The Anti-Atlas Mountains of Morocco formed as a result of the collision of the African and Eurasian tectonic plates about 80 million years ago. This collision destroyed the Tethys Ocean; the limestone, sandstone, claystone, and gypsum layers that formed the ocean bed were folded and crumpled to create the Anti-Atlas Mountains. In this ASTER image of southwest Morocco, visible, near infrared, and short wavelength infrared bands are combined to dramatically highlight the different rock types, and illustrate the complex folding. The ability to map geology using ASTER data is enhanced by bands that are sensitive to differences in rock mineralogy. The image covers an area of 51.9 km by 60.8 km, and is located at 28.1°N, 10.7°W.

With its 14 spectral bands from the visible to the thermal infrared wavelength region and its high spatial resolution of about 15 to 90 m, ASTER images Earth to map and monitor the changing surface of our planet. The broad spectral coverage and high spectral resolution of ASTER provides scientists in numerous disciplines with critical information for surface mapping and monitoring of dynamic conditions and temporal change. Example applications are monitoring glacial advances and retreats; monitoring potentially active volcanoes; identifying crop stress; determining cloud morphology and physical properties; wetlands evaluation; thermal pollution monitoring; coral reef degradation; surface temperature mapping of soils and geology; and measuring surface heat balance.