



JKASP8 Sapporo 2014

01 Sep 2014



8th Biennial Workshop on Japan-Kamchatka-Alaska Subduction Processes: -Finding clues for science and disaster mitigation from international collaboration-

Institute of Seismology and Volcanology and Department of Natural History Sciences

Hokkaido University

Geological Survey of Hokkaido, Hokkaido Research Organization

Sapporo, Japan

3rd Circular and Program



Venue: Hokkaido University, Sapporo, Japan

Date: 22-26 September 2014

Excursion: Taisetsu volcanic field

<http://sites.google.com/site/jkasp2014sapporo/home>



Welcome to JKASP8! We are kindly inviting you who are interesting in geodynamics and disaster mitigation of Japan-Kuril-Kamchatka-Aleutian-Alaska subduction processes. This biennial unique workshop has been held at Petropavlovsk-Kamchatsky, Sapporo and Fairbanks in rotation with warm relation of North Pacific neighbors. You can make scientific reports and discussion of great earthquakes, tsunamis, volcanic eruptions, plate interaction and mantle dynamics emphasizing in North Pacific and surrounding regions through presentation and field excursion. Proposals for international and interdisciplinary projects are also welcoming. Disaster mitigation activity through international monitoring of earthquake, tsunami and eruption are also important target of JKASP. Borderless communication during this workshop will give clues to solve and make progress in science and disaster mitigation.

Steering committee:

Mitsuhiro Nakagawa, Hiroaki Takahashi, Sapporo, Japan

John Eichelberger, Pavel Izbekov, Fairbanks, Alaska, USA

Evgeny Gordeev, Victor Chebrov, Petropavlovsk-Kamchatsky, Russia

Registration: Sep. 22 9:00~ @Venue

- Registration fee: ¥22,000, \$220
(Student: ¥6,000, \$60)
- Excursion fee: ¥18,000, \$180

Venue:

Hokkaido University (HOKUDAI)

Faculty of Science Building No. 5

5-203 room (large lecture room)

- 15min walk from Sapporo station
- LOC is in ISV of science building No. 4



Session program:

22, September (Monday)

09:00 Registration

10:10 Opening remarks (Gordeev, Takahashi)

Earthquakes and tectonics: Evgeny Gordeev, Hiroaki Takahashi

10:20 Impacts of subduction great earthquakes to regional tectonics

**Takahashi H., M. Ohzono, N. Shestakov, M. Gerasimenko, V. Bykov, E. Gordeev, V. Chebrov, S. Serovetnikov, T Titkov, N. Vasilenko, A. Prytkov, A. Sorokin, M. Serov, M. Kondratyev, V. Pupatenko*

10:40 Modeling of co-seismic ground motions caused by the 24 May, 2013 deep Okhotsk earthquake of Mw=8,3

*Shestakov, N.V., *E. I. Gordeev, M.D. Gerasimenko, V. Bykov, S.S. Serovetnikov*

11:00 Analysis of the far-field postseismic displacements in the south of the Russian Far East caused by the 2011 Great Tohoku earthquake inferred from continuous GPS observations

**Shestakov N., M. Gerasimenko, M. Ohta-Ohzono, H. Takahashi*

11:20 The field of low-frequency seismic noise at Japan islands before and after Tohoku mega-earthquake on March 11, 2011

**Lyubushin, A.*

11:40 *Break*

12:00 Spatial pattern of frictional characteristics on the subducting Pacific plate inferred from stress drops of middle-size earthquakes

*Saito, Y., *T. Yamada, Y. Tanioka*

12:20 Reconstruction of the Tectonic Stress Field Before and After 2011 Great Tohoku Earthquake

**Polets A.*

12:40 Empirical laws of aftershock sequences as indicator of rheology behaviors and stress state of geological medium with damages

**Konovalov A.*

13:00 *Lunch*

Earthquakes and tectonics: Saltykov Vadim and Maeda Takahiro

14:00 Short periods strong motion attenuation characteristics of plate boundary large earthquake in Hokkaido

**Takai N.*

14:20 Statistical approach to estimation of seismicity level making seismology accessible to society

**Saltykov V.*

14:40 Finite-difference simulation of long-period ground motion for the Nankai Trough megathrust earthquakes

**Maeda T., N. Morikawa, S. Aoi, H. Fujiwara*

15:00 Effect of heterogeneous seismic structure of frontal prism on coseismic megathrust slip distribution in trench axial zone, Japan Trench and other subduction zones

**Azuma R., R. Hino, Y. Ito, K.Mochizuki, K. Uehira, Y. Murai, T. Sato, T. Takanami, M. Shinohara, T. Kanazawa*

15:20 *Break*

15:40 Realtime seismic monitoring system in northern Sakhalin

**Stepnov A.*

16:00 Seismic activity and code Q-1 deduced from longterm ocean bottom seismographic observation around the focal region of large earthquakes off Nemuro, Hokkaido, Japan

**Murai Y., R. Hino, Y. Ito, S. Suzuki, Y. Kaneda*

16:20 Specification of tectonic tsunami sources along the eastern Aleutian Island Arc and Alaska Peninsula for inundation mapping and hazard assessment

**Suleimani E., D. Nicolsky, J. Freymueller, R. Koehler*

16:40 Tsunami Hazard Estimation and Zoning Scheme for the Japan (East) Sea Coast using Observational Data

**Kaistrenko V., Y. Tanioka, B. H. Choi, H. J. Lee*

17:00 **Poster**

18:00 **Ice Breaker**

23, September (Tuesday)

Volcanism: Churikova Tatiana and Aoyama Hiroshi

- 10:00 Fissure Eruption on Tolbachik Dol (FTE-50, Kamchatka, 2012-2013)
*Gordeev E. I., V. A. Droznin, I. K. Dubrovskaya, V. N. Dvigalo, M. A. Maguskin, *Muravyev Y., N. V. Titkov, A. O. Volynets*
- 10:20 Petrology and geochemistry of the Tolbachik stratovolcano
**Churikova, T., B. Gordeychik, H. Iwamori, H. Nakamura, T. Nishizawa, S. Haraguchi, K. Yasukawa, O. Ishizuka*
- 10:40 Estimation of geological structure at Tolbachik Dol (Kamchatka) using low-frequency microseisms
**Kugaenko Y. V. Saltykov, A. Gorbatiykov, M. Stepanova*
- 11:00 Japanese-Russian project of study Klychevskoy volcano (Kamchatka, Russia): First results of the geological and petrological investigations
**Bergal-Kuvikas O., M. Nakagawa, Y. Muravyev, N. Malik, A. Ovsyanikov, Y. Ishizuka, T. Hasegawa, S. Uesawa*
- 11:20 *Break*
- 11:40 Ultra-long period tilt signals observed at Klyuchevskoy volcano
**Takahashi H., H. Aoyama, T. Matsushima, H. Miyamachi, E. Gordeev, Y. Muravyev, S. Serovetnikov*
- 12:00 Dike opening inferred from tilt change prior to the small phreatic eruption of Meakan-dake volcano, Hokkaido, Japan in November 2008
**Aoyama H., H. Oshima*
- 12:20 Application of satellite and airborne InSAR to volcano deformation processes in the Pacific Rim
**Lundgren P., P. Milillo, A. Kiryukhin, S. Samsonov, I. Dubrovskaya, F. Gil, M. Cordova, A. Tanaka, S. Owen*
- 12:40 Recurrent sub-meter slope sliding of large block on buried Cenozoic calderas in Tohoku, Japan triggered by 2008 M7.2 and 2011 M9 earthquakes; Forerunners of Future Catastrophic Landslides?
**Murakami M., T. Abe, M. Furuya, S. Okuyama*
- 13:00 *Lunch*

Volcanism: Nakagawa Mitsuhiro and Timina Tatiana

- 14:00 Location estimation by the spatial distribution of seismic amplitudes: Volcanic tremors of the 2008 Meakandake eruption and debris flow on Izu-Oshima island on 16 October 2013
*Ogiso M., *Yomogida K.*
- 14:20 Change of the mode of eruptive activity since 20th century at Sakurajima volcano, Japan: Possible evidence for new magma entry into the magma plumbing system
**Nakagawa M., M. Amma-Miyasaka, A. Matsumoto, Y. Togashi, T. Kobayashi, M. Iguchi*
- 14:40 Numerical inversion of eruption source parameters from atmospheric tephra dispersal simulations and field data
**Moiseenko K., N. Malik*
- 15:00 Eruption patterns of parasitic volcanoes
**Yokoyama I.,*
- 15:20 Melt and fluid inclusion evidence of metasomatic alterations within the mantle wedge beneath Avacha volcano (Kamchatka, Russia)
**Timina T., A. A. Tomilenko, S. Z. Smirnov, D. V. Kuzmin*
- 15:40 **Poster**

24, September (Wednesday)

Geochemistry: Nakamura Hitomi and Shakirov Renat

- 10:00 Comprehensive method of studying changes in the composition, structure and properties of rocks under the influence of hydrothermal processes
**Shanina V., K.K. Gerke, A. Bychkov, D. Korost, V. Funikova*
- 10:20 REEs compositions of non-volcanic Arima-type hot spring waters along the Median Tectonic Line: Possible origin from subducting slab
**Nakamura H., H. Iwamori, K. Chiba, Y. Fujita, S. Nakai, J. Kimura, Q. Chang, K. Kazahaya*
- 10:40 Hydrocarbon and other gases on Kurile island (past data and nowadays data)
**Shakirov R., U. Tsunogai, R. Zharkov*

- 11:00 Hydrochemical fluxes from Baransky volcano, Iturup, Kuril Island
*Chelnokov G., R. Zharkov, *I. Bragin, N. Kharitonova*
- 11:20 Temporal changes in thermal waters related to volcanic activity of Tokachidake volcano, Japan
**Takahashi R., T. Shibata, Y. Murayama, T. Ogino, N. Okazaki*
- 11:40 Introduction to Taisetsu volcanic field
**Ishige K., M. Nakagawa*

26, September (Friday)

Status report and future programs from institutions and projects (tentative)

- 14:00 Institute of Seismology and Volcanology of Hokkaido University
- 14:15 Institute of Volcanology and Seismology of FEB-RAS
- 14:30 Institute of Tectonics and Geophysics of FEB-RAS
- 14:45 Institute of Marine Geology and Geophysics of FEB-RAS
- 15:00 Institute of Applied Mathematics of FEB-RAS and Far Eastern Federal University
- 15:15 Break
- 15:30 Sakhalin Branch of Geophysical Survey of RAS
- 15:45 Kamchatka Branch of Geophysical Survey of RAS
- 16:00 University of Alaska Fairbanks and Alaska Volcano Observatory
- 16:15 Jet Propulsion Laboratory
- 16:30 Japan-Russia re-inventing educational program project
- 16:45 Closing remarks (Nakagawa)
- 18:00 **Farewell party for information exchange**

Poster presentation:

Poster size is 90cm (width) by 180cm (height) vertically long.

22, September (Monday): 17:00-18:00: Available only from 15:00

- P1-1 Earthquake prediction based on the synchronization of the high-frequency seismic noise with Earth tides
**Saltykov V*
- P1-2 Slow strain waves in the Earth and their application to tectonic stress transfer
**Bykov V.*
- P1-3 Long-Term Earthquake forecast for the Kuril-Kamchatka Arc for the Period from April 2014 to March 2019
*Fedotov S., *A. Solomatin*
- P1-4 Waveform inversion of recent dispersive tsunamis using DART measurements near Japan, Kurils and Kamchatka
**Loskutov A.*
- P1-5 Sedimentary characteristics of tsunami deposits in Okushiri island, southwestern Hokkaido, Japan
**Kase Y., K. Nishina, K. Hayashi, G. Kawakami, K. Koshimizu, Y. Takashimizu, T. Watanabe, T. Sagayama, R. Takahashi, W. Hirose, S. Ohtsu, S. Ishimaru, H. Fukami, J. Tajika*
- P1-6 Possible source of tsunami deposits on Kamchatka coast of Bering Sea from tsunami modeling
**Petukhin A., T. Pineguna, A. Lander, B. MacInnes, Y. Tanioka*
- P1-7 Geological record of tsunami events in the northern Japan Sea
**Kawakami G., Tsunami Deposits Survey Team of GSH*
- P1-8 Tsunami source of the 17th century great earthquake occurred in southern Kurile subduction zone estimated from tsunami deposit data
**Ioki K., Y. Tanioka, Y. Nakamura*
- P1-9 Correlation of Simushir earthquakes 2006-2009 with the geophysical fields and block structure of the Central Kuril basement
*Kulinich R. G., *M. G. Valitov, Z. N. Proshkina*
- P1-10 Coseismic effect Gravity and GPS measurements at Far East Russia continental coast.
**Valitov M., R. Kulinich, V. Timofeev, T. Stus, E. Kalish, P. Gornov, D. Ardyukov, I. Sizikov, A. Timofeev, B. Ducarme, T. Kolpashikova, Z. Proshkina*

- P1-11 Macroseismic and peak ground acceleration data of the May 24, 2013 (Mw8.3) Sea of Okhotsk deep earthquake
**Chebrova Y. A., V. N. Chebrov, A. A. Gusev, A. V. Lander, E. M. Guseva, S. V. Mityushkina, A. A. Rayevskaya*
- P1-12 Strong Motion Records of the 2006-2007 Great Earthquake Doublet in the Central Kurile Islands
**Shigefuji M., N. Takai, T. Sasatani, M. Ichiyanagi*
- P1-13 Borehole geophysical monitoring in Kamchatka: the results of geoaoustic and electromagnetic measurements prior to strong earthquakes
*Gavrilov V., Y. Buss, J. Vlasov, V. Denisenko, *Y. Morozzova, E. Poltavtseva, G. Ryabinin, O. Fedoristov*
- P1-14 Simulation of isoseismals of a large subduction zone earthquake taking into account pronounced anisotropy of attenuation
**Chebrov D., A. A. Gusev, V. N. Chebrov*
- P1-15 Plate motion of Ryukyu Arc, South-western Japan, derived by continuous GPS observation
**Nakao S., H. Yakiwara, S. Hirano, K. Goto*
- P1-16 The long-term time series of records on broadband seismic station in Kamchatka
**Kasimova V.A., G. N. Kopylova, L. N. Taranova*
- P1-17 Seismic monitoring for disaster
**Levin I.*
- P1-18 Measurements of inter-station phase speed and amplitude of surface waves toward high-resolution S-wave model in the Sea of Japan
**Hamada K., K. Yoshizawa*
- P1-19 Mantle anisotropy beneath the northwest Pacific from local deep earthquake
**Luneva M.*
- P1-20 Statical estimation of the seismicity level of Hokkaido island
**Voropaev P., H. Takahashi, V. Saltykov*
- P1-21 Improvement of the earthquake early warning system with wavefield extrapolation
**Sato A., K. Yomogida*
- P1-22 Potential approach to short-term and longterm prediction of strong earthquakes for example the Tohoku earthquake (Japan) 11 march 2011 with Mw=9.0
*Shrikov V., P. Firstov, *E. Makarov, I. Stepanov, V. Stepanov*
- P1-23 Moderate repeating earthquakes off Kushiro, eastern Hokkaido, Japan
**Sakoi H., T. Matsuyama, T. Hirayama, I. Yamazaki, T. Yamamoto. M.Ichiyanagi, H. Takahashi*
- P1-24 How well does the ITRF2008 solution explain the current IGS site velocities observed by GNSS technique?
**Nechaev G., N. Shestakov, M. Gerasimenko*
- P1-25 Non-volcanic shallow low-frequency tremor activity at the shallow transition zone in the Hyuga-nada, southwestern Nankai Trough
**Yamashita Y., H. Yakiwara, H. Shimizu, K. Uchida, S. Hirano, K. Umakoshi, H. Miyamachi, T. Yamada, M. Nakamoto, M. Fukui, M. Kamizono, H. Kanehara, K. Obara*
- P1-26 Source Characterization of The 1995 Neftegorsk Earthquake
**Polets A., M. Raeesi*
- P1-27 Comparison of waveforms of the March 11 2011, Mw=9.0 Tohoku earthquake estimated from GPS and seismic data
**Pupatenko V.*
- P1-28 Seismic activity in southern Kuril trench by Japan-Russia joint seismic data (2010-2012)
**Ichiyanagi M., H. Takahashi, M. Valentin, I. Levin*
- P1-29 Perspectives of development the international tsunami early warning system along the Sea of Japan margins based on GPS/GLONASS technique
**Shestakov N., H. Takahashi, P. H. Park*
- P1-30 The relationship between intra-plate earthquakes and subsurface structures around Mitsuishi area, south-central Hokkaido: Possibility of unknown active faults
**Tamura M., S. Ohtsu. T. Suzuki*
- P1-31 Numerical simulation of migration of seismic activity (on the example of Kamchatka)
**Chetyrbotsky A. N.*

23, September (Tuesday):15:4 0-16:40

- P2-1 Origin of the across and along arc geochemical variations of volcanic rocks from the Northern Kurile islands
**Bergal-Kuvikas O., M. Nakagawa, G. P. Avdeiko*
- P2-2 Geological map of Fuji Volcano, 2nd edition, central Japan: Implications for hazard assessment
**Ishizuka Y.*
- P2-3 Volcanoes of Kurile-Kamchatka islands arc information system for integration heterogeneous volcanological data
**Romanova I. M., O. A. Girina, A. P. Maximov, I. V. Meleleestsev, S. E. Vasiliev*
- P2-4 Increase of Lava Within the Crater at Kirishima, Shinmoe-dake Volcano, Detected by DInSAR
**Miyagi Y., T. Ozawa, T. Kozono, M. Shimada*
- P2-5 Crustal deformation and seismic activation preceding the 2012-2013 fissure eruption at Tolbachik volcano Kamchatka
**Kugaenko Y., N. Titkov, V. Saltykov*
- P2-6 Teprostratigraphy in South Kurile Islands in the last 14 ka: Evaluation of eruptive activity on Kunashir and Itrup Islands
**Matsumoto A., N. Razzhigaeva, M. Nakagawa*
- P2-7 Estimation of the sulfur dioxide emission by Kamchatka volcanoes using differential optical absorption spectroscopy
**Melnikov D., S. Ushakov, B. Galle*
- P2-8 Sr-Nd isotopic composition of Shiveluch volcanic massif (Kamchatka)
Gorbach N., M. Portnyagin, F. Hauff
- P2-9 Relationship between Infrasound Signals and Plume Heights by the JMA's Weather Radar, the Shinmoe-dake 2011 Eruption, Japan
**Takagi A., T. Shimbori, E. Sato, K. Fukui*
- P2-10 KLUCHEVSKOY VOLCANO CONTINUOUS TILTMETER OBSERVATIONS(RUSSIA).
**Serovetnikov S., H. Takahashi, E. T. Gnitieva, I. F. Abkadyrov*
- P2-11 Gravity change due to volcanic inflation of Tokachi-dake, Hokkaido
**Okazaki N.*
- P2-12 Earth surface displacements and crustal deformations by GNSS data during the 2012-13 Tolbachik fissure eruption, Kamchatka
**Titkov N., M. Maguskin*
- P2-13 Geodetic strain field around Kussharo Caldera, eastern Hokkaido, Japan
**Ohzono M., H. Takahashi*
- P2-14 Variations of seismicity level connected with the 2000-2012 eruptions of Bezymianny Volcano
*Kuganenko Y., V. Saltykov, *P. Voropaev, A. Konovalova*
- P2-15 Absolute paleointensity determinations of welded tuffs correlated with widespread tephra in marine sediment cores
*Fujii S., N. Mochizuki, *T. Hasegawa, M. Okada H. Shibuya, M. Sugaya*
- P2-16 Composition and Geochemical Characteristics of Volcanic Ash erupted during 2012-13 Tolbachik Fissure eruption
**Malik N., P. Izbekov*
- P2-17 Review of the volcanic scenarios of Tarumae Volcano based on the volcanic activity of 2013
**Nagayama H., M. Miyamoto, J. Fujimatsu, Y. Usui, J. Miyamura, Y. Fushiya*
- P2-18 Eruption of Kizimen volcano in 2009-2013 in seismic data and visual observations
*Firstov P., *A. Shakirova*
- P2-19 Activity of Kamchatkan volcano in 2012-2013 and danger to aviation
**Girina O., A. Manevich, D. Melnikov, A. Nuzhdaev, Y. Demyanchuk*
- P2-20 Petrological and chronological study of primitive high-Mg andesite from monogenetic volcanoes in the forearc region of northern Kamchatka Peninsula
**Nishizawa T., H. Nakamura, T. Churikova, B. Gordeychik, O. Ishizuka, H. Iwamori*
- P2-21 Geology and petrology of Taisetsu volcano group, Japan; Evolution of magma and longterm time variation of eruption rate
**Ishige K., M. Nakagawa, A. Matsumoto*
- P2-22 Preliminary FEM analysis of the local deformation at Mt. Tokachi
**Okuyama S., H. Takahashi*

- P2-23 Local deformation around Mt. Usu detected by ALOS/PALSAR interferometry
**Okuyama S., H. Oshima, M. Murakami*
- P2-24 Geologo-Geophysical Researches in Brouton Bay (Uratman Volcano, Simushir Isl., The Kurile Islands)
**Veselov O. V., D. N. Kozlov*
- P2-25 Plagioclase lapilli and phenocrysts in the lavas of the 2012-2013 Tolachik Fissure eruption
**Volynets A., D. Melnikov, I. Griboedova*
- P2-26 Composition of pyroxenes in Miocene-Quaternary basalts of the Sredinny Range of Kamchatka: Implications to the crystallization conditions
Volynets A., G. Worner, A. Kronz, I. Griboedova, A. Babansky
- P2-27 The finding of the tephra related with the formation of L'vinaya Past' caldera at the central part of Iturup island, southern Kuril
**Nakagawa M., R. Furukawa, A. Matsumoto*

Ice Breaker:

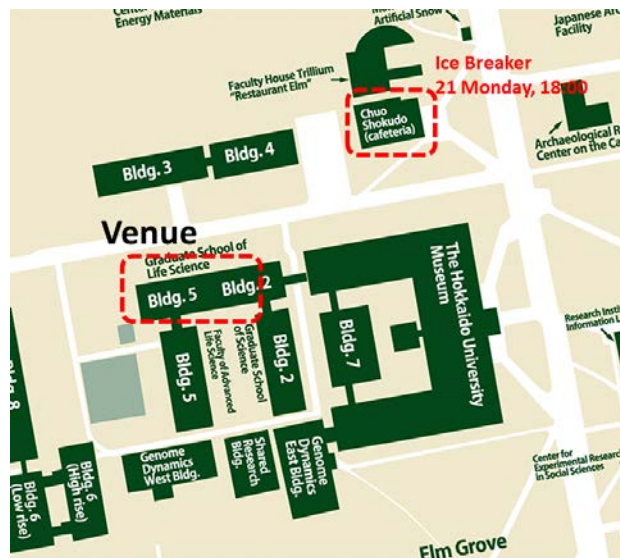
Ice breaker will be held on 22 Monday 18:00 at University's central cafeteria (Chuo Shokudo) 2nd floor, one minute walk from venue.

Lunch:

You can use also university's central cafeteria (Chuo Shokudo) 1st and 2nd floor. Restaurant Elm, situated north of cafeteria is also available. Small Kiosk selling drinks and snacks is operated in the cafeteria building.

Smoking:

Smoking room is situated 2nd floor of Bldg. 2 and entrance of Bldg. 2.



Farewell party for information exchange:

Farewell party will be held on 26 Friday 18:00 at KKR Hotel Sapporo: address is N4, W5; southern part of JR Sapporo station. About 20 min walk from venue. Participants will move there after the session end of 26 September.



Excursion:

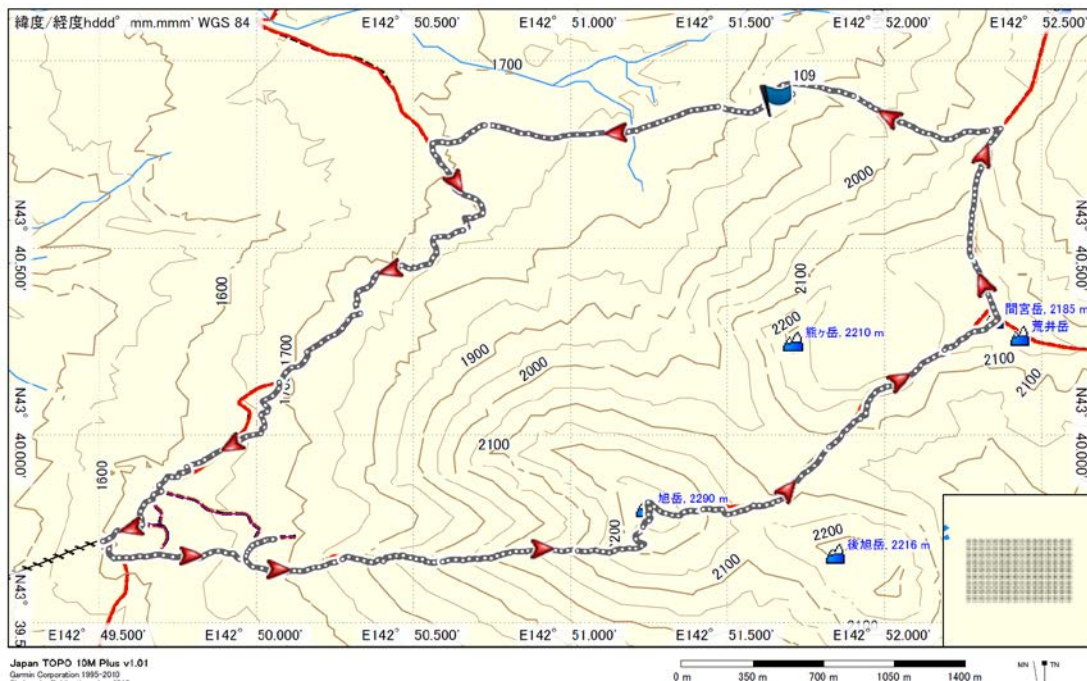
Excursion will be at Taisetsu (Daisetsu) volcanic field in central Hokkaido in 24-25. You can see Active Asahidake volcano, the highest mountain in Hokkaido (2,291m) and explosive active craters with volcanic complex. Ropeway to middle flank of mountain is in operation.

Participants who have good legs can cross mountain summit by a day trekking about 7-8 hours, and another participants will enjoy autumn fresh air in mountain region easily using ropeway. Weather will be to being cold, about less than 10 degrees temperature, and might be first snow. Participants who will try to climb up to the summit have to bring suitable shoes and waterproof clothes.

You can enjoy Japanese style accommodation and hot spring spa (ONSEN) at accommodation hotel. Participants will share a Japanese style room by 4 peoples.

http://www.data.jma.go.jp/svd/vois/data/tokyo/STOCK/souran_eng/volcanoes/009_taisetsuzan.pdf

<http://www.tenninkaku.jp/english/> (Hotel information)



Tentative schedule:

09/24 Sapporo(12:00)-Ten'ninkaku Hot Spring Hotel (17:00)

09/25 Fullday trekking course

Hotel(05:30)-Ropeway_Station(06:30)-Asahidake(10:00)-Nakagake_Spa(12:30)-
Ropeway_end(15:30)-Ropeway_station(16:00)-Sapporo(20:00)

Halfday trekking course

Hotel(05:30)-Ropeway_station(06:30)-Trecking-Ropeway_station(09:30)-Asahik
awa_city(13:00)-Sapporo(16:00)

Travel information:

Participants who will arrive and departure at New-Chitose (Sapporo) international airport, should use JR (Japan Railway) train transportation to/from Sapporo station. Rapid train "Airport" to Sapporo is operated every 15min. It takes about 40min to Sapporo, and fee is 1380JPYen. Be careful that final station of train is not Sapporo! Do not miss Sapporo station!

Participants should arrive at airport about 1 hour earlier of departure time, suggesting should take about 2 hour before train from Sapporo station. If you will use earlier flight from airport, you should use at least the first "Airport" rapid train which will depart 06:15 from Sapporo JR station.

<Time table from Airport to Sapporo>

	Airport213	Airport215	Airport217	Airport221	Airport223	Airport225	Airport227
New Chitose Airport	21:15	21:30	21:50	22:00	22:14	22:35	22:53
Sapporo	21:55	22:09	22:29	22:39	22:53	23:15	23:32

<Time table from Sapporo to Airport>

	Airport60	Airport62	Airport64	Airport70	Airport72	Airport74	Airport76
Sapporo	6:15	6:31	6:48	7:06	7:20	7:35	7:48
New Chitose Airport	6:53	7:09	7:26	7:46	7:58	8:13	8:26

Weather condition:

September is the best season in Sapporo, comfortable daytime temperature of 18 degree, sunny and dry air and clear sky in early autumn.

Sponsorships:

This meeting will be supported by Institute of Seismology and Volcanology of Hokkaido University, Geological Survey of Hokkaido, Geodynamics project promoted by KAKENHI of JSPS-MEXT, bilateral joint research programs by JSPS.

Contact information:

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