Object:
Observable Universe 300,000 years after the Big Bang

Distance from Earth:
13.6 billion light-years

Size:
The observable universe—that part of the universe we can see—was 100 million light-years across 300,000 years after the Big Bang. Since then, space has expanded and the same portion is now 100 billion light-years across.

Telescope:
Wilkinson Microwave Anisotropy Probe

Light:
Microwave radiation

Description:
This snapshot shows the newborn universe shortly after the Big Bang and long before the first stars and galaxies formed. The temperature had cooled to 2700°C (5000°F) enough that stable atoms could form and light could travel without bouncing around chaotically. Over the last 13.6 billion years, this radiation has cooled to -270°C (-454°F). This very cold radiation comes from every direction in the universe.

Credits:
NASA/WMAP Science Team