

Using techniques from the visual effects industry to process raw JunoCam imagery for 3D presentation

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Abstract

Processing raw space data typically involves aspects of image processing, 3D data creation/manipulation, and data management - problems also common to the Visual Effects (VFX) industry.

Using VFX techniques learnt over the past decade, along with NASA's SPICE toolkit, I have used common VFX tools to process raw JunoCam imagery from scratch. The result is a 3D projected version of the image set, which I am subsequently presenting in an interactive web application, Juno Observer. The final imagery is also suitable for display in immersive AR/VR mobile applications.