



Fly Me to the Moons

Image Credit & Copyright: [Greg Gibbs](#)

Sometimes the Moon is a busy direction. Last week, for example, our very [Moon passed](#) in front of the planet Jupiter. While capturing this unusual spectacle from New South Wales, Australia, a quick-thinking astrophotographer realized that a nearby plane might itself pass in front of the Moon, and so quickly reset his camera to take a continuous series of short duration shots. As hoped, for a brief instant, that airplane, the Moon, and Jupiter were all visible in a single exposure, which is shown above. But the project was not complete -- a longer exposure was then taken to bring up three of the Jupiter's own moons: Io, Calisto, and Europa (from left to right). Unfortunately, this triple spectacle soon disappeared. Less than a second later, the plane flew away from the Moon. A few seconds after that, the Moon moved to cover all of Jupiter. A few minutes after that, Jupiter reappeared on the other side of the Moon, and even a few minutes after that the Moon moved completely away from Jupiter. Although hard to catch, planes cross in front of the Moon quite frequently, but the Moon won't eclipse Jupiter again for another three years.

NASA and Meet & Greet Videoconferences

February was a month of videoconferences for PSSP schools. All dedicated teachers and students worked very hard to be prepared for the videoconferences and did very well.

The following videoconferences took place:

February 12, 2013: MEF College (Istanbul, Turkey) and Middle School 328 - Class 701 (NYC, U.S.A.) had their first videoconference with NASA about Solar System Vacation on February 12, 2013.

February 13, 2013: Atasehir Doga College (Istanbul, Turkey) and Children's Aid Society (CAS) (New York City, U.S.A.) had their first NASA videoconference. The topic was Toys in Space. The Turkish school experienced a technical problem during videoconference. A second chance has been given to the Turkish school to repeat the conference on February 22. CAS' NASA Robotics Afterschool Club consists of students from two different schools MS324 and MS319.



February 15, 2013: Another Solar System Vacation videoconference with NASA was held between Kemberburgaz Doga College and Middle School 328-Class 702 (NYC, U.S.A.).

February 20, 2013: Rawson Sounder School (Texas, U.S.A.) and Turk College (Izmir, Turkey) held their first Meet and Greet videoconference on February 20, 2013. Students shared their toy designs with each other before sharing them with NASA expert.

February 26, 2013: Mr. Tolga Yildirim joined Parent Meeting at Middle School 328 (NY, U.S.A) through videoconference and informed parents about E-Pal Week participation and activities. GFTSE's U.S. school coordinator Mrs. Marilyn Anderson attended the meeting in New York.

February 27, 2013: A Toys in Space videoconference took place between Rawson Sounders School and Turk College. Students shared their toy models and ideas with a NASA expert.



We would like to congratulate and thank you all for your great efforts!

Indian Rocket Launches Asteroid-Hunting Satellite, Tiny Space Telescopes

By Miriam Kramer, Space.com <http://www.space.com/19939-asteroid-satellite-indian-rocket-launch.html>

A rocket carrying seven new satellites, including the first spacecraft designed to hunt huge asteroids and two of the world's smallest space telescopes, launched into space Monday (Feb. 25) from an Indian spaceport.

The Indian [Polar Satellite Launch Vehicle blasted off](#) at 7:31 a.m. EST (1231 GMT) from the Satish Dhawan Space Centre in Sriharikota, India, on a mission to deliver its multi-national payloads into Earth orbit.

Monday's rocket flight primarily aimed to launch the new ocean-monitoring SARAL satellite into orbit for the Indian Space Research Organisation and French Space Agency. The satellite is the first in a series of satellites created by ISRO to image the Earth, conduct space science, and carry out oceanic and atmospheric studies, ISRO officials said.



CREDIT: Canadian Space Agency

An artist's illustration of the NEOSSat asteroid-hunting satellite in Earth orbit. The Canadian Space Agency mission will search for large asteroids near Earth and track space debris.

Several other payloads rode piggyback on the PSLV rocket, including the \$25 million [Near-Earth Object Surveillance Satellite \(NEOSSat\)](#), a small spacecraft designed to seek out large asteroids in orbits that may stray near the Earth.

The suitcase-size satellite cannot track small space rocks like asteroid 2012 DA14, the 130-foot (40 meters) object that buzzed the Earth on Feb. 15, but scientists working with NEOSSat will use it to search for a specific types of asteroids that are at least 31 million miles (50 million kilometers) from Earth, mission scientist said. [[See how NEOSSat tracks asteroids \(Video\)](#)]

Two smaller nanosatellites developed in Canada also hitched a ride into orbit alongside SARAL and NEOSSat in what their builders have billed as the [world's smallest space telescope mission](#). The twin satellites make up the

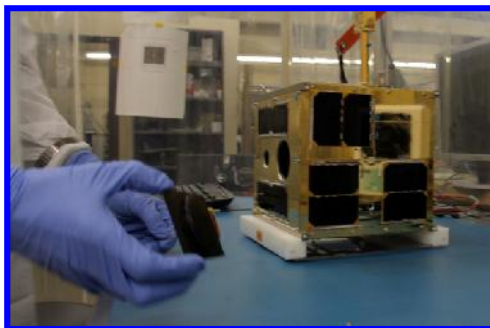
BRiGht Target Explorer (BRITE) mission, which includes two tiny cubes, each just 8 inches (20 centimeters) across and weighing less than 15.5 pounds (7 kilograms). The satellites are expected to study the brightest stars in the night sky by measuring how their brightness changes over time.

The compact satellites were designed at the Space Flight Laboratory at the University of Toronto Institute for Aerospace Studies. One of the satellites was built at the laboratory while the other was assembled by a partner team in Austria.

The two BRITE [nanosatellites](#) are part of a planned constellation that is expected to eventually number six satellites in all once complete.

Another Canadian satellite was launched as well. SAPPHIRE, Canada's first military satellite is a small spacecraft designed to monitor space debris and satellites within an orbit 3,728 to 24,855 miles (6,000 to 40,000 kilometers) above Earth. The satellite is expected to augment the U.S. military's existing Space Surveillance System.

Cordell Grant putting the finishing touches to the first BRITE satellite at UTIAS-SFL. The tiny nanosatellite, designed to study the brightest stars in the night sky, is one of seven spacecraft launching on India's Polar Satellite



Launch Vehicle C20 mission on Feb. 25, 2013.

The other satellites launched on India's Polar Satellite Launch Vehicle Monday were a mixed bag of spacecraft and missions. They included:

AAUSAT3: A small science satellite developed in Denmark and built by students from Aalborg University.

STRaND-1: The first smartphone-powered satellite ever launched into space. The Android phone that functions as the satellite's brain will run four apps that will take photos from the satellite, test the Earth's magnetic field, monitor the health of the satellite, and allow people around the world to upload videos that will play in space on the phone.