

Europe plans busy year in space

Forthcoming European Space Agency projects include the launch of two orbital telescopes to peer into deep space, and three satellites to gather data on ice, soil, and gravity on Earth. The 10bn-euro programme also sees the maiden liftoff of Vega and Soyuz rockets from Kourou, French Guiana

Herschel Space Observatory:

Will observe Universe at far-infrared wavelengths, allowing it to see through dust obscuring earliest phases of star and planetary formation

Planck:

Will study cosmic microwave background radiation which carries information about earliest structures in cosmos

Soyuz:

Russian rocket will benefit from increased capacity due to Kourou's proximity to equator. In 2010, Soyuz will start launching operational **Galileo** satellites

Vega:

Designed to launch small payloads. Part of Europe's policy of having "guaranteed access" to space

Goce:

Will measure Earth's gravity field, revealing new details about ocean behaviour

Cryosat-2:

Will monitor ice thickness on both land and sea to provide conclusive evidence of rates at which ice cover may be diminishing

Smos:

Will observe soil moisture over Earth's landmasses and salinity over oceans to improve understanding of planet's water cycle and ocean circulation patterns