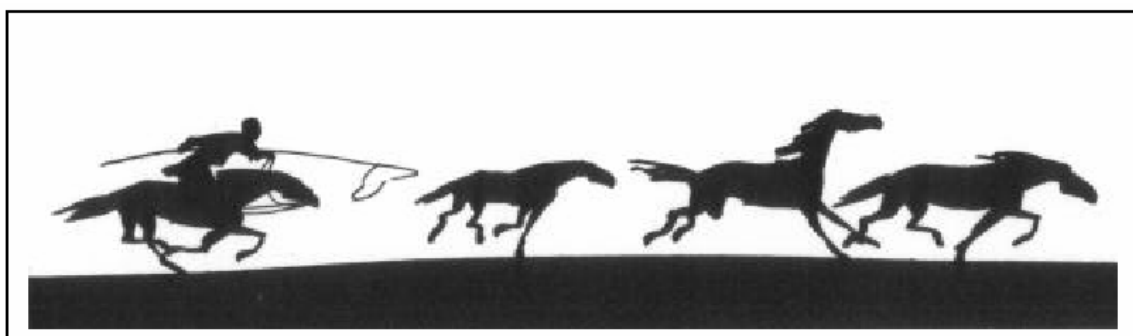


AMPEX/IORGC/RAISE

Third International Workshop on Terrestrial Change in Mongolia

- Joint Workshop of AMPEX, IORGC and RAISE Projects -

Program



Tsukuba, Ibaraki, Japan
9-10 November 2004

CONTACT ADDRESS

RAISE Project Office

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November 9 (Tuesday)

Opening address 10:30 – 10:50

Tanaka Tadashi. (Director, TERC, Univ. of Tsukuba)
Tuvshinjargal Dampil (Science secretary, IG)

Session 1 10:50 – 12:50 Chair Kadota, T. (IORGC)

- 1) Current activities of the AMPEX AMSR/AMSR-E studies
-- Kaihotsu Ichiro (Hiroshima Univ.), Yamanaka, Tsutomu (Univ. of Tsukuba) Koike, Toshio (Univ. of Tokyo)
- 2) Progress of IORGC project in northern Mongolia and additional study plan
-- Ohata Tetsuo (IORGC) et al.
- 3) RAISE project: summary for the first three years' activities
-- Sugita Michiaki (Univ. of Tsukuba), Asanuma Jun (Univ. of Tsukuba), Mariko Shigeru (Univ. of Tsukuba), Tsujimura Maki (Univ. of Tsukuba), Kimura Fujio (Univ. of Tsukuba), Lu Minjiao (Nagaoka Univ. Tech.), Azzaya Dolgorsuren (IMH), Adyasuren **Tsokhio (ECO Asia)**
- 4) Application of flood routing models along the Kherlen river basin
-- Oyunbaatar Dambaravjaa (IMH)
- 5) Budget analysis on groundwater and river water interaction in Kherlen River Basin, eastern Mongolia
-- Tsujimura Maki (Univ. of Tsukuba)
- 6) Groundwater recharge process in Kherlen River basin, eastern Mongolia
-- Tanaka Tadashi (Univ. of Tsukuba), Tsujimura Maki (Univ. of Tsukuba), Abe Yutaka (Metocean Environment INC.)

Lunch 12:50 – 14:20

Session 2 14:20 – 16:20 Chair Oyunbaatar, D. (IMH)

- 7) Hydrological changes in the upper Tuul river basin
-- Davaa Gombo (IMH)
- 8) Recent glacier variations in Mongolia, a preliminary study
-- Kadota Tsutomu (IORGC), Davaa Gombo (IMH)
- 9) Role of snow playing in water cycle in semi-arid region of Mongolia
-- Zhang Yinsheng (IORGC), Ishikawa Mamoru (IORGC), Ohata Tetsuo (IORGC)
- 10) Hydro-thermal regimes of dry active layer -First two years observations at a grassland site-
-- Ishikawa Mamoru (IORGC), Zhang Yinsheng (IORGC), Kadota Tsutomu (IORGC), Yabuki Hironori (IORGC), Ohata Tetsuo (IORGC)
- 11) Dynamics of active layer and spring icing at Terej observation sites, Mongolia
-- Dorjgotov Battogtokh (IG)
- 12) Impact of interannual variability of meteorological parameters on vegetation activity and predict possibility of vegetation activity over Mongolia
-- Iwasaki Hiroyuki (Gunma Univ.)

Coffee Break 16:20 – 16:40

Session 3 (Poster session) 16:40 – 18:00

Chair Tsujimura, M. (Univ. of Tsukuba)

- 13) Hydrological analysis of small catchment in Mongolia using IORGC dataset
-- Ma Xieyao (FRCGC)
- 14) Influence of grazing on surface fluxes and Net Ecosystem Production over the Mongolian Grassland
-- Kato Hidekazu (Univ. of Tsukuba), Mariko Shigeru (Univ. of Tsukuba), Urano Tadaaki (Univ. of Tsukuba), Sugita Michiaki (Univ. of Tsukuba)
- 15) Aircraft turbulence measurements to estimate surface heat fluxes from the mixed layer variance methods over semi-arid grassland in Mongolia
-- Kotani Ayumi (Univ. of Tsukuba), Sugita Michiaki (Univ. of Tsukuba)
- 16) Estimation of Evapotranspiration in Northeastern Mongolia combining Satellite data and Ground data
-- Matsuura Yosuke (Tohoku Univ.), Matsushima Dai (Tohoku Univ.)
- 17) Comparison of several properties between the soils under the grassland and the abandoned field in the Kherlen river basin, Mongolia
-- Hoshino Aki (Univ. of Tsukuba), Tamura Kenji (Univ. of Tsukuba), Asano Maki (Univ. of Tsukuba), Higashi Teruo (Univ. of Tsukuba)
- 18) Isotopic variation of precipitation over eastern Mongolia
-- Yamanaka Tsutomu (Univ. of Tsukuba), Tsujimura Maki (Univ. of Tsukuba), Oyunbaatar Dambaravjaa (IMH), Davaa Gombo (IMH)
- 19) Overland flow generation and surface erosion in Mongolia
-- Kato Hiroaki (Univ. of Tsukuba), Onda Yuichi (Univ. of Tsukuba), Tanaka Yukiya (Kyung Hee Univ.), Nishikawa Tomoyuki (Nippon Koei Co., Ltd.), Davaa Gombo (IMH), Oyunbaatar Dambaravjaa (IMH)
- 20) Spatial variation and long-term change of hydrological regime of Kherlen river basin, Mongolia
-- Kamimera Hideyuki (Nagaoka Univ. Tech.), Lu Minjiao (Nagaoka Univ. Tech.), Doi Hironori (Nagaoka Univ. Tech.), Oyunbaatar Dambaravjaa (IMH), Davaa Gombo (IMH)
- 21) Micro-climatology on sparse grassland of Nalaikh, Mongolia.
-- Zhang Yinsheng (IORGC), Kadota Tsutomu (IORGC), Ohata Tetsuo (IORGC), Ganbold Tseveenchimed (IMH)
- 22) Uses of geoelectric and neutron methods to investigate water condition of the frozen ground, Mongolia
-- Ishikawa Mamoru (IORGC), Sharkhuu Natsag (IG), Battogtokh Dorjgotov (IG), D. Byambademberel (IG), Kadota Tsutomu (IORGC), Ohata Tetsuo (IORGC)
- 23) Modeling approach to the atmosphere-hydrosphere-biosphere interactions in Mongolia.
-- Sato Tomonori (JST), Lee Giljae (Univ. of Tsukuba), Lu Minjiao (Nagaoka Univ. Tech.), Lee Pilzae (Univ. of Tsukuba), Chen Yuxiang (Univ. of Tsukuba), Kamimera Hideyuki (Nagaoka Univ. Tech.), Kimura Fujio (Univ. of Tsukuba), Oikawa Takehisa (Univ. of Tsukuba), Sugita Michiaki (Univ. of Tsukuba)
- 24) On "break" in Mongolian rainy season
-- Iwasaki Hiroyuki (Gunma Univ.), Nii Tomomi (Gunma Univ.)
- 25) Groundwater flow system in Kherlen river basin revealed by environmental tritium
-- Higuchi Satoru (Kumamoto Univ.), Shimada Jun (Kumamoto Univ.), Tsujimura Maki (Univ. of Tsukuba), Abe Yutaka (Metocean Environment INC.), Davaa Gombo (IMH)
- 26) Hydrological processes in Kherlen River Basin revealed by isotope tracer approaches
-- Tsujimura Maki (Univ. of Tsukuba)
- 27) The characteristics of soils at the steppe of Kherlen River Basin, Mongolia
-- Asano Maki (Univ. of Tsukuba), Tamura Kenji (Univ. of Tsukuba), Maejima Yuji (National

- Institute for Agro-Environmental Sciences), Matsuzaki Hiroyuki (Univ. of Tokyo), Higashi Teruo (Univ. of Tsukuba)
- 28) Digital Atlas of Mongolian Natural Environments. (1) Vegetation, Soil, Ecosystems and Water
-- Saandar Mijiddorj (MONMAP Engineering Service Co., LTD), Sugita Michiaki (Univ. of Tsukuba)
- 29) Some result for spectral reflectance of vegetation-soil associations in Kherlen river basin for under RAISE project.
-- Adyasuren Tsokhio (ECO Asia), Byambakhuu **Ishugaldan (ECO Asia)**, Matsushima Dai (Tohoku Univ.), Ganbaatar Tumur (IMH), Munbat Tsendeekhuu (ECO Asia), **Sugita Michiaki (Univ. of Tsukuba)**

Friendship party 18:30 – 20:30

November 10 (Wednesday)

Session 4 9:30 – 11:10 Chair Gomboluudev, P. (IMH)

- 30) Preliminary report of environmental regulation of xylem sap-flow at the northern faced forest slope
-- Iijima Yoshihiro (IORGC), Ishikawa Mamoru (IORGC), Suzuki Kazuyoshi (IORGC), Battogtokh Dorjgotov (IG), Sharkhuu Natsag (IG), Kadota Tsutomu (IORGC), Ohata Tetsuo (IORGC)
- 31) Thermal balance features in the Terelj and Nalaikh valley, Mongolia
-- Tuvshinjargal Dampil (IG)
- 32) An estimation of areal distribution of evapotranspiration over Khentii region using a combination of satellite data and a heat budget model
-- Matsushima Dai (Tohoku Univ.), Matsuura Yosuke (Tohoku Univ.), Byambakhuu **Ishugaldan (ECO Asia)**, Adyasuren **Tsokhio (ECO Asia)**
- 33) Development of a physically based model for soil water and heat transfer processes in semi-arid cold region
-- Doi Hironori (Nagaoka Univ. Tech.), Lu Minjiao (Nagaoka Univ. Tech.), Kamimera Hideyuki (Nagaoka Univ. Tech.)
- 34) Water balance for a Mongolian steppe and its environmental constraints
-- Li Shenggong (JST), Asanuma Jun (Univ. of Tsukuba), Kotani Ayumi (Univ. of Tsukuba), Davaa Gombo (IMH), Oyunbaatar Dambaravjaa (IMH), Sugita Michiaki (Univ. of Tsukuba)

Coffee Break 11:10 – 11:30

Session 5 11:30 – 12:50 Chair Ohata, T. (IORGC)

- 35) Seasonal dynamics of biomass and carbon dioxide fluxes in a Mongolian grassland
-- Urano Tadaaki (Univ. of Tsukuba), Takehisa Oikawa (Univ. of Tsukuba), Shigeru Mariko (Univ. of Tsukuba), Kawada Kiyokazu (Univ. of Tsukuba)
- 36) The estimation and verification of carbon / water cycle in a Mongo using Sim-CYCLE
-- Lee Piljae (Univ. of Tsukuba), Takehisa Oikawa (Univ. of Tsukuba), Shigeru Mariko (Univ. of Tsukuba), Lee Giljae (Univ. of Tsukuba), Chen Yuxiang (Univ. of Tsukuba)
- 37) Effect of grazing on net primary production in Mongolian grassland ecosystem

- Chen Yuxiang (Univ. of Tsukuba), Takehisa Oikawa (Univ. of Tsukuba), Shigeru Mariko (Univ. of Tsukuba), Lee Giljae (Univ. of Tsukuba), Lee Pilzae (Univ. of Tsukuba)
- 38) Study on extraction of vegetation state using ADEOS-II/GLI data
-- Muramatsu Kanako (Nara Woman's Univ.), Xiong Yan (Nara Woman's Univ.), Ide Saori (Nara Woman's Univ.)

Lunch 12:50 – 13:50

Session 6 13:50 – 15:30 Chair Adyasuren, T. (ECO Asia)

- 39) Cloud frequency in eastern Mongolia and its relation to the orography.
-- Sato Tomonori (JST), Kimura Fujio (Univ. of Tsukuba), Hasegawa Akira (Univ. of Tsukuba)
- 40) Downscaling of precipitation over Mongolia using regional climate model.
-- Kimura Fujio (Univ. of Tsukuba), Sato Tomonori (JST)
- 41) The impact of desertification on Mongolian climate and its numerical study using regional climate model (RegCM3)
-- Gomboluudev Purevjav (IMH), Natsagdorj Luvsan (IMH)
- 42) Climate change impact on *Microus brandii* Radde and *Agriddae* in Mongolia
-- Ganbaatar, T. (IMH), Azzaya Dolgorsuren (IMH)
- 43) ECOASIA/FAO. Mongolian natural resource (land and water) database gateway
-- Adyasuren Tsokhio (ECO Asia)

Closing Address 15:30 – 15:40

Batjargal Zamba. (Ambassador extraordinary and plenipotentiary of Mongolia to Japan)

Business Meetings 16:00-19:00

Information for Paper Presentation:

1) Oral presentation

Presentation time: 20 min/person (speaking: 15 min, discussion: 5 min). A multimedia (LCD) projector and an overhead projector will be available. For those who will use the LCD projector with the Windows power point (ver 2000 or later) should prepare the presentation and bring the file in USB memory card or CD-ROM. The file should be handed to the registration desk. The file will be copied to our PC and the PC will be available for your presentation. For those will use the LCD projector with programs other than power point (ver 2000 or later) and/or Mac should bring both the file and your PC for your presentation.

2) Poster Presentation

Each poster presentation will have a space of 210 (height) x 120 (width) cm. This should allow A0-size poster (84.1 x 118.9 cm) posted in either orientation of portrait or landscape. Poster can be posted during the coffee break time after Session 2. You will have oral one-min introduction time at the beginning of the poster session, so that if necessary you can bring one-page transparency sheet. (LCD projector will not be available for this purpose).

Workshop Place:

Laboratory of Advanced Research A, University of Tsukuba

Tsukuba, Ibaraki 305-8572, Japan

Phone & FAX : +81-29-853-6878 (RAISE Project office)

Access

<http://www.tsukuba.ac.jp/eng/navi/access.html> (English)

<http://www.tsukuba.ac.jp/navi/access.html> (Japanese)

http://www.tsukuba.ac.jp/map/jpn_campus/images/b_01.gif (Japanese map)

Sponsors and Cooperator

JAMSTEC, JST, JAXA, TERC

Notes

ADEOS II: Advanced Earth Observing Satellite II

ECO-Asia: Environmental Education and Research Institute ECO Asia, Mongolia

FRCGC: Frontier Research Center for Global Change

IG: Institute of Geography, Mongolian Academy of Science, Mongolia

IORGC: Institute of Observational Research for Global Change

JAMSTEC: Japan Agency for Marine-Earth Science and Technology

IMH: Institute of Meteorology and Hydrology, Ministry of Nature and Environment, Mongolia

JST: Japan Science and Technology Agency

JAXA: Japan Aerospace Exploration Agency

TERC: Terrestrial Environment Research Center, University of Tsukuba

AMPEX : ADEOS II Mongolian Plateau Experiment for Ground Truth

[<http://home.hiroshima-u.ac.jp/ampex/htm>]

IORGC: Institute of Observational Research for Global Change

[<http://w3.jamstec.go.jp/iorgc/>]

RAISE: The Rangelands Atmosphere-Hydrosphere-Biosphere Interaction Study Experiment in Northeastern Aisa

[<http://erc2.suiri.tsukuba.ac.jp/~raise/new/gaiyou.htm>]