

Tanegashima Space Center

The Tanegashima Space Center, located on the south-eastern tip of Tanegashima Island in the south of Kyushu, is the largest launch complex in Japan (9,700,000 square meters).

The Center is equipped with launch pads for large, medium, and small launch vehicles, and related facilities for conducting all activities from ground tests on launch vehicles to tracking and control. The Center is a facility to conduct ground firing tests on solid and liquid rocket engines, conduct all activities prior to launch such as assembly preparation, and inspection of launch vehicles, conduct actual launches of the vehicles, and track and control vehicles after launch. The Tanegashima Space Center plays a central role in conducting satellite launches that are a part of space development in Japan.



Firing tests

Ground firing tests are carried out on rocket engines to collect all types of data including combustion data.



Assembly

Launch vehicles and satellites are assembled, prepared, and inspected in assembly facilities to prepare for launch.



Launch

Launch vehicles are transported to the launch complex, filled with fuel and oxidizer, and launched.

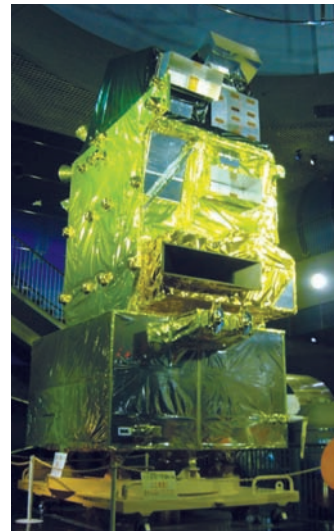


Launch Control

Launch is controlled by using information about acceleration, pressure, temperature, and position, which is received from the launch vehicle.

Space Museum (Exhibition Hall)

Space Museum provides exhibitions and introductions of various fields in space development such as launch vehicles, satellites, the International Space Station project, earth observation, and lunar and planetary. Enter and experience in full-scale model of the Japanese Experiment Module, "Kibo", which is a part of the International Space Station (ISS) program that is currently in construction in the space. At the Rocket Launch Theatre, with full audio on a large screen, you can experience a lift-off of Japan's flagship large-scale rocket, the H-IIA Launch Vehicle, as if you were at a launch site.



Introduction to satellite technology



A Moon Scope that shows the history of lunar exploration



A model that traces the trajectory of launch vehicles development in Japan

- Open from 9:30 a.m. to 5:00 p.m. (9:30 a.m. to 5:30 p.m. in July and August)
- Closed on every Monday (if Monday falls on a public holiday, the building is closed on the following Tuesday) and during New Years' Holidays. (December 29 through January 1) The building may also close during launches and other events.
- The building is generally open every day in August.
- Tel: +81-(0)997-26-9244 (Space Science and Technology Building)
+81-(0)997-26-9125 (voice guidance)
- Admission is free of charge
- Facility tours are run from Tuesday to Sunday.
For details, contact the Space Science and Technology Building.

Access Map



Access by public transportation

- By Air
Kagoshima Airport - Tanegashima Airport (30 min.)
Taxi from Tanegashima Airport (50 min.)
- By Ship
- FERRY
From Kagoshima to Tanegashima (Nishinomote Harbor) (210 min.).
- JET FOIL
From Kagoshima (South Pier) to Tanegashima (Nishinomote Harbor) (95 min.).
Taxi from Nishinomote Harbor to TNSC (75 min.).
- Access to the rocket launch observation points
Rocket launches can be viewed freely from anywhere beyond a radius of three kilometers from the rocket (excluding Tanegashima Space Center premises).
Minamitane Town has various observation points such as Uchugaoka Park and Hase Park.

Tanegashima Space Center

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JAXA Website: <http://www.jaxa.jp/>



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Tanegashima Space Center



JAXA's mission is to pursue the infinite possibilities for future development in the space.

We feel a longing and awe towards the vast universe that seems to be boundless.

Such feelings have been harbored since the start of humankind. The world that our ancestors gazed upon and could only imagine is now an important field actively explored by humankind with the aid of incredible advances in science and technology.

Through these advances, a deep link was formed between space and all the people living on our planet.

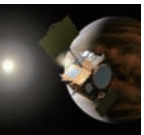
Although the vast universe remains shrouded in mystery, it reveals an infinite number of possibilities.

JAXA will continue to carry out great missions in order to pursue these mysteries, to expand our activities even further, and to give firm support to ensuring a secure and prosperous lifestyle.

Japan Aerospace Exploration Agency activities

Space Science

Explore the mysteries of space and the solar system, as well as the mystery of the forming of the earth and the beginning of life.



Satellites and Observational Imaging

Observe the earth with our "eyes" in space. Support our lifestyle with use of satellites.



Utilization of Space Environment

A new environment is grasped by humankind. International Space Station program is underway to explore the possibilities for utilization of the space.



Space Transportation System

Open up the possibilities for transportation systems that link the earth and space, and help development of space activities.



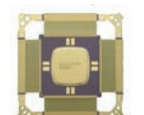
Aviation Research and Development

Aim to contribute to growth of the aviation industry and make new developments for future air transportations.



Fundamental Technology Research

Establish an autonomous technology platform through continuous accumulation of research.



Japan Aerospace Exploration Agency

The Tanegashima Space Center fulfills a central role in launching of satellites.

Vehicle Assembly Building (VAB) for large-scale launch vehicles

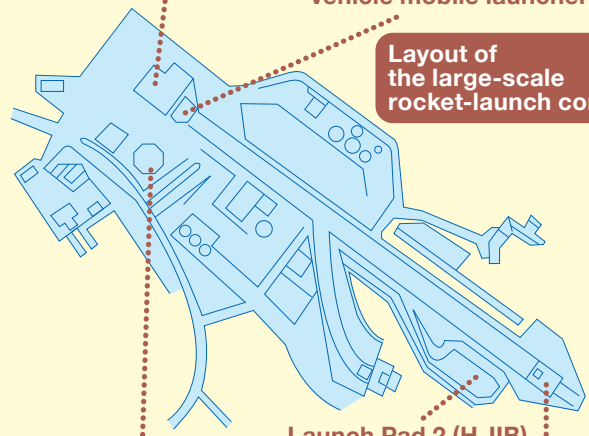


VAB is a facility to assemble, inspect, and prepare a launch vehicle shipped from a factory. At the VAB, two vehicles can be assembled simultaneously. The launch vehicles are assembled on a large-scale launch vehicle mobile launcher (ML). The satellite and fairing are mounted, and the vehicle is transported to the launch pad.



Large-scale launch vehicle mobile launcher (ML)

Layout of the large-scale rocket-launch complex



Launch Pad 2 (H-IIB)

Yoshinobu Block House (for controlling launch of large-scale launch vehicles) (B/H)



B/H is located only 500 meters away from the launch pads. All launch preparations up to the launch are remotely monitored and controlled from the B/H after sending necessary information to the Takesaki Range Control Center (RCC). A launch control room sits 12 meters underground where automatic launch sequences are started.

Launch Pad 1 (H-IIA)

The 2-ton class geostationary satellites are launched by the H-IIA launch vehicles from Launch Pad 1. A total of seven H-II Launch Vehicles were launched from Launch Pad 1, which is currently being used to launch H-IIA Launch Vehicles. Launch Pad 2 is used to launch H-IIB Launch Vehicles.



The Large-size Rocket Launch Complex seen from the Large-size Rocket Assembly Building



A Yoshinobu Launch Complex (for large-scale launch vehicles)

Yoshinobu Launch Complex on the north side of Tanegashima Space Center is an assembly and launch facility for large-sized launch vehicles. It currently has facilities for launching the H-IIA and H-IIB Launch Vehicles.



B Osaki Launch Complex (for mid-size launch vehicles)

Osaki Launch Complex is equipped with an assembly tower for a mid-size launch vehicle of up to 60 meters in height and 2,700 tons in weight. N-I, N-II, H-I, and J-I Launch Vehicles have been launched from this complex.



C Takesaki Range (for small-size launch vehicles)

This range on the south tip of Tanegashima Space Center has a facility which was used for assembly, inspection, and launch control of small launch vehicles. It was previously used to launch the TR-IA and other small launch vehicles for conducting basic experiments for space development.



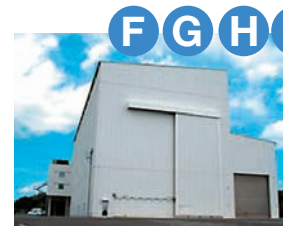
D Takesaki Range Control Center (RCC)

RCC serves as the "nerve center" for rocket launches. During launches, all launch-related responsible persons will be on stand-by at this center. All necessary launch information will be gathered here, and all decisions related to the launch, including the launch itself, tracking, and ground safety, are made here.



E 80-meter Meteorological Tower

For safer launch operations, accurate weather information is imperative. The 80-meter Meteorological Observation Tower is utilized for our unique meteorological observation data acquisition.



F G H I Spacecraft Test and Assembly Building (STA) & Spacecraft and Fairing Assembly Building (SFA)

These buildings are used for assembling and testing satellites, and encapsulating them with a fairing cover that protects the satellite.



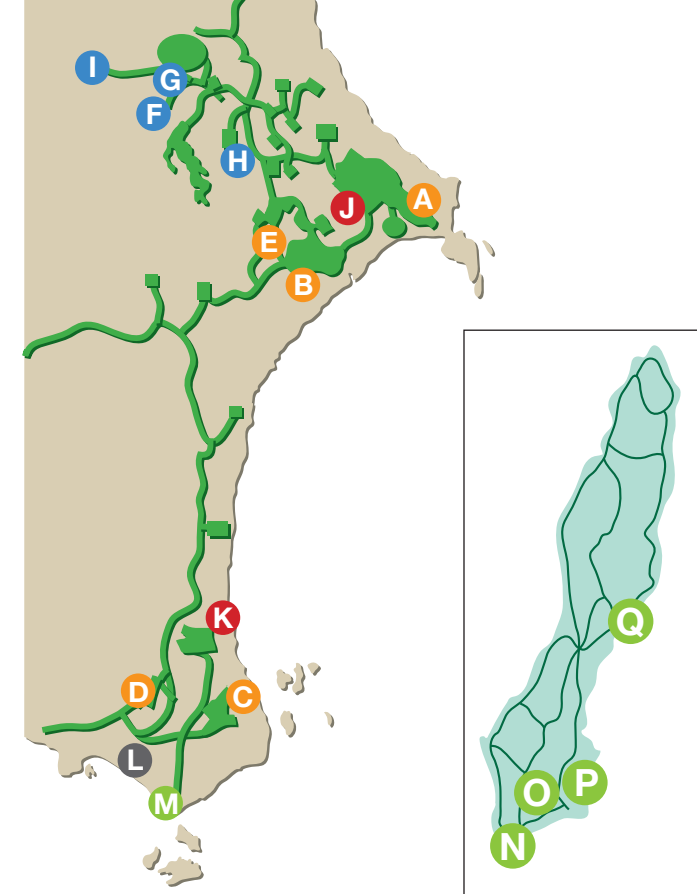
J Yoshinobu Static Firing Test Stand (for Liquid-fuel Boosters)

This stand was built as a ground firing test site for testing the main engine that is the heart of the H-II Launch Vehicle. It now acts as a firing test site for testing the main engine (LE-7A) of the H-IIA Launch Vehicle.



K Takesaki Static Firing Test Facilities for Solid-fuel Boosters

This facility is for conducting ground firing tests on Solid Rocket Boosters that generate a strong propulsion force. It is currently being used to conduct ground firing tests on Solid Rocket Boosters of the H-IIA Launch Vehicles (SRB-A).



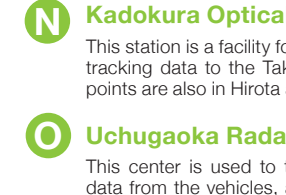
L Space Museum (Exhibition Hall)

For a deeper understanding of space development, the museum exhibits shows the relations between space and humankind, and the mechanism of launch vehicles and satellites in an easy-to-understand manner.



M Takesaki Observation Stand

At the time of a rocket launch, this building becomes a press center. It is equipped with a rooftop stand for press coverage, a briefing room, and a press center room.



N Kadokura Optical Tracking Station

This station is a facility for optical tracking of launched rockets and sending tracking data to the Takesaki Range Control Center. Optical observation points are also in Hirota and Takesaki.



O Uchugaoka Radar Center

This center is used to track launch vehicles via radar, receive telemetry data from the vehicles, and send obtained data on position and status of the vehicles to the Takesaki Range Control Center.



P Kamisato Collimation Tower

This facility is for carrying out radio system tests on radars used to track launch vehicles and telemeters.



Q Masuda Tracking & Communication Station

This station is a part of the satellite tracking network, and is used to track satellites and receive telemetry data from satellites.