

ISTC JAPAN WORKSHOP

International Workshop on Progress of Research for Disaster Mitigation of Earthquakes and Volcanic Eruptions in the North Pacific Region

Date: May 10-13, 2010

Place: Conference Hall, Hokkaido University, Sapporo, Japan

Sponsor

Institute of Seismology and Volcanology, Hokkaido University
Department of Natural History Sciences, Hokkaido University
International Science and Technology Center (ISTC), Moscow

Co-Sponsor

Ministry of Education, Culture, Sports, Science and Technology-Japan

Support

Japan Meteorological Agency
Geospatial Information Authority of Japan
Geological Survey of Hokkaido

Objectives

Earthquakes including tsunamis and volcanic eruptions have frequently caused catastrophic disasters. Its occurrence and damages spread beyond borders. The North Pacific region, Japan, the Kuril Islands, Kamchatka, the Aleutians and Alaska, is one of the most active regions of earthquake and volcanic activity in the world. To deal with borderless disaster, international collaboration in researches and activity monitoring should be operated. Reliable geohazard information are required for residents in the North Pacific and also in North America, Hawaii and circum Pacific regions because of great tsunamis easily propagate the ocean and cause devastating damages. The view of economic and traffic functions strongly request the concrete geohazard information because lot of aviations and vessels pass this region with more than 10,000 peoples and freights of several hundred million dollars per day. Volcanic ash can cause fatal trouble to jet engines and vessel operations.

Hokkaido University and Russian Institutions have continued cooperative international scientific activity since 1994 under the intergovernmental agreement of Japan-Russia science and technology cooperation. Many outputs and mature relationship have been in the making. United States Geological Survey have also recognized the importance the cooperative operation of earthquake and volcano researches and monitoring in the North Pacific and have provided various supports to Russian institutions.

This workshop intends to enhance the partnership between Russian, Japanese and US institutions who have responsibility for earthquake and volcano researches and monitoring in the North Pacific. We hope mature international collaborations around the North Pacific will provide useful geohazard information to the residents and organs concerned.

The symposium will be open for citizens with the help of simultaneous translation.



Sessions:

1. Earthquakes and volcanic activity in the North Pacific region
2. Earthquake monitoring and alert system
3. Volcano monitoring and alert system
4. Active fault research and crustal deformation monitoring
5. Ongoing and planned research project in the North Pacific region

Official language:

Russian, English and Japanese (Simultaneous translations between the languages will be provided)

Organizing committee:

<Chair>

Prof. Yuichiro Tanioka, Institute of Seismology and Volcanology, Hokkaido University

<Vice Chair>

Prof. Mitsuhiro Nakagawa, Department of Natural History Sciences, Hokkaido University

<Members>

Prof. Makoto Murakami, Institute of Seismology and Volcanology, Hokkaido University

Prof. Kiyoshi Yomogida, Department of Natural History Sciences, Hokkaido University

Prof. Hiroki Miyamachi, Graduate School of Science and Engineering, Kagoshima University

Prof. Emeritus, Minoru Kasahara, Hokkaido University

Mr. Yasuhiro Yukimatsu, International Science and Technology Center (ISTC)

Assoc. Prof. Shigeru Nakao, Graduate School of Science and Engineering, Kagoshima University

Assoc. Prof. Jun'ichi Miyamura, Scientific Support Section of Hazard Mitigation for Earthquakes and Volcanoes, Hokkaido University

Assoc. Prof. Yoshio Murai, Institute of Seismology and Volcanology, Hokkaido University

Mr. Noritoshi Okazaki, Geological Survey of Hokkaido

<Secretariat>

Assoc. Prof. Hiroaki Takahashi, Institute of Seismology and Volcanology, Hokkaido University

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Program

May 10 (Monday)

09:30-10:15

Opening Addresses

09:30-09:40

Opening: **Yuichiro Tanioka** (Chair, Hokkaido University)

09:40-09:50

Address: **Konstantin Latynin** (International Science and Technology Center, Moscow)

09:50-10:05

Address: **Yoshinori Suzuki** (Director of Earthquake and Disaster-Reduction Research Division, Ministry of Education, Culture, Sports, Science and Technology-Japan)

10:05-10:15

Welcome: **Hisatake Okada** (Vice-President of Hokkaido University)

10:15-10:30 Break

10:30-12:00

Session 1: Earthquakes and volcanic activity in the North Pacific region

Convener: Hiroki Miyamachi (Kagoshima Univ.)

10:30-11:00

Evgeny Gordeev (Institute of Volcanology and Seismology, FEB-RAS)

Earthquakes and Volcanic activity in Kamchatka and northern Kuril

11:00-11:30

Yuichiro Tanioka (Institute of Seismology and Volcanology, Hokkaido University)

Earthquakes, tsunami and Volcanic activity in Kuril and Hokkaido

11:30-12:00

Victor Bykov, Bormotov Vladimir (Institute of Tectonics and Geophysics, FEB-RAS)

Earthquakes and seismicity in Far East Russia

12:00-13:00 Lunch



13:00-15:00

Session 2: Earthquake monitoring and alert system

Convener: Evgeny Gordeev (Institute of Volcanology and Seismology, FEB-RAS)

13:00-13:30

Alexey Malovichko (Geophysical Survey, RAS)

Earthquake monitoring in Russian Federation

13:30-14:00

Victor Chebrov (Kamchatka Branch of Geophysical Survey, RAS)

Earthquake monitoring and alert system in Kamchatka

14:00-14:30

Yury Levin (Sakhalin Branch of Geophysical Survey, RAS)

Earthquake monitoring and alert system in Kuril Islands, Sakhalin and Far East Mainland

14:30-15:00

Takeshi Koizumi (Japan Meteorological Agency)

Earthquake and tsunami observation and warning/information system in Japan

15:00-15:20 Break

15:20-17:50

Session 3: Volcano monitoring and alert system

Convener: Mitsuhiro Nakagawa (Hokkaido Univ.)

15:20-15:50

Christina Neal (Alaska Volcano Observatory, Anchorage, USGS)

Volcano monitoring and alert system in Alaska and Aleutian

15:50-16:20

Tony Hall (Anchorage Volcanic Ash Advisory Center, NOAA)

Anchorage Volcanic Ash Advisory Center (VAAC) and aviation weather unit

16:20-16:50

Olga Girina (Kamchatka Volcanic Eruption Response Team, IVS-FEB-RAS)

Volcano monitoring and alert system in Kamchatka and northern Kuril

16:50-17:20

Alexander Rybin (Sakhalin Volcanic Eruption Response Team, IMGG-FEB-RAS)

Volcano monitoring and alert system in Kuril Islands

17:20-17:50

Makoto Saito (Japan Meteorological Agency)

Volcano observation and warning/information system in Japan

18:15-20:15 Reception at Sapporo Aspen Hotel



May 11 (Tuesday)

9:00-12:15

Session 4: Active fault research and crustal deformation monitoring

Convener: Makoto Murakami (Hokkaido Univ.), Shigeru Nakao (Kagoshima Univ.)

09:00-09:30

Jun Tajika (Geological Survey of Hokkaido)

Active fault research in Hokkaido

09:30-10:00

Nikolay Shestakov, Mikhail Gerasimenko (Institute of Applied Mathematics, FEB-RAS)

GPS observation in Russian Far East

10:00-10:30

Hiroshi Yarai (Geospatial Information Authority of Japan)

Earthquake and volcano monitoring by GPS and InSAR in Japan and its vicinity

10:30-10:45 Break

10:45-11:15

Yousuke Miyagi (Japan Aerospace Exploration Agency)

Earthquake and volcano monitoring by ALOS PALSAR and its operation

11:15-11:45

Hitoshi Yamasato (Meteorological Research Institute, Japan Meteorological Agency)

Characteristics of ground deformations associated with volcanic activities in Japan and their evaluation

11:45-12:15

Noritoshi Okazaki (Geological Survey of Hokkaido)

Volcano monitoring and research by Hokkaido regional government

12:15-13:30 Lunch

13:30-15:00

Session 5: Ongoing and planned research project in the North Pacific region

Convener: Yuichiro Tanioka (Hokkaido Univ.)

13:30-14:00

Evgeny Gordeev (Institute of Volcanology and Seismology, FEB-RAS)

Complex geological and geophysical research of the Northern volcanic group of Kamchatka, forecast and dynamics of eruptions for promotion of safety to population and reducing their impact on the environment, and Far-Eastern Geodynamics project

14:00-14:15

Mitsuhiro Nakagawa (Department of Natural History Sciences, Hokkaido University)

Geological and geophysical investigation of Klyuchevskoy volcano by KAKENHI



14:15-14:30

Hiroaki Takahashi (Institute of Seismology and Volcanology, Hokkaido University)

Re-contraction of tectonic frame in NE Asia by geophysical observation by KAKENHI

14:30-15:00

Kevin Mackey (Michigan State University)

US-Russia cooperative seismological/tectonic researches in eastern Russia

15:00-15:15 Break

15:15-17:30

General discussion for cooperative research and monitoring

Convener: Mitsuhiro Nakagawa (Hokkaido Univ.)

15:15-15:35

Comment: Konstantin Latynin (ISTC)

Current status of ISTC activity in seismology

15:35-15:50

Akimichi Takagi (Ministry of Education, Culture, Sports, Science and Technology-Japan)

Earthquake and Volcano research and disaster mitigation promotion by Japanese government

15:50-17:30

Russian Institutions, USGS, MRI, GSI, GSH, Hokkaido University

Open discussion and wrap up

17:30-17:40

Closing: Mitsuhiro Nakagawa (Vice Chair, Hokkaido University)

May 12 (Wednesday)

Technical tour by chartered bus

Sapporo District Meteorological Observatory of Japan Meteorological Agency

Usu volcano and Toya caldera: Usu volcano observatory of Hokkaido University

Lodgment at Noboribetsu Spa at volcanic active vent

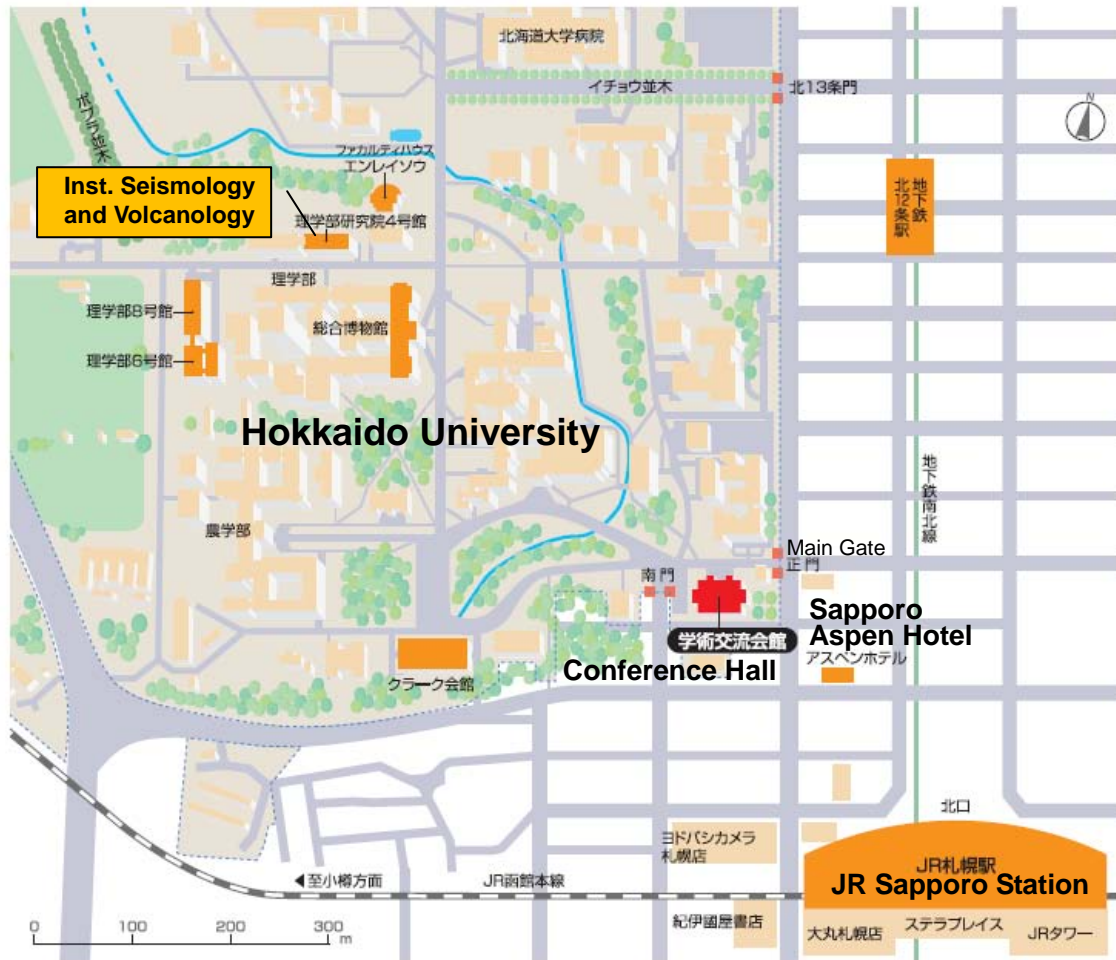
May 13 (Thursday)

Return to Sapporo via New-Chitose International Airport

Several participants visit JMA-Tokyo



会場および周辺のご案内



- ✓ VENUE: Hokkaido University Conference Hall, N8-W5, 7min walk from JR Sapporo Station
- ✓ RECEPTION: Sapporo Aspen Hotel, 5min walk from JR Sapporo Station
- ✓ Access to Sapporo: 40min from New-Chitose (Sapporo) airport by [Airport] rapid train of JR-Hokkaido.

Excursion route : 2 days 1 night trip



Excursion stops:

guided by Dr. Wataru Hirose of Geological Survey of Hokkaido

- ① Sapporo district Meteorological Observatory of JMA at Sapporo
- ② Nakayama-pass to see Yotei stratovolcano group
- ③ Toya caldera and Usu volcano flank craters and Usu volcano observatory of Hokkaido University
- ④ Noboribetsu phreatic-explosion crater and hot-spring activity

