Satellite observing system

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

● Some recent updates:
  ◆ 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.