



An ESBAŞ Enterprise



Global Friendship Through Space Education

### CONTENTS

- SpaceX Lofts Turkish Communications Satellite ..... 1
- Webb Space Telescope Confirmed for December 24 .. 1
- 'Touching' Sun for 1<sup>st</sup> Time ..... 2
- Japanese Space Tourists Return to Earth ..... 2
- Ingenuity Reaches a Total of 30 Minutes Aloft ..... 3
- Seeking Europa's Water Plumes ..... 3

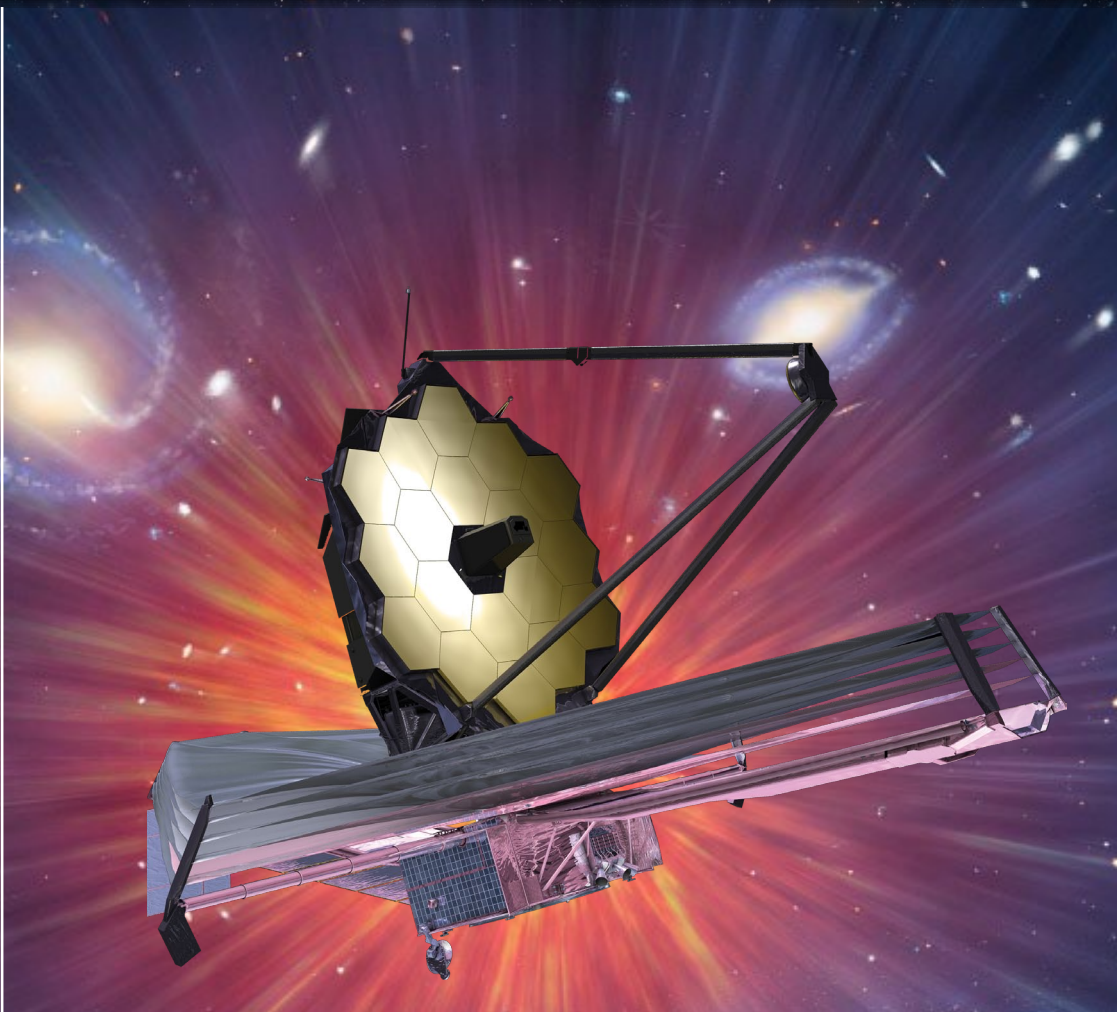


### SpaceX Lofts Turkish Communications Satellite to Orbit

SpaceX launched its second rocket in less than 24 hours on Saturday night (Dec. 18), delivering a Turkish communications satellite into orbit before capping off the successful mission with a landing at sea.

70 meters tall Falcon 9 rocket blasted off from Space Launch Complex 40 here at Cape Canaveral Space Force Station at 10:58 p.m. EST (03:58 GMT on Dec. 19), at the beginning of a planned 90-minute window, carrying the Turksat 5B satellite into space.

Space.com



### NASA's Webb Space Telescope Confirmed for December 24 Launch

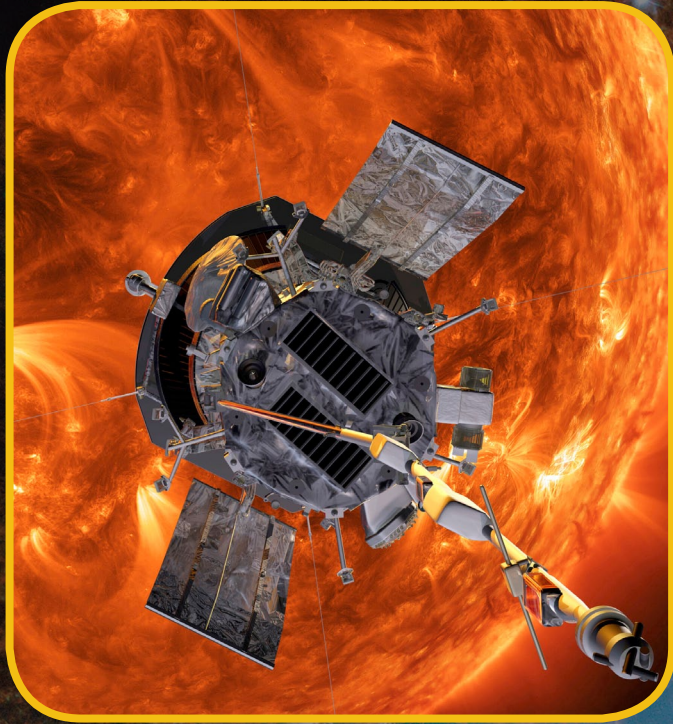
The James Webb Space Telescope is confirmed for the target launch date of December 24, at 7:20 a.m. EST.

The James Webb Space Telescope joins a great legacy of space-based astronomy. NASA's space telescope missions have revolutionized our understanding of the universe and our place within it. Webb has the high resolution of the Hubble Space Telescope and the ability to detect light wavelengths into the mid-infrared range, like the Spitzer Space Telescope. Webb's infrared-detecting technology will reveal the hidden universe to our eyes: stars shrouded in clouds of dust, water in the atmospheres of other worlds, and the first light from the earliest galaxies ever formed.

SciTechDaily.com



## NASA Craft 'Touches' Sun for 1<sup>st</sup> Time, Dives Into Atmosphere



A NASA spacecraft has officially “touched” the sun, plunging through the unexplored solar atmosphere known as the corona. Scientists announced the news Tuesday during a meeting of the American Geophysical Union. The Parker Solar Probe actually flew through the corona in April during the spacecraft’s eighth close approach to the sun. Scientists said it took a few months to get the data back and then several more months to confirm.

*Phys.org*

## Japanese Space Tourists Return to Earth After 12 Days on ISS

A Japanese billionaire returned to Earth Monday, after 12 days spent on the International Space Station where he made videos about performing mundane tasks in space including brushing teeth and going to the bathroom.

Online fashion tycoon Yusaku Maezawa and his assistant Yozo Hirano parachuted onto Kazakhstan’s steppe at around the expected landing time of 03:13 (GMT) Monday, along with Russian cosmonaut Alexander Misurkin.



*SpaceDaily.com*



## NASA's Ingenuity Mars Helicopter Reaches a Total of 30 Minutes Aloft



The 17<sup>th</sup> flight of NASA's Ingenuity Mars Helicopter on Dec. 5, pushed the total flight time past the 30-minute mark. The 117-second sortie brought history's first aircraft to operate from the surface of another world closer to its original airfield, "Wright Brothers Field," where it will await the arrival of the agency's Perseverance Mars rover, currently exploring "South Séítah" region of Mars' Jezero Crater. Along with accumulating 30 minutes and 48 seconds of flight time, the helicopter has traveled 3,592 meters, flying as high as 12 meters and as fast as 5 meters per second.

*Technology.org*

## Seeking Europa's Water Plumes with Clipper

Jupiter's moon Europa is considered one of the most promising places in our solar system to look for life. We know it has a subsurface ocean not too different from Earth's. And, like Saturn's moon Enceladus, it might also have plumes of water vapor, spewing from an underground ocean and erupting from its surface into space. But, unlike the plumes of Enceladus, the water plumes on Europa have been difficult to verify so far. That's where NASA's upcoming Europa Clipper mission comes in. After it launches in 2024, Clipper should be able to confirm Europa's plume.



*EarthSky.org*



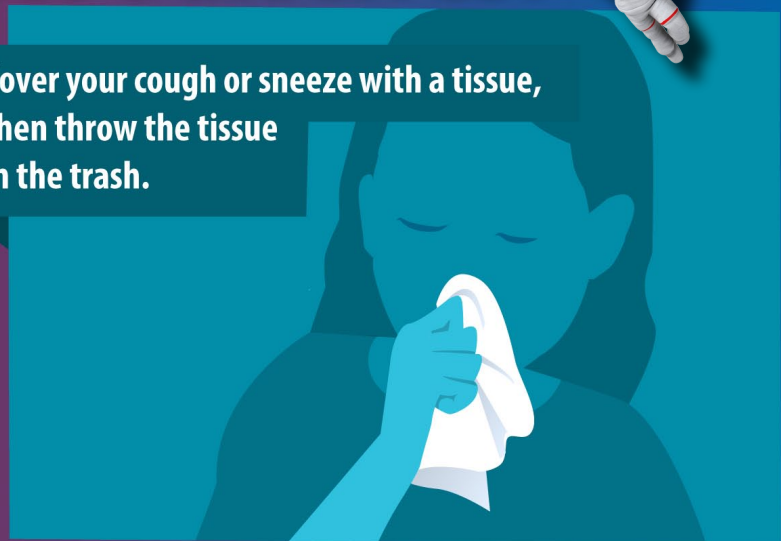
## How to Protect Ourselves?



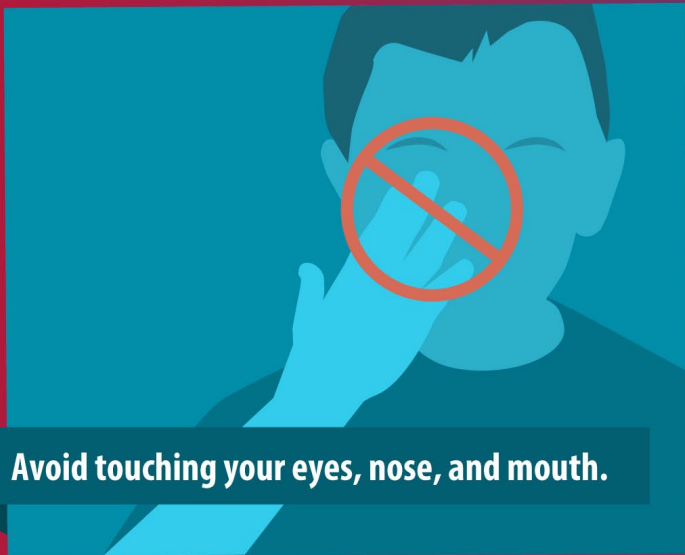
Avoid close contact with people who are sick.



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.



## Astronomy Picture of the Day

### Stephan's Quintet

**Image Credit & Copyright:** NASA, ESA, Hubble Legacy Archive; Bernard Miller

The first identified compact galaxy group, Stephan's Quintet is featured in this eye-catching image constructed with data drawn from the extensive Hubble Legacy Archive. About 300 million light-years away, only four of these five galaxies are actually locked in a cosmic dance of repeated close encounters. The odd man out is easy to spot, though. The interacting galaxies, NGC 7319, 7318A, 7318B, and 7317 have an overall yellowish cast. They also tend to have distorted loops and tails, grown under the influence of disruptive gravitational tides. But the predominantly bluish galaxy, NGC 7320, is closer, just 40 million light-years distant, and isn't part of the interacting group. Stephan's Quintet lies within the boundaries of the high flying constellation Pegasus. At the estimated distance of the quartet of interacting galaxies, this field of view spans about 500,000 light-years. But moving just beyond this field, up and to the right, astronomers can identify another galaxy, NGC 7320C, that is also 300 million light-years distant. Including it would bring the interacting quartet back up to quintet status.

[apod.nasa.gov](http://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](mailto:info@spacecampturkey.com)

© 2020 - SPACE CAMP TURKEY / ALL RIGHTS RESERVED - An ESBAS Enterprise

