

Mission	Agency	Programme	Key Instruments	Applications	Further Information
Aqua	NASA	NASA's Earth Observing System	AIRS, AMSU, CERES, MODIS, AMSR-E	Biological and physical processes, surface temperatures of land and ocean	Aqua
Aura	NASA	Earth Observing System (EOS)	HIRDLS, MLS, OMI, TES	Earth's ozone layer, air quality and climate.	Aura
Envisat	ESA	Envisat Programme	AATSR, ASAR, ASAR (image mode), ASAR (wave mode), DORIS-NG, MERIS, MIPAS, MWR, RA-2, SCIAMACHY	Physical oceanography, land surface, ice and snow, atmospheric chemistry, atmospheric dynamics	Envisat
ERS-1	ESA	ESA	AMI/SAR/Image, AMI/SAR/Wave, AMI/Scatterometer, ATSR	Earth resources, physical oceanography, land, geodesy, atmosphere	ERS-1
ERS-2	ESA	ESA	AMI/SAR/Image, AMI/SAR/Wave, AMI/Scatterometer, ATSR/M	Earth resources, physical oceanography, land, geodesy, atmosphere	ERS-2
GoSat	JAXA	GCOM (Global Change Observation Mission)	TANSO-FTS (greenhouse gas observation sensor), TANSO-CAI (cloud/aerosol sensor)	Atmosphere	GoSat
Metop-A	EUMETSAT/NOAA/CNES/ESA	Metop Programme	GOME-2, IASI, AMSU-A	Meteorology, climatology	Metop-A
Metop-B	EUMETSAT/NOAA/CNES/ESA	Metop Programme	GOME-2, IASI, AMSU-A	Meteorology, climatology	Metop-B

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Metop-C	EUMETSAT/NOAA/ CNES/ESA	Metop Programme	GOME-2, IASI, AMSU-A	Meteorology, climatology	
Meteosat Second Generation (8, 9, 10, 11)	EUMETSAT/ESA	Meteosat Second Generation (MSG) program.	GERB, MSG Comms, SEVIRI	Meteorology, climatology	MSG
Meteosat Third Generation (4 Imaging Satellites (MTG-I), 2 Sounding satellites(MTG-S) (Future missions)	EUMETSAT/ESA	Meteosat Third Generation (MTG) program	<p><u>MTG-I:</u> FCI (Flexible Combined Imager), LI (Lightning Imager).</p> <p><u>MTG-S:</u> IRS (Infrared Sounder), UVN (Ultraviolet Visible Near-</p>	Meteorology, climatology	MTG
OCO-2	NASA	Orbiting Carbon Observatory	Three high resolution grating spectrometers	Climatology – CO ₂	OCO-2
Sentinel-3	ESA/EUMETSAT	Copernicus	OLCI (Ocean and Land Colour Instrument) – can measure the atmospheric composition (mainly aerosols and water vapour), illumination condition, and downwelling solar radiation.	Global land and ocean monitoring services	Sentinel-3

Course EO Satellite Missions Table

Mission	Agency	Programme	Key Instruments	Applications	Further Information
Sentinel-4 (Future mission)	ESA/EUMETSAT	Copernicus	UVN (Multispectral Spectrometer), (IRS) Infra-Red Sounder	Atmosphere	Sentinel-4
Sentinel-5p	ESA	Copernicus	Tropomi - TROPOspheric Monitoring Instrument	Air pollution	Sentinel-5p
Sentinel-5 (Future mission)	ESA	Copernicus	UVNS (Ultraviolet Visible Near-infrared Shortwave)	Atmosphere	Sentinel-5
SUOMI NPP	NOAA, NASA	Polar Orbiting Missions	ATMS, OMPS, VIIRS, CERES	Climatology	
Terra	NASA/METI/CSA	NASA's Earth Observing System	MODIS, MOPITT, MISR, ASTER, CERES	Biological and physical processes, surface temperatures of land and ocean, measurements of CO in the troposphere	Terra