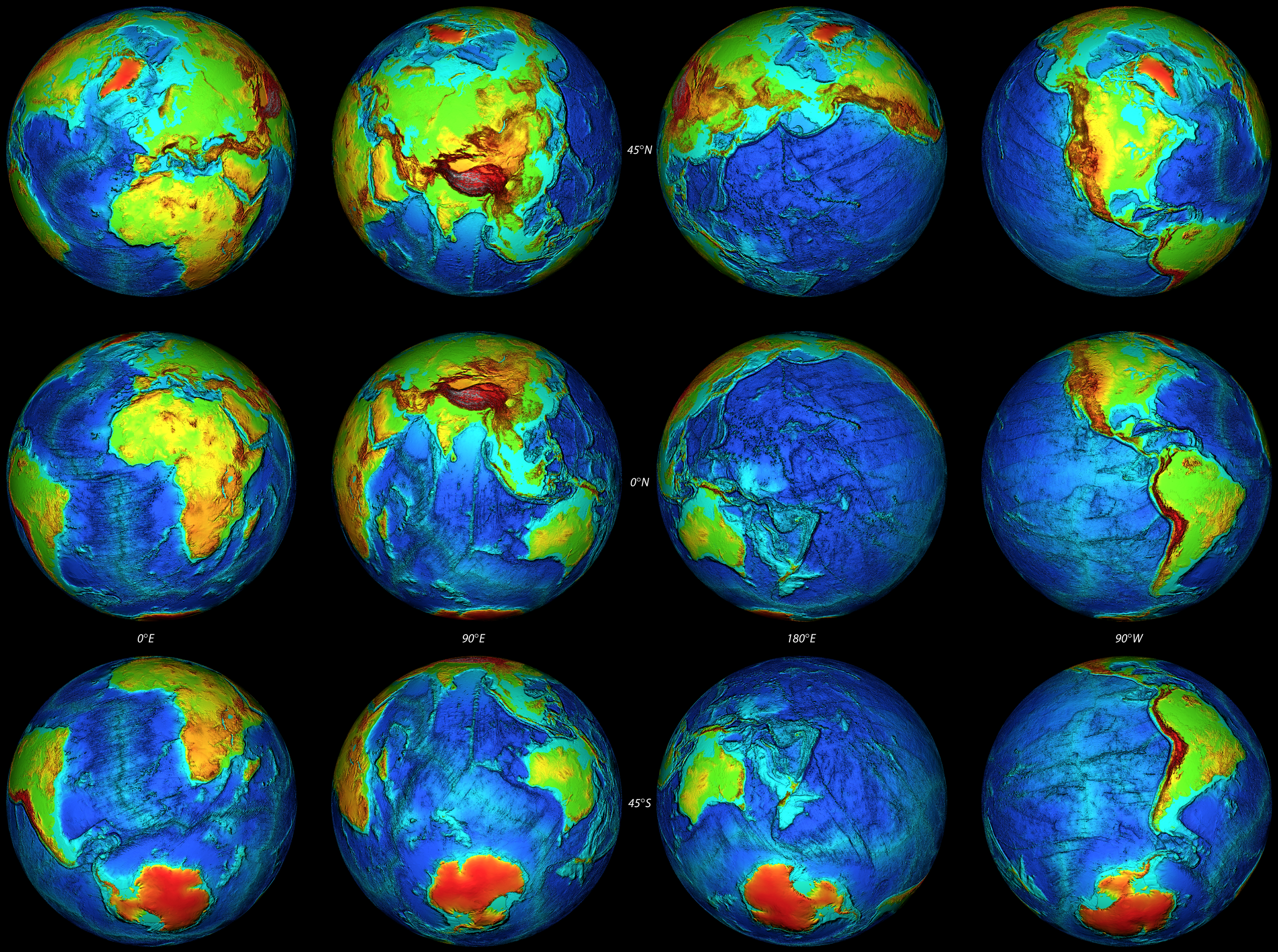
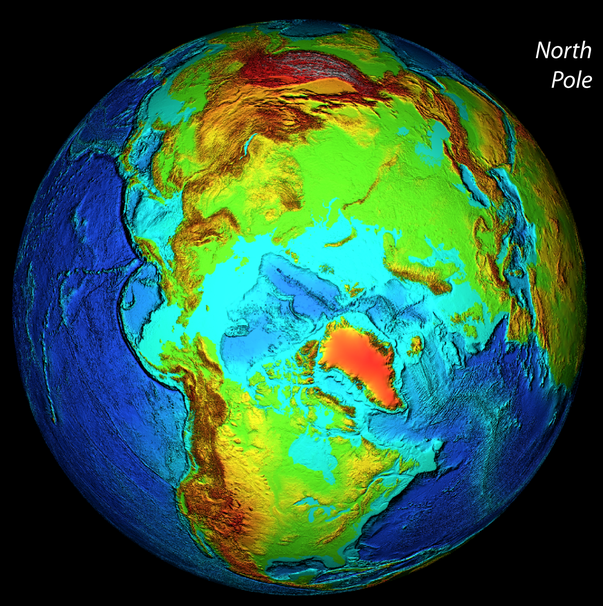
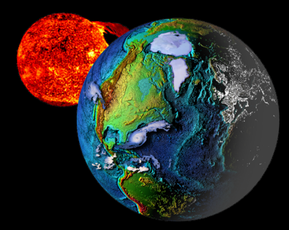
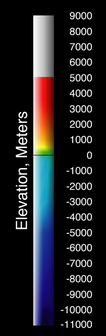
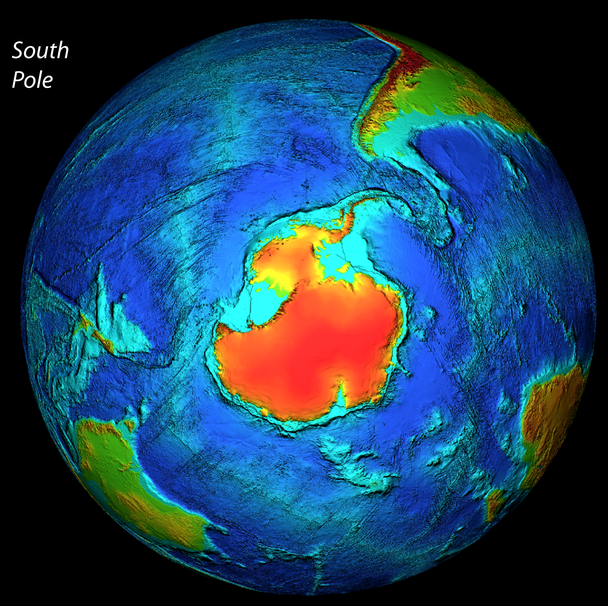




Views of the Globe

Modeled from Digital Elevation Data

A texture-mapped, orthographic-projection view was used for rendering the images. This (R3) version of the images is the first with display based on the full 2-minute horizontal and 16-bit resolution of the vertical data. The center viewpoints of the globes step 90° of longitude from 0° East around the world eastward to 90° West. Viewpoint latitudes step ±45° either side of the Equator, and directly over the Equator and each pole. As rendered for these images, each pixel covers at least a 3.44 minute square on the earth's surface. An arbitrary color palette was chosen to give a natural look to the continents and oceans, and the colors were assigned according to elevation. The resolution of the gridded data varies from 2 minutes (2 n. mi. or 3.66 km at the Equator) for the Atlantic, Pacific, and Indian Ocean floors and all land masses to 5 minutes for parts of the Arctic Ocean floor. Most ocean data points were taken from 2-minute gridded ocean depths derived from satellite altimery of the sea surface between 64° N and 72°S; Seafloor data northward from 64° North are from the International Bathymetric Chart of the Arctic Ocean (IBCAO) Version 1. Land data were primarily from 30-second gridded data collected from various sources by the (then) National Imagery and Mapping Agency.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