

Colorful Fractured Bedrock in Ritchey Crater ESP_029542_1510



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Central peaks form in large impact craters during the impact event, when the crater floor rebounds after the initial compression. These central uplifts make attractive targets for HiRISE both because they tend to be relatively dust-free, and because as a consequence of their formation, they tend to bring up to the surface rocks that come from greater depths. In the case of Ritchey Crater, these exposed rocks appear to be chunks of fractured bedrock, possibly of plutonic origin. (Meaning igneous rock that solidifies below the surface).

The HIRISE camera onboard the Mars Reconnaissance Orbiter is the most powerful one of its kind ever sent to another planet. Its high resolution allows us to see Mars like never before, and helps other missions choose a safe spot to land for future exploration. Thousands of images are available online at: uahirise.org.