OUR SOLAR SYSTEM LAST WEEK

Over the past few days, Earthlings have been treated to some stunning images from across the Solar System. Jupiter and Mars were snapped by spacecraft on their way to more distant destinations, the gap between Earth and the Sun was captured by the STEREO mission, and the Cassini spacecraft collated months of hard work to give us fresh views of Saturn and its moon Titan.

NASA/JPL/SPACE SCI. INST.

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◀ SATURN'S SHADOW

NASA's Cassini spacecraft has spent months circling ever higher above Saturn. This picture of the planet and its rings (left), complete with shadow, is made from 36 images taken over 2.5 hours. Cassini's radar, meanwhile, has captured an image of an island in the middle of a lake on Saturn's moon Titan (inset).

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◀ STORM CLOUDS AND VOLCANIC PLUMES

The culmination of three storms on Jupiter, known as the little red spot, is seen swirling over the surface of the planet (far left) just as the Sun was setting. This image was taken from 3.5 million kilometres away, before NASA's New Horizons passed by Jupiter on 28 February, on its way to Pluto. On Jupiter's moon Io (left), an eruption from the volcano Tvashtar spews out its dusty plume as seen from 2.5 million kilometres away.

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SKIMMING THE SURFACE OF MARS

Rosetta, the European comet-hunting mission, skirted Mars at a distance of just 250 kilometres during its flyby on 25 February, and used the opportunity to test its instruments. This true-colour image was taken the day before the closest approach, from 240,000 kilometres away. Rosetta will now team up with New Horizons to take more detailed measurements of Jupiter, especially the charged gases flying around its moon Io, before it returns for a flyby of Earth.

ESA MPS/UPD/LAM/IAA/RSSD/INTA/UPM/DASP/IDA

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EXTREME SUN

The image below is the first ever profile view of the space between the Sun and Earth, captured by NASA's Solar Terrestrial Relations Observatory (STEREO) spacecraft. Compiled from five instruments, the image shows sunlight scattering from zodiacal dust. The white line is Venus, and the blue dots are background stars. Earth would be off to the far left. STEREO also sent back a high-resolution image of the Sun's surface in extreme ultraviolet light (left). Late next month, the mission's two sister craft will start producing three-dimensional views of the inner Solar System, including solar storms travelling towards Earth.

NASA/NRL

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