/list.html">http://decadal.gsfc.nasa.gov/list.html</a>
MAPSAR Multi-purpose SAR  INPE / DLR	Approved	03 Dec 13	03 Sep 17	Multi-purpose SAR	SAR (MAPSAR), DCS	Type: Sun-synchronous Altitude: 620 km Period: Inclination: 98 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Descending URL:
MEGHA-TROPIQUES  CNES / ISRO	Approved	01 Apr 10	01 Apr 15	Study of the inter-tropical zone and its convective systems (water and energy cycles).	ScaRaB, SAPHIR, MADRAS, GPS ROS	Type: Inclined, non-sunsynchronous Altitude: 867 km Period: 102.16 mins Inclination: 20 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.cnes.fr/espace_pro/communiqués/cp2001/5_17_va.html">www.cnes.fr/espace_pro/communiqués/cp2001/5_17_va.html</a>
Meteor-M N1 Meteor-M N1 Meteorological Satellite  ROSHYDROMET / ROSKOSMOS	Currently being flown	18 Sep 09	18 Sep 14	Hydrometeorology, climatology, heliogeophysics, DCS	MTVZA, MSU-MR, DCS (ROSHYDROMET), KMSS, GGAK-M, Severjanin, BRLK	Type: Sun-synchronous Altitude: 835 km Period: 102 mins Inclination: 98.7 deg Repeat cycle: 37 days LST: 10:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
Meteor-M N2 Meteor-M Meteorological Satellite N2  ROSHYDROMET / ROSKOSMOS	Approved	31 Dec 10	31 Dec 15	Hydrometeorology, climatology, heliogeophysics, DCS	MTVZA, IKFS-2, MSU-MR, DCS (ROSHYDROMET), KMSS, GGAK-M, BRLK	Type: Sun-synchronous Altitude: 835 km Period: 102 mins Inclination: 98.7 deg Repeat cycle: 37 days LST: TBD Longitude (if geo): Asc/desc: Ascending URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
Meteor-M N3 Meteor-M Oceanographical Satellite N3  ROSHYDROMET / ROSKOSMOS	Approved	31 Dec 13	31 Dec 17	Oceanography, hydrometeorology, climatology	DCS (ROSHYDROMET), SAR (ROSHYDROMET), Radiomet, MSS-BIO, CZS, Scatterometer (ROSHYDROMET)	Type: Sun-synchronous Altitude: 835 km Period: 102 mins Inclination: 98.7 deg Repeat cycle: 37 days LST: TBD Longitude (if geo): Asc/desc: Ascending URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Meteor-MP Meteor-MP Meteorological Satellite N1  ROSHYDROMET / ROSKOSMOS	Planned	31 Dec 14	31 Dec 19	Hydrometeorology, climatology, heliogeophysics, DCS	DCS (ROSHYDROMET), SAR (ROSHYDROMET), Radiomet, MSS-BIO, CZS, Scatterometer (ROSHYDROMET)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>
Meteosat Third Generation-S1 (sounding) MTG S1 Sounding Satellite 1  EUMETSAT / EC / ESA	Considered	15 Dec 18	15 Jun 27	Supporting European atmospheric composition and air quality monitoring services. MTG S1 carries the Sentinel-4 A mission.	IRS	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Meteosat Third Generation-S2 (sounding) MTG S2 Sounding Satellite 2  EUMETSAT / EC / ESA	Planned	15 Dec 26	15 Jun 35	Supporting European atmospheric composition and air quality monitoring services. MTG S2 carries the Sentinel-4 B mission.	IRS	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Meteosat-6  EUMETSAT / ESA	Currently being flown	20 Nov 93	31 Dec 13	Meteorology, climatology, atmospheric dynamics/water and energy cycles. Meteosat 1-7 are first generation. Meteosat 8-11 are second generation and known as MSG in the development phase	Meteosat Comms, MVIC	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 9 Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/dps/news/spacecraft.html">www.eumetsat.de/en/dps/news/spacecraft.html</a>
Meteosat-7  EUMETSAT / ESA	Currently being flown	03 Sep 97	31 Dec 13	Meteorology, climatology, atmospheric dynamics/water and energy cycles. Meteosat 1-7 are first generation. Meteosat 8-11 are second generation and known as MSG in the development phase	Meteosat Comms, MVIC	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/mtp/index.html">www.eumetsat.de/en/mtp/index.html</a>
Meteosat-8 Meteosat Second Generation-1  EUMETSAT / ESA	Currently being flown	13 Aug 02	30 Jun 11	Meteorology, climatology, atmospheric dynamics/water and energy cycles. Meteosat 1-7 are first generation. Meteosat 8-11 are second generation and known as MSG in the development phase	MSG Comms, SEVIRI, GERB	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic1.html">www.eumetsat.de/en/area4/topic1.html</a>
Meteosat-9 Meteosat Second Generation-2  EUMETSAT / ESA	Currently being flown	21 Dec 05	30 Jun 14	Meteorology, climatology, atmospheric dynamics/water and energy cycles. Meteosat 1-7 are first generation. Meteosat 8-11 are second generation and known as MSG in the development phase	MSG Comms, SEVIRI, GERB	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic1.html">www.eumetsat.de/en/area4/topic1.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Meteosat-10 Meteosat Second Generation-3 EUMETSAT / ESA	Approved	31 Jan 12	31 Jan 19	Meteorology, climatology, atmospheric dynamics/water and energy cycles. Meteosat 1-7 are first generation. Meteosat 8-11 are second generation and known as MSG in the development phase	MSG Comms, SEVIRI, GERB	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic1.html">www.eumetsat.de/en/area4/topic1.html</a>
Meteosat-11 Meteosat Second Generation-4 EUMETSAT / ESA	Approved	31 Jan 14	31 Jan 21	Meteorology, climatology, atmospheric dynamics/water and energy cycles. Meteosat 1-7 are first generation. Meteosat 8-11 are second generation and known as MSG in the development phase	SEVIRI, GERB	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic1.html">www.eumetsat.de/en/area4/topic1.html</a>
Metop-A Meteorological Operational Polar Satellite - A EUMETSAT / ESA	Currently being flown	19 Oct 06	30 Apr 12	Meteorology, climatology	SEM (POES), ARGOS, S&R (NOAA), MHS, IASI, GRAS, GOME-2, ASCAT, AMSU-A, AVHRR/3, HIRS/4	Type: Sun-synchronous Altitude: 840 km Period: 107.1 mins Inclination: 98.8 deg Repeat cycle: 29 days LST: 9:30 Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic2.html">www.eumetsat.de/en/area4/topic2.html</a>
Metop-B Meteorological Operational Polar Satellite - B EUMETSAT / ESA	Approved	02 Apr 12	01 May 17	Meteorology, climatology	SEM (POES), ARGOS, S&R (NOAA), MHS, IASI, GRAS, GOME-2, ASCAT, AMSU-A, AVHRR/3, HIRS/4	Type: Sun-synchronous Altitude: 840 km Period: 101.7 mins Inclination: 98.8 deg Repeat cycle: 29 days LST: 9:30 Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic2.html">www.eumetsat.de/en/area4/topic2.html</a>
Metop-C Meteorological Operational Polar Satellite - C EUMETSAT / ESA	Approved	02 Apr 16	01 Dec 21	Meteorology, climatology	SEM (POES), ARGOS, MHS, IASI, GRAS, GOME-2, ASCAT, AMSU-A, AVHRR/3, A-DCS4	Type: Sun-synchronous Altitude: 840 km Period: 101.7 mins Inclination: 98.8 deg Repeat cycle: 29 days LST: 9:30 Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.eumetsat.de/en/area4/topic2.html">www.eumetsat.de/en/area4/topic2.html</a>
Monitor-E ROSKOSMOS	Currently being flown	26 Aug 05	31 Dec 10	Agriculture and forestry, hydrology, environmental monitoring, hydrometeorology, ice and snow, land surface, meteorology	PSA, RDSA	Type: Sun-synchronous Altitude: 540 km Period: Inclination: 97.5 deg Repeat cycle: LST: 5:40 Longitude (if geo): Asc/desc: TBD URL:
MTG-I1 (imaging) Meteosat Third Generation - Imaging Satellite 1 EUMETSAT	Approved	15 Dec 16	15 Jun 25	Meteorology, climatology, Atmospheric dynamics/water and energy cycles	FCI, LI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm">www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm</a>



Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>MTG-I2 (imaging)</b> <b>Meteosat Third Generation - Imaging Satellite 2</b>  <b>EUMETSAT</b>	Approved	15 Jun 21	15 Dec 29	Meteorology, climatology, Atmospheric dynamics/ water and energy cycles	FCI, LI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm">www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm</a>
<b>MTG-I3 (imaging)</b> <b>Meteosat Third Generation - Imaging Satellite 3</b>  <b>EUMETSAT</b>	Approved	15 Jan 25	15 Jul 33	Meteorology, climatology, Atmospheric dynamics/ water and energy cycles	FCI, LI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm">www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm</a>
<b>MTG-I4 (imaging)</b> <b>Meteosat Third Generation - Imaging Satellite 4</b>  <b>EUMETSAT</b>	Approved	15 Jun 29	15 Dec 37	Meteorology, climatology, Atmospheric dynamics/ water and energy cycles	FCI, LI	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm">www.eumetsat.int/Home/Main/What_We_Do/Satellites/Future_Satellites/Meteosat_Third_Generation/index.htm</a>
<b>MTSAT-1R</b> <b>Multi-functional Transport Satellite</b>  <b>JMA / JCAB</b>	Currently being flown	26 Feb 05	28 Jun 10	Meteorology, aeronautical applications	MTSAT Comms, JAMI/MTSAT-1R, MTSAT DCS	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -140 Asc/desc: N/A URL:
<b>MTSAT-2</b> <b>Multi-functional Transport Satellite</b>  <b>JMA / JCAB</b>	Currently being flown	18 Feb 06	28 Jun 15	Meteorology, aeronautical applications	IMAGER/MTSAT-2, MTSAT Comms, MTSAT DCS	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -145 Asc/desc: N/A URL:
<b>NigeriaSat-1</b>  <b>NASRDA</b>	Currently being flown	27 Sep 03	27 Sep 08	Meteorology, aeronautical applications	IMAGER/MTSAT-2, MTSAT Comms, MTSAT DCS	Type: Geostationary Altitude: 36000 km Period: Inclination: Repeat cycle: LST: Longitude (if geo): -145 Asc/desc: N/A URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
NigeriaSat-2  NASRDA	Approved	01 Sep 09	01 Sep 16	Small satellite mission with technical and scientific objectives (environmental) monitoring	NigeriaSat Medium and High Resolution	Type: Sun-synchronous Altitude: 700 km Period: 97 mins Inclination: Repeat cycle: 4 days LST: Longitude (if geo): Asc/desc: TBD URL: www.nasrda.net
NMP EO-1 New Millenium Program Earth Observing-1  NASA	Currently being flown	21 Nov 00	30 Sep 11	1.5-year nominal mission life, currently in extended operations. Land surface, earth resources	ALI, Hyperion, LEISA AC	Type: Sun-synchronous Altitude: 705 km Period: 99 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: http://eo1.gsfc.nasa.gov
NOAA-15 National Oceanic and Atmospheric Administration - 15  NOAA	Currently being flown	01 May 98	31 Dec 10	Meteorology, agriculture and forestry, environmental monitoring, climatology, physical oceanography, Volcanic eruption monitoring, ice and snow cover, space environment, solar flux analysis, search and rescue	ARGOS, S&R (NOAA), ATOVS (HIRS/3 + AMSU + AVHRR/3), AMSU-A, HIRS/3, AMSU-B, AVHRR/3, NOAA Comms	Type: Sun-synchronous Altitude: 813 km Period: 101.4 mins Inclination: 98.6 deg Repeat cycle: LST: 7:08 Longitude (if geo): Asc/desc: Descending URL: www.oso.noaa.gov/poes
NOAA-16 National Oceanic and Atmospheric Administration - 16  NOAA	Currently being flown	21 Sep 00	31 Dec 12	Meteorology, agriculture and forestry, environmental monitoring, climatology, physical oceanography, Volcanic eruption monitoring, ice and snow cover, total ozone studies, space environment, solar flux analysis, search and rescue	SEM (POES), ARGOS, S&R (NOAA), ATOVS (HIRS/3 + AMSU + AVHRR/3), AMSU-A, HIRS/3, SBUV/2, AMSU-B, AVHRR/3, NOAA Comms	Type: Sun-synchronous Altitude: 870 km Period: 102 mins Inclination: 98.8 deg Repeat cycle: LST: 13:54 Longitude (if geo): Asc/desc: Ascending URL: www.oso.noaa.gov/poes
NOAA-17 National Oceanic and Atmospheric Administration - 17  NOAA	Currently being flown	24 Jun 02	31 Dec 14	Meteorology, agriculture and forestry, environmental monitoring, climatology, physical oceanography, Volcanic eruption monitoring, ice and snow cover, total ozone studies, space environment, solar flux analysis, search and rescue	SEM (POES), ARGOS, S&R (NOAA), AMSU-A, HIRS/3, SBUV/2, AMSU-B, AVHRR/3, NOAA Comms	Type: Sun-synchronous Altitude: 833 km Period: 101.4 mins Inclination: 98.75 deg Repeat cycle: LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: www.oso.noaa.gov/poes
NOAA-18 National Oceanic and Atmospheric Administration - 18  NOAA	Currently being flown	20 May 05	31 Dec 15	Meteorology, agriculture and forestry, environmental monitoring, climatology, physical oceanography, Volcanic eruption monitoring, ice and snow cover, total ozone studies, space environment, solar flux analysis, search and rescue	SEM (POES), ARGOS, S&R (NOAA), MHS, AMSU-A, SBUV/2, AVHRR/3, NOAA Comms, HIRS/4	Type: Sun-synchronous Altitude: 870 km Period: 102.1 mins Inclination: 98.75 deg Repeat cycle: LST: 14:00 Longitude (if geo): Asc/desc: Ascending URL: www.oso.noaa.gov/poes
NOAA-19 National Oceanic and Atmospheric Administration - 19  NOAA	Currently being flown	04 Feb 09	01 Mar 16	Meteorology, agriculture and forestry, environmental monitoring, climatology, physical oceanography, Volcanic eruption monitoring, ice and snow cover, total ozone studies, space environment, solar flux analysis, search and rescue	SEM (POES), ARGOS, S&R (NOAA), MHS, SBUV/2, AVHRR/3, NOAA Comms, HIRS/4, A-DCS4, LRIT	Type: Sun-synchronous Altitude: 870 km Period: 102.1 mins Inclination: 98.75 deg Repeat cycle: LST: 14:00 Longitude (if geo): Asc/desc: Ascending URL: www.oso.noaa.gov/poes

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
NPOESS-1 National Polar-orbiting Operational Environmental Satellite System - 1  NOAA	Approved	31 Jan 13	01 Jan 20	Meteorological, climatic, terrestrial, oceanographic, and solar-geophysical applications; global and regional environmental monitoring, search and rescue, data collection.	CrIS, CERES, VIIRS, ATMS, TSIS, OMPS, A-DCS4, SARSAT, SEM-N	Type: Sun-synchronous Altitude: 824 km Period: 101 mins Inclination: 98.75 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.npoess.noaa.gov">www.npoess.noaa.gov</a>
NPOESS-2 National Polar-orbiting Operational Environmental Satellite System - 2  NOAA	Approved	31 Jan 16	01 Jan 22	Meteorological, climatic, terrestrial, oceanographic, and solar-geophysical applications; global and regional environmental monitoring, search and rescue, data collection.	VIIRS, A-DCS4, SARSAT, MIS	Type: Sun-synchronous Altitude: 824 km Period: 101 mins Inclination: 98.75 deg Repeat cycle: LST: 17:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.npoess.noaa.gov">www.npoess.noaa.gov</a>
NPOESS-3 National Polar-orbiting Operational Environmental Satellite System - 3  NOAA	Approved	31 Jan 18	01 Jan 25	Meteorological, climatic, terrestrial, oceanographic, and solar-geophysical applications; global and regional environmental monitoring, search and rescue, data collection.	CrIS, VIIRS, ATMS, OMPS, A-DCS4, SARSAT, SEM-N, MIS	Type: Sun-synchronous Altitude: 833 km Period: 101 mins Inclination: 98.75 deg Repeat cycle: LST: 17:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.npoess.noaa.gov">www.npoess.noaa.gov</a>
NPOESS-4 National Polar-orbiting Operational Environmental Satellite System - 4  NOAA	Approved	31 Jan 20	01 Jan 27	Meteorological, climatic, terrestrial, oceanographic, and solar-geophysical applications; global and regional environmental monitoring, search and rescue, data collection.	VIIRS, A-DCS4, SARSAT, MIS	Type: Sun-synchronous Altitude: 833 km Period: 101 mins Inclination: 98.75 deg Repeat cycle: LST: 21:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.npoess.noaa.gov">www.npoess.noaa.gov</a>
NPP NPOESS (National Polar-orbiting Operational Environmental Satellite System) Preparatory Project  NASA / NOAA / DoD (USA)	Approved	02 Jun 10	02 Jun 15	5-year nominal mission life. Operational Polar weather and climate measurements	CrIS, CERES, VIIRS, ATMS, OMPS	Type: Sun-synchronous Altitude: 824 km Period: 101 mins Inclination: Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://jointmission.gsfc.nasa.gov">http://jointmission.gsfc.nasa.gov</a>
OCEANSAT-1 Ocean Satellite-1  ISRO	Currently being flown	26 May 99	31 Dec 09	Ocean and atmosphere applications	OCM, MSMR	Type: Sun-synchronous Altitude: 720 km Period: 99.31 mins Inclination: 98.28 deg Repeat cycle: 2 days LST: Longitude (if geo): Asc/desc: Descending URL:
OCEANSAT-2 Ocean Satellite-2  ISRO	Currently being flown	24 Sep 09	24 Sep 13	OCM, Scatterometer, ROSA	OCM, MSMR	Type: Sun-synchronous Altitude: 720 km Period: 99.31 mins Inclination: 98.28 deg Repeat cycle: 2 days LST: 12:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
OCEANSAT-3 Ocean Satellite-3  ISRO	Considered	01 Jan 11	01 Jan 15	Ocean and atmosphere applications	Scatterometer, Altimeter (OCEANSAT-3), TIR (OCEANSAT-3), PMR, OCM (OCEANSAT-3)	Type: Sun-synchronous Altitude: 720 km Period: 99.31 mins Inclination: 98.28 deg Repeat cycle: 2 days LST: Longitude (if geo): Asc/desc: Descending URL: www.isro.org
Odin  SNSB / TEKES / CNES / CSA	Currently being flown	20 Feb 01	31 Dec 12	Atmospheric research, stratospheric ozone chemistry, mesospheric ozone science, summer mesospheric science	OSIRIS, SMR	Type: Sun-synchronous Altitude: 590 km Period: 97.6 mins Inclination: 97.8 deg Repeat cycle: LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: www.ssc.se/?id=7180
Ørsted (Oersted)  DNSS / CNES	Currently being flown	21 Nov 99	31 Dec 09	Earth magnetic field mapping	Overhauser Magnetometer, CSC FVM, SI, GPSRO (Oersted)	Type: Inclined, non-sunsynchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: http://web.dmi.dk/projects/oersted
OSTM Ocean Surface Topography Mission  NASA / NOAA / CNES / EUMETSAT	Currently being flown	20 Jun 08	07 Dec 11	3-year nominal mission life. Physical oceanography, geodesy/gravity, climate monitoring, marine meteorology	LRA, JMR, DORIS-NG, POSEIDON-3, AMR, GPSP	Type: Inclined, non-sunsynchronous Altitude: 1336 km Period: 112.4 mins Inclination: 66 deg Repeat cycle: 10 days LST: Longitude (if geo): Asc/desc: N/A URL: http://sealevel.jpl.nasa.gov/mission/ostm.html
PARASOL Polarization and Anisotropy of Reflectances for Atmospheric Science coupled with Observations from a LIDAR  CNES	Currently being flown	01 Dec 04	30 Jun 10	Micro-satellite with the aim of characterisation of the clouds and aerosols microphysical and radiative properties, needed to understand and model the radiative impact of clouds and aerosols.	POLDER-P	Type: Sun-synchronous Altitude: 700 km Period: 98.8 mins Inclination: Repeat cycle: LST: 12:00 Longitude (if geo): Asc/desc: TBD URL: http://smc.cnes.fr/PARASOL/index.htm
PATH Precipitation and All-weather Temperature and Humidity  NASA	Considered	01 Jan 30	01 Jan 33	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. High frequency, all-weather temperature and humidity soundings for weather forecasting and SST	GeoSTAR	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: http://decadal.gsfc.nasa.gov/path.html
PAZ  CDTI	Approved	31 Dec 11	31 Dec 16	Security, land use, urban management, environmental monitoring, risk management	Paz SAR-X	Type: Sun-synchronous Altitude: 510 km Period: 90 mins Inclination: 98 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
PCW-1 Polar Communications and Wether Mission: 2 satellites in Molinya orbit CSA	Planned	01 Jan 15	01 Jan 20	Continuous meteorological obseravtation and communications servioce to the Arctic	PCW	Type: Highly elliptical Altitude: Period: 718 mins Inclination: 63.4 deg Repeat cycle: LST: N/A Longitude (if geo): Asc/desc: N/A URL:
PCW-2 Polar Communications and Wether Mission: 2 satellites in Molinya orbit CSA	Planned	01 Jan 15	01 Jan 20	Continuous meteorological obseravtation and communications servioce to the Arctic	PCW	Type: Highly elliptical Altitude: Period: 718 mins Inclination: 63.4 deg Repeat cycle: LST: N/A Longitude (if geo): Asc/desc: N/A URL:
PICARD CNES	Approved	01 Dec 09	01 Dec 11	Simultaneous measurements of solar diameter, differential rotation, solar constant, and variability.	SODISM, SOVAP, PREMOS	Type: TBD Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://smc.cnes.fr/PICARD">http://smc.cnes.fr/PICARD</a>
Pleiades 1 CNES	Approved	01 Jan 10	01 Jan 15	Cartography, land use, risk, agriculture and forestry, civil planning and mapping, digital terrain models, defence	HiRI	Type: Sun-synchronous Altitude: 694 km Period: Inclination: Repeat cycle: 26 days LST: 10:15 Longitude (if geo): Asc/desc: Descending URL: <a href="http://smc.cnes.fr/PLEIADES/Fr/index.htm">http://smc.cnes.fr/PLEIADES/Fr/index.htm</a>
Pleiades 2 CNES	Approved	01 Jun 11	01 Jun 16	Cartography, land use, risk, agriculture and forestry, civil planning and mapping, digital terrain models, defense	HiRI	Type: Sun-synchronous Altitude: 694 km Period: Inclination: Repeat cycle: LST: 10:15 Longitude (if geo): Asc/desc: Descending URL: <a href="http://smc.cnes.fr/PLEIADES/Fr/index.htm">http://smc.cnes.fr/PLEIADES/Fr/index.htm</a>
Post-EPS Meteorological Operational Polar Satellite (Post-EPS) EUMETSAT / EC / ESA	Planned	01 Dec 19	01 Dec 24	In early stages of mission definition. Other payloads will be added. Post-EPS carries the Sentinel-5 mission.		Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.esa.int/esaLP/LPgm.html">www.esa.int/esaLP/LPgm.html</a>
PRISMA-I Precursores IperSpettrale della Missione Applicativa - I ASI	Approved	30 Jul 11	30 Jul 16	Land surface, agriculture and forestry, regional geology, land use studies, water resources, vegetation studies, coastal studies and soils	HYC, PAN CAMERA	Type: Sun-synchronous Altitude: 620 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 29 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.asi.it/it/flash/osservare/prisma">www.asi.it/it/flash/osservare/prisma</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>PROBA</b> Project for On-Board Autonomy  ESA	Currently being flown	22 Oct 01	31 Dec 09	PROBA is a technology experiment to demonstrate the on-board autonomy of a generic platform suitable for small scientific or application missions. A number of earth observation instruments are included. CHRIS - a hyperspectral imager provides data related to Earth Resources science and applications	CHRIS	Type: Sun-synchronous Altitude: 615 km Period: 96.97 mins Inclination: 97.9 deg Repeat cycle: 7 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://earth.esa.int/proba">http://earth.esa.int/proba</a>
<b>QuikSCAT</b> Quick Scatterometer  NASA	Currently being flown	19 Jun 99	30 Sep 11	3-year nominal mission life, currently in extended operations. Acquires accurate, high-resolution, global measurements of sea-surface wind vectors in 1 to 2 day repeat cycles for studies of tropospheric dynamics and air-sea interaction processes, including air-sea momentum transfer.	SeaWinds	Type: Sun-synchronous Altitude: 803 km Period: 101 mins Inclination: 98.6 deg Repeat cycle: LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://winds.jpl.nasa.gov/missions/quikscat/index.cfm">http://winds.jpl.nasa.gov/missions/quikscat/index.cfm</a>
<b>RADARSAT CONSTELLATION-1</b>  CSA	Planned	06 Dec 13	01 Apr 20	Ecosystem monitoring, Maritime surveillance, Disaster management	SAR (RCM), AIS (RCM)	Type: Sun-synchronous Altitude: 600 km Period: 96.5 mins Inclination: 97.7 deg Repeat cycle: 12 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.space.gc.ca/asc/eng/satellites/radarsat/default.asp">www.space.gc.ca/asc/eng/satellites/radarsat/default.asp</a>
<b>RADARSAT CONSTELLATION-2</b>  CSA	Planned	14 Mar 15	01 Feb 21	Ecosystem monitoring, Maritime surveillance, Disaster management	SAR (RCM), AIS (RCM)	Type: Sun-synchronous Altitude: 600 km Period: 96.5 mins Inclination: 97.7 deg Repeat cycle: 12 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.space.gc.ca/asc/eng/satellites/radarsat/default.asp">www.space.gc.ca/asc/eng/satellites/radarsat/default.asp</a>
<b>RADARSAT CONSTELLATION-3</b>  CSA	Planned	06 Jul 14	01 Apr 22	Ecosystem monitoring, Maritime surveillance, Disaster management	SAR (RCM), AIS (RCM)	Type: Sun-synchronous Altitude: 600 km Period: 96.5 mins Inclination: 97.7 deg Repeat cycle: 12 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.space.gc.ca/asc/eng/satellites/radarsat/default.asp">www.space.gc.ca/asc/eng/satellites/radarsat/default.asp</a>
<b>RADARSAT-1</b> Radar satellite-1  CSA	Currently being flown	04 Nov 95	31 Mar 12	Environmental monitoring, physical oceanography, ice and snow, land surface	SAR (RADARSAT), RADARSAT DTT, RADARSAT TTC	Type: Sun-synchronous Altitude: 798 km Period: 100.7 mins Inclination: 98.594 deg Repeat cycle: 24 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.space.gc.ca/asc/eng/satellites/radarsat1">www.space.gc.ca/asc/eng/satellites/radarsat1</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>RADARSAT-2</b> Radar satellite-2  CSA	Currently being flown	14 Dec 07	17 Apr 15	Environmental monitoring, physical oceanography, ice and snow, land surface	SAR (RADARSAT-2)	Type: Sun-synchronous Altitude: 798 km Period: 100.7 mins Inclination: 98.6 deg Repeat cycle: 24 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.space.gc.ca/asc/eng/satellites/radarsat2/default.asp">www.space.gc.ca/asc/eng/satellites/radarsat2/default.asp</a>
<b>RapidEye</b>  DLR	Currently being flown	29 Aug 08	30 Aug 15	System of 5 satellites for cartography, land surface, digital terrain models, disaster management, environmental monitoring.	MSI	Type: Sun-synchronous Altitude: 622 km Period: Inclination: 98.7 deg Repeat cycle: 1 days LST: 11:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.rapideye.de">www.rapideye.de</a>
<b>RASAT</b> RASAT Remote Sensing Satellite  TUBITAK	Approved	01 May 10	01 May 13	Cartography, land cover/land use, city planning, disaster mitigation/monitoring, environmental monitoring.	RASAT VIS Panchromatic, RASAT VIS Multispectral	Type: Sun-synchronous Altitude: 700 km Period: 98.8 mins Inclination: 98.21 deg Repeat cycle: 4 days LST: 10:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.uzaytubitak.gov.tr">www.uzaytubitak.gov.tr</a>
<b>RESOURCESAT-1</b> Resource Satellite-1  ISRO	Currently being flown	17 Oct 03	17 Oct 09	Natural resources management; agricultural applications; forestry etc.	AWIFS, LISS-IV, LISS-III (RESOURCESAT)	Type: Sun-synchronous Altitude: 817 km Period: 102 mins Inclination: 98.72 deg Repeat cycle: 26 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
<b>RESOURCESAT-2</b> Resource Satellite-2  ISRO	Planned	01 Dec 09	01 Jul 13	Natural resources management; agricultural applications; forestry etc.	AWIFS, LISS-IV, LISS-III (RESOURCESAT)	Type: Sun-synchronous Altitude: 817 km Period: 102 mins Inclination: 98.72 deg Repeat cycle: 26 days LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
<b>RESOURCESAT-3</b> Resource Satellite-3  ISRO	Considered	01 Jul 11	01 Jul 16	Natural resources management; agricultural applications; forestry etc.	WS LISS III, ATCOR	Type: Sun-synchronous Altitude: 817 km Period: 102 mins Inclination: 98.72 deg Repeat cycle: 26 days LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
<b>Resurs DK 1</b> Resurs DK Environmental Satellite 1  ROSKOSMOS / ROSHYDROMET	Currently being flown	15 Jun 06	30 Jun 11	Land surface	Geoton-L1, Pamela, Arina	Type: Inclined, non-sunsynchronous Altitude: 600 km Period: 92 mins Inclination: 70 deg Repeat cycle: 17 days LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://planet.iitp.ru">http://planet.iitp.ru</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Resurs P N1 Resurs P Environmental Satellite N1  ROSKOSMOS / ROSHYDROMET	Planned	31 Dec 10	31 Dec 15	Land surface	Geoton-L1, Pamela, Arina	Type: Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
Resurs P N2 Resurs P Environmental Satellite N2  ROSKOSMOS / ROSHYDROMET	Planned	31 Dec 13	31 Dec 18	Land surface	Geoton-L1, Pamela, Arina	Type: Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
RISAT-1 Radar Imaging Satellite  ISRO	Approved	20 Jan 10	20 Jan 14	Land surface, agriculture and forestry, regional geology, land use studies, water resources, vegetation studies, coastal studies and soils - Specially during cloud season	SAR (RISAT)	Type: Sun-synchronous Altitude: 610 km Period: 96.5 mins Inclination: 97.844 deg Repeat cycle: 12 days LST: 6:00 Longitude (if geo): Asc/desc: Descending URL: www.isro.org
RISAT-2 Radar Imaging Satellite  ISRO	Currently being flown	20 Apr 09	20 Apr 14	For research and disaster management applications purpose	SAR-X	Type: Sun-synchronous Altitude: 550 km Period: 90 mins Inclination: Repeat cycle: LST: 6:00 Longitude (if geo): Asc/desc: Descending URL: www.isro.org
RISAT-L Radar Imaging Satellite  ISRO	Considered	01 Jul 14	01 Jul 20	Land surface, agriculture and forestry, regional geology, land use studies, water resources, vegetation studies, coastal studies and soils - Specially during cloud season	SAR L	Type: Sun-synchronous Altitude: Period: 96.5 mins Inclination: 97.844 deg Repeat cycle: 12 days LST: Longitude (if geo): Asc/desc: Descending URL: www.isro.org
SABRINA SAR Bissat Radar for INTERferometric Applications  ASI	Approved	20 Apr 12	08 Sep 16	Research and testing on interferometric and bistatics techniques	SAR (SABRINA)	Type: Sun-synchronous Altitude: 622 km Period: 97.15 mins Inclination: 97.8 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL:
SAC-C  CONAE	Currently being flown	21 Nov 00	01 Jan 10	Earth Observation, studies the structure and dynamics of the Earth's surface, atmosphere, ionosphere and geomagnetic field.	MMRS, HRTC, HSTC, MMP, GOLPE, IST, INES, ICARE, WTE, DCS (SAC-C)	Type: Sun-synchronous Altitude: 705 km Period: 98 mins Inclination: 98.2 deg Repeat cycle: 9 days LST: 10:25 Longitude (if geo): Asc/desc: Descending URL: www.conae.gov.ar



Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
SAC-D/Aquarius CONAE	Approved	22 May 10	22 May 15	Earth observation studies; measurement of ocean salinity; emergency management	Lagrange, MWR, HSC, SODAD, NIRST, CARMEN-1, DCS (SAC-D), ROSA, TDP, Microwave radiometer, Aquarius L-Band Scatterometer	Type: Sun-synchronous Altitude: 657 km Period: 98 mins Inclination: 98 deg Repeat cycle: 9 days LST: 10:15 Longitude (if geo): Asc/desc: Ascending URL: www.conae.gov.ar
SAC-E/SABIA/mar CONAE / INPE	Planned	01 Jan 12	01 Jan 17	Food production; environmental monitoring; inner coastal and water quality	MOC	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: 9 days LST: 10:15 Longitude (if geo): Asc/desc: Descending URL: www.conae.gov.ar
SAC-F CONAE	Planned	01 Jan 14	01 Jan 19	Earth observation studies; emergency management; landscape epidemiology	HRMS, HSMS, TIS (CONAE), HSS	Type: Sun-synchronous Altitude: 705 km Period: 98 mins Inclination: 98.2 deg Repeat cycle: 9 days LST: 10:15 Longitude (if geo): Asc/desc: Descending URL: www.conae.gov.ar
SAOCOM 1A CONAE / ASI	Approved	01 Jun 12	01 Jun 17	Earth observation and emergency management with an L-band SAR	SAR-L	Type: Sun-synchronous Altitude: 620 km Period: 97.2 mins Inclination: 97.89 deg Repeat cycle: 16 days LST: 6:12 Longitude (if geo): Asc/desc: Ascending URL: www.conae.gov.ar
SAOCOM 1B CONAE / ASI	Approved	01 Dec 12	01 Dec 17	Earth observation and emergency management with an L-band SAR	SAR-L	Type: Sun-synchronous Altitude: 620 km Period: 97.2 mins Inclination: 97.89 deg Repeat cycle: 16 days LST: 6:12 Longitude (if geo): Asc/desc: Ascending URL: www.conae.gov.ar
SAOCOM-2A CONAE	Planned	01 Jan 14	01 Jan 19	Earth observation and emergency management with an L-band SAR	SAR-L	Type: Sun-synchronous Altitude: 620 km Period: Inclination: 98 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Descending URL: www.conae.gov.ar

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
SAOCOM-2B  CONAE	Planned	01 Jan 15	01 Jan 20	Earth observation and emergency management with an L-band SAR	SAR-L	Type: Sun-synchronous Altitude: 620 km Period: Inclination: 98 deg Repeat cycle: 16 days LST: 6:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.conae.gov.ar">www.conae.gov.ar</a>
SARAL Satellite with ARgos and ALtiKa  CNES / ISRO	Approved	01 Sep 10	01 Oct 13	This will provide precise, repetitive global measurements of sea surface height, significant wave heights and wind speed	ARGOS, ALtiKa	Type: Sun-synchronous Altitude: 799 km Period: 100.59 mins Inclination: 98.55 deg Repeat cycle: 35 days LST: Longitude (if geo): Asc/desc: Descending URL:
SARE-1  CONAE	Planned	01 May 10	01 May 14	Earth observation studies, technology testing	High Resolution Panchromatic Camera, Panchromatic High Sensitivity Camera, SAR components testing	Type: Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
SCD-1 Data Collecting Satellite 1  INPE	Currently being flown	09 Feb 93	01 Dec 12	Data collection and communication	DCP (SCD)	Type: Inclined, non-synchronous Altitude: 750 km Period: 100 mins Inclination: 25 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://www.inpe.br/programas/mecb/default.htm">www.inpe.br/programas/mecb/default.htm</a>
SCD-2 Data Collecting Satellite 2  INPE	Currently being flown	22 Oct 98	01 Dec 12	Data collection and communication	DCP (SCD)	Type: Inclined, non-synchronous Altitude: 750 km Period: 100 mins Inclination: 25 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://www.inpe.br/programas/mecb/default.htm">www.inpe.br/programas/mecb/default.htm</a>
SCISAT-1 SCISAT-I/ACE  CSA	Currently being flown	12 Aug 03	31 Dec 09	To improve our understanding of the depletion of the ozone layer, particularly over Canada and the Arctic.	ACE-FTS, MAESTRO	Type: Inclined, non-synchronous Altitude: 650 km Period: 97.7 mins Inclination: 74 deg Repeat cycle: 365 days LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.space.gc.ca/asc/eng/satellites/scisat/default.asp">www.space.gc.ca/asc/eng/satellites/scisat/default.asp</a>
SCLP Snow and Cold Land Processes  NASA	Considered	01 Jan 30	01 Jan 33	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Snow accumulation for fresh water availability	Ku and X-band radars (SCLP), K band radiometers (SCLP)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: 15 days LST: Longitude (if geo): Asc/desc: URL: <a href="http://decadal.gsfc.nasa.gov/scip.html">http://decadal.gsfc.nasa.gov/scip.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Sentinel-1 A ESA / EC	Approved	01 Nov 11	01 Nov 18	Providing continuity of C-band SAR data for operational applications notably: Marine Core services, Land Monitoring and Emergency Services	C-Band SAR	Type: Sun-synchronous Altitude: 693 km Period: 98.74 mins Inclination: 98.19 deg Repeat cycle: 12 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-1 B ESA / EC	Planned	01 Jul 12	01 Jul 19	Providing continuity of C-band SAR data for operational applications notably: Marine Core services, Land Monitoring and Emergency Services	C-Band SAR	Type: Sun-synchronous Altitude: 693 km Period: 98.74 mins Inclination: 98.19 deg Repeat cycle: 12 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-1 C ESA / EC	Considered	01 Jul 18	01 Jul 25	Providing continuity of C-band SAR data for operational applications notably: Marine Core services, Land Monitoring and Emergency Services	C-Band SAR	Type: Sun-synchronous Altitude: 693 km Period: 98.74 mins Inclination: 98.19 deg Repeat cycle: 12 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-2 A ESA / EC	Approved	01 Oct 12	01 Oct 19	Supporting land monitoring related services	MSI (Sentinel-2)	Type: Sun-synchronous Altitude: 786 km Period: 100.7 mins Inclination: 98.62 deg Repeat cycle: 10 days LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-2 B ESA / EC	Planned	01 Apr 15	01 Apr 22	Supporting land monitoring related services	MSI (Sentinel-2)	Type: Sun-synchronous Altitude: 786 km Period: 100.7 mins Inclination: 98.62 deg Repeat cycle: 10 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-2 C ESA / EC	Considered	01 Mar 19	01 Mar 26	Supporting land monitoring related services	MSI (Sentinel-2)	Type: Sun-synchronous Altitude: 786 km Period: 100.7 mins Inclination: 98.62 deg Repeat cycle: 10 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">http://www.esa.int/esaLP/LPgmes.html</a>
Sentinel-3 A ESA / EC	Approved	01 Oct 12	01 Oct 19	Supporting global land and ocean monitoring services	OLCI, SLSTR, SRAL	Type: Sun-synchronous Altitude: 814 km Period: 100 mins Inclination: 98.65 deg Repeat cycle: 27 days LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Sentinel-3 B ESA / EC	Planned	01 Oct 15	01 Oct 22	Supporting global land and ocean monitoring services	OLCI, SLSTR, SRAL	Type: Sun-synchronous Altitude: 814 km Period: 100 mins Inclination: 98.65 deg Repeat cycle: 27 days LST: 10:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-3 C ESA / EC	Considered	01 Jul 19	01 Jul 26	Supporting global land and ocean monitoring services	OLCI, SLSTR, SRAL	Type: Sun-synchronous Altitude: 814 km Period: 100 mins Inclination: 98.65 deg Repeat cycle: 27 days LST: 10:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-4 A ESA / EC	Considered	15 Dec 18	15 Jun 27	Supporting European atmospheric composition and air quality monitoring services. The Sentinel-4 A mission is carried on MTG S1	UVN (Sentinel-4), IRS	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-4 B ESA / EC	Planned	15 Dec 26	15 Jun 35	Supporting European atmospheric composition and air quality monitoring services. The Sentinel-4 B mission is carried on MTG S2	UVN (Sentinel-4), IRS	Type: Geostationary Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): 0 Asc/desc: N/A URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-5 precursor ESA / NSO	Planned	01 Jun 14	01 Jan 20	Supporting global atmospheric composition and air quality monitoring services	UVNS (Sentinel-5 precursor)	Type: Sun-synchronous Altitude: 814 km Period: 17 mins Inclination: 98.742 deg Repeat cycle: LST: 13:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sentinel-5 ESA	Planned	01 Dec 19	01 Dec 24	In early stages of mission definition. Other payloads will be added. The Sentinel-5 mission is carried on post-EPS.	IRS, METimage, UVNS (post-EPS)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.esa.int/esaLP/LPgmes.html">www.esa.int/esaLP/LPgmes.html</a>
Sich-2 NSAU	Approved	01 Apr 10	01 Apr 14	Land Observation	MBEI, MIREI	Type: Sun-synchronous Altitude: 668 km Period: 98 mins Inclination: 98 deg Repeat cycle: 5 days LST: 10:50 Longitude (if geo): Asc/desc: Descending URL:

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
SMAP Soil Moisture Active Passive  NASA	Approved	31 Dec 14	31 Dec 17	Late 2014 launch expected, 3-year nominal mission life. Global soil moisture mapping	L-band Radar (SMAP), L-band Radiometer (SMAP)	Type: Sun-synchronous Altitude: 670 km Period: Inclination: 98 deg Repeat cycle: LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://smap.jpl.nasa.gov">http://smap.jpl.nasa.gov</a>
SMOS Soil Moisture and Ocean Salinity (Earth Explorer Opportunity Mission)  ESA / CDTI / CNES	Approved	02 Nov 09	02 Nov 12	Overall objectives are to provide global observations of two crucial variables for modelling the weather and climate, Soil Moisture and Ocean Salinity. It will also monitor the vegetation water content, snow cover and ice structure.	MIRAS (SMOS)	Type: Sun-synchronous Altitude: 758 km Period: 100.075 mins Inclination: 98.445 deg Repeat cycle: 149 days LST: 6:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.esa.int/export/esaLP/smos.html">www.esa.int/export/esaLP/smos.html</a>
SORCE Solar Radiation and Climate Experiment  NASA	Currently being flown	25 Jan 03	30 Sep 11	5-year nominal mission life, currently in extended operations. Continues the precise, long-term measurements of total solar irradiance at UV and VNIR wavelengths. Daily measurements of solar UV. Precise measurements of visible solar irradiance for climate studies.	SOLSTICE, SIM, TIM, XPS	Type: Inclined, non-sunsynchronous Altitude: 600 km Period: Inclination: 40 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL: <a href="http://lasp.colorado.edu/sorce">http://lasp.colorado.edu/sorce</a>
SPOT-4 Satellite Pour l'Observation de la Terre - 4  CNES	Currently being flown	24 Mar 98	01 Jan 12	Cartography, land surface, agriculture and forestry, civil planning and mapping, digital terrain models, environmental monitoring	HRVIR, VEGETATION, DORIS (SPOT)	Type: Sun-synchronous Altitude: 832 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: 26 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.spot.com/home/system/introsat/welcome.htm">www.spot.com/home/system/introsat/welcome.htm</a>
SPOT-5 Satellite Pour l'Observation de la Terre - 5  CNES	Currently being flown	04 May 02	01 Jan 13	Cartography, land surface, agriculture and forestry, civil planning and mapping, digital terrain models, environmental monitoring	HRG, VEGETATION, HRS, DORIS-NG (SPOT)	Type: Sun-synchronous Altitude: 832 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: 26 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.spotimage.fr/home/system/future/spot5/welcome.htm">www.spotimage.fr/home/system/future/spot5/welcome.htm</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
STARLETTE CNES	Currently being flown	06 Feb 75	31 Dec 50	Geodesy/gravity study of the Earth's gravitational field and its temporal variations	Laser Reflectors	Type: Inclined, non-sunsynchronous Altitude: 812 km Period: 104 mins Inclination: 49.83 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL:
STELLA CNES	Currently being flown	30 Sep 93	31 Dec 50	Geodesy/gravity study of the Earth's gravitational field and its temporal variations	Laser Reflectors	Type: Inclined, non-sunsynchronous Altitude: 830 km Period: 101 mins Inclination: 98 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL:
SumbandilaSat Sumbandila Satellite SANSa / Uni of Stellenbosh	Currently being flown	18 Sep 09	18 Sep 14	Primary payload (imager) will be used to support decision making in natural resource management, disaster management, agriculture, urban planning and other applications.	SumbandilaSat Imager	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: URL:
Swarm Earth's Magnetic Field and Environment Exploreres; Constellation of three satellites ESA / CNES / CSA	Approved	01 Oct 10	01 Dec 14	To provide the best ever survey of the geomagnetic field and its temporal evolution, and gain new insights into improving our knowledge of the Earth's interior and climate.	Laser Reflectors (ESA), ASM, VFM, STR, EFI, ACC, GPS Receiver (Swarm)	Type: Inclined, non-sunsynchronous Altitude: 450 km Period: 90 mins Inclination: 87.4 deg Repeat cycle: LST: 6:00 Longitude (if geo): Asc/desc: N/A URL: <a href="http://www.esa.int/export/esaLP/swarm.html">www.esa.int/export/esaLP/swarm.html</a>
SWOT Surface Water Ocean Topography NASA / CNES	Considered	01 Jan 20	01 Jan 23	Phase-2 DS Mission, launch order unknown, 3-year nominal mission. Ocean, lake, and river water levels for ocean and inland water dynamics	CO Sensor (ASCENDS), Ka-band Radar Interferometer (KaRIN)	Type: Inclined, non-sunsynchronous Altitude: 970 km Period: Inclination: 78 deg Repeat cycle: 22 days LST: Longitude (if geo): Asc/desc: URL: <a href="http://bprc.osu.edu/water/index.php">http://bprc.osu.edu/water/index.php</a>
TanDEM-X TerraSAR-X Add-on for Digital Elevation Measurements DLR	Approved	21 Oct 09	31 Dec 14	Cartography, land surface, civil planning and mapping, digital terrain models, environmental monitoring.	X-Band SAR	Type: Sun-synchronous Altitude: 514 km Period: 94.85 mins Inclination: 97.4 deg Repeat cycle: 11 days LST: Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.dlr.de/hr/desktopdefault.aspx/tabid-2317/3669_read-5488/">www.dlr.de/hr/desktopdefault.aspx/tabid-2317/3669_read-5488/</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
Terra Terra (formerly EOS AM-1)  NASA / JAXA / CSA	Currently being flown	18 Dec 99	30 Sep 11	6-year nominal mission life, currently in extended operations. Atmospheric dynamics/water and energy cycles, atmospheric chemistry, physical and radiative properties of clouds, air-land exchanges of energy, carbon and water, vertical profiles of CO and methane volcanology	MOPITT, MODIS, MISR, CERES, ASTER	Type: Sun-synchronous Altitude: 705 km Period: 99 mins Inclination: 98.2 deg Repeat cycle: 16 days LST: 10:30 Longitude (if geo): Asc/desc: Descending URL: <a href="http://terra.nasa.gov">http://terra.nasa.gov</a>
TerraSAR-X  DLR	Currently being flown	15 Jun 07	01 Jan 13	Cartography, land surface, civil planning and mapping, digital terrain models, environmental monitoring.	X-Band SAR, GPSRO (Terra-SAR)	Type: Sun-synchronous Altitude: 514 km Period: 94.85 mins Inclination: 97.4 deg Repeat cycle: 11 days LST: 18:00 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.terrasar.de">www.terrasar.de</a>
TerraSAR-X2 TerraSAR-X follow-on  DLR	Planned	01 Jan 13	01 Jan 18	Commercial follow-on mission to TerraSAR-X operated by Infoterra. Cartography, land surface, civil planning and mapping, digital terrain models, environmental monitoring.	X-Band SAR	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: Ascending URL:
TES Technology Experimental Satellite on Cartography  ISRO	Currently being flown	22 Oct 01	31 Dec 09	For demonstrating many satellite technologies for future Cartosat satellites	TES PAN	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.isro.org">www.isro.org</a>
TES-HYS Technology Experimental Satellite on Hyperspectral  ISRO	Considered	01 Jan 10	01 Jan 14	For demonstrating many satellite technologies for future Hyperspectral satellites	HySI (TES-HYS)	Type: Sun-synchronous Altitude: Period: Inclination: Repeat cycle: LST: Longitude (if geo): Asc/desc: TBD URL:
THEOS Thailand Earth Observation System  GISTDA	Currently being flown	01 Oct 08	01 Oct 13	Earth resources, land surface and disaster monitoring, civil planning	PAN (GISTDA), MS (GISTDA)	Type: Sun-synchronous Altitude: 822 km Period: 101 mins Inclination: 98.7 deg Repeat cycle: 26 days LST: 10:00 Longitude (if geo): Asc/desc: Descending URL: <a href="http://www.gistda.or.th">www.gistda.or.th</a>

Mission	Status	Launch date	EOL date	Applications	Instruments	Orbit details & URL
<b>TopSat</b> <b>Optical Imaging Satellite</b>  <b>BNSC</b>	Currently being flown	27 Oct 05	31 Dec 09	Prototype low-cost high-resolution imager	TOPSAT Telescope	Type: Sun-synchronous Altitude: 600 km Period: Inclination: 98 deg Repeat cycle: LST: 10:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.bnsc.gov.uk/content.aspx?nid=5907">www.bnsc.gov.uk/content.aspx?nid=5907</a>
<b>TRMM</b> <b>Tropical Rainfall Measuring Mission</b>  <b>NASA / JAXA</b>	Currently being flown	27 Nov 97	30 Sep 11	3-year nominal mission life, currently in extended operations. Atmospheric dynamics/water and energy cycles	LIS, PR, CERES, VIRS, TMI	Type: Inclined, non-sun-synchronous Altitude: 405 km Period: 93.5 mins Inclination: 35 deg Repeat cycle: LST: Longitude (if geo): Asc/desc: N/A URL: <a href="http://trmm.gsfc.nasa.gov">http://trmm.gsfc.nasa.gov</a>
<b>UK-DMC</b> <b>UK Disaster Monitoring Constellation</b>  <b>BNSC</b>	Currently being flown	27 Sep 03	31 Dec 09	Wide area, medium resolution optical imaging for mapping, crop monitoring, environmental resource and disaster management	SLIM-6	Type: Sun-synchronous Altitude: 686 km Period: 98.4 mins Inclination: 98.2 deg Repeat cycle: 5 days LST: 10:15 Longitude (if geo): Asc/desc: Ascending <a href="http://www.sstl.co.uk/index.php?loc=113">www.sstl.co.uk/index.php?loc=113</a>
<b>UK-DMC2</b> <b>UK Disaster Monitoring Constellation 2</b>  <b>BNSC</b>	Approved	30 Jul 09	25 Jul 14	Wide area, medium resolution optical imaging for mapping, crop monitoring, environmental resource and disaster management	SLIM-6-22	Type: Sun-synchronous Altitude: 686 km Period: 98.5 mins Inclination: 98.14 deg Repeat cycle: 5 days LST: 10:30 Longitude (if geo): Asc/desc: Ascending URL: <a href="http://www.dmcii.com">www.dmcii.com</a>
<b>VENUS</b> <b>Vegetation and Environment monitoring on a New Micro-Satellite</b>  <b>CNES / ISA</b>	Approved	01 Dec 11	01 Dec 14	Vegetation, agriculture monitoring, water management	VSC	Type: Sun-synchronous Altitude: 720 km Period: Inclination: 98.27 deg Repeat cycle: 2 days LST: Longitude (if geo): Asc/desc: Descending URL: <a href="http://smc.cnes.fr/VENUS/index.htm">http://smc.cnes.fr/VENUS/index.htm</a>