

National Oceanographic and Atmospheric Administration (NOAA)
Geostationary Operational Environmental Satellite(s) - GOES-10 (West), GOES-12 (East)

Mission orbital parameters

Purpose	Precession rate	Orbit radius (km)	Long. of ascending node	Inclination	Repeat time
Continuous monitoring for extensive data analysis and aid	Geosynchronous	35,786	75°W, 135°W	0.41°	N/A

Instrument Name	Purpose	# of Cha	Wave range (μm)	Spect. Res. (μm)	Horiz Swath	Horiz Res. (km)	Vert. Res. (km)	Data rate	Launch & end dates
Imager: VIS Shortwave Moisture Longwave-IR1 Longwave-IR2	To sense radiant and reflected solar energy by temperature, water vapor, SSTs, and clouds		0.55 - 0.75 3.80 - 4.00 6.50 - 7.00 10.20 - 11.20 11.50 - 12.50	0.2 0.2 0.5 1.0 1.0	Pole to Pole and 60° E-W	1 4 8 4 4		2.6208 Mbps	1990's to current
Sounder: Longwave-IR	19-channel radiometer for sensing specific data parameters (e.g. temperature, ozone, water vapor)	7	14.71 (T) 14.37 14.06 13.64 13.37 12.66		Pole to Pole and 60° E-W	10	1	40.0 kbps	1990's to current
Midwave-IR		5	12.02 (sfc T) 11.03 (sfc T) 9.71 (ozone) 7.43 (vapor) 7.02			10	1		
Shortwave-IR		6	6.51 4.57 (T) 4.52 4.45 4.13 3.98 (sfc T) 3.74 (T)			10	1		
Visible		1	0.70 (cloud)			10	1		
SEM: Magnetometer X-ray Proton/Alpha	Space Env. Monitor Magnetic field Solar x-ray High Energy Flux								
		2	N/A	0.03 nT	N/A	N/A	N/A		
		3	0.5-3, 1-8 Å	2.5, 7 Å	N/A	<=	<=		
		1	370 - 970 MeV	600 MeV	~34° half angle	2%	2%		
		1	>= 970 MeV	N/A	N/A	N/A	N/A		1990's to current
Particle	Flux	16	0.55 - 500 MeV	499.45 MeV		N/A	N/A		
DCS	Data collection and relay system for ground-based data platforms (pole-to-pole)				75°E to 75°W				1990's to current
SAR	Search and rescue (pole-to-pole)				75°E to 75°W				1990's to current

Good reference web pages

<http://noaasis.noaa.gov/NOAASIS/ml/genlsatl.html>

<http://rsd.gsfc.nasa.gov/goes/text/goes.databook.html>