

AsiaPEX Kick-off Conference Program

28-30 August 2019, Sapporo



Venue

Faculty of Environmental Earth Science (Graduate school of Environmental Science),
Hokkaido University (Session room: D-201, Poster room: D-101)



The conference is hosted by AsiaPEX Kick-off Conference Organizing Committee and co-hosted by Kagawa Univ., Tokyo Inst. of Tech., Hokkaido Univ., Kyoto University, and Nagoya University

Aim

The aim of AsiaPEX (Asian Precipitation Experiment) Kick-off Conference is to exchange ideas associated with all aspects of hydroclimatological research regarding the AsiaPEX. The issues range all main objectives, scientific approaches, and key questions of the AsiaPEX project. The Science Plan of AsiaPEX is under a drafting phase. Presentations and discussions during the Kick-off Conference will be integrated in the updated Science Plan. Plans for the regional projects will be also discussed.

Along with the presented topics below, relevant issues associated with disaster risk reduction and possible researches for the sustainability of future Monsoon Asia are highly welcome.

Program

28 Aug. 2019 (Wed.)

- 14:00-15:05 Opening Session (Session 0): AsiaPEX as a GEWEX RHP
- 15:05-15:50 Session 1a: Observation and Estimation of Asian Precipitation
- 16:05-17:05 Session 1b (cont)
- 17:05-18:05 Poster Session 1
 - 17:05-17:15 Lightning Talks 1 (Short Presentations for group A posters) @D-201
 - 17:15-18:05 Poster Core Time @D-101
- 18:10-19:40 Banquet @D-101

29 Aug. 2019 (Thu.)

- 08:45-10:15 Session 1c (cont)
- 10:30-12:15 Session 2: Process Studies of Asian Land Precipitation
- 13:30-14:45 Session 3: Subseasonal to Interdecadal Variability of Asian Monsoon
- 15:00-16:45 Session 4: Land Surface Hydrological Modeling: Human Impact to Cryosphere
- 16:45-17:45 Poster Session 2
 - 16:45-16:55 Lightning Talks 2 (Short Presentations for group B posters) @D-201
 - 16:55-17:45 Poster Core Time @D-101
- 18:00-20:00 Dinner Party @Restaurant Elm

30 Aug. 2019 (Fri.)

- 08:45-09:45 Session 5: Coordinated Observation and Modeling Initiatives
- 09:45-10:45 Session 6a: Detection and Projection of the Climate Change
- 11:00-12:15 Session 6b (cont)
- 12:15-12:30 Closing Session
- Afternoon City Tour (optional)

Access

● Airport (New-Chitose) to Sapporo station (45-min by Train)

Train station is located in the domestic terminal. All trains departing at the airport (Rapid Airport) will stop at Sapporo station (1,070JPY). DO NOT get off at the "Shin-Sapporo" station which is different from the "Sapporo" station. Trains are operated in about every 15-20 minutes.

駅は国内線ターミナルにあります。新千歳空港では約 15 分間隔で出発する全ての電車が「札幌」へ行きます。途中の「新札幌」で間違えて下車しないで下さい。

● JR (and subway) Sapporo Station to Campus (10-15min walk)

(1) Please pass at "West Ticket Gate" and proceed to "North Exit".

西改札口を通過し、北口から外へ。

To West Ticket Gate



North Exit (→)



(2) At North Exit of Sapporo station, turn left (west) and walk one block. At West-5 street, turn right (North) and walk 200m. You will find the main gate of the university campus. After passing the main gate, immediately turn right and walk under the trees. You will find the building of "Graduate School of Environmental Science" beyond the parking area.

札幌駅北口から西 5 丁目通りを北へ進み、大学正門へ。正門を通過してすぐに右の小道へ入ると近道。50m ほど歩くと駐車場の先に環境科学院の建物が見えます。

If you use subway "Kita 12 jou (which means North-12 street)" station, enter the campus through the "Pedestrian gate". You will soon find the graduate school building.

地下鉄「北 12 条」下車の場合は、歩行者用の門からキャンパスに入ると目の前が環境科学院です。

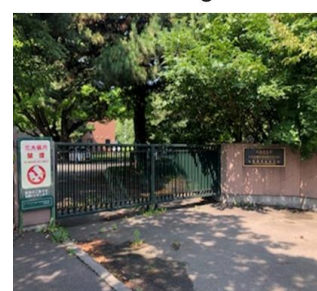
Campus main gate



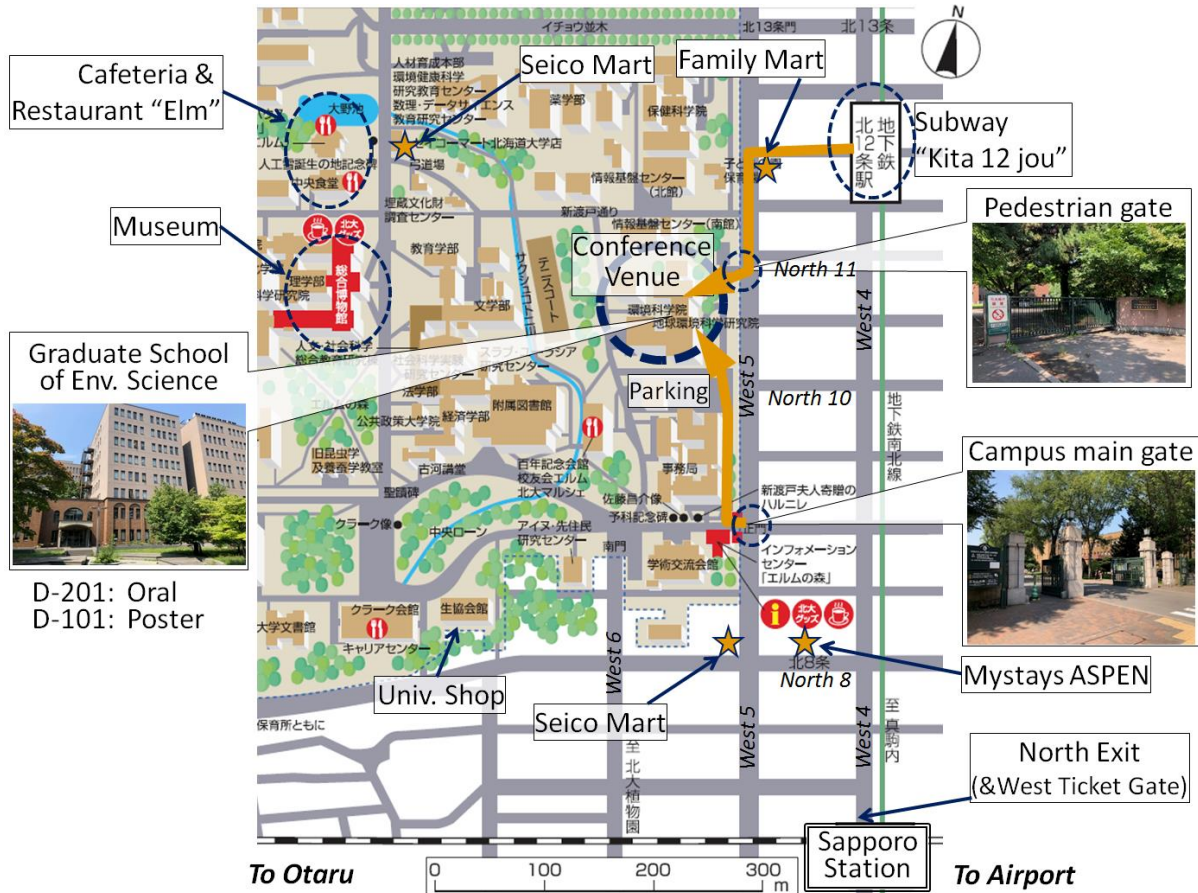
Graduate School of Environmental Science
(Faculty of Environmental Earth Science)



Pedestrian gate



Guide Map to the Venue



Campus Map

The Campus map is available here by clicking the link or by scanning the QR code.

<https://www.global.hokudai.ac.jp/maps/?p=sapporo>



Notes for Presenters

Oral Presentation:

We would highly appreciate your cooperation and understanding on following matters.

Presenters should arrive at the session room (D-201) at least 10 minutes in prior to the session starts. A presentation should be no more than 15 minutes long because of the tight session schedule. Following each presentation, the audience will be given a few minutes to ask clarification and technical questions. The Session chair will monitor the time and will show time signs at 5 min and 1 min before the end of the presentation.

Windows 10 laptop, which includes MS PowerPoint 2016, is available. If you upload the presentation to the laptop, please complete at least 5 minutes before the session starts. For Mac users, you can directly connect your own Laptop via RGB or HDMI cable.

It is greatly appreciated if you agree to provide your presentation file. The file might be utilized as a valuable input for drafting the science plan.

Poster Presentation:

Posters will be presented throughout the conference at the Poster session room (D-101). You can present your poster from 13:00 on 28 Aug. Poster boards are pre-assigned and marked with your Abstract Serial Number P1 to P16 and poster group code (A) or (B). The size of poster board is 90 cm width and 180 cm height. Poster pins are available on site.

Lightning Talks (Short Presentations) session will be held at the session room (D-201) before the core time of poster presentation. Please prepare the power point file for 1-minute presentation. For quick exchange, please upload your presentation file to the laptop placed in the session room at least 5 minutes before the Lightning Talks start. Also, please be ready very near the laptop during the Lightning Talks session.

During the core time, the presenters are recommended to stay in front of their posters.

Session Program Details

Day 1: 28 August 2019 (Wednesday)

14:00-15:05 Opening Session -AsiaPEX as a GEWEX RHP-

Chair: Shinjiro Kanae

	Title	Presenter (Affiliation)
14:00-14:35	Opening Addresses, Photo Session	
14:35-14:50	Objectives and Overarching Key Questions of AsiaPEX	<i>Toru Terao (Faculty of Education, Kagawa University, Japan)</i>
14:50-15:05	The GEWEX Regional Hydroclimate Projects and Related Activities in High Mountain Regions and Asia	<i>Peter van Oevelen (International GEWEX Project Office, USA)</i>

15:05-15:50 Session 1a -Observation and Estimation of Asian Precipitation-

Chair: Ailikun

	Title	Presenter (Affiliation)
15:05-15:20	Monsoonal Precipitation and Challenges for Sustainable development of Bangladesh	<i>ATM Shakhawat Hossain (Department of Geological Sciences, Jahangirnagar University, Bangladesh)</i>
15:20-15:35	Toward assessment of precipitation climate resource: Bias correction on daily precipitation measurement in Mongolia	<i>Purevjav Gomboluudev (Information and Research Institute of Meteorology and Hydrology, Mongolia)</i>
15:35-15:50	The progress on the observation and modeling of land-atmospheric Interactions over heterogeneous landscapes: from Tibetan Plateau to Third Pole and Pan-Third Pole regions	<i>Yaoming Ma (Institute of Tibetan Plateau Research, CAS, China)</i>

Break Time: 15 minutes

16:05-17:05 Session 1b (cont.)**Chair: Shakhawat Hossain**

	Title	Presenter (Affiliation)
16:05 -16:20	Long-term dataset of geostationary meteorological satellites in Center for Environmental Remote Sensing (CEReS), Japan	<i>Atsushi Higuchi</i> (Center for Environmental Remote Sensing, Chiba University, Japan)
16:20 -16:35	Uncertainties in gridded precipitation products derived from spaceborne radars	<i>Masafumi Hirose</i> (Faculty of Science and Technology, Meijo University, Japan)
16:35 -16:50	JAKarta Heavy precipitation Experiment (JAHE), a new Kakenhi-based field study on the IMC coastal hydrological cycle climatology	<i>Shuichi Mori</i> (Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan)
16:50-17:05	Evolution of tropical coastal triple boundary zone as biosphere and anthroposphere	<i>Manabu D. Yamanaka</i> (Research Institute for Humanity and Nature, and Kobe University, and JAMSTEC, Japan)

17:05-18:05 Poster Session 1

*17:05-17:15 Lightning Talks (1-min presentation per poster) @D-201

*17:15-18:05 **Group A** Core time@D-101**Chair: Masato I. Nodzu**

	Title	Presenter (Affiliation)
P1(A)	Orographic Effects on Polar Mesocyclones Genesis around the Western Offshore of Hokkaido Island	<i>Kenta Tamura</i> (Graduate School of Environmental Science, Hokkaido University, Japan)
P2(A)	Influence of terrestrial precipitation to the variability of extreme sea levels along the coast of Bangladesh	<i>Md. Anowarul Islam</i> (Graduate School of Environmental Science, Hokkaido University, Japan)
P3(A)	The influence of uncertainty of upstream discharge on downstream in Tokachi river basin	<i>Mai Ando</i> (Graduate school of Engineering, Hokkaido University, Japan)
P4(A)	Predictability of river water level, riverbed fluctuation and flood disaster pattern using ensemble weather forecast for 2016 Hokkaido heavy rainfall disaster	<i>Muhammad Izaaz Hazmii Bin Suhaimi</i> (Faculty of Engineering, Hokkaido University, Japan)
P5(A)	Influence of topography on annual maximum heavy rainfalls over upper catchments in Hokkaido	<i>Yui Takehara</i> (Faculty of Engineering, Hokkaido University, Japan)
P6(A)	New-record theory of annual maximum	<i>Seang Chhay Ngorn</i> (Graduate School of Engineering,

	precipitation associated with the temperature trend among 58 stations and database for Policy Decision making for Future climate change (d4PDF), Japan	<i>Hokkaido University, Japan)</i>
P7(A)	Sensitivity Experiments for Multiple Equilibria of the Water Cycle Analyzed by a Soil-Atmosphere Model	<i>Ryosuke Kato (Graduated school of Engineering, Hokkaido University, Japan)</i>

18:10-19:40 Banquet @D-101

Day 2: 29 August 2019 (Thursday)

08:45-10:15 Session 1c (cont.)-Observation and Estimation of Asian Precipitation-

Chair: Subashisa Dutta

	Title	Presenter (Affiliation)
08:45-09:00	Role of coastal precipitation in Asian monsoon	<i>Shin-Ya Ogino (Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan)</i>
09:00-09:15	BRAIN: Borderless Radar Information Networking over South and Southeast Asia	<i>Hideyuki Kamimera (National Research Institute for Earth Science and Disaster Resilience (NIED), Japan)</i>
09:15-09:30	Toward improvement in estimate of precipitation in higher resolution with surface gauge, radar and satellite observations in Vietnam	<i>Masato I. Nodzu (Department of Geography, Tokyo Metropolitan University, Japan)</i>
09:30-09:45	Field observation of rainfall, ocean spray and wave with X-band radar in summer season of 2018	<i>Hiroki Okachi (Graduate School of Engineering, Hokkaido University, Japan)</i>
09:45-10:00	Causes of the wettest place in the southern slope of the Meghalaya Plateau, Northeast India	<i>Fumie Murata (Faculty of Science and Technology, Kochi University, Japan)</i>
10:00-10:15	Regionality of interannual variation of seasonal precipitation over India	<i>Azusa Fukushima (Faculty of Humanities and Sciences, Kobe Gakuin University, Japan)</i>

Break Time: 15 minutes

10:30-12:15 Session 2 -Process Studies of Asian Land Precipitation-**Chair: Hideyuki Kamimera**

	Title	Presenter (Affiliation)
10:30-10:45	Observation and Simulation of land-air and lake-air interactions on the Tibetan Plateau	<i>Yang Kun</i> (Department of Earth System Science, Tsinghua University, China)
10:45-11:00	Analysis on atmospheric heating field by using different methods over the Tibetan Plateau	<i>Weiqiang Ma</i> (Institute of Tibetan Plateau Research, CAS, China)
11:00-11:15	Simulated clouds and precipitation over and around the Himalayas using the cloud resolving model	<i>Shiori Sugimoto</i> (Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan)
11:15-11:30	Understanding of plant physiological response using turbulent flux observation and transpiration model	<i>Daisuke Komori</i> (Department of Civil Engineering, Tohoku University, Japan)
11:30-11:45	Evapotranspiration from Remote Sensing and Spatio-temporal Analysis over the Tibetan Plateau	<i>Jia Li</i> (Institute of Remote Sensing and Digital Earth, CAS, China)
11:45-12:00	Simulation of Convective Hot Spots along the Foot-Hills of the Himalayas that Kicked-off a Tornado in Nepal and a Severe Storm in Bangladesh on 31st March 2019	<i>Someshwar Das</i> (Department of Atmospheric Science, Central University of Rajasthan, India)
12:00-12:15	Enhanced probability of mesoscale convective system initiations due to land surface heterogeneity	<i>Tomonori Sato</i> (Faculty of Environmental Earth Science, Hokkaido University, Japan)

Lunch Break: (12:15 – 13:30)**13:30-14:45 Session 3-Subseasonal to Interdecadal Variability of Asian Monsoon-****Chair: Someshwar Das**

	Title	Presenter (Affiliation)
13:30-13:45	The boreal summer intraseasonal oscillation: A review	<i>Kazuyoshi Kikuchi</i> (International Pacific Research Center, University of Hawaii, USA)
13:45-14:00	Investigation of Transport Processes Associated with the Asian Summer Monsoon Circulation using Balloons, Lidars, and Aircrafts – Collaboration	<i>Masatomo Fujiwara</i> (Faculty of Environmental Earth Science, Hokkaido University, Japan)

	with the ACCLIP	
14:00-14:15	Using weather pattern recognition to classify and predict summertime heavy rainfall occurrence over the Upper Nan river basin, northwestern Thailand	<i>Dzung Nguyen-Le</i> (Faculty of Engineering, Hokkaido University, Japan)
14:15-14:30	Data rescue for the long-term tropical cyclone variabilities in the western north Pacific	<i>Hisayuki Kubota</i> (Faculty of Science, Hokkaido University, Japan)
14:30-14:45	Current status and challenges in seasonal prediction of the Asian summer monsoon	<i>Yuhei Takaya</i> (Meteorological Research Institute, Japan Meteorological Agency, Japan)

Break Time: 15 minutes

15:00-16:45 Session 4 -Land Surface Hydrological Modeling: Human Impact to Cryosphere-

Chair: Dzung Nguyen-Le

	Title	Presenter (Affiliation)
15:00-15:15	Some challenges and their current examples in large-scale modeling of hydrology and water resources under AsiaPEX	<i>Shinjiro Kanae</i> (Department of Civil and Environmental Engineering, Tokyo Institute of Technology, Japan)
15:15-15:30	Characteristics of Rainfall Extremes over Jakarta and an Approach of Flood Monitoring using Weather Radar Data and River Discharge of Ciliwung River	<i>Fadli Syamsudin</i> (Agency for the Assessment and Application of Technology (BPPT), Indonesia)
15:30-15:45	Multi-sphere hydrological modeling over the Third Pole	<i>Lei Wang</i> (Institute of Tibetan Plateau Research, CAS, China)
15:45-16:00	Near Real time Basin Scale hydrological modelling of Brahmaputra River for Flood predication	<i>Subashisa Dutta</i> (Indian Institute of Technology Guwahati, India)
16:00-16:15	High resolution land surface distributed hydrological modeling in Nepal Himalaya	<i>Maheswor Shrestha</i> (Water and Energy Commission Secretariat, Nepal)
16:15-16:30	Analysis of Rainfall and Extreme Rainfall Events over Himalayas	<i>Ajit Tyagi</i> (Indian Meteorological Society, India)
16:30-16:45	Precipitation and its variability in high elevation areas of the Nepal Himalayas	<i>Hatsuki Fujinami</i> (Institute for Space-Earth Environmental Research, Nagoya University, Japan)

16:45-17:45 Poster Session 2

*16:45-16:55 Lightning Talks (1-min presentation per poster) @D-201

*16:55-17:45 **Group B** Core time@D-101**Chair: Azusa Fukushima**

	Title	Presenter (Affiliation)
P8(B)	Potential Impact of Climate Change on Rainfall Erosivity in Kushiro Basin, Japan	<i>Shara Grace C. Astillero</i> (Graduate School of Engineering, Hokkaido University, Japan)
P9(B)	Three dimensional wind field in Rain-Shaped Rain Band around Sapporo 2014 using three radars	<i>Yuta Ohya</i> (Graduate School of Engineering, Hokkaido University, Japan)
P10(B)	Interannual Characteristics of Snow Falling and Melting Process in Jozankei, Sapporo	<i>Nobutaka Hosoi</i> (Graduated school of Engineering, Hokkaido University, Japan)
P11(B)	A promising new observation in the AsiaPEX – an unmanned aerial vehicle observation of evolution in the lower boundary layer in the morning	<i>Masato I. Nodzu</i> (Department of Geography, Tokyo Metropolitan University, Japan)
P12(B)	Short term Precipitation Forecast System in Heterogeneous Urban Landscape in Delhi City using Weather Radar	<i>Subashisa Dutta</i> (Department of Civil Engineering, IIT Guwahati, India)
P13(B)	Comparison of diurnal variation in precipitation between pre-monsoon and monsoon seasons in Assam, India	<i>Kyoichiro Kuriyama</i> (Graduate School of Integrated Arts and Sciences, Kochi University, Japan)
P14(B)	South Asia Implementation Plan for the Asian Monsoon Year-II Observation and Modelling Initiative	<i>Toru Terao</i> (Faculty of Education, Kagawa University, Japan)
P15(B)	Assessing flood hazard and crop yield loss relationship using hydrodynamic simulation and remote-sensing data: an alternative approach for data-scarce regions	<i>Vempi Satriya Adi Hendrawan</i> (Department of Civil Engineering, Tohoku University, Japan)
P16(B)	Meso-scale precipitation systems and their role in the rapid development of a monsoon depression over the Bay of Bengal	<i>Hatsuki Fujinami</i> (Institute for Space-Earth Environmental Research, Nagoya University, Japan)

18:00-20:00 Dinner Party at Faculty House Trillium "Restaurant Elm"<https://www.hokudai.ac.jp/bureau/property/s02/>

Day 3: 30 August 2019 (Friday)**08:45-09:45 Session 5 -Coordinated Observation and Modeling Initiatives-****Chair: Fadli Syamsudin**

	Title	Presenter (Affiliation)
08:45-09:00	YMC-BSM 2020 field campaign over western Pacific and surrounding Asian countries	<i>Satoru Yokoi</i> (Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan)
09:00-09:15	ULAT SATREPS -Observation study for the lightning activity and tropical cyclone intensity relationship in the Philippine Sea	<i>Yukihiro Takahashi</i> (Faculty of Science, Hokkaido University, Japan)
09:15-09:30	Modelling and observational aspects of soil-moisture dynamics and its linkage with extremes over the regions of south Asian monsoon	<i>Milind Mujumdar</i> (Indian Institute of Tropical Meteorology, India)
09:30-09:45	Long-term Asian monsoon changes through the data rescue activities under the ACRE-Japan	<i>Jun Matsumoto</i> (Tokyo Metropolitan University and JAMSTEC, Japan)

9:45-10:45 Session 6a -Detection and Projection of the Climate Change-**Chair: Satoru Yokoi**

	Title	Presenter (Affiliation)
09:45-10:00	Reduction in the east-west contrast in water budget over the Tibetan Plateau under a future climate	<i>Akio Kitoh</i> (Japan Meteorological Business Support Center, Japan)
10:00-10:15	Precipitation bias variability versus various gauges under different climatic conditions over the Third Pole Environment (TPE) region	<i>Yinsheng Zhang</i> (Institute of Tibetan Plateau Research, CAS, China)
10:15-10:30	Flood, drought and lack of sunshine in an East Asian monsoon region. A comparative economic, cultural and environmental history of the 19th century Japan	<i>Satoshi Murayama</i> (Faculty of Education, Kagawa University, Japan)
10:30-10:45	The analysis of future heavy rainfall characteristics in Hokkaido, northern Japan, using database for Policy Decision making for Future climate change (d4PDF)	<i>Tsuyoshi Hoshino</i> (Graduate school of Engineering, Hokkaido University, Japan)

Break Time: 15 minutes

11:00-12:15 Session 6b (Cont.)**Chair: Thanh Ngo-Duc**

	Title	Presenter (Affiliation)
11:00-11:15	Urban expansion in Metro Manila and its impact on the Southwest monsoon rainfall	<i>Julie Dado</i> (Manila Observatory, Philippine)
11:15-11:30	Rainfall in Vietnam: from past observation to future projection	<i>Thanh Ngo-Duc</i> (Department of Space and Aeronautics, University of Science and Technology of Hanoi, Vietnam Academy of Science and Technology, Vietnam)
11:30-11:45	ADAP-T for water disaster risk management and sustainable development	<i>Masashi Kiguchi</i> (Institute of Industrial Science, The University of Tokyo, Japan)
11:45-12:00	Development of future runoff scenarios in Karnali River Basin of western Nepal Himalaya utilizing the CORDEX South Asia climate product	<i>Madan L. Shrestha</i> (Nepal Academy of Science and Technology, Nepal)
12:00-12:15	Changing Indian monsoon rainfall patterns under warming climate	<i>A. P. Dimri</i> (School of Environmental Sciences, Jawaharlal Nehru University, India)

12:15-12:30 Closing Session

Closing Address

Afternoon City Tour (optional)

1. Mt. Okura and Hitsujigaoka Observation Hill Tour

<http://teikan.chuo-bus.co.jp/en/course/1916>

14:10- Departure at Sapporo Station



2. Shiroy Koibito Park and Central Wholesale Market Tour

<http://teikan.chuo-bus.co.jp/en/course/2559>

13:10- Departure at Sapporo Station

