

SHINKAI 6500 + HYPER-DOLPHIN Joint Dive

JAMSTEC completed the special dive by SHINKAI 6500 and HYPER-DOLPHIN in 2006 in order to keep the image on the investigation and research in the deep sea.
This page is to introduce some of the selected images taken during these special dives.



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Joint dive was completed by using two research submersibles at the same time to synergize their capabilities to improve the efficiency of observation and research. By combining SHINKAI 6500 and HYPER-DOLPHIN, it was enabled to take the image of the operation of SHINKAI 6500 by high vision camera during diving. JAMSTEC has been technically cooperated with NHK in the development of equipments. The present cruise provided the performance of the joint development to provide the images in the deep sea for the TV program, "Planet Earth" which was produced in joint with BBC of UK and NHK. Many valuable images in the deep sea will be presented during this program.

What's new

February 06, 2007 "Joint Dive" web page is opened in Japanese.

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Information

● NHK Special "Planet Earth" Broadcasting Schedule

Planet Earth Third series, No. 11 "Blue Desert, Open ocean and Deep Sea"
This program will broadcast the images taken by the joint dive by NHK and JAMSTEC.

Timing February 11, 2007 (Sun) 21:00~21:59
February 21, 2007 (Wed) 0:00 ~
March 29, 2007 (Thu) 19:30 ~

Detail Homepage of NHK(Japanese);

● Related Event

Open seminar at YES

Title: Imaging in deep sea

Speaker Mr. T. Uchida-JAMSTEC

Timing: February 17, 2007 (Sat), 13:30-15:00

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Gallery

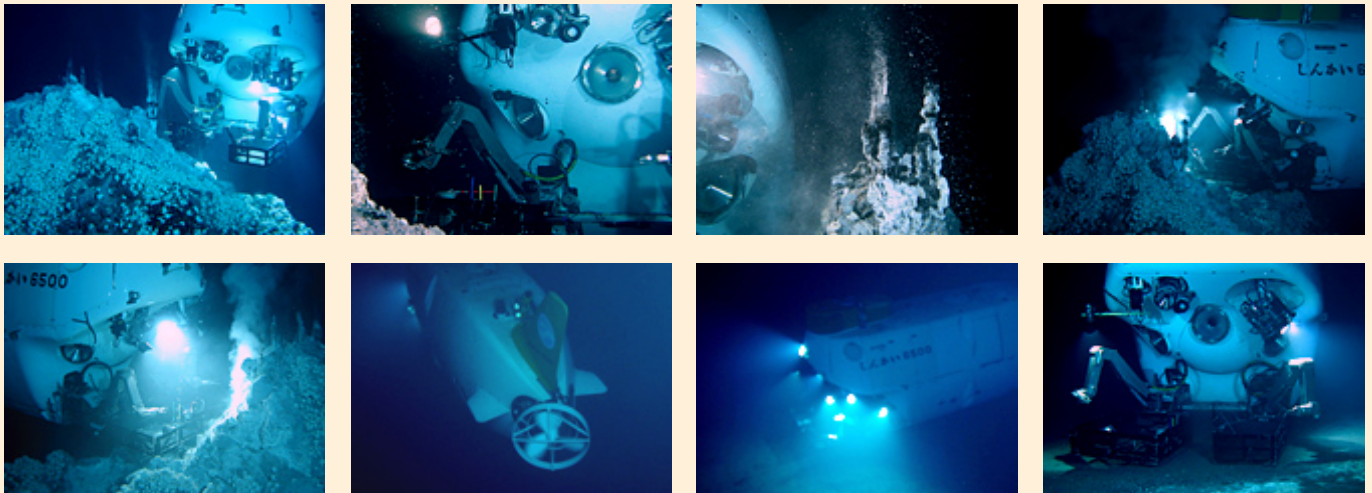
Images taken by the Joint Dive this time.

- Date of Dive : August 3, 2006
- Area : Hatoma Knoll in Okinawa Trough about 50 km northwest off Ishigaki Islands (see PDF map)
- Depth : about 1500 m

Blue smoker (blue hydrothermal vent) was first discovered in the world by this dive.

> [Press release](#)

> [Blue smoker movie](#)



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Vehicle

DSRV[Deep Submergence Research Vehicle] SHINKAI 6500, Remotely Operated Vehicle HYPER-DOLPHIN, and their support vessels, YOKOSUKA and NATSUSHIMA will be introduced below which were utilized for the joint dive this time.



DSRV[Deep Submergence Research Vehicle] SHINKAI 6500

SHINKAI 6500 can dive into the maximum depth of 6500 meter which is the record depth for the three-manned research submersible in the world. It brought about 800 researchers into the deep sea. SHINKAI 6500 expects its 1000th dive within 2007. Its major research targets are focused on the geography of the sea bottom and biology in the deep sea.



Remotely Operated Vehicle **HYPER-DOLPHIN**

HYPER-DOLPHIN was completed in 1999, and can dive into the depth of 3000 meter in the sea without man. It equips with high sensitive high-vision video cameras which were developed in cooperation with NHK for the convenience of imaging and research by the naked eye in addition to two sets of manipulators (robot arms) for the sampling in the deep sea.



Support vessel **YOKOSUKA**

Support vessel YOKOSUKA supports SHINKAI 6500 which can dive to the maximum depth of 6500 meter under the sea. YOKOSUKA is equipped with many other facilities for the observation and research on the surface of the sea bottom, fault, and geology in the deep sea for the extensive study in the deep sea and trench.



Research vessel **NATSUSHIMA**

NATSUSHIMA started its service as the supporting vessel for SHINKAI 2000 which was the predecessor of SHINKAI 6500. After the service-off of SHINKAI 2000 in 2004, NATSUSHIMA has been operated as the supporting vessel for HYPER DOLPHIN, unmanned remotely operated vehicle. NATSUSHIMA is equipped with DEEP TOWs, deep-ocean floor survey system, single-chamber research equipment, and piston core dredge for the convenience for the observation and research in the deep sea and trench.