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Overview of Planck results

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The European Space Agency's Planck satellite, dedicated to studying the early Universe and its subsequent evolution, was launched in May 2009 and scanned the microwave and submillimetre sky continuously up to late 2013. This talk gives an overview of the main characteristics of the data and the data products now released, in temperature and polarization, as well as the associated cosmological and astrophysical science results.

The science products include maps of the cosmic microwave background (CMB), the thermal Sunyaev-Zeldovich effect, and diffuse foregrounds in temperature and polarization, catalogues of compact Galactic and extragalactic sources, and extensive simulations of signals and noise used in assessing the performance of the analysis methods and estimation of uncertainties.

Scientific results include cosmological parameters deriving from CMB power spectra, gravitational lensing, reionization history and cluster counts, as well as constraints on inflation, non-Gaussianity, primordial magnetic fields, dark energy, and modified gravity.

Summary

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