

Astronautical News

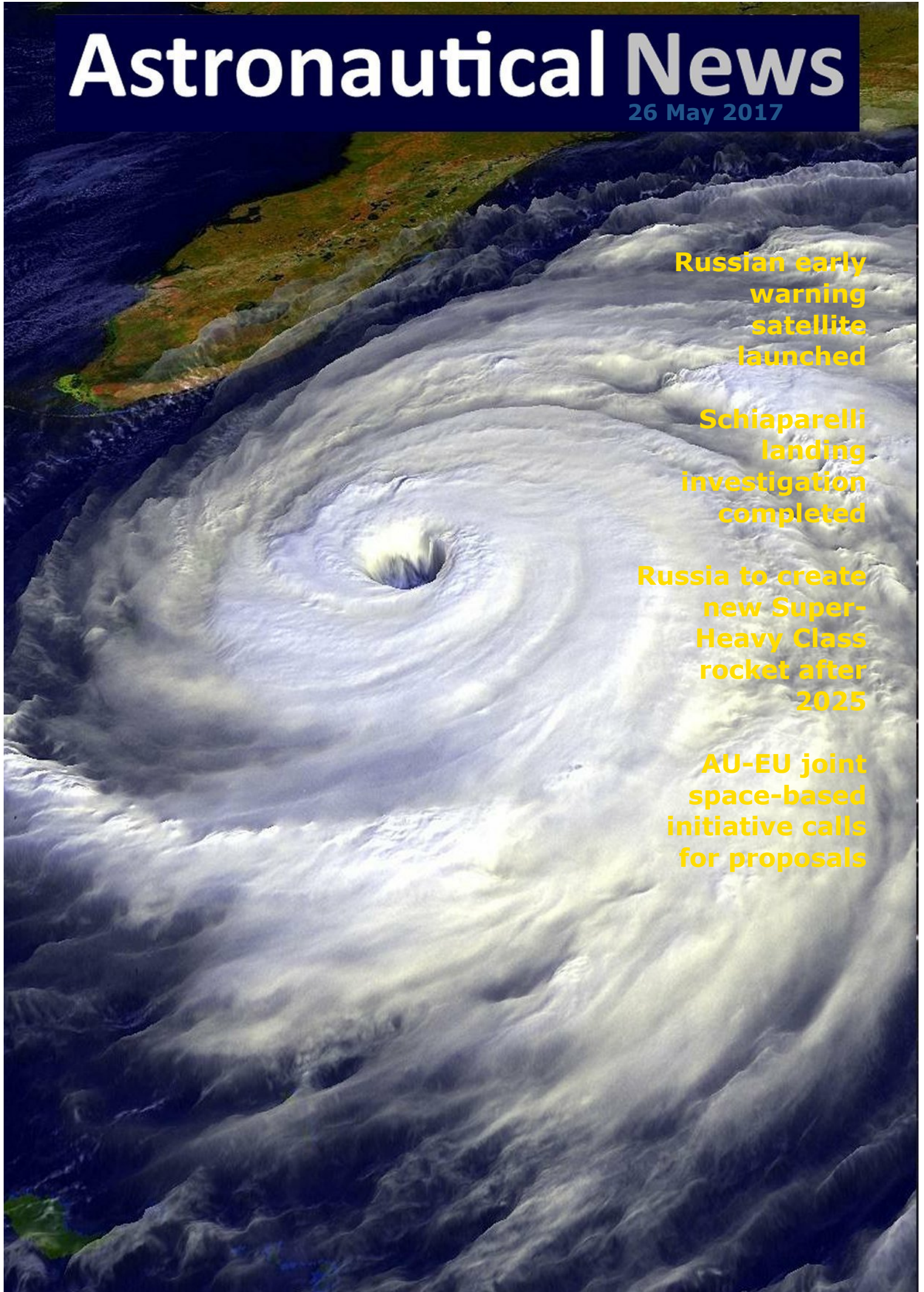
26 May 2017

**Russian early
warning
satellite
launched**

**Schiaparelli
landing
investigation
completed**

**Russia to create
new Super-
Heavy Class
rocket after
2025**

**AU-EU joint
space-based
initiative calls
for proposals**





Will international space law struggle to remain relevant? 'Holistic' system of global space governance needed to keep space law pertinent



New Zealand space launch is first from a private site An American company has launched a rocket into space from New Zealand, the first from a private launch facility. Rocket Lab's 17m (56ft) Electron rocket took off from the Mahia Peninsula, in North Island, the firm said. The test flight was the first launch from New Zealand and is a major first step in an emerging market; launching cheap disposable rockets to carry small satellites and other cargo.



Tests done on game changing nanotube material for thruster parts NASA test tiny nanotube material that is being hailed as a game-changer and could one day be used to fly rockets into space.



Researchers create largest-ever 3D map of the Universe By mapping quasars and 'frozen' waves, researchers help cement Einsteins predictions to build up our understanding of the Universe.



ISS demonstrates possibilities Of low-cost Launch By making launch more affordable, SpaceX hopes to open the door to wider experimentation in space.



NASA spins asteroid robotics out to industry Despite being cut from the budget request by the Trump administration, robotics developed by NASA will still be of great use to the space industry.



NASA-ISRO satellite to be put in space by Indian GSLV rocket in 2021 NISAR is the first big collaboration between NASA and ISRO, certainly on RADAR but just in general as well. This is two frequency RADAR, it is an L-band 24 centimetre RADAR and S- band 13 centimetre. S-band is being built by ISRO and L-band by NASA. It is a major collaboration both in terms of the technical building of the satellite as well as working together across the Pacific between India and US.



Research details developments in the global satellite payloads market report for 2017 'Satellite Payloads' presents an in-depth study of the Satellite Payloads market. Providing a brief history about the market, the report analyses the entire value chain of the market and points out the key drivers and restraints affecting the growth of the market during the forecast period.



SA space agency, Airbus launch challenge to find new uses for satellite data The South African National Space Agency (Sansa) and Airbus Defence and Space has launched an open innovation challenge to entrepreneurs, universities and other interested parties seeking homegrown and novel uses for earth observation data obtained by satellites.



Russian early warning satellite launched The Russian Defense Ministry said the flight went normally and delivered the early warning satellite to its intended orbit.



Astronauts restore Space Station to full health in quick repair spacewalk NASA astronauts sped through an urgent spacewalk May 23 to replace a malfunctioning computer relay box outside the International Space Station.



Cruz to hold hearing on updating the Outer Space Treaty The chairman of the US Senate's space subcommittee said May 16 that his committee will hold a hearing to hear testimony on possible updates to a 50-year-old treaty that is the cornerstone of international space law.



NASA plans emergency spacewalk on International Space Station A pair of astronauts will venture outside the International Space Station on Tuesday for an emergency spacewalk to replace a failed computer, one of two that control major U.S. systems aboard the orbiting outpost, NASA said. The primary device failed on 20 May, leaving the \$100 billion orbiting laboratory to depend on a backup system to route commands to its solar power system, radiators, cooling loops and other equipment.

Recent Launch Activities

Russian early warning satellite launched

The Russian Defense Ministry said the flight went normally and delivered the early warning satellite to its intended orbit.

(26 May 2017)

New Zealand space launch is first from a private site

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(25 May 2017)

Arianespace launches SES-15 using Soyuz rocket

Arianespace has orbited the SES-15 telecommunications satellite for European operator SES. Liftoff took place on Thursday, May 18 at 8:54 a.m. (local time in Kourou) from the Guiana Space Center (CSG), Europe's Spaceport in French Guiana. This launch was the fifth of the year for Arianespace, and the second by Soyuz from CSG to geostationary transfer orbit (GTO).

(19 May 2017)

SpaceX launches Inmarsat Global Xpress satellite

A SpaceX Falcon 9 rocket successfully launched the fourth Inmarsat Global Xpress satellite on May 15.

(16 May 2017)

Development Activities

Russia to create new Super-Heavy Class rocket after 2025

Russian Deputy Prime Minister Dmitry Rogozin stated that Russian President Vladimir Putin posed the task before Roscosmos to speed up creating a super-heavy class rocket. President Vladimir Putin has asked the Roscosmos state space corporation to speed up the work to build a super-heavy class rocket, this type will appear after 2025 and will make it possible to fly around the moon,

(26 May 2017)

NASA-ISRO satellite to be put in space by Indian GSLV rocket in 2021

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(24 May 2017)

NASA asks science community for Europa Lander Instruments ideas

NASA is asking scientists to consider what would be the best instruments to include on a mission to land on Jupiter's icy moon, Europa. NASA informed the science community to prepare for a planned competition to select science instruments for a potential Europa lander.

(19 May 2017)

Testing prepares Space Launch System for liftoff

The world's most powerful rocket - NASA's Space Launch System (SLS) - may experience ground wind gusts of up to 70 mph as it sits on the launch pad before and during lift off for future missions. Understanding how environmental factors affect the rocket will help calculate a safe and reliable distance away from the launch tower during launch.

(14 May 2017)

Winning plans for CubeSats to the Moon

If you could fly a CubeSat to the Moon, what could such a tiny satellite do there? ESA posed this question - and now four proposals will be studied in more detail for possible flight over the coming decade.

(14 May 2017)

NASA's Mars plans include a one-year mission to the Moon

Before sending a manned mission to Mars in the 2030s, NASA may have a group of astronauts spend a year in orbit around the moon, officials from the space agency's Human Exploration and Operations Mission Directorate revealed earlier this week at an event in Washington DC.

(13 May 2017)

NASA Receives Proposals for Future Solar System Mission

NASA has received and is reviewing 12 proposals for future unmanned solar system exploration. The proposed missions of discovery - submitted under NASA's New Frontiers program - will undergo scientific and technical review over the next seven months. The goal is to select a mission for flight in about two years, with launch in the mid-2020s.

(9 May 2017)

Going Back to Pluto? Scientists to Push for Orbiter Mission

The first up-close look at Pluto was so intriguing that some researchers want to go back and spend a lot more time studying the icy world.

(9 May 2017)

Launch Failures and Investigations

Schiaparelli landing investigation completed

The inquiry into the crash-landing of the ExoMars Schiaparelli module has concluded that conflicting information in the onboard computer caused the descent sequence to end prematurely.

ISS Activities

Astronauts restore Space Station to full health in quick repair spacewalk

NASA astronauts sped through an urgent spacewalk May 23 to replace a malfunctioning computer relay box outside the International Space Station.

(25 May 2017)

SpaceX Dragon to deliver research payloads to Space Station

SpaceX is scheduled to launch its Dragon spacecraft for its eleventh commercial resupply mission to the International Space Station June 1 from NASA's Kennedy Space Center's historic pad 39A. Dragon will lift into orbit atop the Falcon 9 rocket carrying crew supplies, equipment and scientific research to crewmembers living aboard the station.

(22 May 2017)

NASA plans emergency spacewalk on International Space Station

A pair of astronauts will venture outside the International Space Station on Tuesday for an emergency spacewalk to replace a failed computer, one of two that control major U.S. systems aboard the orbiting outpost, NASA said. The primary device failed on 20 May, leaving the \$100 billion orbiting laboratory to depend on a backup system to route commands to its solar power system, radiators, cooling loops and other equipment.

(22 May 2017)

Landmark 200th Space Station spacewalk starts with glitch but ends in 'awesomesauce'

Astronauts sped through the landmark 200th spacewalk at the International Space Station, after a glitch in preparations left them looking at a shortened trip outside.

(13 May 2017)

Dark matter probe on Space Station to be revitalized

After six years in space, the Alpha Magnetic Spectrometer (AMS), a sensitive particle detector aboard the International Space Station, is being prepared for a cooling system retrofit to keep the instrument operational until the station's retirement in 202

(12 May 2017)

Space Tourism

Virgin Galactic Aims to Fly Space Tourists in 2018, CEO Says

Richard Branson's Virgin Galactic is on track to begin commercial passenger spaceflights before the end of 2018, the company's chief executive said.

(1 May 2017)

Russia aims for 15 remote sensing satellites in orbit by 2020 Russian President Vladimir Putin stated that the remote sensing technologies must be used to boost the Russian defense and security, develop the economy and social sphere, and increase the quality of the state's governance. The number of operating Russian remote sensing satellites orbiting the Earth will reach 15 by 2020, Russian President Vladimir Putin said. (25 May 2017)

New nano-satellite fleet starts launch in June An Australian-backed company is to launch the first three of a planned fleet of 200 new nano-satellites in the third week of June. Sky and Space Global (SAS) says the satellites will provide affordable communication services to those who are currently underserved across the equatorial belt. (18 May 2017)

Novel use of satnav saves precious water Water conservation is a growing concern globally, and particularly for farmers in the USA, where decades of irrigating huge fields has depleted vital resources of fresh surface water and groundwater. An ESA spin-off that can help to preserve water supplies while guaranteeing crop irrigation is now undergoing final testing. (15 May 2017)

Iridium deploys first 10 Next satellites Iridium Communications has integrated the first set of its Next satellites into the existing operational constellation to improve communications for shipping. This followed a rigorous testing and validation process of the 10 satellites in orbit. (11 May 2017)

New look at satellite data questions scale of China's afforestation success China has invested more resources than any other country in reversing deforestation and planting trees. However, given the large scale of these programmes it has been difficult to quantify their impact on forest cover. A new study shows that much of China's new tree cover consists of sparse, low plantations as opposed to large areas of dense, high tree cover. (8 May 2017)

Satellites track Antarctic ice loss over decades Over two decades of observations by five radar satellites show the acceleration of ice loss of 30 glaciers in Western Palmer Land in the southwest Antarctic Peninsula. (3 May 2017)

Space debris problem getting worse, say scientists Scientists sounded the alarm over the problems posed to space missions from orbital junk - the accumulating debris from mankind's six-decade exploration of the cosmos. In less than a quarter of a century, the number of orbiting fragments large enough to destroy a spacecraft has more than doubled, a conference in Germany heard. (19 April 2017)

ESA helps faster cleaner shipping With around 90% of world trade carried by ships, making sure a vessel follows the fastest route has clear economic benefits. By merging measurements from different satellites, ESA is providing key information on ocean currents, which is not only making shipping more efficient but is also helping to reduce carbon dioxide emissions. (18 April 2017)

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China considering cooperation with Russia on space debris China is contemplating developing cooperation with Russia with respect to space debris, China's National Space Administration Secretary-General Yulong Tian told Sputnik. (12 April 2017)

China's BeiDou system to expand cooperation to SE Asia China's home-grown BeiDou Navigation Satellite System (BDS) will expand its cooperation to Thailand and Sri Lanka, and then to the entire Southeast Asia, in a bid to go global, the system's operator has said. (1 April 2017)

Decommissioned Earth Science satellite to remain in orbit for decades A NASA Earth science satellite whose mission is ending this week will remain in orbit through the middle of the century, far longer than the limit set by orbital debris mitigation guidelines. (30 March 2017)

Satellites shed new light on earthquakes Satellite radar scans of last year's earthquake in New Zealand are changing the way we are thinking about earthquake hazards in regions where our planet's tectonic plates meet. (25 March 2017)

ICESat-2 to provide more depth to sea ice forecasts In March, the Arctic sea ice pack is supposed to reach its greatest extent - but this year it's far below average, off by an area about the size of Texas and New Mexico combined. Satellite observations currently reveal how much of the ocean surface is covered by ice, but there is another critical measurement to make. (23 March 2017)

30 years of deforestation While the world marks the International Day of Forests, satellites continue to monitor the long-term effects of human activities on our planet's precious resources. (22 March 2017)

Copernicus Sentinel-2B delivers its first images Just over a week after being lofted into orbit, the European Union's Sentinel-2B satellite delivered its first images of Earth, offering a glimpse of the 'colour vision' it will provide for the Copernicus environmental monitoring programme. (16 March 2017)

NASA studies growing Louisiana deltas The Louisiana coastline is sinking under the Gulf of Mexico at the rate of about one football field of land every hour (about 18 square miles of land lost in a year). But within this sinking region, two river deltas are growing. The Atchafalaya River and its diversion channel, Wax Lake Outlet, are gaining about one football field of new land every 11 and 8 hours, respectively. (28 February 2017)

Using high-resolution satellites to measure African farm yields Stanford researchers have developed a new way to estimate crop yields from space, using high-res photos snapped by a new wave of compact satellites. The approach, detailed in the February 13 issue of the journal of the Proceedings of the National Academy of Sciences, could be used to estimate agricultural productivity and test intervention strategies in poor regions of the world. (25 February 2017)

Turn satellites into sparkling fireworks to burn up space junk Satellite debris that falls to Earth could be deadly, but pellets made of a heat-generating mixture could help them burn up safely in the atmosphere. (19 February 2017)

100 Earth-shattering remote-sensing applications and uses This list may change the way you feel about how this industry is changing our world and the way we think. (13 February 2017)

CryoSat reveals lake outbursts beneath Antarctic ice A novel way of using ESA's CryoSat mission has revealed how lakes beneath Thwaites Glacier drained into the Amundsen Sea - potentially the largest such outflow ever reported in this region of West Antarctica. (11 February 2017)

A whole new Jupiter: First science results from NASA's Juno mission Early science results from NASA's Juno mission to Jupiter portray the largest planet in our solar system as a complex, gigantic, turbulent world, with Earth-sized polar cyclones, plunging storm systems that travel deep into the heart of the gas giant.

(26 May 2017)

Juno spacecraft has close encounter with Jupiter's cloud tops in sixth flyby Juno skimmed the cloud tops of Jupiter at a range of just 3,500 kilometres during its close approach, NASA officials said. The manoeuvre marked the sixth time the Juno probe's orbit has brought it up close with Jupiter.

(21 May 2017)

LIGO could detect gravitational waves' permanent space-time warp When gravitational waves permanently distort space-time, it causes a 'memory signal' which may help LIGO find some of the universe's most exotic objects

(20 May 2017)

Fermi satellite observes billionth gamma ray with LAT instrument On April 12, one of the spacecraft's instruments - the Large Area Telescope (LAT), which was conceived of and assembled at the Department of Energy's SLAC National Accelerator Laboratory - detected its billionth extraterrestrial gamma ray.

(15 May 2017)

Astrophysicists find that planetary harmonies around TRAPPIST-1 save it from destruction When NASA announced its discovery of the TRAPPIST-1 system back in February it caused quite a stir, and with good reason. Three of its seven Earth-sized planets lay in the star's habitable zone, meaning they may harbour suitable conditions for life. But one of the major puzzles from the original research describing the system was that it seemed to be unstable.

(14 May 2017)

First results from Jupiter probe show huge magnetism and storms Observations from the Juno spacecraft are confounding astronomers with revelations about the weather and magnetism of our solar system's biggest planet

(5 May 2017)

Cassini radio signal from Saturn picked up after dive The Cassini spacecraft is sending data back to Earth after diving in between Saturn's rings and cloudtops. The probe executed the daredevil manoeuvre on Wednesday - the first of 22 plunges planned over the next five months - while out of radio contact.

(27 April 2017)

NASA's Cassini, Voyager missions suggest new picture of Sun's interaction with galaxy

New data from NASA's Cassini mission, combined with measurements from the two Voyager spacecraft and NASA's Interstellar Boundary Explorer, or IBEX, suggests that our sun and planets are surrounded by a giant, rounded system of magnetic field from the sun - calling into question the alternate view of the solar magnetic fields trailing behind the sun in the shape of a long comet tail.

(26 April 2017)

China's first cargo spacecraft docks with space lab China's first cargo spacecraft, Tianzhou-1, successfully completed docking with an orbiting space lab, the Beijing Aerospace Control Center said.

(24 April 2017)

Gaia's snapshot of another galaxy While compiling an unprecedented census of one billion stars in our Galaxy, ESA's Gaia mission is also surveying stars beyond our Milky Way. A new image of M33, also known as the Triangulum galaxy, shows tens of thousands of stars detected by Gaia, including a small stellar census in its star-forming region NGC 604.

(24 April 2017)

Cassini probe heads towards Saturn 'grand finale' Cassini has used a gravitational slingshot around Saturn's moon Titan to put it on a path towards destruction. The flyby swept the probe into an orbit that takes it in between the planet's rings and its atmosphere. This gap-run gives the satellite the chance finally to work out the length of a day on Saturn, and to determine the age of its stunning rings. But the manoeuvre means also that it cannot escape a fiery plunge into Saturn's clouds in September.

(22 April 2017)

NASA and partners survey space weather science NASA scientists worked with scientists and engineers from research institutions and industry during a pair of intensive week-long workshops in order to assess the state of science surrounding this type of space weather.

(22 April 2017)

Saturn moon 'able to support life' Saturn's ice-crusted moon Enceladus may now be the single best place to go to look for life beyond Earth. The assessment comes on the heels of new observations at the 500km-wide world made by the Cassini probe. It has flown through and sampled the waters from a subsurface ocean that is being jetted into space. Cassini's chemistry analysis strongly suggests the Enceladean seafloor has hot fluid vents - places that on Earth are known to teem with life.

(14 April 2017)

New Horizons spacecraft enters hibernation

The New Horizons spacecraft has entered hibernation, reported by Johns Hopkins University Applied Physics Laboratory.

(13 April 2017)

Milky Way stars on the move - satellite data used to see into the future The motion of 2 million stars over the course of 5 million years into the future is depicted in this new animation from the European Space Agency. Data from their Gaia Mission was used to create it.

(13 April 2017)

Metal detected in Mars' Atmosphere NASA's MAVEN spacecraft has spotted iron, magnesium and sodium ions ?? electrically charged atoms - high up in the Red Planet's atmosphere over the past two years, a new study reports.

(12 April 2017)

Cassini prepares for last plunge NASA's unmanned Cassini spacecraft is preparing for its final plunge into Saturn later this year, after two decades of helping Earth-bound scientists make new discoveries about the sixth planet from the Sun and its mysterious rings.

(8 April 2017)

NASA observations reshape basic plasma wave physics When NASA's Magnetospheric Multiscale - or MMS - mission was launched, the scientists knew it would answer questions fundamental to the nature of our universe - and MMS hasn't disappointed. A new finding, presented in a paper in Nature Communications, provides observational proof of a 50-year-old theory and reshapes the basic understanding of a type of wave in space.

(6 April 2017)

Prolific Mars Orbiter Completes 50,000 Orbits

The most data-productive spacecraft yet at Mars swept past its 50,000th orbit this week, continuing to compile the most sharp-eyed global coverage ever accomplished by a camera at the Red Planet. In addition, the spacecraft - NASA's Mars Reconnaissance Orbiter (MRO) - recently aided preparations for NASA's next mission to Mars, the InSight lander.

(3 April 2017)

NASA orbiter shows Mars lost 90 per cent of its CO2 to space The MAVEN spacecraft has completed the key part of its mission: to track down how much argon Mars's atmosphere is giving up as a proxy for carbon dioxide loss

(2 April 2017)

ExoMars: Rover scientists to study Mawrth Vallis option Scientists are going to investigate a second site on Mars as a possible destination to send ESA's 2021 rover. Scientists spent two days considering the options and plumped in the end for Mawrth Vallis - an area rich in clay minerals that must have formed during prolonged rock interactions with water. Mawrth joins Oxia Planum, which was selected for study in 2015.

(29 March 2017)

New treasures from Juno: Jupiter dazzles during fourth close approach

Image processor Björn Jónsson shares some of his latest stunning images of Jupiter, created using data from NASA's Juno spacecraft.

(28 March 2017)

NASA's SDO sees a stretch of spotless Sun

For 15 days starting on March 7, 2017, NASA's Solar Dynamics Observatory, or SDO, returned visible light images of a yolk-like spotless sun. This is the longest stretch of spotlessness since the last solar minimum in April 2010, indicating the solar cycle is marching on toward the next minimum, which scientists predict will occur between 2019- 2020.

(26 March 2017)

China's first cargo spacecraft to make three rendezvous with Tiangong-2

China's first cargo spacecraft Tianzhou-1 is expected to dock with the orbiting Tiangong-2 space lab three times after its planned launch in April, sources said. Tianzhou-1 will be sent into space from the Wenchang Space Launch Center in south China's Hainan Province aboard a Long March-7 Y2 carrier rocket.

(9 March 2017)

Orbiter steers clear of Mars moon Phobos

NASA's MAVEN spacecraft performed a previously unscheduled manoeuvre to avoid a collision in the near future with Mars' moon Phobos. The Mars Atmosphere and Volatile Evolution (MAVEN) spacecraft has been orbiting Mars for just over two years, studying the Red Planet's upper atmosphere, ionosphere and interactions with the sun and solar wind.

(4 March 2017)

Increasing the sensitivity of next-generation gravitational wave detectors


Nearly one year ago the LIGO Collaboration announced the detection of gravitational waves, once again confirming Einstein's theory of General Relativity. This important discovery by the Advanced Laser Interferometer Gravitational-Wave Observatory (aLIGO) has spurred great interest in improving these advanced optical detectors.

(27 February 2017)


Kepler's 'second life' - DLR researchers find six planets


In 2009, NASA's Kepler space probe was launched, embarking on a mission to hunt for exoplanets. In 2013, due to the failure of two of its reaction wheels, the mission had to be modified. Mission control managed to change the operational modus and manoeuvre the telescope orbiter into a different position in its orbit around the Sun that enabled the mission to continue.


(24 February 2017)


 **Cruz to hold hearing on updating the Outer Space Treaty** The chairman of the US Senate's space subcommittee said May 16 that his committee will hold a hearing to hear testimony on possible updates to a 50-year-old treaty that is the cornerstone of international space law.
(25 May 2017)

 **SA space agency, Airbus launch challenge to find new uses for satellite data** The South African National Space Agency (Sansa) and Airbus Defence and Space has launched an open innovation challenge to entrepreneurs, universities and other interested parties seeking homegrown and novel uses for earth observation data obtained by satellites.
(23 May 2017)


 **Brazil starts satellite trials** The Brazilian government has started the testing procedures for its first own satellite, built to boost broadband capacity in the country as well as security of critical defence information.
(21 May 2017)

 **Could Brexit blow a hole in UK's space ambitions?** There are possible effects on the long-established cooperation of the UK and ESA.
(19 May 2017)


 **US military satellites in crisis as foreign weapons advance and proliferate** The U.S. military's satellite communications are facing a crisis, threatened by a growing array of foreign weapons, including cyberattack capabilities, lasers, electronic jammers and anti-satellite weapons, according to a Pentagon study. An executive summary of the report by the Defense Science Board warns that military satellite communications used for global operations "will be contested by a myriad of effects ranging from reversible to destructive."
(18 May 2017)


 **Washington still has no engine to replace Russian-made RD-180** US aerospace company Blue Origin suffered a setback while testing its Blue Engine 4 (BE-4), a staged-combustion rocket engine designed to replace Russian-made RD-180s, meaning that Washington still does not have an indigenously built version of a key piece of equipment needed to propel its Atlas V launch vehicles or its analogues into space.
(17 May 2017)


 **Bulgarian satellite to launch on reused SpaceX Falcon 9 rocket in June** A communications satellite built for a Bulgarian operator will be the second payload to launch on a previously-flown Falcon 9, that operator announced.
(11 May 2017)


 **NOAA cuts target future polar weather satellites** While the National Oceanic and Atmospheric Administration received full funding for its ongoing weather satellite programmes, the agency is looking at options after a cut to a programme for future polar-orbiting weather satellites.
(10 May 2017)

 **Thales launches communications satellite for Brazil** Thales Alenia Space launched two telecommunications satellites, among them the Geostationary Defence and Strategic Communications Satellite (SGDC), into orbit using an Ariane 5 launcher from the Kourou base in French Guiana on Thursday, May 04.
(9 May 2017)

 **Air Force's X-37B Space Plane Lands in Florida After Record-Breaking Secret Mission** The record-breaking, hush-hush mission of the U.S. Air Force's robotic X-37B space plane is finally over.
(8 May 2017)


 **California plans for collecting taxes on spaceflight** The earthly convention of paying taxes may soon extend into outer space, if California regulators have anything to say about it. The state's Franchise Tax Board is seeking public comment on its proposal for computing taxes on commercial space transportation companies..
(7 May 2017)


 **NASA examines effects of 2017 spending bill on science** As members of Congress took credit for NASA funding levels in a fiscal year 2017 omnibus spending bill, the agency's science leadership is examining how those funds will affect its programmes.
(7 May 2017)

 **US Air Force lines up space launch vehicle investments** Orbital ATK, SpaceX and United Launch Alliance are key contenders for the Air Force's EELV launch service investments.
(5 May 2017)

 **India's Space Agency saves over US\$2 billion per year for the country** The Indian Space Research Organisation (ISRO) is not just building satellites or driving innovation by sharing its Lithium-ion batteries for powering vehicles, the space agency is helping fishermen locate better catchment areas. By doing this, ISRO is helping India save over \$ 2 billion per year, said the ISRO chairman.
(2 May 2017)

 **Spaceport Prestwick to join forces with Newquay UK bid** To win grant funding, Orbital Access will have to show how they will "develop spaceflight capabilities, such as building spaceport infrastructure or adapting launch vehicle technology for use in the UK".
(30 April 2017)


 **Myanmar plans to set up own satellite system** Myanmar is planning to set up a satellite system of its own and to form a steering committee for the purpose, the official Global New Light of Myanmar reported.
(30 April 2017)


 **MUOS-5 Navy satellite online after engine failure** A Navy communications satellite launched from Cape Canaveral Air Force Station last June is now online after a post-launch engine failure, according to builder Lockheed Martin.
(30 April 2017)

 **China courts international coalition set up to promote space cooperation** A coalition was established Sunday in northwest China's Shaanxi Province to promote innovation and cooperation on space exploration under the the Belt and Road Initiative. The coalition, set up in the provincial capital of Xi'an, encompasses 48 universities, research institutes and academic organisations at home and abroad.
(28 April 2017)

 **ESA boosting its Argentine link with deep space** Thanks to some high-tech improvements, ESA's radio dish in Argentina will be ready to receive the rising torrent of scientific data beamed back by future missions exploring deep in our Solar System.
(27 April 2017)

 **Houston Spaceport Breaks Ground On New Control Tower** A new, state-of-the-art air traffic control tower for the city of Houston's Ellington Airport and Spaceport is expected to be operational by the end of next year.
(26 April 2017)

 **ISRO aims at increasing satellite launches to 12 per year** The Indian Space Research Organisation is trying to increase its capacity to deliver by scaling up the frequency of launches to 12 per year from the seven at present by building more satellites and lowering the cost of access to space.
(25 April 2017)

 **US President signs Commercial Satellite Weather Bill** President Trump signed into law this week a weather bill that includes provisions formally authorizing ongoing commercial satellite weather data projects and a study of future weather satellite needs.
(23 April 2017)

Opportunities

NASA AFRC Internship - NASA (United States)

previous work. Students are given an opportunity to interact with NASA researchers, engineers, and technicians in design, construction, implementation, verification

NASA History Division Internship - NASA (United States)

As part of NASA 's Office of Communications, student interns will assist the NASA History Division by writing our social media posts; writing features for our Web

NASA Journalism and Multimedia Fall Internship - NASA (United States)

INTRODUCTION: NASA invites students working towards degrees in journalism, communications, media relations, science writing, interactive journalism, or broadcast

NASA LaRC: Crew Systems and Aviation Operations - NASA (United States)

NASA is conducting research in the areas of intelligent flight systems, autonomous systems, aviation operations, flight deck systems, and crew

NASA LaRC: Flight Deck Technologies - NASA (United States)

NASA is conducting research into Increasingly Autonomous Systems (IAS) for the flight deck. This work involves computer programming, machine learning, and human in

Atmospheric Composition Expert Sentinel3

Are you interested in applying your expertise in remote sensing or atmospheric physics to enrich our understanding of climate change? This is a unique opportunity for an expert in atmospheric physics to lead the development of atmosphere products and enhance prototype tools for calibration, validation and longterm monitoring activities. You will be able to apply your knowledge within an operational environment, delivering solutions and responding to the evolving needs of our customers. In this role you will be integral to enhancing future products and services for the Copernicus Atmosphere and Marine Environment Monitoring Services and its customers. Along with a degree in remote sensing, atmospheric physics, or another relevant discipline, you should be a committed team player as you will be expected to collaborate and cooperate with worldclass scientists and engineers to drive forward this groundbreaking area. You will also have opportunity to apply creative solutions to complex tec...

Business Student Trainee - NASA Pathways Intern - Goddard Space Flight Center (United States)

Tuesday 4/11/2017 (4 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Data Management Analyst - NASA Open Data Project - Qualified Technical Services, Inc (United States)

Work Location: NASA Ames Research Center (Mountain View, CA) Minimum Citizenship: US Citizen Clearance: US Government JOB DESCRIPTION Interested in improving the

Data Management Analyst/technical Writer, *Nasa* Project Open Data - Sgt Incorporated (United States)

Data Management Analyst/Technical Writer, NASA Project Open Data Information Technology Moffett Field, California Job ID: 20308 I'm Interested! Description

Data Systems Management Engineer mf

Terma The hightech and innovative Terma Group develops products and systems for defense, nondefense and security applications, including command and control systems, radar systems, selfprotection systems for aircraft and vessels, space technology, and aerostructures for the aircraft industry. Terma is headquartered at Aarhus, Denmark. Internationally, Terma has subsidiaries and operations in The Netherlands, Germany, United Kingdom, United Arab Emirates, India, Singapore and the U.S. The Space Business Area contributes with missioncustomized software and hardware products including power systems and star trackers as well as services to support a number of inorbit pioneering European scientific and Earth observation satellite missions. Additionally, Terma is contracted for the development and delivery of software and hardware systems and services for numerous ongoing and future European, and international missions. Terma Space operates out of Denmark, The Netherlands, Germany, and the ...

Development of Advanced Optical Diagnostics for NASA Ground Test Facilities - NASA (United States)

of several non-intrusive, advanced optical measurement techniques for use in NASA wind tunnel facilities in support of several strategic thrusts identified

Engineer, Digital Communications Systems

SES is the worldleading satellite operator with a fleet of more than 50 geostationary satellites. The company provides satellite communications services to broadcasters, content and internet service providers, mobile and fixed network operators and business and governmental organizations worldwide. SES stands for longlasting business relationships, highquality service and excellence in the satellite industry. The culturally diverse regional teams of SES are located around the globe and work closely with customers to meet their specific satellite bandwidth and service requirements. SES holds a participation in O3b Networks, a next generation satellite network combining the reach of satellite with the speed of fiber. Where others see barriers, we see opportunities. Do you enjoy supporting customers realizing breakthrough value? Do you stay attuned to your customers needs and visions? Do you like to work openly and supportively together with your colleagues and customers? Our work involv...

Engineering internship with SOFIA at NASA Armstrong - NASA (United States)

Provide potential experience in leadership, engineering, and astronomy. The student will assist the SOFIA Program in the development and integration of various

Engineering Student Trainee - NASA Pathways Intern - Goddard Space Flight Center (United States)

Tuesday 4/11/2017 (4 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Full Stack Developer - NASA Open Data Project - Qualified Technical Services, Inc (United States)

Work Location: NASA Ames Research Center (Mountain View, CA) Minimum Citizenship: US Citizen Clearance: US Government REQUIREMENTS Education: BS Discipline(s):

Galileo Space Segment Maintenance Engineer

CAM Space www.camspacegmbh.de is a competent partner and consultant for companies involved in the aerospace and defence industries. CAM Space supports the Galileo project since the year 2000 and has a very strong presence of engineers at the Galileo Control Centre in Oberpfaffenhofen near Munich. We are reinforcing our team in the Munich area. We are looking for you as Galileo Space Segment Maintenance Engineer mf Are you looking for a new and interesting activity in one of Europes most outstanding projects in the area of operation of navigation satellites? This could be your field of responsibility Become a member of the Galileo Operations Team Specialise on space segment maintenance Support of engineering tasks for the preparation, validation and execution of special operations Anomaly investigation, root cause analysis and Anomaly Reports handling Provide recommendations for workarounds to mitigate satellite anomalies Maintenance and update of operational documentations included Sp...

Junior aerospace engineer space debris activities

WHO ARE WE? GMV www.gmv.com is a privately owned technological enterprise group with an international presence employing more than 1.100 staff. Founded in 1984, GMV mainly operates in eight large sectors for both public and private organizations Aeronautics, Space, Defense, Health, Security, Transportation, Telecommunications and Information Technologies. GMV currently runs eight work centers in Spain Tres Cantos Madrid headquarters, Boecillo Valladolid, Seville, Barcelona, Valencia, Tenerife, Len, Zaragoza and also work centers in Lisbon Portugal, Rockville Maryland, USA, Darmstadt Germany, Warsaw Poland, Bucharest Romania, Malaysia, Toulouse France and New Delhi India. We recruit and hire excellent engineers, and encourage innovation, technical excellence and continuing education. Our engineers regularly present papers at technical conferences, continue their education more than 85 have a masters degree, and we reinvest more than 12 of budget in IRD projects. This striving for exce...

Mirror Integration Development for NASA 's Next Generation X-ray Optics (NGXO) Effort - NASA (United States)

black holes, galaxy clusters, and the evolution of matter and energy. But first, NASA needs to develop a mirror technology up to the challenge. The Next Generation

Optical Calibration Expert

Are you experienced in the calibration of optical satellite instruments and product retrievals? We are looking for an expert to develop tools and techniques to perform and measure the calibration and validation of our optical instruments, specifically those on board the future Meteosat Third Generation MTG and EUMETSAT Polar System Second Generation EPSSG satellites. This is an opportunity to develop and implement calibration concepts for the optical imagers planned for the future geostationary and polar orbiting Earth Observation EO missions. You must be adept at using and monitoring calibration techniques along with the algorithms recommended by the Global Spacebased InterCalibration System GSICS. You need to have an advanced university degree or equivalent in physics, remote sensing, optical instrument engineering, or a related subject. You should be a team player and be motivated to apply your expertise in an operational environment. You will also need to demonstrate A proven expe...

Prandtl-m: NASA Flight Scholar-Science/Avionics Lead - NASA (United States)

This will include identifying and integrating relevant components and systems to fulfill both aircraft and science requirements. Typical work will include programming

Project Support on X57 Maxwell electric vehicle and other NASA UAV sponsored projects - NASA (United States)

Vision: A global transportation system which allows routine access for all classes of Unmanned Aircraft Systems. 1) Support the Integrated Systems Research Program to

Sales Manager, Defence Security

SES is the worldleading satellite operator with a fleet of more than 50 geostationary satellites. The company provides satellite communications services to broadcasters, content and internet service providers, mobile and fixed network operators and business and governmental organizations worldwide. SES stands for longlasting business relationships, highquality service and excellence in the satellite industry. The culturally diverse regional teams of SES are located around the globe and work closely with customers to meet their specific satellite bandwidth and service requirements. SES holds a participation in O3b Networks, a next generation satellite network combining the reach of satellite with the speed of fiber. Where others see barriers, we see opportunities. Do you enjoy supporting customers realizing breakthrough value? Do you stay attuned to your customers needs and visions? Do you like to work openly and supportively together with your colleagues and customers? Our work involv...

Senior Project Manager Multinational Software Development Projects EGSCC

We have been selected by ESA as Prime Contractor for the development of a complex infrastructure to support space missions. The system is under development involving a large consortium across Europe. Telespazio VEGA is seeking to appoint a Senior Project Manager to be phased in as the current Project Manager will retire within the next 12 months. The Project Manager is supported by a Management and Coordination team in charge of the system engineering. The Project Manager requires experience in managing multimillion projects and have a thorough understanding of Satellite Mission Ground Systems. The successful applicant will become a member of the Software Solutions department, based in our main office in Darmstadt, Germany. Responsibilities/Duties Execution of the project within project schedule and budget and to the satisfaction of the customer Management of the consortium conformance of the industrial team to project objectives according to contractual agreements and resolution of pro...

Senior/Senior Advanced Quality Engineer (NASA) - KBRwyle (United States)

Title: Senior/Senior Advanced Quality Engineer (NASA) Location: US-US-MD-GREENBELT Job Number: 00336429 KBRwyle seeks an experienced Quality Engineer to provide

Software engineer Space projects

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Space Segment Maintenance Engineer mf Galileo

LSE Space GmbH is looking for an experienced Space Segment Maintenance Engineer mf to join our SSEG Maintenance Support team at the Galileo Control Center in Oberpfaffenhofen near MunichGermany. The objective of the role is to provide onsite support SSEG Maintenance Support at the GCC relating to the following activities Support of engineering tasks for the preparation, validation and execution of special operations Anomaly investigation Typical tasks will be Anomaly investigation, root cause analysis and Anomaly Reports handling writing, action processing, support of review boards i.e. Anomaly Review Boards and NonConformance Review Boards. This will also include providing recommendations for workarounds to mitigate satellite anomalies Maintenance and update of operational documentations included Spacecraft User Manuals and Known Anomaly Databases Spacecraft Performance Analysis including the generation, screening and processing of the satellite trend reports identification of prob...

Student Trainee (Engineering Technician) - NASA Pathways Intern Employment Program - Armstrong Flight Research Center (United States)

4/12/2017 (5 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Student Trainee (Engineering) - NASA Pathways Intern Employment Program - Armstrong Flight Research Center (United States)

4/12/2017 (5 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Student Trainee (Engineering) - NASA Pathways Intern Employment Program - John Glenn Research Center at Lewis Field (United States)

About the Agency To receive consideration, you must submit a resume and answer NASA -specific questions. The NASA questions appear after you submit your resume

Student Trainee (Resources Analyst) - NASA Pathways Intern Employment Program - Armstrong Flight Research Center (United States)

4/12/2017 (5 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Systems Level Assessment of NASA Advanced Technologies for Space Missions and Aerospace Concepts - NASA (United States)

NASA Langley Research Directorate is developing a range of advanced technologies intended for use in space missions and aeronautics applications. The purpose of this

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