Planck is the third-generation satellite aimed at measuring the cosmic microwave background, a relic of the hot big bang. Launched in May 2009 Planck has surveyed the full sky at high sensitivity, high angular resolution and with a broad range of frequencies from 30 to 857 GHz. In this talk I will present our sky maps, their statistical properties and explain how we use them to reach conclusions about the standard cosmological model and extensions to this model. We will consider consistency with other cosmological measurements, and what we can conclude by combining them with Planck.

This work was supported by NASA and ESA.