This Hubble picture, taken on 23 July 2009, is the first full-disc, natural-colour image of Jupiter made with Hubble's new camera, the Wide Field Camera 3 (WFC3). The dark smudge at bottom right is debris from a comet or asteroid that plunged into Jupiter's atmosphere and disintegrated. In addition to the fresh impact, the image reveals a spectacular variety of shapes in the swirling atmosphere of Jupiter. The planet is wrapped in bands of yellow, brown and white clouds. These bands are produced by the atmosphere flowing in different directions at various places. When these opposing flows intersect, turbulence appears.