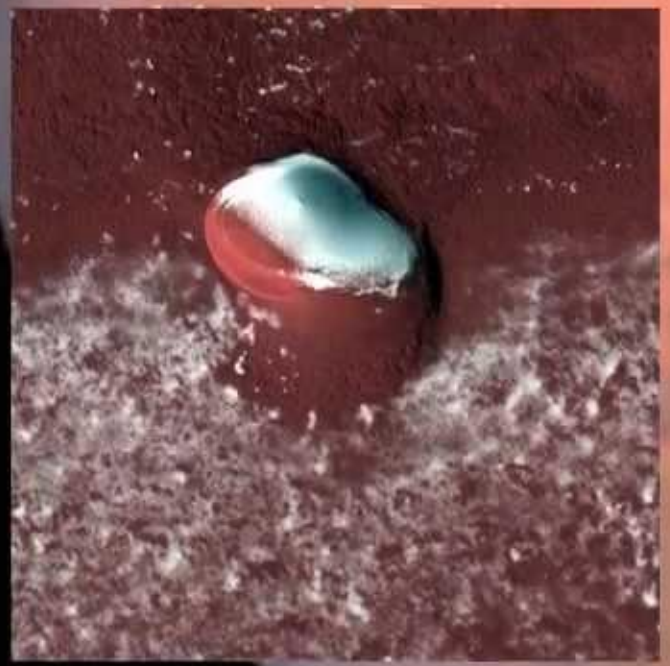

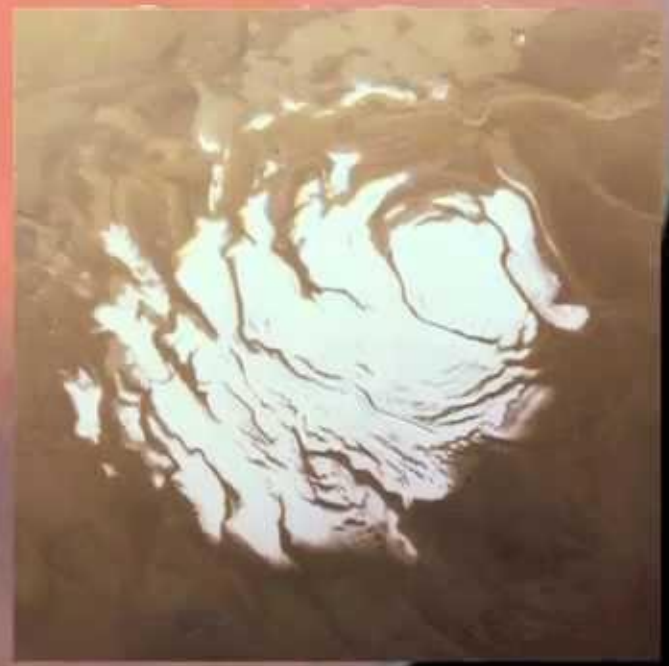

1
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Music.

2
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What's up for April? Ice in the solar system! Hello and welcome! I'm Jane Houston Jones

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at NASA's Jet Propulsion Laboratory in Pasadena, California.

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Ice is common in our solar system, from ice-covered moons and rings around distant Jupiter and Saturn

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to deposits at the poles of the Moon... and even Mercury!

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Obviously, ice is present on our own world, too.

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The only ice off-Earth that's easy to see distinctly is the Martian polar cap.

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Seeing it will take some magnification, though.

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Both of Mars' poles have water ice, but its south pole is coated with a layer of frozen carbon dioxide.

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You can see many of these icy worlds when you view the Saturn system this month.

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Saturn reaches opposition on April 15 and is now visible earlier in the evening and all night long.

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Through a telescope you'll see the icy rings, Titan and -- with a little luck -- Enceladus.

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Saturn's moon Titan is famous for its methane, which can exist as a solid, a liquid and a gas

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at Titan's surface temperatures and pressures.

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But even Titan has water ice -- and hydrocarbon ice -- on its surface.

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Saturn's intriguing moon Enceladus actually spews water ice out of geyser-like vents,

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ice that orbits Saturn as the E ring!

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And Saturn's rings themselves are made up mostly of water ice.

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Comets are made of ice and dust: frozen water ice and sometimes ice from other substances including

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methane, ammonia, carbon monoxide, sulfur and hydrogen sulfide.

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The moons of the outer planets are rich in ice, too.

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Jupiter's moon Europa is blanketed by frozen water ice, with a liquid ocean under the ice blanket.

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Ganymede is the largest moon in our solar system, even larger than Mercury.

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It's mostly water ice with a rocky core.

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Callisto is rock and water ice, too, although ammonia and carbon dioxide ice may be present.

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Uranus and Neptune are filled with 'icy' materials like water, ammonia and methane

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under incredible heat and pressure.

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Their moons are ice-rock conglomerates made mostly of water ice, with some ammonia and dry ice.

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Neptune's moon Triton even has volcano-like geysers that erupt nitrogen gas.

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Music.

31
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Jones: Mercury is easy to spot this month.

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And we say goodbye to Jupiter for a few months, but not before a pretty crescent moon pairing on April 22.

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You can read more about ice in the solar system at solarsystem dot nasa dot gov slash y s s

34
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for Year of the Solar System.

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And you can learn about all of NASA's missions at w w w dot nasa dot gov.