## July 2022 SPACE ECONOMY NEWS -Update Dr Jack Dyer, Blue Economy Future SA

Contents

[December 2021 SPACE ECONOMY NEWS -Update Dr Jack Dyer, Blue Economy Future SA 1](#_Toc91521378)

[NASA 4](#_Toc91521379)

[**NASA's Webb Telescope Launches to See First Galaxies, Distant Worlds** 4](#_Toc91521380)

[**NASA Selects Four University Teams for Aviation Projects** 4](#_Toc91521381)

[**NASA Awards Contract for Software Engineering Services at Goddard** 4](#_Toc91521382)

[**NASA Awards Systems and Software Assurance Services 2 Contract** 5](#_Toc91521383)

[**NASA’s 2021 Included Mars Landing, First Flight, Artemis, More** 5](#_Toc91521384)

[**Detergent, Skin Bioprinter Launch on NASA’s SpaceX Resupply Mission** 5](#_Toc91521385)

[**NASA Sets Coverage, Invites Public to View Webb Telescope Launch** 5](#_Toc91521386)

[**NASA Awards Marshall Engineering Support Contract** 5](#_Toc91521387)

[**Two Astronauts Receive Assignments for NASA’s SpaceX Crew-6 Mission** 5](#_Toc91521388)

[**NASA Sets Coverage, Invites Public to Virtually Join Next Cargo Launch** 6](#_Toc91521389)

[**NASA Awards Contracts for Rotorcraft Vertical Lift Technology Services** 6](#_Toc91521390)

[**NASA Selects Second Private Astronaut Mission to Space Station** 6](#_Toc91521391)

[**NASA Selects Education Projects to Help Broaden STEM Participation** 6](#_Toc91521392)

[**NASA Launches New Mission to Explore Universe’s Most Dramatic Objects** 6](#_Toc91521393)

[**NASA Invites Media to Briefing on Research Launching to Space Station** 6](#_Toc91521394)

[**NASA Administrator Pays Tribute to Senior Advisor Mark Geyer** 7](#_Toc91521395)

[**NASA’s Laser Communications Tech, Science Experiment Safely in Space** 7](#_Toc91521396)

[**La NASA selecciona nuevos candidatos a astronauta** 7](#_Toc91521397)

[**NASA Selects New Astronaut Recruits to Train for Future Missions** 7](#_Toc91521398)

[**NASA to Highlight New Science Findings, Missions During AGU Meeting** 7](#_Toc91521399)

[Space News 7](#_Toc91521400)

[News 8](#_Toc91521401)

[SPACE.COM 8](#_Toc91521402)

[Space News 8](#_Toc91521403)

[NASA's James Webb Space Telescope mission: Live updates 8](#_Toc91521404)

['29 days on the edge:' What's next for NASA's newly launched James Webb Space Telescope 8](#_Toc91521405)

[5 space missions to look forward to now that Webb has launched 8](#_Toc91521406)

[On This Day in Space! Dec. 26, 1974: Salyut 4 space station launches into orbit 8](#_Toc91521407)

['Wind' from Earth's middle layer blows through a secret passage beneath Panama 9](#_Toc91521408)

[Rare wispy ice formations streak across the sea near Antarctica in beautiful satellite images 9](#_Toc91521409)

[James Webb Space Telescope notches crucial maneuver to set its path 9](#_Toc91521410)

['It's truly Christmas': James Webb Space Telescope's yuletide launch has NASA overjoyed 9](#_Toc91521411)

[Space photos: The most amazing images this week! 10](#_Toc91521412)

[The top space stories of the week! 10](#_Toc91521413)

[NASA's James Webb Space Telescope launches on epic mission to study early universe 10](#_Toc91521414)

[Christmas launch of NASA's James Webb Space Telescope has sparked some epic holiday memes 10](#_Toc91521415)

[Astronauts on International Space Station send Christmas video message to Earth 11](#_Toc91521416)

[How to watch NASA's James Webb Space Telescope launch online in several languages on Christmas Day 11](#_Toc91521417)

[James Webb Space Telescope's rocket begins fueling up for launch 11](#_Toc91521418)

[Here's the space weather forecast for NASA's James Webb Space Telescope launch 11](#_Toc91521419)

[Pictures from space! Our image of the day 12](#_Toc91521420)

[The Christmas night sky: A 2021 Yuletide stargazing guide 12](#_Toc91521421)

[30 years and $10 billion later, the James Webb Space Telescope is finally on the launch pad 12](#_Toc91521422)

[NASA's James Webb Space Telescope won't hit Santa during Christmas launch 12](#_Toc91521423)

[Space News 13](#_Toc91521424)

[BROWSE CATEGORIES 13](#_Toc91521425)

[James Webb Space Telescope: The scientific mysteries no other observatory could unravel 13](#_Toc91521426)

[Track Santa as he delivers gifts around the world on Christmas Day 13](#_Toc91521427)

[Nerves run high ahead of the James Webb Space Telescope launch this Saturday 13](#_Toc91521428)

[How a real NASA patch anchors Netflix's 'Don't Look Up' in reality 14](#_Toc91521429)

['Star Trek: Discovery' Season 4, Episode 6 keeps the tempo up 14](#_Toc91521430)

[Comet Leonard shines amid aurora and meteor shower in stunning footage by Chinese spacecraft 14](#_Toc91521431)

[This record-breaking black hole eruption could cover 16 full moons in the sky 14](#_Toc91521432)

[Axiom Space developing in-house spacesuits to prepare for future stations 15](#_Toc91521433)

[Watch an exclusive sneak peek at 'The Expanse' Season 6 Episode 3 (video) 15](#_Toc91521434)

[When did scientists first warn humanity about climate change? 15](#_Toc91521435)

[DeepMind cracks 'knot' conjecture that bedeviled mathematicians for decades 15](#_Toc91521436)

[James Webb Space Telescope reaches launch pad for Christmas liftoff 16](#_Toc91521437)

[SpaceX Dragon cargo ship delivers Christmas presents (and supplies) to space station 16](#_Toc91521438)

[The James Webb Space Telescope will open up the 'secrets of the universe,' NASA administrator says 16](#_Toc91521439)

[Why NASA's James Webb Space Telescope will orbit nearly 1 million miles from Earth 16](#_Toc91521440)

['The Book of Boba Fett,' new teasers offer a tantalizing glimpse of what to expect 17](#_Toc91521441)

[NASA is tracking two explorers across Antarctica to prepare humans for Mars 17](#_Toc91521442)

[Winner of Blue Origin's $28 million auction to fly with 5 'space warriors' next year 17](#_Toc91521443)

[Daniel Abraham and Ty Franck on sticking the landing for final 'The Expanse' novel, 'Leviathan Falls' (exclusive) 17](#_Toc91521444)

[Mars and Earth likely formed from collisions of moon-sized rocks 18](#_Toc91521445)

[Space X 18](#_Toc91521446)

[STARLINK MISSION 18](#_Toc91521447)

[IMAGING X-RAY POLARIMETRY EXPLORER (IXPE) MISSION 19](#_Toc91521448)

[DOUBLE ASTEROID REDIRECTION TEST (DART) MISSION 19](#_Toc91521449)

[STARSHIP TO LAND NASA ASTRONAUTS ON THE MOON 19](#_Toc91521450)

[ROSCOSMOS 20](#_Toc91521451)

[EUROPEAN SPACE AGENCY 28](#_Toc91521452)

[spotlight 28](#_Toc91521453)

[**webb: seeing farther** 29](#_Toc91521454)

[**Liftoff in images: Webb on Ariane 5** 30](#_Toc91521455)

[**Webb on Ariane 5 roll-out to the launch pad** 30](#_Toc91521456)

[**Red velvet Mars** 31](#_Toc91521457)

[**Webb on Ariane 5 poised for launch** 31](#_Toc91521458)

[**Matthias’ international Christmas greetings** 33](#_Toc91521459)

[**Webb on Ariane 5 roll-out to the launch pad** 33](#_Toc91521460)

[**Webb launch date confirmed for 25 December** 34](#_Toc91521461)

[**A Christmas comet for Solar Orbiter** 34](#_Toc91521462)

[**MORE ITEMS** 35](#_Toc91521463)

[**ESA highlights 2021** 35](#_Toc91521464)

[CHINA SPACE AGENCY 35](#_Toc91521465)

[VIRGIN GALACTIC 36](#_Toc91521466)

[Omaze and Virgin Galactic Announce Winner of Once-in-a-Lifetime Trip to Space 36](#_Toc91521467)

[Virgin Galactic Announces Third Quarter 2021 Financial Results 36](#_Toc91521468)

[Virgin Galactic Begins Planned Vehicle Enhancement and Modification Period; Unity 23 Test Flight Rescheduled to Follow Completion of This Program 36](#_Toc91521469)

[SEPTEMBER 29, 2021 37](#_Toc91521470)

[Virgin Galactic Cleared to Fly Following Conclusion of FAA Inquiry 37](#_Toc91521471)

[SEPTEMBER 23, 2021 37](#_Toc91521472)

[Virgin Galactic Hires Aparna Chitale as Chief People Officer 37](#_Toc91521473)

[SEPTEMBER 23, 2021 38](#_Toc91521474)

[Meet Aparna Chitale, Virgin Galactic’s Chief People Officer 38](#_Toc91521475)

[SEPTEMBER 02, 2021 38](#_Toc91521476)

[Virgin Galactic Announces First Commercial Research Mission 38](#_Toc91521477)

[JULY 11, 2021 38](#_Toc91521478)

[Virgin Galactic Successfully Completes First Fully Crewed Spaceflight 38](#_Toc91521479)

[BLUE ORIGINS 39](#_Toc91521480)

[Latest Updates 39](#_Toc91521481)

## NASA

<https://www.nasa.gov/news/releases/latest/index.html>

[NASA Awards Engineering, Technology, Science Contract](https://www.nasa.gov/press-release/nasa-awards-engineering-technology-science-contract)

Jul 1, 2022 - NASA has awarded the JSC Engineering, Technology, and Science (JETS) II contract to Jacobs Technology Inc. of Tullahoma, Tennessee, to provide engineering and scientific products, technical services and related services for the agency’s Johnson Space Center in Houston, other NASA centers and government agencies.

[Florida Students to Hear from NASA Astronauts Aboard Space Station](https://www.nasa.gov/press-release/florida-students-to-hear-from-nasa-astronauts-aboard-space-station)

Jul 1, 2022 - Florida students will have an opportunity soon to hear from NASA astronauts aboard the International Space Station.

[NASA Shares Climate, Earth Science Resources at Folklife Festival](https://www.nasa.gov/press-release/nasa-shares-climate-earth-science-resources-at-folklife-festival)

Jun 30, 2022 - Members of the public are invited to explore the many ways space science helps families, communities, and our nation better understand our home planet and become more climate resilient through hands-on and virtual activities during NASA Day at the Smithsonian Folklife Festival Saturday, July 2, on the National Mall in Washington.

[NASA to Industry: Let’s Develop Flight Tech to Reduce Carbon Emissions](https://www.nasa.gov/press-release/nasa-to-industry-let-s-develop-flight-tech-to-reduce-carbon-emissions)

Jun 30, 2022 - NASA announced Wednesday the agency is seeking partners to develop technologies needed to shape a new generation of lower-emission, single-aisle airliners that passengers could see in airports in the 2030s.

[CAPSTONE Launches to Test New Orbit for NASA’s Artemis Moon Missions](https://www.nasa.gov/press-release/capstone-launches-to-test-new-orbit-for-nasa-s-artemis-moon-missions)

Jun 28, 2022 - NASA’s CubeSat designed to test a unique lunar orbit is safely in space and on the first leg of its journey to the Moon.

[NASA to Cover Northrop Grumman Cygnus Departure from Space Station](https://www.nasa.gov/press-release/nasa-to-cover-northrop-grumman-cygnus-departure-from-space-station)

Jun 28, 2022 - Northrop Grumman’s uncrewed Cygnus spacecraft is scheduled to depart the International Space Station on Tuesday, June 28, more than four months after delivering 8,300 pounds of supplies, scientific investigations, commercial products, hardware, and other cargo to the orbiting laboratory for NASA.

[NASA Awards Engineering Design, Inspection Services Contract](https://www.nasa.gov/press-release/nasa-awards-facilities-engineering-design-inspection-services-contract-0)

Jun 25, 2022 - NASA has awarded the Facilities Engineering Design and Inspection Services (FEDIS) II contract to Vanguard Pacific LLC of Foley, Alabama, to provide architect and engineering design services at the agency’s Marshall Space Flight Center in Huntsville, Alabama.

[NASA Announces Launch Delay for Psyche Asteroid Mission](https://www.nasa.gov/press-release/nasa-announces-launch-delay-for-psyche-asteroid-mission)

Jun 25, 2022 - NASA announced Friday that the Psyche asteroid mission – the agency’s first mission designed to study a metal-rich asteroid – will not make its planned 2022 launch attempt.

[NASA to Discuss Psyche Asteroid Mission](https://www.nasa.gov/press-release/nasa-to-discuss-psyche-asteroid-mission)

Jun 25, 2022 - NASA will host a media teleconference at 2 p.m. EDT Friday to provide an update on the agency’s mission to study the Psyche asteroid. Audio of the briefing will livestream on the agency’s website.

[NASA Sets Live Launch Coverage for CAPSTONE Mission to Moon](https://www.nasa.gov/press-release/nasa-sets-live-launch-coverage-for-capstone-mission-to-moon)

Jun 24, 2022 - NASA will air live launch coverage of the agency’s Cislunar Autonomous Positioning System Technology Operations and Navigation Experiment (CAPSTONE), the first spacecraft to fly a specific unique lunar orbit ahead of future missions with crew.

## Space News

<https://spacenews.com/>

Agile to consolidate operations in new Colorado plant

by Debra Werner — July 1, 2022

Agile Space Industries is preparing to consolidate propulsion design, manufacturing and production in a new 1,860-square-meter facility in Durango, Colorado.

COMMERCIAL AGILE SPACE INDUSTRIESCOLORADOPROPULSION

OneWeb to launch second-generation satellites with Relativity Space

OneWeb to launch second-generation satellites with Relativity Space

by Jeff Foust — July 1, 2022

OneWeb will launch some of its next-generation satellites on Relativity Space’s next-generation launch vehicle starting as soon as 2025, the companies announced June 30.

COMMERCIAL LAUNCH ONEWEBRELATIVITY

Venus orbiter, lunar constellation and exoplanets telescopes among candidates as China selects new space science missions

Venus orbiter, lunar constellation and exoplanets telescopes among candidates as China selects new space science missions

by Andrew Jones — July 1, 2022

The Chinese Academy Sciences is preparing to select a new batch of space missions from proposals to study Earth, the Sun and solar system, and the deeper universe as part of a "New Horizons Program."

ASIA CHINACHINESE ACADEMY OF SCIENCESEARTH SCIENCEEXOPLANETSEXPLORATIONGRAVITATIONAL WAVESHELIOPHYSICSSPACE SCIENCEVENUS

House appropriators reduce proposed budget for FAA commercial space office

House appropriators reduce proposed budget for FAA commercial space office

by Jeff Foust — June 30, 2022

House appropriators eliminated most of a proposed budget increase for the FAA’s commercial space transportation office while also directing the agency on spaceports and cooperation with another agency on spaceflight investigations.

POLICY & POLITICS COMMERCIAL SPACE LAUNCHFAA OFFICE OF COMMERCIAL SPACE TRANSPORTATIONHOUSENTSBSPACEPORTS

Kepler books orbital transfer vehicle for next launch

Kepler books orbital transfer vehicle for next launch

by Jason Rainbow — June 30, 2022

Canada’s Kepler Communications said June 30 it plans to use D-Orbit’s orbital transfer vehicle for the next two satellites in its low-data-rate constellation.

COMMERCIAL LAUNCH D-ORBITKEPLER COMMUNICATIONS

China looks to launch liquid propellant rockets from the seas

China looks to launch liquid propellant rockets from the seas

by Andrew Jones — June 30, 2022

Chinese state-owned and commercial companies are developing capabilities to launch liquid propellant rockets from sea platforms to boost the country's launch options.

ASIA CALTCHINAGALACTIC ENERGYLONG MARCH 11LONG MARCH 8ORIENSPACE

NASA prepares to release first JWST science images

NASA prepares to release first JWST science images

by Jeff Foust — June 29, 2022

With commissioning of the James Webb Space Telescope nearly complete, project officials and NASA leadership promise the telescope’s first images will stun scientists and the public alike.

CIVIL JWSTNASA

SpaceX launches SES-22 C-band replacement satellite

SpaceX launches SES-22 C-band replacement satellite

by Jason Rainbow — June 29, 2022

SpaceX launched the first television broadcast satellite under SES’s C-band clearing plan June 29 from Cape Canaveral in Florida.

COMMERCIAL LAUNCH SESSPACEX

NASA administrator tests positive for COVID

NASA administrator tests positive for COVID

by Jeff Foust — June 29, 2022

NASA Administrator Bill Nelson has tested positive for COVID-19, he announced June 29, but is continuing to lead the agency as he isolates at home.

CIVIL BILL NELSONCOVID-19NASA

Space Force considering strategy for procuring national security launch services

Space Force considering strategy for procuring national security launch services

by Sandra Erwin — June 29, 2022

Space Force acquisition executive Frank Calvelli said he would be open to a different model than the current two-vendor approach for national security launch services procurement

LAUNCH MILITARY LAUNCH SERVICE PROCUREMENTNSSLSPACE FORCE

Avio gets pandemic recovery funds to develop launchers for the 2030s

Avio gets pandemic recovery funds to develop launchers for the 2030s

by Jason Rainbow — June 29, 2022

Italian rocket maker Avio secured 340 million euros ($358 million) in government funding June 29 to develop launch vehicles for the next decade.

EUROPE ARIANESPACEAVIO

Sierra Space signs agreement with Turkish Space Agency

Sierra Space signs agreement with Turkish Space Agency

by Jeff Foust — June 29, 2022

Sierra Space announced an agreement with the Turkish Space Agency and an affiliated company June 29 that could lead to cooperation on human spaceflight and lunar missions.

CIVIL COMMERCIAL SIERRA SPACETURKISH SPACE AGENCY

Rocket Lab sees payoff from CAPSTONE launch

Rocket Lab sees payoff from CAPSTONE launch

by Jeff Foust — June 28, 2022

The successful launch of a NASA lunar cubesat mission was the culmination of two and a half years of work at Rocket Lab that, the company’s chief executive says, could enable “ridiculously low cost” planetary missions.

COMMERCIAL LAUNCH CAPSTONEELECTRONROCKET LAB

Space Force acquisition chief to meet with ULA and Blue Origin, expects Vulcan to launch in December

Space Force acquisition chief to meet with ULA and Blue Origin, expects Vulcan to launch in December

by Sandra Erwin — June 28, 2022

Frank Calvelli said he wants to make sure Blue Origin and ULA understand 'the importance of hitting their milestones' for the BE-4 and Vulcan

LAUNCH MILITARY BLUE ORIGINSPACE FORCEULA

Virgin Orbit ready for first night launch

Virgin Orbit ready for first night launch

by Jeff Foust — June 28, 2022

Virgin Orbit says it’s ready for a nighttime launch for the U.S. Space Force as it attempts to get into a more frequent rhythm of building and launching vehicles.

COMMERCIAL LAUNCH MILITARY LAUNCHERONEVIRGIN ORBIT

Ovzon needs to piggyback another Ariane 5 ride for late 2022 launch

Ovzon needs to piggyback another Ariane 5 ride for late 2022 launch

by Jason Rainbow — June 28, 2022

Arianespace is looking to move Ovzon’s first satellite to another Ariane 5 after Eutelsat switched to a dedicated mission to launch sooner.

## News

## SPACE.COM

Space is supported by its audience. When you purchase through links on our site, we may earn an affiliate commission. [Here’s why you can trust us](https://www.space.com/41418-about-us.html#section-affiliate-advertising-disclosure)

**Space News**

**BROWSE CATEGORIES**

* [**Infographics**](https://www.space.com/infographics)
* [**Countdowns**](https://www.space.com/countdowns)
* [**References**](https://www.space.com/references)
* [**Quizzes**](https://www.space.com/quizzes)
* [**Wallpapers**](https://www.space.com/wallpapers)

**[Exclusive: The hunter becomes the hunted in Marvel Comics 'Predator #1' relaunch](https://www.space.com/marvel-comics-predator-relaunch)**

[By Jeff Spry published about 1 hour ago](https://www.space.com/marvel-comics-predator-relaunch)

[Marvel Comics releases its long-awaited "Predator" series from Ed Brisson and Kev Walker.](https://www.space.com/marvel-comics-predator-relaunch)

**[NASA's tiny CAPSTONE probe continues spiraling out toward the moon](https://www.space.com/nasa-capstone-moon-cubesat-aces-engine-burns)**

[By Mike Wall published about 2 hours ago](https://www.space.com/nasa-capstone-moon-cubesat-aces-engine-burns)

[NASA's little CAPSTONE cubesat is making good progress on its long journey to the moon.](https://www.space.com/nasa-capstone-moon-cubesat-aces-engine-burns)

**[China launches new Gaofen 12 Earth observation satellite](https://www.space.com/china-launches-gaofen-12-satellite)**

[By Andrew Jones published about 2 hours ago](https://www.space.com/china-launches-gaofen-12-satellite)

[China has launched another in its series of Gaofen Earth observation satellites as it continues building out its space infrastructure.](https://www.space.com/china-launches-gaofen-12-satellite)

**[Astronauts may need to jump in space to fight bone loss](https://www.space.com/astronaut-bone-loss-jumping-exercise-study)**

[By Brett Tingley published about 3 hours ago](https://www.space.com/astronaut-bone-loss-jumping-exercise-study)

[A new study suggests that high-impact exercise could help astronauts limit bone loss while in space.](https://www.space.com/astronaut-bone-loss-jumping-exercise-study)

**[Satellites watch record-breaking wildfires burn across Alaska](https://www.space.com/satellite-photos-record-breaking-alaska-wildfires-2022)**

[By Samantha Mathewson published about 5 hours ago](https://www.space.com/satellite-photos-record-breaking-alaska-wildfires-2022)

[A hot, dry start to summer has spurred a record number of wildfires in southern Alaska, and weather satellites are tracking the development of the blazes from space.](https://www.space.com/satellite-photos-record-breaking-alaska-wildfires-2022)

**[Tricky Mars rocks making things difficult for NASA's Perseverance rover](https://www.space.com/nasa-perseverance-mars-rover-rock-problems)**

[By Samantha Mathewson published about 5 hours ago](https://www.space.com/nasa-perseverance-mars-rover-rock-problems)

[NASA's Perseverance rover is on the hunt for the "goldilocks" of rocks to sample on Mars.](https://www.space.com/nasa-perseverance-mars-rover-rock-problems)

**[Surprise 'fossil galaxy' spotted near mighty Andromeda](https://www.space.com/fossil-dwarf-galaxy-near-andromeda)**

[By Elizabeth Howell published about 6 hours ago](https://www.space.com/fossil-dwarf-galaxy-near-andromeda)

[An amateur astronomer found a fossilized surprise in the well-studied sky near the bright Andromeda Galaxy.](https://www.space.com/fossil-dwarf-galaxy-near-andromeda)

**[James Webb Space Telescope's supercold camera is now ready for science](https://www.space.com/james-webb-space-telescope-second-instrument-ready)**

[By Tereza Pultarova published about 7 hours ago](https://www.space.com/james-webb-space-telescope-second-instrument-ready)

[The second of the four cutting-edge instruments on the James Webb Space Telescope is ready to perform science ahead of the awaited release of first full-quality images on July 12.](https://www.space.com/james-webb-space-telescope-second-instrument-ready)

**[NASA will unveil the James Webb Space Telescope's 1st science photos this month. Here's how to watch.](https://www.space.com/james-webb-space-telescope-science-photos-webcast)**

[By Elizabeth Howell published about 8 hours ago](https://www.space.com/james-webb-space-telescope-science-photos-webcast)

[After half a year of commissioning in space, the James Webb Space Telescope will release its first science images in July. Here's how you can tune in to the historic event for free.](https://www.space.com/james-webb-space-telescope-science-photos-webcast)

**[SpaceX's Starlink satellites will help improve space weather forecasts amid sun's unpredictable activity](https://www.space.com/spacex-starlink-helps-noaa-space-weather-forecast)**

[By Tereza Pultarova published about 10 hours ago](https://www.space.com/spacex-starlink-helps-noaa-space-weather-forecast)

[SpaceX's Starlink satellites are providing data to NOAA to help improve space weather forecasts as spacecraft operators struggle with unexpected effects of frequent solar eruptions.](https://www.space.com/spacex-starlink-helps-noaa-space-weather-forecast)

**[Another supermoon rises this month with July's 'Buck Moon'](https://www.space.com/full-moon-rises-supermoon-july-2022)**

[By Elizabeth Howell published about 10 hours ago](https://www.space.com/full-moon-rises-supermoon-july-2022)

[July's full moon will once again be a supermoon, reaching its perigee or closest point to our planet on July 13.](https://www.space.com/full-moon-rises-supermoon-july-2022)

**[Where will NASA set up its moon base?](https://www.space.com/nasa-artemis-moon-base-camp-location)**

[By Leonard David published about 10 hours ago](https://www.space.com/nasa-artemis-moon-base-camp-location)

[Artemis Base Camp will be established in the moon's south polar region, in a to-be-determined spot that features plentiful sunlight, direct-to-Earth communications and good access to water ice.](https://www.space.com/nasa-artemis-moon-base-camp-location)

**[A huge comet will make its closest approach to Earth in July. Here's how to watch it live.](https://www.space.com/giant-comet-k2-closest-approach-webcast)**

[By Samantha Mathewson published about 10 hours ago](https://www.space.com/giant-comet-k2-closest-approach-webcast)

[One of the farthest active comets ever spotted will make its closest approach to Earth on July 14, and here's how you can catch the action live.](https://www.space.com/giant-comet-k2-closest-approach-webcast)

**[On This Day In Space: July 1, 1962: Kennedy Space Center established](https://www.space.com/39251-on-this-day-in-space.html)**

[By Hanneke Weitering published about 10 hours ago](https://www.space.com/39251-on-this-day-in-space.html)

[On July 1, 1962, NASA established the Launch Operations Center — which was later renamed the Kennedy Space Center — on the east coast of Florida.](https://www.space.com/39251-on-this-day-in-space.html)

**[Pictures from space! Our image of the day](https://www.space.com/34-image-day.html)**

[By Space.com Staff published about 11 hours ago](https://www.space.com/34-image-day.html)

[An experimental moon exploration robot called Scout is being tested in the moon-like terrain of Italy's Etna volcano.](https://www.space.com/34-image-day.html)

**[US Space Force establishes new unit to track 'threats in orbit'](https://www.space.com/space-force-delta-18-threats-orbit)**

[By Brett Tingley published about 23 hours ago](https://www.space.com/space-force-delta-18-threats-orbit)

[The United States Space Force has activated a new unit that is tasked with providing "critical intelligence on threat systems, foreign intentions and activities in the space domain."](https://www.space.com/space-force-delta-18-threats-orbit)

**[Watch NASA roll huge Artemis 1 moon rocket off the pad Friday](https://www.space.com/artemis-1-moon-mission-roll-off-launch-pad)**

[By Mike Wall published 1 day ago](https://www.space.com/artemis-1-moon-mission-roll-off-launch-pad)

[NASA plans to start rolling its Artemis 1 moon mission off the launch pad Friday evening (July 1), and you can watch the slow-moving action live.](https://www.space.com/artemis-1-moon-mission-roll-off-launch-pad)

**[Satellite snaps gorgeous 4K selfie over Great Barrier Reef (video)](https://www.space.com/great-barrier-reef-gorgeous-satellite-selfie)**

[By Elizabeth Howell published 1 day ago](https://www.space.com/great-barrier-reef-gorgeous-satellite-selfie)

[A new spacecraft selfie shows the machine in glorious 4K resolution above Australia's Great Barrier Reef.](https://www.space.com/great-barrier-reef-gorgeous-satellite-selfie)

**['E.T. the Extra-Terrestrial' at 40: Spielberg’s charming sci-fi classic still offers wonder today](https://www.space.com/et-the-extra-terrestrial)**

[By Jeff Spry published 1 day ago](https://www.space.com/et-the-extra-terrestrial)

[40 years ago director Steven Spielberg introduced audiences to a benevolent alien in "E.T" the Extra-Terrestrial](https://www.space.com/et-the-extra-terrestrial)

**[NASA's James Webb Space Telescope mission: Live updates](https://www.space.com/news/live/james-webb-space-telescope-updates)**

[By Space.com Staff published 1 day ago](https://www.space.com/news/live/james-webb-space-telescope-updates)

[Read the latest news about NASA's James Webb Space Telescope.](https://www.space.com/news/live/james-webb-space-telescope-updates)

## Space X

<https://www.spacex.com/news>

[INSTAGRAM](https://www.instagram.com/spacex/) [FLICKR](https://www.flickr.com/photos/spacex) [LINKEDIN](https://www.linkedin.com/company/spacex) [PRIVACY POLICY](https://www.spacex.com/media/privacy_policy_spacex.pdf)

## ROSCOSMOS

[Russia publishes Pentagon coordinates, says Western ...](https://www.reuters.com/world/russia-publishes-pentagon-coordinates-says-western-satellites-work-our-enemy-2022-06-28/)

[Dmitry Rogozin, head of Roscosmos, told the Russian RIA Novosti news agency: "The entire conglomerate of private and state orbital groupings...](https://www.reuters.com/world/russia-publishes-pentagon-coordinates-says-western-satellites-work-our-enemy-2022-06-28/)

[.](https://www.reuters.com/world/russia-publishes-pentagon-coordinates-says-western-satellites-work-our-enemy-2022-06-28/)

[2 days ago](https://www.reuters.com/world/russia-publishes-pentagon-coordinates-says-western-satellites-work-our-enemy-2022-06-28/)

[](https://www.jpost.com/international/article-710608)

[The Jerusalem Post](https://www.jpost.com/international/article-710608)

[Russian space agency Roscosmos shares images of NATO summit location](https://www.jpost.com/international/article-710608)

[According to Roscosmos Director General Dmitry Rogozin, private Western satellite firms are sending information for NATO and, consequently, to...](https://www.jpost.com/international/article-710608)

[.](https://www.jpost.com/international/article-710608)

[3 days ago](https://www.jpost.com/international/article-710608)

[](https://www.republicworld.com/science/space/roscosmos-hacked-after-posting-satellite-images-of-nato-members-facilities-report-articleshow.html)

[Republic World](https://www.republicworld.com/science/space/roscosmos-hacked-after-posting-satellite-images-of-nato-members-facilities-report-articleshow.html)

[Roscosmos hacked after posting satellite images of NATO members' facilities: Report](https://www.republicworld.com/science/space/roscosmos-hacked-after-posting-satellite-images-of-nato-members-facilities-report-articleshow.html)

[Dmitry Strugovets, spokesperson of Roscosmos said as per Russian news agency TASS that the images featured the "decision-making centers" of...](https://www.republicworld.com/science/space/roscosmos-hacked-after-posting-satellite-images-of-nato-members-facilities-report-articleshow.html)

[.](https://www.republicworld.com/science/space/roscosmos-hacked-after-posting-satellite-images-of-nato-members-facilities-report-articleshow.html)

[2 days ago](https://www.republicworld.com/science/space/roscosmos-hacked-after-posting-satellite-images-of-nato-members-facilities-report-articleshow.html)

[](https://www.reuters.com/lifestyle/science/european-space-agency-russias-roscosmos-hold-talks-mars-mission-2022-06-13/)

[Reuters](https://www.reuters.com/lifestyle/science/european-space-agency-russias-roscosmos-hold-talks-mars-mission-2022-06-13/)

[European Space Agency, Russia's Roscosmos hold talks on ...](https://www.reuters.com/lifestyle/science/european-space-agency-russias-roscosmos-hold-talks-mars-mission-2022-06-13/)

[Dmitry Rogozin, the head of Roscosmos, told the Russian TASS news agency over the weekend that the ESA would consult its members following the...](https://www.reuters.com/lifestyle/science/european-space-agency-russias-roscosmos-hold-talks-mars-mission-2022-06-13/)

[.](https://www.reuters.com/lifestyle/science/european-space-agency-russias-roscosmos-hold-talks-mars-mission-2022-06-13/)

[2 weeks ago](https://www.reuters.com/lifestyle/science/european-space-agency-russias-roscosmos-hold-talks-mars-mission-2022-06-13/)

[](https://www.jpost.com/international/article-710689)

[The Jerusalem Post](https://www.jpost.com/international/article-710689)

[Cyberattack hits Russian space agency site after sharing NATO photos](https://www.jpost.com/international/article-710689)

[The site of Russian space agency Roscosmos was targeted by hackers in a DDoS attack after it published satellite images of NATO buildings.](https://www.jpost.com/international/article-710689)

[.](https://www.jpost.com/international/article-710689)

[2 days ago](https://www.jpost.com/international/article-710689)

[](https://www.dw.com/en/russia-plans-to-restart-german-telescope-without-permission/a-62033082)

[DW](https://www.dw.com/en/russia-plans-to-restart-german-telescope-without-permission/a-62033082)

[Russia plans to restart German telescope without permission](https://www.dw.com/en/russia-plans-to-restart-german-telescope-without-permission/a-62033082)

[Roscosmos will make relevant decisions in the near future," Rogozin said. ... The Russian Interfax news agency also cited him as saying that...](https://www.dw.com/en/russia-plans-to-restart-german-telescope-without-permission/a-62033082)

[.](https://www.dw.com/en/russia-plans-to-restart-german-telescope-without-permission/a-62033082)

[4 weeks ago](https://www.dw.com/en/russia-plans-to-restart-german-telescope-without-permission/a-62033082)

[](https://news.cgtn.com/news/2022-06-12/U-S-paid-2-bln-in-rubles-for-astronaut-s-trip-via-Russian-spacecraft-1aNE3d8289y/index.html)

[CGTN](https://news.cgtn.com/news/2022-06-12/U-S-paid-2-bln-in-rubles-for-astronaut-s-trip-via-Russian-spacecraft-1aNE3d8289y/index.html)

[U.S. paid 2 bln in rubles for astronaut's trip via Russian ...](https://news.cgtn.com/news/2022-06-12/U-S-paid-2-bln-in-rubles-for-astronaut-s-trip-via-Russian-spacecraft-1aNE3d8289y/index.html)

[Dmitry Rogozin, head of the Russia's state space corporation Roscosmos, ... spacecraft in an interview with the Russia 24 news channel.](https://news.cgtn.com/news/2022-06-12/U-S-paid-2-bln-in-rubles-for-astronaut-s-trip-via-Russian-spacecraft-1aNE3d8289y/index.html)

[.](https://news.cgtn.com/news/2022-06-12/U-S-paid-2-bln-in-rubles-for-astronaut-s-trip-via-Russian-spacecraft-1aNE3d8289y/index.html)

[3 weeks ago](https://news.cgtn.com/news/2022-06-12/U-S-paid-2-bln-in-rubles-for-astronaut-s-trip-via-Russian-spacecraft-1aNE3d8289y/index.html)

[](https://www.republicworld.com/science/space/roscosmos-only-female-cosmonaut-to-launch-in-spacex-capsule-on-september-1-report-articleshow.html)

[Republic World](https://www.republicworld.com/science/space/roscosmos-only-female-cosmonaut-to-launch-in-spacex-capsule-on-september-1-report-articleshow.html)

[Roscosmos' only female cosmonaut to launch in SpaceX capsule on September 1: Report](https://www.republicworld.com/science/space/roscosmos-only-female-cosmonaut-to-launch-in-spacex-capsule-on-september-1-report-articleshow.html)

[Roscosmos' Anna Kikina will board SpaceX's Crew Dragon capsule on ... for September 1", Roscosmos said as per Russian news agency, TASS.](https://www.republicworld.com/science/space/roscosmos-only-female-cosmonaut-to-launch-in-spacex-capsule-on-september-1-report-articleshow.html)

[.](https://www.republicworld.com/science/space/roscosmos-only-female-cosmonaut-to-launch-in-spacex-capsule-on-september-1-report-articleshow.html)

[5 days ago](https://www.republicworld.com/science/space/roscosmos-only-female-cosmonaut-to-launch-in-spacex-capsule-on-september-1-report-articleshow.html)

[](https://tdpelmedia.com/roscosmos-state-corporation-publishes-images-of-western-decision-making-centers)

[TDPel Media](https://tdpelmedia.com/roscosmos-state-corporation-publishes-images-of-western-decision-making-centers)

[Roscosmos State Corporation publishes images of Western decision-making centers](https://tdpelmedia.com/roscosmos-state-corporation-publishes-images-of-western-decision-making-centers)

[Roscosmos State Corporation publishes images of Western decision-making centers · See Something Say Something, Share The News · ↯↯↯Read More On...](https://tdpelmedia.com/roscosmos-state-corporation-publishes-images-of-western-decision-making-centers)

[.](https://tdpelmedia.com/roscosmos-state-corporation-publishes-images-of-western-decision-making-centers)

[3 days ago](https://tdpelmedia.com/roscosmos-state-corporation-publishes-images-of-western-decision-making-centers)

[](https://www.republicworld.com/science/space/russia-will-work-aboard-international-space-station-till-2024-roscosmos-chief-rogozin-articleshow.html)

[Republic World](https://www.republicworld.com/science/space/russia-will-work-aboard-international-space-station-till-2024-roscosmos-chief-rogozin-articleshow.html)

[Russia will work aboard International Space Station till 2024: Roscosmos chief Rogozin](https://www.republicworld.com/science/space/russia-will-work-aboard-international-space-station-till-2024-roscosmos-chief-rogozin-articleshow.html)

[Our minds are already living in that future", Rogozin said as per Russian news agency TASS. READ | Roscosmos to report its position on ISS...](https://www.republicworld.com/science/space/russia-will-work-aboard-international-space-station-till-2024-roscosmos-chief-rogozin-articleshow.html)

[.](https://www.republicworld.com/science/space/russia-will-work-aboard-international-space-station-till-2024-roscosmos-chief-rogozin-articleshow.html)

[4 weeks ago](https://www.republicworld.com/science/space/russia-will-work-aboard-international-space-station-till-2024-roscosmos-chief-rogozin-articleshow.html)

## EUROPEAN SPACE AGENCY

## spotlight

[SCIENCE & EXPLORATION](https://www.esa.int/Newsroom/Press_Releases/Media_advisory_Webb_telescope_s_first_images)

[Media advisory: Webb telescope’s first images](https://www.esa.int/Newsroom/Press_Releases/Media_advisory_Webb_telescope_s_first_images)

[NASA, ESA and CSA will release the James Webb Space Telescope’s first full-color images and spectroscopic data during a televised broadcast beginning at 16:30 CEST on Tuesday, 12 July.](https://www.esa.int/Newsroom/Press_Releases/Media_advisory_Webb_telescope_s_first_images)

[21/06/20221039 VIEWS](https://www.esa.int/Newsroom/Press_Releases/Media_advisory_Webb_telescope_s_first_images)

[OPEN](https://www.esa.int/Newsroom/Press_Releases/Media_advisory_Webb_telescope_s_first_images)

[PRESS RELEASEN° 31–2022](https://www.esa.int/Newsroom/Press_Releases/Call_for_Media_ARCHES_robotic_demonstration_of_Mount_Etna_in_Sicily)

[SCIENCE & EXPLORATION](https://www.esa.int/Newsroom/Press_Releases/Call_for_Media_ARCHES_robotic_demonstration_of_Mount_Etna_in_Sicily)

[Call for Media: ARCHES robotic demonstration of Mount Etna in Sicily](https://www.esa.int/Newsroom/Press_Releases/Call_for_Media_ARCHES_robotic_demonstration_of_Mount_Etna_in_Sicily)

[Media representatives are invited to join the ARCHES Space-Analog Demonstration on Mount Etna in Sicily on 29 June 2022, to learn more about this test campaign of autonomous and interconnected robotic systems, designed for future lunar exploration and beyond. The campaign includes ESA testing of an advanced control system allowing astronauts in orbit to experience a ground-based rover’s sense of touch.](https://www.esa.int/Newsroom/Press_Releases/Call_for_Media_ARCHES_robotic_demonstration_of_Mount_Etna_in_Sicily)

[20/06/2022327 VIEWS](https://www.esa.int/Newsroom/Press_Releases/Call_for_Media_ARCHES_robotic_demonstration_of_Mount_Etna_in_Sicily)

[OPEN](https://www.esa.int/Newsroom/Press_Releases/Call_for_Media_ARCHES_robotic_demonstration_of_Mount_Etna_in_Sicily)

[PRESS RELEASEN° 30–2022](https://www.esa.int/Newsroom/Press_Releases/From_the_Earth_to_the_Moon_and_on_to_Mars_ESA_and_NASA_take_decisions_and_plan_for_the_future)

[AGENCY](https://www.esa.int/Newsroom/Press_Releases/From_the_Earth_to_the_Moon_and_on_to_Mars_ESA_and_NASA_take_decisions_and_plan_for_the_future)

[From the Earth to the Moon and on to Mars – ESA and NASA take decisions and plan for the future](https://www.esa.int/Newsroom/Press_Releases/From_the_Earth_to_the_Moon_and_on_to_Mars_ESA_and_NASA_take_decisions_and_plan_for_the_future)

[The next steps in exploring and using space for the benefit of European citizens were this week on the agenda at ESA’s Council meeting in ESA/ESTEC, the Netherlands on 14 and 15 June. The possibility of the first-ever European astronaut to set foot on the Moon, a telecommunication satellite for lunar exploration and a mission to return precious rock samples from Mars were all discussed.](https://www.esa.int/Newsroom/Press_Releases/From_the_Earth_to_the_Moon_and_on_to_Mars_ESA_and_NASA_take_decisions_and_plan_for_the_future)

[15/06/20224044 VIEWS](https://www.esa.int/Newsroom/Press_Releases/From_the_Earth_to_the_Moon_and_on_to_Mars_ESA_and_NASA_take_decisions_and_plan_for_the_future)

[OPEN](https://www.esa.int/Newsroom/Press_Releases/From_the_Earth_to_the_Moon_and_on_to_Mars_ESA_and_NASA_take_decisions_and_plan_for_the_future)

[PRESS RELEASEN° 29–2022](https://www.esa.int/Newsroom/Press_Releases/Invitation_to_the_media_ILA_Berlin)

[AGENCY](https://www.esa.int/Newsroom/Press_Releases/Invitation_to_the_media_ILA_Berlin)

[Invitation to the media: ILA Berlin](https://www.esa.int/Newsroom/Press_Releases/Invitation_to_the_media_ILA_Berlin)

[The media are cordially invited to attend a press conference with ESA Director General, Dr Josef Aschbacher, at ILA Berlin on Wednesday 22 June 2022 from 09:00–10:00 CEST.](https://www.esa.int/Newsroom/Press_Releases/Invitation_to_the_media_ILA_Berlin)

[15/06/2022224 VIEWS](https://www.esa.int/Newsroom/Press_Releases/Invitation_to_the_media_ILA_Berlin)

[OPEN](https://www.esa.int/Newsroom/Press_Releases/Invitation_to_the_media_ILA_Berlin)

[PRESS RELEASEN° 28–2022](https://www.esa.int/Newsroom/Press_Releases/Gaia_sees_strange_stars_in_most_detailed_Milky_Way_survey_to_date)

[SCIENCE & EXPLORATION](https://www.esa.int/Newsroom/Press_Releases/Gaia_sees_strange_stars_in_most_detailed_Milky_Way_survey_to_date)

[Gaia sees strange stars in most detailed Milky Way survey to date](https://www.esa.int/Newsroom/Press_Releases/Gaia_sees_strange_stars_in_most_detailed_Milky_Way_survey_to_date)

[Today, ESA’s Gaia mission released its new treasure trove of data about our home galaxy. Astronomers describe strange ‘starquakes’, stellar DNA, asymmetric motions and other fascinating insights in this most detailed Milky Way survey to date.Gaia is ESA’s mission to create the most accurate and complete multi-dimensional map of the Milky Way. This allows astronomers to reconstruct our home galaxy’s structure and past evolution over billions of years, and to better understand the lifecycle of stars and our place in the Universe.](https://www.esa.int/Newsroom/Press_Releases/Gaia_sees_strange_stars_in_most_detailed_Milky_Way_survey_to_date)

[13/06/2022739 VIEWS](https://www.esa.int/Newsroom/Press_Releases/Gaia_sees_strange_stars_in_most_detailed_Milky_Way_survey_to_date)

[OPEN](https://www.esa.int/Newsroom/Press_Releases/Gaia_sees_strange_stars_in_most_detailed_Milky_Way_survey_to_date)

[PRESS RELEASE ARCHIVE](https://www.esa.int/Newsroom/Press_Releases)

Latest

ALL STORIES VIDEOS IMAGES

[VIDEO00:40:12](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Replay_NASA_Administrator_at_the_ESA_Council)

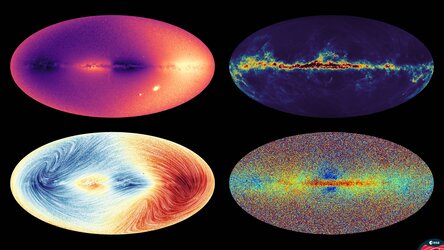
[[](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Replay_NASA_Administrator_at_the_ESA_Council)AGENCY](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Replay_NASA_Administrator_at_the_ESA_Council)

[Replay: NASA Administrator at the ESA Council](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Replay_NASA_Administrator_at_the_ESA_Council)

[15/06/2022257 VIEWS3 LIKES](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Replay_NASA_Administrator_at_the_ESA_Council)

[PLAY](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Replay_NASA_Administrator_at_the_ESA_Council)

[VIDEO00:54:56](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Gaia_data_release_3_press_event)

[[](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Gaia_data_release_3_press_event)SCIENCE & EXPLORATION](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Gaia_data_release_3_press_event)

[Gaia data release 3 – press event](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Gaia_data_release_3_press_event)

[13/06/20223833 VIEWS109 LIKES](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Gaia_data_release_3_press_event)

[PLAY](https://www.esa.int/ESA_Multimedia/Videos/2022/06/Gaia_data_release_3_press_event)

[VIDEO00:57:08](https://www.esa.int/ESA_Multimedia/Videos/2022/05/News_Conference_with_ESA_Astronaut_Matthias_Maurer_in_German)

[[](https://www.esa.int/ESA_Multimedia/Videos/2022/05/News_Conference_with_ESA_Astronaut_Matthias_Maurer_in_German)SCIENCE & EXPLORATION](https://www.esa.int/ESA_Multimedia/Videos/2022/05/News_Conference_with_ESA_Astronaut_Matthias_Maurer_in_German)

[News Conference with ESA Astronaut Matthias Maurer (in Germ…](https://www.esa.int/ESA_Multimedia/Videos/2022/05/News_Conference_with_ESA_Astronaut_Matthias_Maurer_in_German)

[11/05/20221440 VIEWS45 LIKES](https://www.esa.int/ESA_Multimedia/Videos/2022/05/News_Conference_with_ESA_Astronaut_Matthias_Maurer_in_German)

[PLAY](https://www.esa.int/ESA_Multimedia/Videos/2022/05/News_Conference_with_ESA_Astronaut_Matthias_Maurer_in_German)

[STORY](https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Watch_live_Matthias_Maurer_returns_to_Earth)

[[](https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Watch_live_Matthias_Maurer_returns_to_Earth)SCIENCE & EXPLORATION](https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Watch_live_Matthias_Maurer_returns_to_Earth)

[Watch live – Matthias Maurer returns to Earth](https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Watch_live_Matthias_Maurer_returns_to_Earth)

[04/05/20225788 VIEWS44 LIKES](https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Watch_live_Matthias_Maurer_returns_to_Earth)

[READ](https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Watch_live_Matthias_Maurer_returns_to_Earth)

[VIDEO00:21:27](https://www.esa.int/ESA_Multimedia/Videos/2022/05/Inflight_call_with_Samantha_and_Matthias)

[[](https://www.esa.int/ESA_Multimedia/Videos/2022/05/Inflight_call_with_Samantha_and_Matthias)SCIENCE & EXPLORATION](https://www.esa.int/ESA_Multimedia/Videos/2022/05/Inflight_call_with_Samantha_and_Matthias)

[Inflight call with Samantha and Matthias](https://www.esa.int/ESA_Multimedia/Videos/2022/05/Inflight_call_with_Samantha_and_Matthias)

[02/05/20225205 VIEWS62 LIKES](https://www.esa.int/ESA_Multimedia/Videos/2022/05/Inflight_call_with_Samantha_and_Matthias)

[PLAY](https://www.esa.int/ESA_Multimedia/Videos/2022/05/Inflight_call_with_Samantha_and_Matthias)

[VIDEO01:15:00](https://www.esa.int/ESA_Multimedia/Videos/2022/04/Media_session_-_ESA_Council_extraordinary_meeting)

[[](https://www.esa.int/ESA_Multimedia/Videos/2022/04/Media_session_-_ESA_Council_extraordinary_meeting)AGENCY](https://www.esa.int/ESA_Multimedia/Videos/2022/04/Media_session_-_ESA_Council_extraordinary_meeting)

[Media session - ESA Council extraordinary meeting](https://www.esa.int/ESA_Multimedia/Videos/2022/04/Media_session_-_ESA_Council_extraordinary_meeting)

[13/04/20221327 VIEWS30 LIKES](https://www.esa.int/ESA_Multimedia/Videos/2022/04/Media_session_-_ESA_Council_extraordinary_meeting)

[PLAY](https://www.esa.int/ESA_Multimedia/Videos/2022/04/Media_session_-_ESA_Council_extraordinary_meeting)

[FOCUS ON](https://www.nasa.gov/press-release/nasa-to-host-briefings-interviews-for-agency-s-spacex-crew-4-mission" \t "_blank)

[[](https://www.nasa.gov/press-release/nasa-to-host-briefings-interviews-for-agency-s-spacex-crew-4-mission)](https://www.nasa.gov/press-release/nasa-to-host-briefings-interviews-for-agency-s-spacex-crew-4-mission" \t "_blank)

[NASA to Host Briefings, Interviews for Agency’s SpaceX Crew…](https://www.nasa.gov/press-release/nasa-to-host-briefings-interviews-for-agency-s-spacex-crew-4-mission" \t "_blank)

[OPEN](https://www.nasa.gov/press-release/nasa-to-host-briefings-interviews-for-agency-s-spacex-crew-4-mission" \t "_blank)

[STORY](https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/Methane_detected_over_Poland_s_coal_mines)

[[](https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/Methane_detected_over_Poland_s_coal_mines)APPLICATIONS](https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/Methane_detected_over_Poland_s_coal_mines)

[Methane detected over Poland’s coal mines](https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/Methane_detected_over_Poland_s_coal_mines)

22/12/20211654 VIEWS50 LIKES

[PLAY](https://www.esa.int/ESA_Multimedia/Videos/2021/12/ESA_highlights_2021)

## CHINA SPACE AGENCY

<http://www.cnsa.gov.cn/english/index.html>

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | [Service Rules for the CHASE Satellite Data](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840608/content.html) [06-23] |  |  | | --- | | [BRICS countries launch joint committee on space cooperation](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840322/content.html) [05-26] |  |  | | --- | | [New cargo spacecraft being built](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840340/content.html) [05-20] |  |  | | --- | | [China launches three low-orbit communication test satellites](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840339/content.html) [05-20] |  |  | | --- | | [Tianwen-1 mission marks 1st year on Mars](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840321/content.html) [05-16] |  |  | | --- | | [China's cargo craft docks with space station combination](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840341/content.html) [05-11] |  |  | | --- | | [China launches atmospheric environment monitoring satellite](http://www.cnsa.gov.cn/english/n6465652/n6465653/c6840342/content.html) [04-21] | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **■ Policies and Announcement** | [more](http://www.cnsa.gov.cn/english/n6465645/n6465648/index.html) |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | [China's Space Program: A 2021 Perspectiv...](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6813088/content.html) |  |  | | --- | | [International Lunar Research Station (IL...](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6812150/content.html) |  |  | | --- | | [Notice of China National Space Administr...](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6811126/content.html) |  |  | | --- | | [Announcement of Opportunities for Scient...](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6806206/content.html) |  |  | | --- | | [Announcement of Opportunities for Scient...](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6806207/content.html) |  |  | | --- | | [The introduction of RHU in Chang'e-4 mis...](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6804536/content.html) |  |  | | --- | | [China’s Space Activities in 2016](http://www.cnsa.gov.cn/english/n6465645/n6465648/c6768527/content.html) | | | | | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **■ Intergovernmental Cooperation** | [more](http://www.cnsa.gov.cn/english/n6465668/n6465670/index.html) |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | [BRICS countries launch joint committee o...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6840322/content.html) |  |  | | --- | | [CNSA: Promoting the building of a commun...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6813144/content.html) |  |  | | --- | | [International Cooperation in outer space...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6840364/content.html) |  |  | | --- | | [Russian-Chinese Joint Seminar on Coopera...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6812568/content.html) |  |  | | --- | | [JOINT STATEMENT Between CNSA And ROSCOSM...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6811967/content.html) |  |  | | --- | | [China, Russia welcome int'l partners in ...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6811943/content.html) |  |  | | --- | | [CNSA and NASA held discussions on exchan...](http://www.cnsa.gov.cn/english/n6465668/n6465670/c6811473/content.html) | | | | | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **■ Major Project** | [more](http://www.cnsa.gov.cn/english/n6465719/index.html) |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | [Chinese Mars mission sends photos of the...](http://www.cnsa.gov.cn/english/n6465719/c6813041/content.html) |  |  | | --- | | [Zhang Rongqiao: Mars explorer](http://www.cnsa.gov.cn/english/n6465719/c6813005/content.html) |  |  | | --- | | [Trekking 100 days on Mars, Zhurong drive...](http://www.cnsa.gov.cn/english/n6465719/c6812439/content.html) |  |  | | --- | | [Mars rover continues scientific mission](http://www.cnsa.gov.cn/english/n6465719/c6812390/content.html) |  |  | | --- | | [China's Tianwen-1 probe sends back Mars ...](http://www.cnsa.gov.cn/english/n6465719/c6812028/content.html) |  |  | | --- | | [Tianwen-1 probe will land on Mars in nex...](http://www.cnsa.gov.cn/english/n6465719/c6812000/content.html) |  |  | | --- | | [Tianwen 1 probe enters preset parking or...](http://www.cnsa.gov.cn/english/n6465719/c6811287/content.html) | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **■ Space Products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | |  | [– Fengyun (FY) Meteoro...](http://www.cnsa.gov.cn/english/n6465715/n6465716/c6840363/content.html) [– TianQin-1 Technology...](http://www.cnsa.gov.cn/english/n6465715/n6465716/c6840362/content.html) [– Insight Hard X-ray M...](http://www.cnsa.gov.cn/english/n6465715/n6465716/c6840361/content.html) [– Quantum Science Expe...](http://www.cnsa.gov.cn/english/n6465715/n6465716/c6840360/content.html) [– SJ-10 Recoverable Sc...](http://www.cnsa.gov.cn/english/n6465715/n6465716/c6840359/content.html) |  |  |  |  | | --- | --- | --- | | **Satellites** | [more](http://www.cnsa.gov.cn/english/n6465715/n6465716/index.html) |  | | |  |  | | --- | --- | |  | [– Space Laboratory Mis...](http://www.cnsa.gov.cn/english/n6465715/n6465717/c6840348/content.html) [– Shenzhou X](http://www.cnsa.gov.cn/english/n6465715/n6465717/c6840347/content.html) [– Shenzhou IX](http://www.cnsa.gov.cn/english/n6465715/n6465717/c6840346/content.html) [– Shenzhou VIII](http://www.cnsa.gov.cn/english/n6465715/n6465717/c6840345/content.html) [– Tiangong I](http://www.cnsa.gov.cn/english/n6465715/n6465717/c6840344/content.html) |  |  |  |  | | --- | --- | --- | | **Spacecraft** | [more](http://www.cnsa.gov.cn/english/n6465715/n6465717/index.html) |  | | |  |  | | --- | --- | |  | [– Launch Vehicles](http://www.cnsa.gov.cn/english/n6465715/n6465718/c6840349/content.html) [– Long March-5](http://www.cnsa.gov.cn/english/n6465715/n6465718/c6476925/content.html) [– Long March-4B](http://www.cnsa.gov.cn/english/n6465715/n6465718/c6476916/content.html) [– Long March-4A](http://www.cnsa.gov.cn/english/n6465715/n6465718/c6476907/content.html) [– Long March-3C](http://www.cnsa.gov.cn/english/n6465715/n6465718/c6476898/content.html) |  |  | | --- | | **Launch Vehicles** | | | |

## VIRGIN GALACTIC

<https://www.virgingalactic.com/news/>

## Omaze and Virgin Galactic Announce Winner of Once-in-a-Lifetime Trip to Space

[Read more](https://www.virgingalactic.com/articles/omaze-and-virgin-galactic-announce-winner-of-once-in-a-lifetime-trip-to-space/)

[](https://www.virgingalactic.com/news/37th-annual-space-symposium-michael-colglazier-reflections-blog)

06.04.2022

## 37th Annual Space Symposium – Michael Colglazier Reflections Blog

[Read more](https://www.virgingalactic.com/news/37th-annual-space-symposium-michael-colglazier-reflections-blog)

[](https://www.virgingalactic.com/news/virgin-galactic-appoints-pilot-kelly-latimer-to-director-of-flight-test)

30.03.2022

## Virgin Galactic Appoints Pilot Kelly Latimer to Director of Flight Test

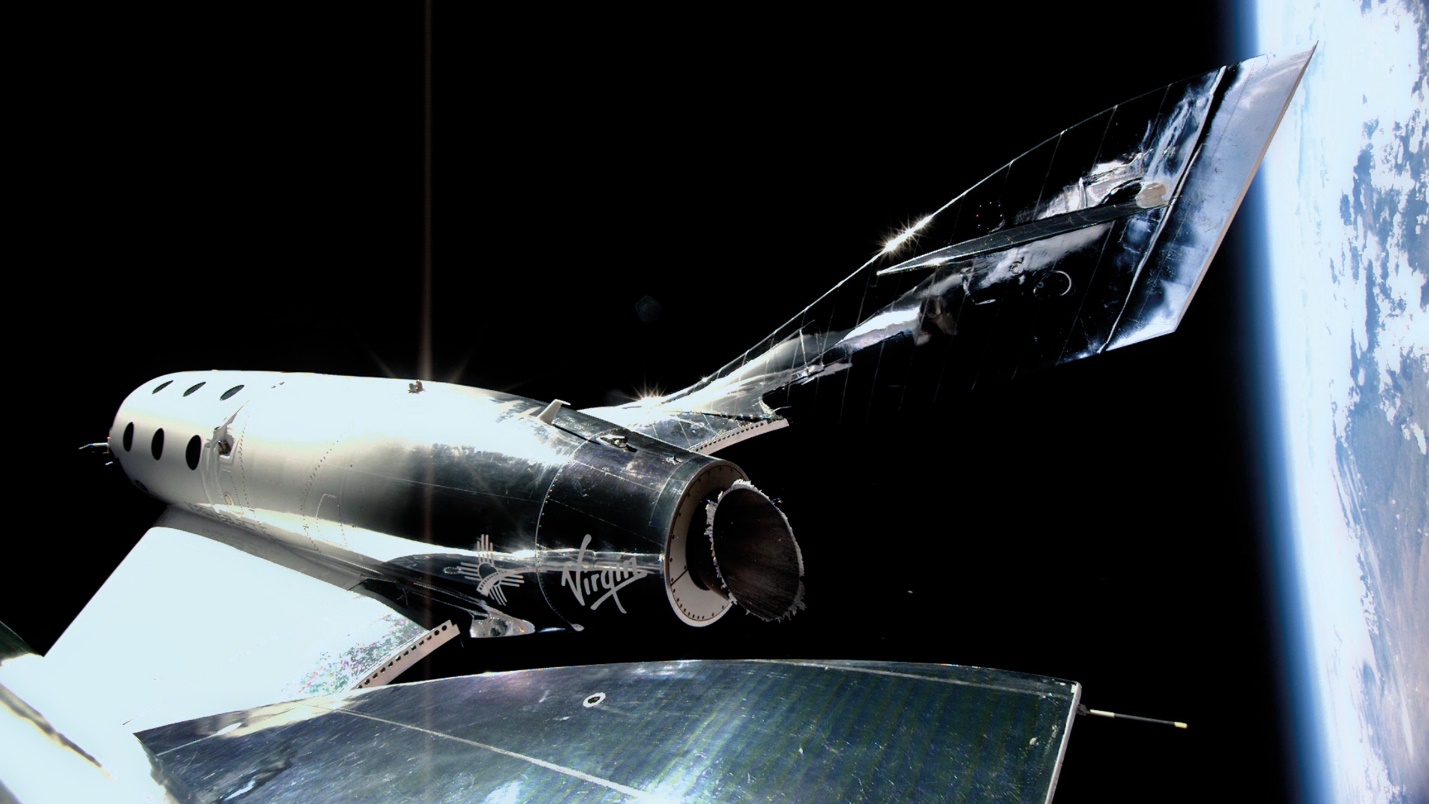
[Read more](https://www.virgingalactic.com/news/virgin-galactic-appoints-pilot-kelly-latimer-to-director-of-flight-test)

[](https://www.virgingalactic.com/news/land-rover-teams-up-with-virgin-galactic-for-sweepstakes-to-send-a-land)

28.02.2022

## Land Rover Teams Up With Virgin Galactic For Sweepstakes To Send A Land Rover Vehicle Owner To Space

[Read more](https://www.virgingalactic.com/news/land-rover-teams-up-with-virgin-galactic-for-sweepstakes-to-send-a-land)

[](https://www.virgingalactic.com/news/virgin-galactic-announces-fourth-quarter-and-full-year-2021-financial)

22.02.2022

## Virgin Galactic Announces Fourth Quarter and Full Year 2021 Financial Results

[Read more](https://www.virgingalactic.com/news/virgin-galactic-announces-fourth-quarter-and-full-year-2021-financial)

[](https://www.virgingalactic.com/news/virgin-galactic-launches-spaceflight-reservations-and-new-consumer-brand)

15.02.2022

## Virgin Galactic Launches Spaceflight Reservations & New Consumer Brand

## BLUE ORIGINS

Latest Updates

**[NEWS](https://www.blueorigin.com/news/general-hyten-joins-blue-origin)**

##### **[General Hyten Joins Blue Origin as Executive Director of Club for the Future and Strategic Advisor](https://www.blueorigin.com/news/general-hyten-joins-blue-origin)**

[Blue Origin today announced that General John Hyten (Ret.) will serve as executive director for its foundation, Club for](https://www.blueorigin.com/news/general-hyten-joins-blue-origin)

[[](https://www.blueorigin.com/news/ns-21-mission-updates)](https://www.blueorigin.com/news/ns-21-mission-updates)

**[JUN 4, 2022](https://www.blueorigin.com/news/ns-21-mission-updates)**

**[NEWS](https://www.blueorigin.com/news/ns-21-mission-updates)**

##### **[Blue Origin Successfully Completes 21st Mission](https://www.blueorigin.com/news/ns-21-mission-updates)**

[Mission NS-21 is New Shepard’s Fifth Crewed Flight Today, Blue Origin successfully completed its fifth human spaceflight](https://www.blueorigin.com/news/ns-21-mission-updates)

[[](https://www.blueorigin.com/news/new-shepard-ns-21-mission-announcement)](https://www.blueorigin.com/news/new-shepard-ns-21-mission-announcement)

**[MAY 18, 2022](https://www.blueorigin.com/news/new-shepard-ns-21-mission-announcement)**

**[NEWS](https://www.blueorigin.com/news/new-shepard-ns-21-mission-announcement)**

##### **[NS-21 to Fly Six Customer Astronauts, Including First Mexican-Born Woman to Visit Space](https://www.blueorigin.com/news/new-shepard-ns-21-mission-announcement)**

[May 18 During our final vehicle check-outs, we observed one of New Shepard's back-up systems was not meeting our](https://www.blueorigin.com/news/new-shepard-ns-21-mission-announcement)

[[](https://www.blueorigin.com/news/amazon-selects-new-glenn-for-kuiper)](https://www.blueorigin.com/news/amazon-selects-new-glenn-for-kuiper)

**[APR 5, 2022](https://www.blueorigin.com/news/amazon-selects-new-glenn-for-kuiper)**

**[NEWS](https://www.blueorigin.com/news/amazon-selects-new-glenn-for-kuiper)**

##### **[Amazon Selects Blue Origin’s New Glenn for up to 27 Project Kuiper Constellation Launches](https://www.blueorigin.com/news/amazon-selects-new-glenn-for-kuiper)**

[Blue Origin today announced New Glenn has been selected for 12 launches, with options for up to 15 additional launches](https://www.blueorigin.com/news/amazon-selects-new-glenn-for-kuiper)

[[](https://www.blueorigin.com/news/ns-20-mission-updates)](https://www.blueorigin.com/news/ns-20-mission-updates)

**[MAR 31, 2022](https://www.blueorigin.com/news/ns-20-mission-updates)**

**[NEWS](https://www.blueorigin.com/news/ns-20-mission-updates)**

##### **[Blue Origin Successfully Completes Fourth Human Spaceflight](https://www.blueorigin.com/news/ns-20-mission-updates)**

[March 31, 2022Today, Blue Origin successfully completed its fourth human spaceflight and 20th overall flight for New](https://www.blueorigin.com/news/ns-20-mission-updates)

[[](https://www.blueorigin.com/news/new-shepard-ns-20-mission-announcement)](https://www.blueorigin.com/news/new-shepard-ns-20-mission-announcement)

**[MAR 21, 2022](https://www.blueorigin.com/news/new-shepard-ns-20-mission-announcement)**

**[NEWS](https://www.blueorigin.com/news/new-shepard-ns-20-mission-announcement)**

##### **[Blue Origin's 20th Mission to Space](https://www.blueorigin.com/news/new-shepard-ns-20-mission-announcement)**

[March 21Blue Origin today announced the sixth crew member joining New Shepard’s 20th mission will be Blue Origin’s Gary](https://www.blueorigin.com/news/new-shepard-ns-20-mission-announcement)