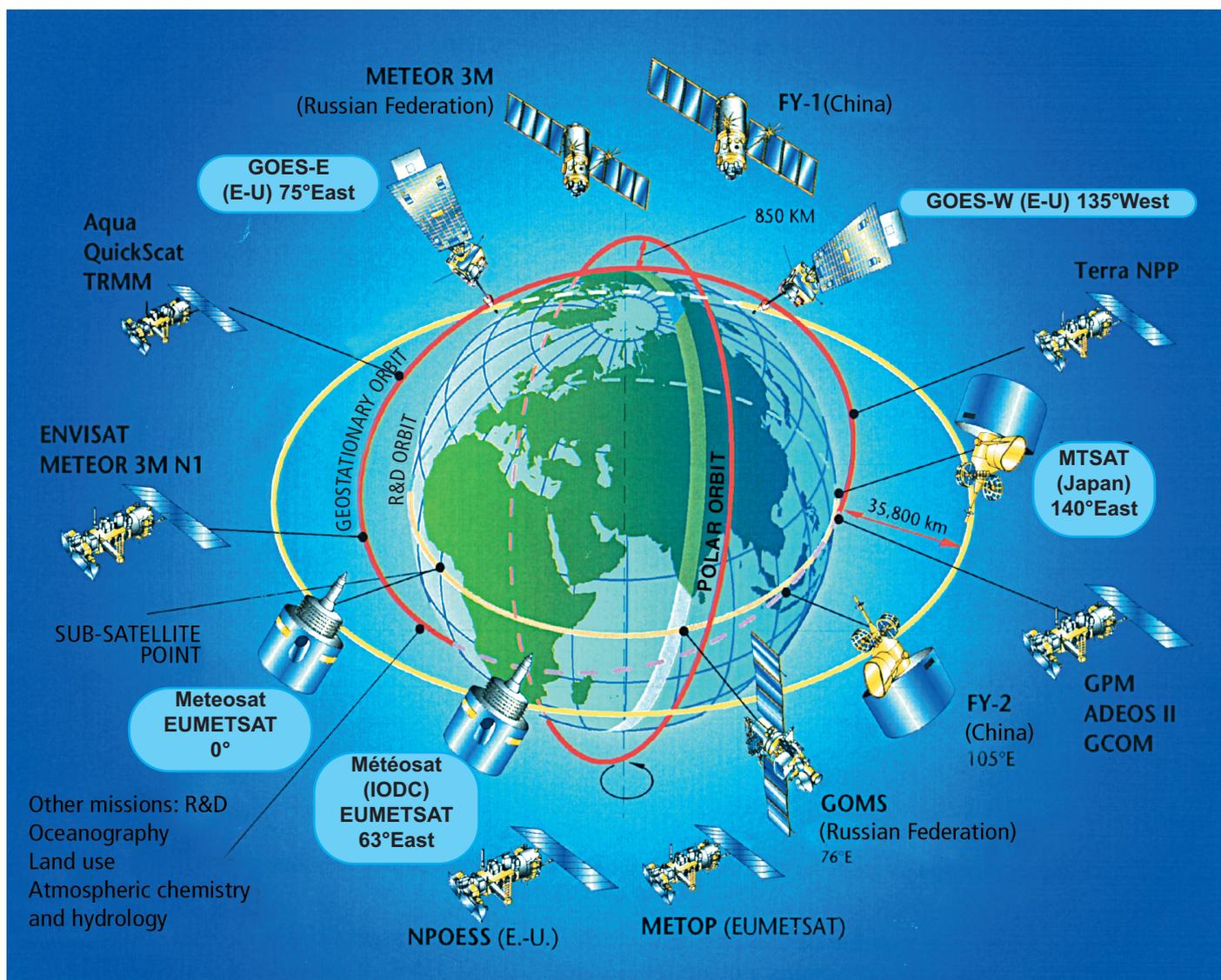


Centre de
Météorologie
Spatiale

METEO
FRANCE

Constellation of weather and environmental satellites co-ordinated by the CGMS



System of current and future satellites organized by the coordination group for meteorological satellites (CGMS), including research and development satellites. Nominal positions of the constellation planned for 2010.

Data from the following satellites was received by the CMS in 2004:

The geostationary satellites Meteosat-5, Meteosat-7, Meteosat-8, GOES-9 (which replaced GMS-5), GOES-10, GOES-12, and the polar orbiting satellites NOAA-15, 16 & 17.

Stage	1960	1965	1970	1975	1980	1985	1990	1995	2000
First meteorological satellite	φ	TIROS -1 (USA)							
First operational meteorological satellite		φ	ESSA -1 (USA)						
First geostationary meteorological satellite		γ	ATS -1 (USA)						
First Soviet meteorological satellite			φ	Météor -1m (URSS)					
Start of automatic picture transmission (APT)			φ	ITOS -1 (USA)					
First atmospheric sounder			φ	NOAA -2 (USA)					
Coordination group for meteorological satellites (CGMS)			φ	First meeting of the CGMS					
First geostationary operational weather satellite			γ	SMS -1 (USA)					
First Japanese geostationary meteorological satellite			γ	GMS -1 (Japan)					
First European geostationary meteorological satellite			γ	Meteosat -1 (ESA)					
First water vapour image			γ	Meteosat -1 (ESA)					
First operational atmospheric sounder					φ	TIROS -N (USA)			
World coverage achieved for the first GARP global experiment			American, Soviet, Japanese	φ	and European satellites.				
Start of continuous operational coverage		American and Soviet polar satellites				φ			
		European, Japanese and American geostationary satellites							
New generation of geostationary satellites							GOES -8 (USA)	γ	
First Russian geostationary meteorological satellite						GOMS -1/Elektro (Russia)		γ	
New generation of atmospheric sounders							NOAA -K (USA)		φ
New concept of multifunctional satellites							MTSAT (Japan)		γ
Enlargement of the space component of SMO to R&D satellites						Inclusion of R&D satellites for SMO			φ
New generation of European meteorological satellites							MSG -1 (EUMETSAT)		γ

Major stages in the deployment of meteorological and environmental research satellites

The CGMS

The space based component of the WMO's Global Observing System for World Weather Watch is composed of several independent, national or regional systems co-ordinated by an informal international group that meets annually: the Coordination Group for Meteorological Satellites (CGMS). Participation in the CGMS initially concerned the effective operators of meteorological satellites and the World Meteorological Organisation (WMO) as the central organisation of users. It included China, EUMETSAT (for Europe), India, Japan, Russia, the United States and the WMO. The CGMS met for the first time in September 1972 (when it was still known as "Coordination of Geostationary Meteorological Satellites") and each year since. Upon the initiative of the WMO, the CGMS recently enlarged itself to include the operators of environmental or experimental satellites, which usefully complement operational meteorological satellites.

The CGMS devotes itself to co-ordinating operational applications and standardising the exploitation of satellite systems at a global scale.

Operational geostationary satellites in May 2004			
Name	Operator	Position	Launch Date
GOES-9 *	E.-U./NOAA	155°East	May 1995
GOES-10 *	E.-U./NOAA	135°West	April 1997
GOES-12 *	E.-U./NOAA	75°West	July 2001
Meteosat-5 *	EUMETSAT	63°East	March 1991
Meteosat-7 *	EUMETSAT	0°	September 1997
Meteosat-8 *	EUMETSAT	3°West	August 2002
KALPANA	INDIA	74°East	September 2002
INSAT-3A	INDIA	93°East	April 2003
FY-2B	CHINA	105°East	June 2000

(*) Satellites marked with an asterisk are operationally exploited at the CMS.