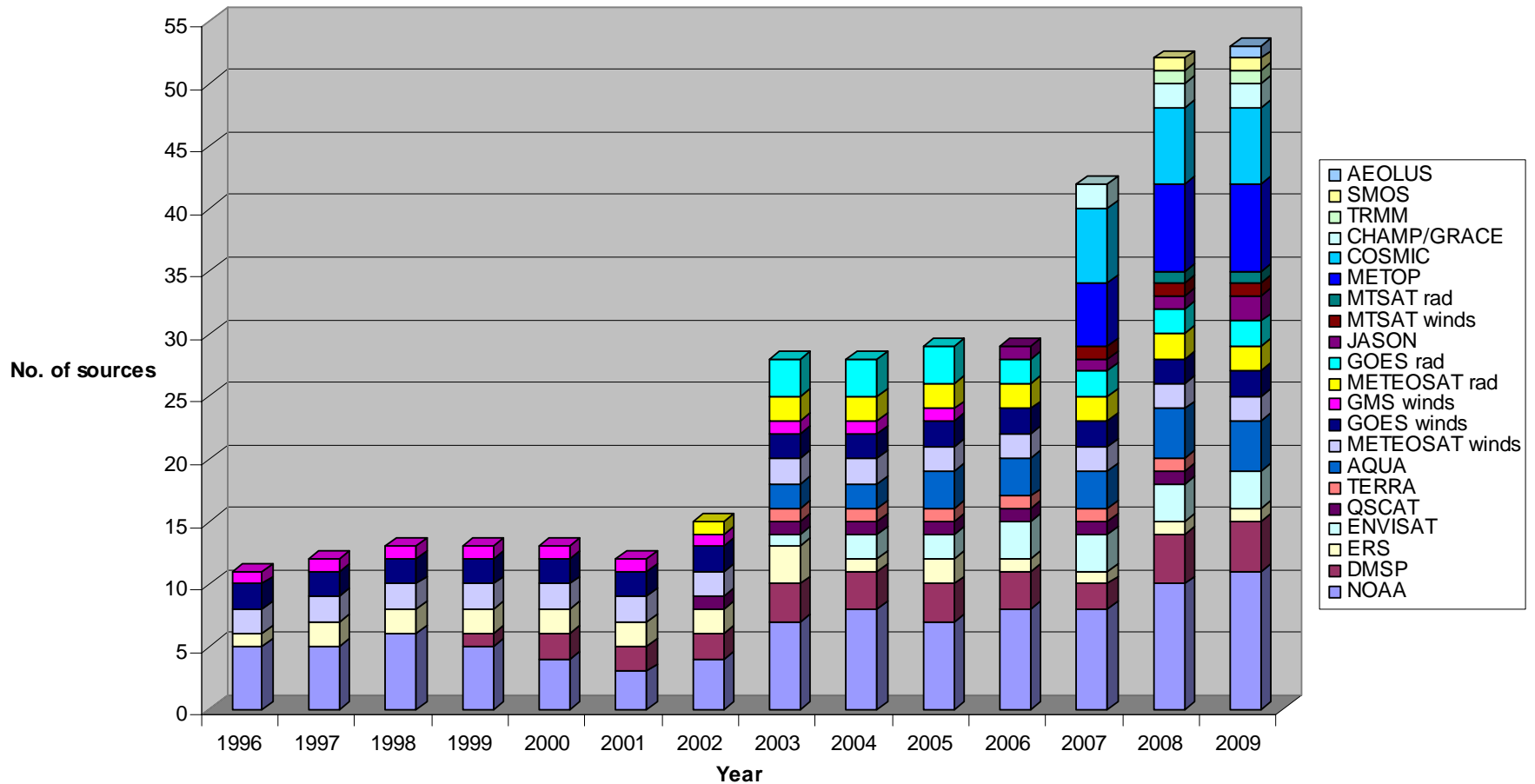


Satellite observing system



**Use data from over 40 different satellite instruments,
expected to increase to ~50 until 2009.**

Highlights

- **Some recent updates:**

- ◆ METOP data assimilated since 11 Jan 2007 (AMSU-A/MHS), 19 March 2007(HIRS), 7 June 2007 (IASI, ASCAT). GRAS, GOME-2 monitored.
- ◆ GPS RO: rising occultations from COSMIC (12 Dec 2006), setting RO (6 Nov 2007); GRAS data under assessment, CHAMP/GRACE as back-up.
- ◆ Replacement of Meteosat 5+8 with 7+9, addition of MTSAT, enhanced ozone monitoring/assimilation (Envisat, METOP, AURA).

- **Key research items:**

- ◆ 4D-Var microwave radiance assimilation in presence of clouds/rain.
- ◆ Evaluation of cloud-affected radiances for most IR-instruments.
- ◆ Improved usage of advanced sounder data (e.g. water vapour).
- ◆ Improved usage of data over land.
- ◆ Improved radiative transfer.