



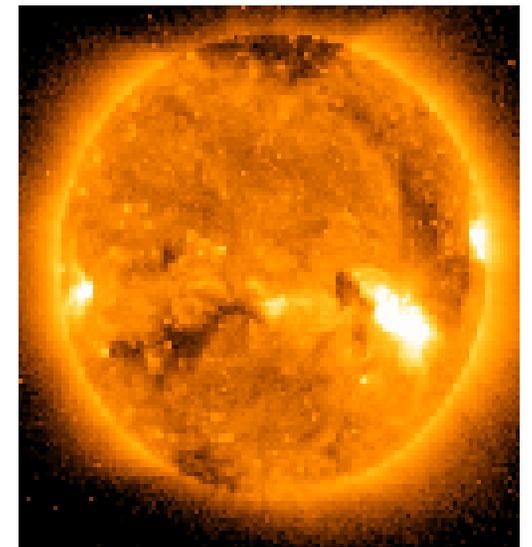
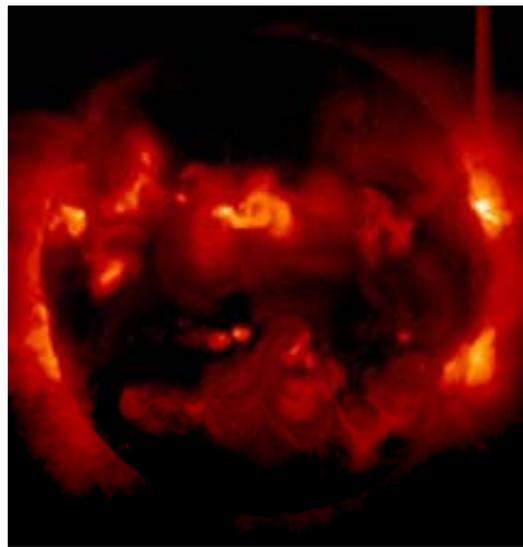
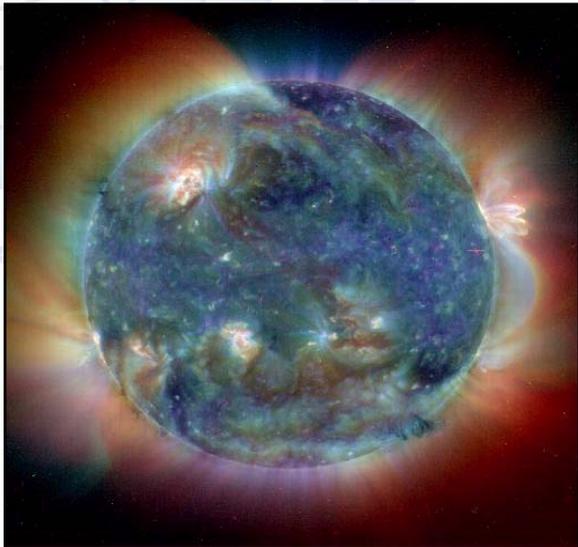
The Role of WMO in Space Weather

***Space Weather Enterprise Forum 2009
Washington, D.C.
May 19-20, 2009***

**Barbara J. Ryan
Director, WMO Space Programme**

Space Weather Events

- **Affect meteorological / environmental satellites**
- **Are monitored by these satellites**
- **Affect meteorological communications**
- **Affect some climate variables**



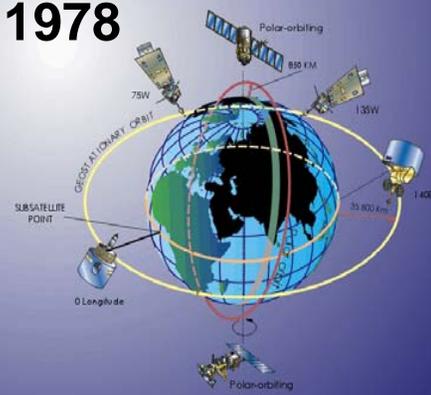
WMO GOS Space-based Development



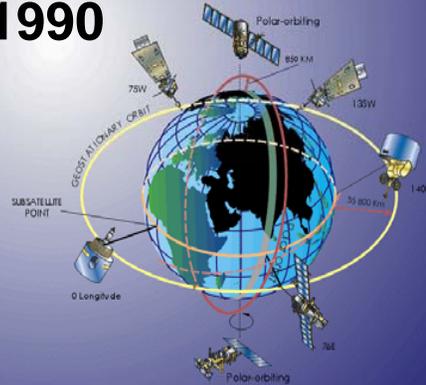
1961



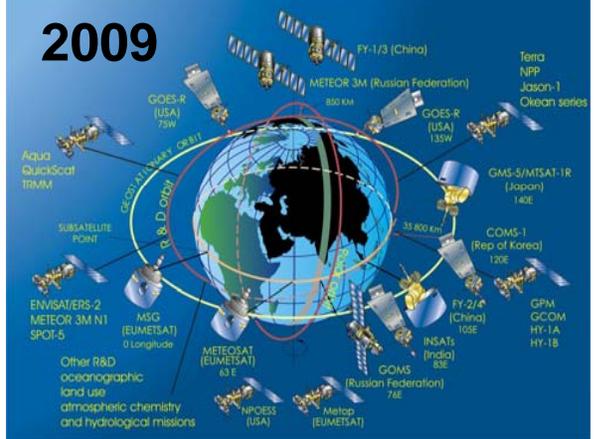
1978



1990

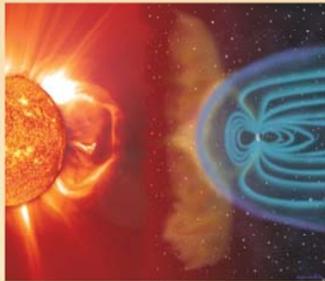


2009



Report to WMO Executive Council

WMO Space Programme



THE POTENTIAL ROLE OF WMO IN SPACE WEATHER

A REPORT ON THE POTENTIAL SCOPE, COST AND BENEFIT OF
A WMO ACTIVITY IN SUPPORT OF INTERNATIONAL
COORDINATION OF SPACE WEATHER SERVICES, PREPARED
FOR THE SIXTIETH EXECUTIVE COUNCIL

APRIL 2008



World
Meteorological
Organization

Weather • Climate • Water

- **Describes economic impact**
- **Potential scope, cost and benefit of WMO coordination**
- **Analysis suggests high benefit / cost**

www.wmo.int/pages/prog/sat/Refdocuments.html#SpaceWeather

WMO TD No. 1482 (SP-5)

Next Steps for WMO

- **Inter-Programme Coordination Team on Space Weather (CBS and CAeM)**
 - **Standardization of data exchange (WIS)**
 - **Harmonized end products including warnings**
 - **Observation integration**
 - **Encourage dialogue – research to operations**
- **Cooperation with ISES, UNOOSA, ICAO, ITU, IMO**
- **Opportunity for secondments**