

"We're made of star-stuff. We are a way for the cosmos to know itself." Carl Sagan



Astro

Volume 13, Issue 12

July 16, 2020

CONTENTS

- Perseverance Rover
Attached to Atlas V 1
- How to See the
Comet Neowise 1
- First Images from Solar Orbiter
Mission 2
- New Mission to Venus 2
- Eruptions on the Sun Might
Trigger Earthquakes..... 3
- Three Missions to Mars From
Three Different Countries..... 3



Perseverance Rover Attached to Atlas V

NASA's Perseverance Mars rover has been attached to the top of the rocket that will send it toward the Red Planet this summer. Encased in the nose cone that will protect it during launch, the rover and the rest of the Mars 2020 spacecraft - the aeroshell, cruise stage, and descent stage - were affixed to a United Launch Alliance Atlas V booster on Tuesday, July 7, at Cape Canaveral Air Force Station in Central Florida. NASA and United Launch Alliance recently updated the mission's launch period - the range of days the rocket can launch in order to reach Mars. It now spans from July 30 to Aug. 15. MarsDaily.com

How to See the Comet Neowise with the Naked Eye

Comet Neowise – or C/2020 F3 (NEOWISE), to give it its proper name – was first spotted in March by astronomers using the infrared-observing NEOWISE telescope and is now in the part of its 6800-year orbit that brings it close to the sun.

By July 14 its altitude will have 10 degrees above the north-northwest horizon, and by July 19 it will have doubled yet again to 20 degrees up by the end of nautical twilight. By then it will have moved to above the northwest horizon.

NewScientist.com

NASA, ESA to Release First Images from Solar Orbiter Mission



Scientists from NASA and ESA (European Space Agency) will release the first data captured by Solar Orbiter, the joint ESA/NASA mission to study the Sun, during an online news briefing at 8 a.m. EDT Thursday, July 16. The briefing will stream live on NASA's website. In mid-June, Solar Orbiter made its first close pass of the Sun following its Feb. 9 launch, turning on all 10 of its instruments together for the first time. This flyby captured the closest images ever taken of the Sun.

Technology.org

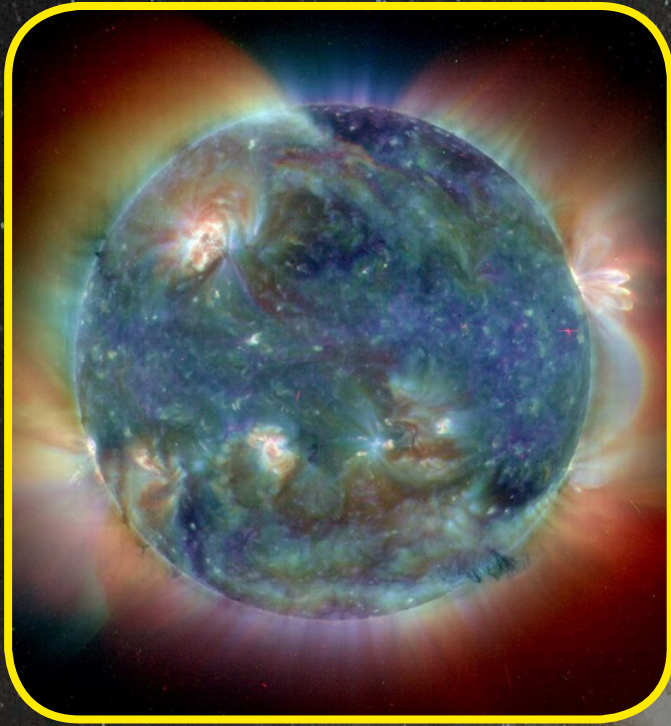
A Proposed New Mission to Venus

The proposed VERITAS mission to Venus is one of the finalists for NASA's Discovery Program. If selected, it will revolutionize our knowledge about the planet's geology and how this formerly habitable world became a fiery wasteland. The last spacecraft to study Venus' surface from orbit was Magellan, whose mission ended in 1994. If it does get selected as a mission, VERITAS will revolutionize our understanding of how Venus formed and evolved, and why our sister planet changed so dramatically from a habitable world to one that could just as well have been forged in hell itself.



EarthSky.org

Powerful Eruptions on the Sun Might Trigger Earthquakes



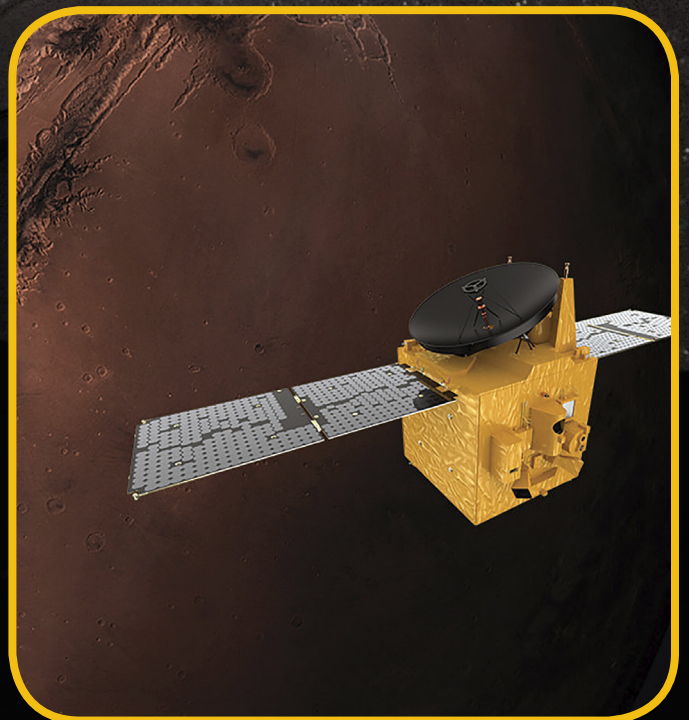
To the unaided eye, the Sun might seem relatively docile. But our star is constantly bombarding the solar system with vast amounts of energy and particles in the form of the solar wind. Sometimes, however, formidable eruptions on the Sun's surface cause coronal mass ejections, or especially energetic floods of particles that careen through the solar system at breakneck speeds. The new research suggests that particles from powerful eruptions like this specifically, the positively charged ions might be responsible for triggering groups of strong earthquakes.

Astronomy.com

Three Missions to Mars From Three Different Countries

Three countries—the United States, China and the United Arab Emirates—are sending unmanned spacecraft to the red planet in quick succession beginning this week, in the most sweeping effort yet to seek signs of ancient microscopic life while scouting out the place for future astronauts.

The U.S., for its part, is dispatching a six-wheeled rover the size of a car, named Perseverance, to collect rock samples that will be brought back to Earth for analysis in about a decade.



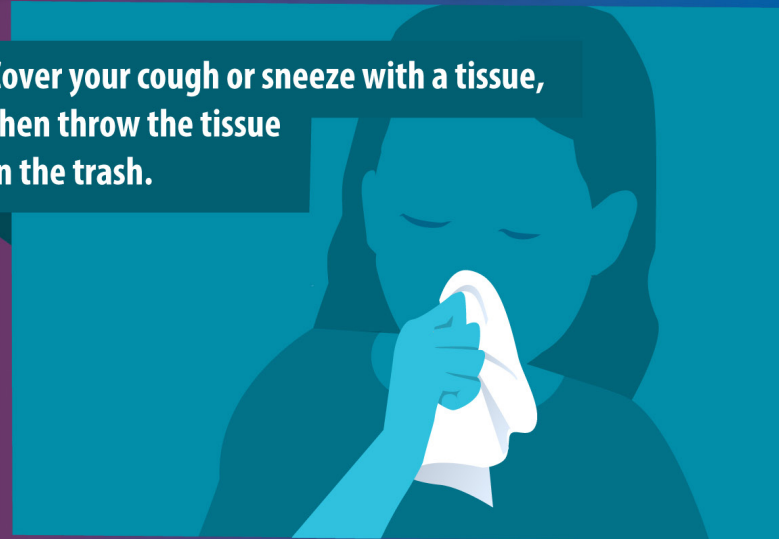
Phys.org

How to Protect Ourselves?

Avoid close contact with people who are sick.



Cover your cough or sneeze with a tissue, then throw the tissue in the trash.



Avoid touching your eyes, nose, and mouth.



Clean and disinfect frequently touched objects and surfaces.



Stay home when you are sick, except to get medical care.



Wash your hands often with soap and water for at least 20 seconds.





ESA/Rosetta

Astronomy Picture of the Day

Comet CG Creates Its Dust Tail

Image Credit & Copyright: ESA, Rosetta, NAVCAM

Where do comet tails come from? There are no obvious places on the nuclei of comets from which the jets that create comet tails emanate. One of the best images of emerging jets is shown in the featured picture, taken in 2015 by ESA's robotic Rosetta spacecraft that orbited Comet 67P/Churyumov-Gerasimenko (Comet CG) from 2014 to 2016. The picture shows plumes of gas and dust escaping numerous places from Comet CG's nucleus as it neared the Sun and heated up. The comet has two prominent lobes, the larger one spanning about 4 kilometers, and a smaller 2.5-kilometer lobe connected by a narrow neck. Analyses indicate that evaporation must be taking place well inside the comet's surface to create the jets of dust and ice that we see emitted through the surface. Comet CG (also known as Comet 67P) loses in jets about a meter of radius during each of its 6.44-year orbits around the Sun, a rate at which will completely destroy the comet in only thousands of years. In 2016, Rosetta's mission ended with a controlled impact onto Comet CG's surface.

apod.nasa.gov



Space Camp Turkey, Aegean Free Zone 35410 Gaziemir, Izmir / Turkey

Phone : +90 232 252 35 00 Fax : +90 232 252 36 00

Email: info@spacecampturkey.com

© 2018 - SPACE CAMP TURKEY / ALL RIGHTS RESERVED - An ESBAS Enterprise

