

Newsletter

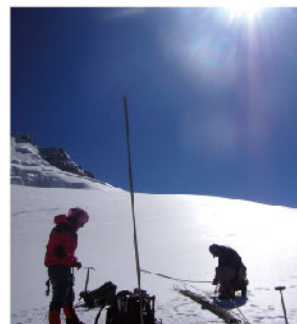
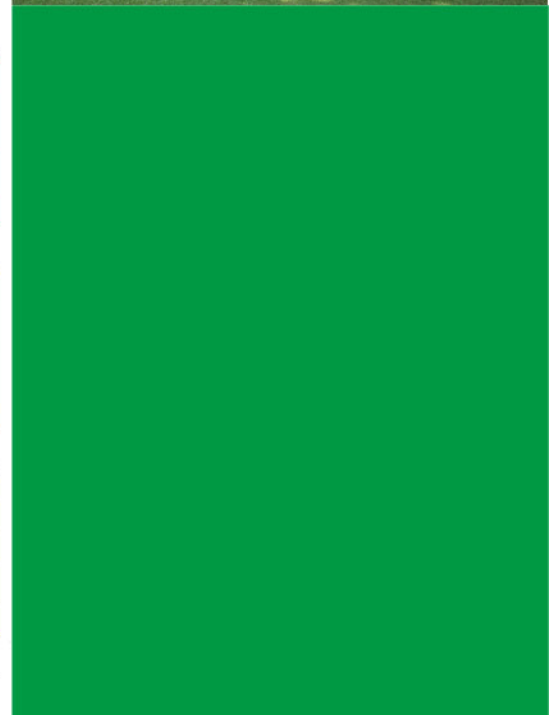
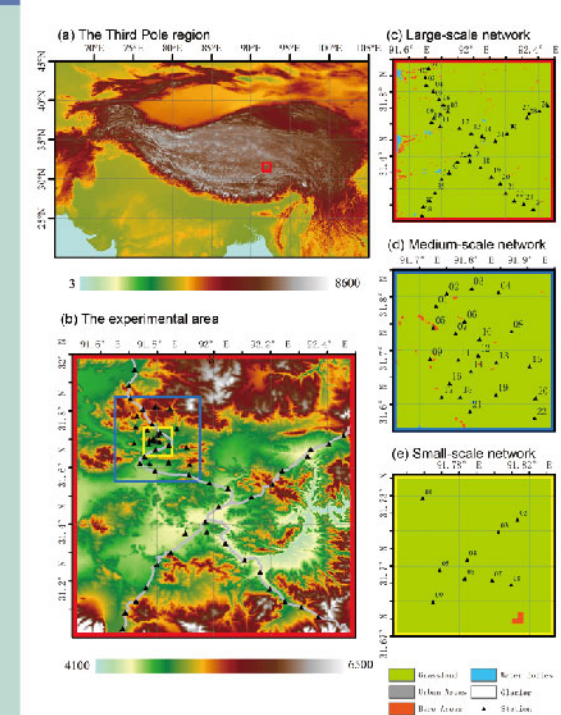
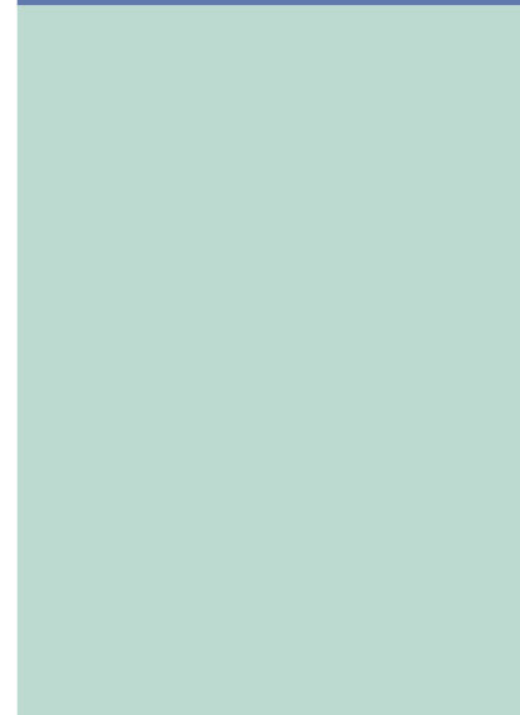
www.itpcas.ac.cn

Newsletter 20

June, 2013



Institute of Tibetan Plateau Research,
Chinese Academy of Sciences



Address:

No. 16 Lincui Road, Chaoyang District,
Beijing 100101, China

Phone: +86-10-84097081

Fax: +86-10-84097079

Web: <http://www.itpcas.ac.cn>

E-mail: itpcas@itpcas.ac.cn



Contents

ITP

Newsletter Editorial Board:

Chief Editor: Tandong Yao
Associate Editor: Yaoming Ma
Responsible Editors: Zhi Liu, Xiaoxin Yang, Meri E. Joswiak, Daniel R. Joswiak

NEWS

ITP Strategic Development Conference Held in Beijing / 1
New members of Academic Committee and Academic Degrees Committee Elected / 1
YAO Tandong reports on Third Pole glacial status to Tibetan Sci-tech Community / 1
ITP joins hands with Tibet Meteorological Bureau in academic research / 2
ITP Scientists drill longest-ever ice core of 142 meters / 2
Science popularization in action at ITP / 2

RESEARCH ACTIVITIES

Meeting for Strategic Pilot Project Held in Beijing / 3
New Research Program Kicked off at ITP / 3
Academician Consultative Meeting for Tibetan Ecological Barrier Held in Beijing / 4
Latest Research Reviewed on the Eighth Annual Conference on Tibetan Plateau Earth Sciences / 4
First-hand soil moisture and temperature data on the Third Pole draws international attention / 4
ITP researchers released preliminary results of the rupture process for Lushan Earthquake / 5
Evidence Found of Lake water seepage in Nam Co, Tibet / 5

INTERNATIONAL COOPERATION

TPE co-chair Lonnie Thompson accepts top award, visits ITP-Beijing / 6
Scientists from Texas A&M University visited ITP / 6
ITP Professor Joins International Journal as Communicating Editor / 6
The 4th Third Pole Environment (TPE) Workshop held in Dehradun, India / 7
TPE held another session in EGU General Assembly / 7
6th China-Nepal joint expedition to Langtang Valley accomplished / 8
MoU signed Between ITP and Myanmar Geosciences Society / 8
Professor from UCLA visits ITP / 8
American scientist introduces research on African lakes at ITP / 8
Australian scientist shares research at ITP / 9

TIBETAN PLATEAU OBSERVATION AND RESEARCH PLATFORM (TORP) ACTIVITIES

Network for systematic monitoring of Alpine region to be established / 9
TPE database construction makes smooth progress / 9



NEWS

► ITP Strategic Development Conference held in Beijing

On February 22-23, 2013, the 2013 Strategic Development Conference of ITP was held in Beijing. Top priorities of the meeting included discussions of CAS's strategic plans for development in the next decade, summarizing ITP's achievements in 2012, promoting reform in research evaluation, advancing international cooperation and laying out the road map for further development in 2013. During this annual staff meeting, ITP further clarified issues in the institute's development, proposed challenges and opportunities and identified direction for 2013.

"We should strive to achieve major scientific and technological breakthroughs and support economic and social development of Tibet through the implementation of Strategic Priority Research Program (B), Tibet Regional Innovation Clusters program, Third Pole Environment program and other major projects," stated ITP director Prof. Yao in his work report. Acknowledging ITP's achievements in previous years, Prof. Yao urged ITP staff to seize the new opportunities to produce better scientific results, attract and cultivate more talented scientists and further promote international cooperation. Yao also introduced the latest developments related to the TPE program and cited it as a successful example of international cooperation.

Following work reports and presentations by ITP leaders, participants engaged in in-depth discussions on topics such as optimal allocation of resources, research platform construction, technical means innovation, the introduction of top talent, innovation and team building, significant achievements output, technology evaluation system, performance evaluation, service to local development, management procedures standardization, and construction of innovation culture.

► New members of Academic Committee and Academic Degrees Committee Elected

On February 21, 2013, elections for Academic Committee and Academic Degrees Committee were held at ITP. Seven new members were elected for the Academic Committee while 19 were elected for the Academic Degrees Committee. Profs. YAO Tandong and MA Yaoming, respectively, were elected chairmen of the two committees.

► YAO Tandong reports Third Pole glacial status to Tibet sci-tech community

CAS member Prof. YAO Tandong delivered an academic report entitled "Possible Influence of Atmospheric Circulation Systems on Glacial Variation in the Third Pole" to the Tibet Meteorological Bureau (TMB) and Tibet Association for Science and Technology on May 24, 2013.

Prof. Yao began the presentation by introducing the overall concept of the "Third Pole" to the audience. He then provided a framework for glacial variation study within the international academic community and went on to detail glacial variation and its heterogeneity as it exists in the Third Pole. Prof. Yao emphasized the interaction of the westerlies and Asian monsoon and their possible influence on heterogeneous glaciers' behaviors.



Prof. Yao also discussed stable water isotope study in China, elaborating on the usefulness of using stable isotopes from ice cores to study paleo-climate as well as modern atmospheric processes and their variations. To illustrate the applications, Prof. Yao referred to the work being done by the Third Pole Environment program.

The report closed with success. Participants expressed great interest in furthering cooperation between the Tibet sci-tech community and ITP.



► ITP joins hands with Tibet Meteorological Bureau in academic research

May 24, 2013, ITP director Prof. YAO Tandong, together with Profs. MA Yaoming and ZHU Liping and Mr. AN Baosheng, was invited to visit the Tibet Meteorological Bureau (TMB) in Lhasa. Mr. WANG Pengxiang, CPC Committee Secretary of the TMB and Ms. Lazhuo, director of the TMB welcomed them and briefed them on the TMB's work in weather and environment study throughout Tibet.

The ITP delegates were also introduced to the TMB Weather Station, Tibetan Plateau Research Institute of Atmospheric Environment (or Tibetan Autonomous Region (TAR) Center for Remote Sensing Application), and TMB Meteorological Service Center.



Prof. Yao signing cooperation agreement with TMB

Both sides agreed to pursue further collaboration revolving around the following three aspects: 1) the sharing of meteorological weather stations and field observation monitoring stations in joint academic research of atmospheric processes and geological hazards monitoring; 2) academic advancement for serving regional sustainable development, and to delivering a scientifically solid assessment of ecosystem and environment of Tibet; and 3) the joint establishment of a platform for meteorological and remote sensing data sharing, thus providing a strong database of reference for academic research.

A Memorandum of Understanding was signed between ITP and TMB to solidify the collaboration in data sharing, joint academic research, young scientist cultivation and laboratory co-construction, with an

ultimate goal of promoting academic research and scientific development for TAR.

► ITP scientists drill longest-ever ice core of 142 meters

A team of scientists led by ITP professor KANG Shichang has successfully obtained three ice cores from a mountain pass near the East Rongbuk glacier of Mt. Qomolangma. The three cores measure 300 meters in total length, one of which being 142 meters. This marks the longest ice core scientists have ever obtained from Mt. Qomolangma. The major objective of the month-long expedition was to obtain ice cores to study climate and environmental changes.

Chinese scientists had previously obtained ice cores from the same location in the late 1990s and early 2000s. "These newly-obtained ice cores, once analyzed by new technologies and methods, will provide more detailed information about climate and environmental changes that have taken place," Prof. Kang said in an interview given to Xinhua News Agency.

► Science popularization in action at ITP

In honor of Public Science Day, on May 19, 2013, ITP opened its doors to roughly 80 members of the community who were interested in learning about Tibetan Plateau research. The themed activity was entitled "Approaching the Tibetan Plateau."

ITP scientists prepared numerous interesting, engaging talks geared at illuminating the remote Tibetan Plateau. Among the highlights was a talk by Prof. ZHU Liping called "Mystical Tibetan Plateau", in which he introduced the mountains and valleys, glaciers and permafrost, lakes and rivers, climate and landscape, and biodiversity of the Tibetan Plateau. Prof. DING Lin also fascinated the crowd with his report "Scientific Expedition to Hol Xil." The report featured his various scientific expeditions to the no-man's zone of the Hol Xil. He elaborated in detail on the activities and scientific significance of those expeditions, painting a vivid and colorful description for the novice-audience. Prof. Ding also screened the newly completed 3-dimensional cartoon video on Tibetan Plateau formation and its influence on regional natural

resources and environment. Participants were also linked up via web with staff at several field stations on the Tibetan Plateau, including the NAMORS, QOMORS and SETORS. During the live, video web-broadcast, the curious guest were given a virtual tour and introduction to in situ observation and monitoring on the Plateau.

Participants expressed great interest in the talks, eliciting a great deal of question-and-answer throughout the day.



A primary school girl asking questions about the Tibetan Plateau.

Science popularization is intended to bridge the gap between the scientific and public realms, making scientific knowledge more accessible to everyone. Activities such as this are conducive to science popularization, encouraging the public to embrace science, to learn more about academic research and promote scientific principles, such as environmental protection, in their daily lives.

RESEARCH ACTIVITIES

► Meeting for Strategic Pilot Project Held in Beijing

The 7th Meeting for the strategic pilot project "Multilayer Interactions on Tibetan Plateau, its Resource and Environmental Implications" was held in Beijing on March 28. The meeting was chaired by FAN Weiming, the then director of the Bureau for Resources and Environment, Chinese Academy of Sciences. Chief scientists Profs. YAO Tandong, WU Fuyuan and directors from the 19 research groups reported on their latest research endeavors. Topics included current scientific issues and their level of

understanding both at home and abroad, solutions (research plans), and evaluation of current capabilities in solving key questions. Based on previous reports, the meeting focused on "Gangdisi arc formation and copper-molybdenum gold mineralization", "Plateau uplift and weathering and its climate effect", "Environmental effect assessment of ecological security barrier construction and advice for optimization." Following the reports, scientists offered additional suggestions for improved project implementation.

► New Research Program launched at ITP

A kick-off meeting for the National Key Basic Research Program "Land weathering, erosion in Western China and their relationship with Tibetan Plateau uplift and global change" was held in Beijing on February 16, 2013. Attendees included officials from the Ministry of Science and Technology and the Chinese Academy of Sciences as well as over 40 scientists from participating institutions including ITP, Institute of Geology and Geophysics (IGG), Institute of Earth Environment, Institute of Geochemistry, Lanzhou University and Tianjin Normal University. ITP director YAO Tandong spearheaded the meeting with chief scientist FANG Xiaomin making a report on behalf of the program team. Introductions by research group directors followed, which led into open discussion. During discussions, academicians AN Zhisheng and QIN Dahe, among others, expressed their regard and approval for the new program, offering well-wishes and suggestions for smooth implementation.



Launching ceremony, Beijing, February 2013

► Academician Consultative Meeting for Tibetan Ecological Barrier Held in Beijing

The 3rd Academician Consultative Meeting for “Impact of climate changes on Tibetan environment and function of the ecological safety barrier and adaptation strategies” was held at the Tibet Hotel in Beijing on February 26, 2013. The program is overseen by the ITP and the China Society on Tibet Plateau (CSTP), with support from the Academic Divisions of the Chinese Academy of Sciences. The meeting was chaired by Academician Prof. SUN Honglie and co-chaired by Academicians WU Guoxiong, FENG Zongwei, ZHENG Du and YAO Tandong. Roughly 20 experts from ITP, the Institute of Geographic Sciences and Natural Resources Research, the Cold and Arid Regions Environmental and Engineering Research Institute, the Institute of Mountain Hazards and Environment, the Research Center for Eco-Environmental Sciences and the Institute of Remote Sensing and Digital Earth (RADI) attended the meeting.

Objectives for the meeting were to review progresses, assign report-drafting duties and to discuss the overall concept for the report. To assess progress, four research groups gave detailed reports on their research “Tibet surface conditions change-related extreme events and their environmental impact assessment and countermeasures”, “Impact of changes of Tibet cryospheric processes on regional water cycle and ecological conditions change and countermeasures”, “Tibet land cover changes in response to climate change and the impact assessment and countermeasures”, “Tibet major ecosystem change and carbon /carbon sink effect assessment and strategies”.

► Latest Research Reviewed at the Eighth Annual Conference on Tibetan Plateau Earth Sciences

The Eighth Annual Conference on Tibetan Plateau Earth Sciences was held on January 20, 2013 at ITP, Beijing. The conference was hosted by the Key Laboratory of Tibetan Environment Changes and Land Surface Processes and CSTP. Attendees included over 350 researchers representing ITP, IGG, Nanjing Institute of Geology and Palaeontology, Guangzhou Institute of Geochemistry, RADI, Institute of

Geology of the Chinese Academy of Geological Sciences, Geological Institute of Mechanics, Institute of Geology of the China Earthquake Administration, Institute of Crustal Dynamics, Peking University, China University of Geosciences (Beijing), Nanjing University, Jilin University and Southwest Jiaotong University.

The conference provided a platform for researchers to share their latest research results while reviewing recent progress in Tibet Plateau research. 39 academic reports covering topics such as structure of the Tibetan Plateau, geophysics, basin evolution, minerals, geochemistry and paleontology, etc. were given. Many different scientific perspectives were shared. Morning reports centered on themes such as collision of India and Eurasia continents, Gandisi uplift mechanisms, deformation process of the current Tibetan Plateau, Kekexili-Songpanganzi Basin Analysis and evolution of Paleo-Tethys, the relation between mineralization and the 3D lithospheric structure of southern Tibet, deformation of east structural knot lithosphere and asthenosphere, and the Third Pole environment program. Special sessions for minerals, geochemistry, paleontology were held in the afternoon.



► First-hand soil moisture and temperature data on the Third Pole draws international attention

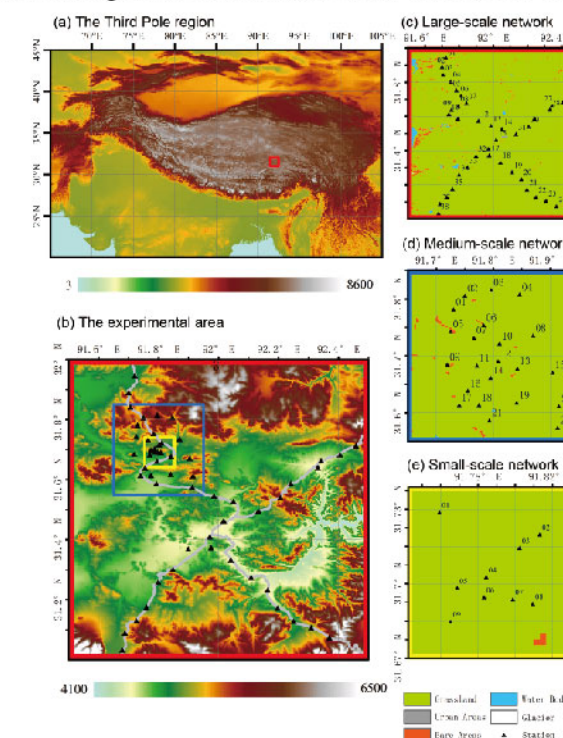
To support remote sensing, land hydrological modeling, and surface process studies, a multi-scale soil moisture and temperature monitoring network was established in 2010 on the central Tibetan Plateau by ITP Prof. YANG Kun and his team. For this effort, they designed and set up a network for monitoring soil moisture and temperature in Nagqu, central Tibet. The network consists of 56 stations with altitudes varying from 4470 m to ~4950 m. To

support the calibration and validation using remote sensing and modeling in the hydro-meteorology, each station was carefully designed to monitor soil humidity and temperature at three spatial scales (1.0, 0.3, 0.1 degree) and four soil depths (0~5, 10, 20, and 40 cm). Additionally, scientists paid special attention to the continuity and high-quality of the data, therefore devoting tremendous effort towards data preservation from soil water intrusion, calibration of soil moisture sensors, and upscaling point measurements.

The experimental area was chosen due to its characteristic low biomass, high soil moisture dynamic range, and typical freeze-thaw cycle. As auxiliary parameters of this network, soil texture and soil organic carbon content are measured at each station to support further studies.

Such a network on the Third Pole champions the highest soil moisture network above sea level in the world. It meets the requirements for evaluating a variety of soil moisture products and for soil moisture scaling analyses. It also directly contributes to the soil-water-ice-air-ecosystem interaction studies on the Third Pole.

Prof. Yang's research was recently published in the Bulletin of the American Meteorological Society (BAMS), with further related publications to follow. (urnals.amrg/doi/abs/10.1175/BA-12-00203.1?af=R).



► ITP researchers released preliminary results of the rupture process for Lushan Earthquake

Shortly after the earthquake in Lushan, Ya'an, Sichuan Province, on April 20, 2013, ITP researcher WANG Weimin and his colleagues in IGG released their prompt analyses of the rupture process. Their analyses was estimated by the finite fault model method using far field body waveform records.

The predicted shakemap is subsequently calculated based on rupture fault model of this earthquake. Results show that the earthquake is an Mw6.7 thrusting event which occurred on the south part of Longmen Shan fault zone with 159 cm largest slip. By the predicted shakemap, the intensity of the epicenter region could reach VII-IX on the Chinese seismic intensity scale. The thrusting mechanism of the Lushan earthquake was similar to that of the Wenchuan earthquake. The earthquake rupture of this event occurred on the southern section of the Longmen Shan fault which revealed an increase in the Coulomb stress caused by the Wenchuan earthquake. This event may have been triggered by the Wenchuan earthquake. On macroscopic view, this earthquake can be considered a delayed strong aftershock of the Wenchuan earthquake.

► Evidence Found of Lake water seepage in Nam Co, Tibet

“Lake water seepage exists in Nam Co, south-central Tibetan Plateau,” according to ITP scientist Dr. ZHOU Shiqiao, “and it contributes to an average outflow of 120-190 m³s⁻¹ or 5-8 mm lake water depth per day.”

The conclusion is drawn from a five-year hydrological observation in the basin of Nam Co, where precipitation, runoff, evaporation and lake level were observed in detail from 2007-2011. Based on the first detailed long-term water balance observations over the Tibetan Lake Namco, Dr. Zhou and colleagues focused on two catchment runoff coefficients at differing catchment scales and two glacial runoff depths. By distinguishing the contributions from glaciated and non-glaciated areas at two additional catchment scales, the surface water inflow to the lake was



quantified, revealing the largest input contributed by the runoff from non-glaciated areas, followed by the contribution from precipitation meltwater inflow from the glaciers. The water input in Nam Co was found to surpass the output of the lake during a 5-month period in 2008, as well as in 2007 and 2009-2011. As there is no surface outflow from the lake, surface water seepage is thus evidenced in the Nam Co region. Dr. Zhou also proposed in the paper that the main pathway for lake water seepage is likely through the sub-surface fault system.

This scientific discovery was reported in a paper recently accepted for publication in the Journal of Hydrology. The paper can be accessed online at <http://www.sciencedirect.com/science/article/pii/S0022169413002394>.

INTERNATIONAL COOPERATION

► TPE co-chair Lonnie Thompson accepts top award, visits ITP-Beijing

In conjunction with his acceptance of the 2012 International Science and Technology Cooperation Award, Dr. Lonnie G. Thompson, Distinguished University Professor from the Ohio State University, member of the National Academy of Sciences, foreign member of the Chinese Academy of Sciences, and TPE Co-chair recently visited ITP-Beijing on January 19, 2013.

The International Scientific and Technological Cooperation Award of the People's Republic of China is a national science and technology award established by the State Council. This year, the award was given to 5 foreign scientists who've made important contributions to Sino-foreign research cooperation.

Following the award ceremony, Thompson graced the 4th Tibetan Plateau Science Forum, held at ITP, with a presentation entitled: Climate Reconstruction from Mountain Glaciers and Ice Cores. In his presentation, Prof. Thompson summarized the history and possible fate of glaciers and ice caps in the Andes, the Himalayas,

Kilimanjaro, Africa and Puncak Jaya, Indonesia (New Guinea). Prof. Thompson also emphasized the urgent need to obtain additional climate records from mountain glaciers over the world. Approximately 100 researchers, administrators and students showed their support for the forum, and of Thompson's renowned research, by attending.

► Scientists from Texas A&M University visited ITP

Upon invitation by Prof. MA Yaoming, March 4, 2013, Chair of the Department of Atmospheric Sciences at Texas Agricultural and Mechanical University (Texas A & M University) Prof. Ping Yang and Prof. Andrew Dessler visited ITP and gave academic reports.

Professor Ping Yang's report was entitled "Basic research in atmospheric physics-fundamentals, applications, and inspiration". He also introduced the Department of Atmospheric Sciences at Texas A & M University, its faculty and research directions. Professor Andrew Dessler's presentation was entitled "Climate change and climate feedbacks: Will feedbacks save us from global warming?". He pointed out that, in global climatic change research, there are some "skeptics" who believe that water vapor and clouds have a strong negative feedback effect on the climate system which will slow down global warming, allowing the climate to stabilize. Prof. Andrew Dessler used satellite observational data and model simulation results to show that the role of water vapor and cloud feedback is positive and does not cause climate stability.

► ITP Professor Joins International Journal as Communicating Editor

Invited by Professor Ulrich E. Lüttge, Prof. LIANG Eryuan will serve as Communicating editor for the international journal *Trees - Structure and Function*. He will be responsible for reviewing manuscripts in tree ring ecology and climatology. The journal was first published in 1987 and is internationally recognized in the area of forestry. It focuses specifically on tree structures, function, physiological and

ecological research and is a major journal in tree ring ecology and climatology.

► The 4th Third Pole Environment (TPE) Workshop held in Dehradun, India

During April 1-3, the 4th Third Pole Environment (TPE) Workshop was held at the Wadia Institute of Himalayan Geology (WIHG) in Dehradun, India. The workshop attracted more than 50 world-renowned scientists from 14 countries, as well as officials from international organizations and governments.

The inaugural function of the workshop was held in the afternoon of April 1, with President of Iceland Ólafur Ragnar Grímsson being the chief guest. In his speech, President Grímsson applauded the work of scientists from the Third Pole region and beyond and said it is "a great honor for Iceland to be a part of this evolving Himalayan cooperation." TPE co-chairs Profs. YAO Tandong and Lonnie Thompson introduced recent TPE activities and progresses while calling for further cooperation among scientists. Minister of Science & Technology and Earth Sciences of the Government of India S. Jaipal Reddy, UNESCO representative Ram Boojh and the director of WIHG Anil K. Gupta also made addresses during the function, all stressing the importance of further promoting TPE research in an effort to confront the challenges posed by global climate change.

Scientific presentations, group and plenary discussions were held April 2-3. 29 scientists from different academic fields presented their latest research results over six themed-sessions entitled "Human-Nature Relationship in the Third Pole Region", "Climate changes in the past and at present in polar region on Earth," "Regional Efforts in TPE Study", "Ecosystem and Geology", as well as "TPE Mass Balance Working Group report" and the TPE Precipitation Working Group report. During plenary discussions, it was agreed that the next TPE event would be an open conference, instead of a workshop, allowing for broader involvement from scientists and policy-makers.

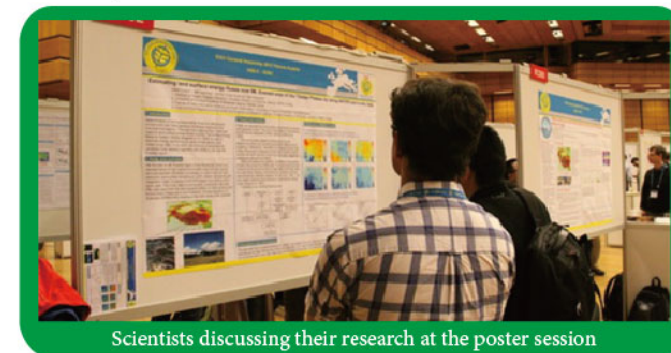
For detailed information of the workshop, please visit the TPE website at <http://www.tpe.ac.cn>.



Group photo of attendees at WIHG

► TPE held another session in EGU General Assembly

On April 11, during the 2013 General Assembly of European Geosciences Union (EGU), the Third Pole Environment (TPE) program hosted a themed session entitled "Observation and Modeling of Hydrometeorological Processes in High Elevation Areas". This is the third time for TPE to host such a session at the EGU general assembly.



Scientists discussing their research at the poster session

The session was comprised of 12 oral presentations and 15 posters highlighting recent achievements in studying land surface processes and environmental changes in the Third Pole region. Scientists from China, France, Italy, Germany, Netherlands, and the U.S.A. were among TPE's presenters. Organizers included ITPCAS Profs. MA Yaoming and ZHANG Fan, Prof. Bob Su of University of Twente, Netherlands, Prof. Antonello Provenzale of Institute of Atmospheric Sciences and Climate, Italy, Dr. Hans-Werner Jacobi of Laboratory of Glaciology and Environmental Geophysics, France, and Dr. Peter van Oevelen of GEWEX.

Tens of thousands of people attended the 2013 EGU General Assembly, giving TPE a wide stage for conducting intensive, extensive academic exchanges on hydrological and environmental research of the Third Pole region.



► 6th China-Nepal joint expedition to Langtang Valley accomplished

Under the auspices of the TPE program, the 6th China-Nepal joint expedition to the Langtang valley was conducted during April 27-May 25, 2013, with an aim to provide data for comparative study of climate and environment at the northern and southern slopes of the Himalayas. The expedition team consisted of 3 ITP researchers and their Nepalese colleagues from Tribhuvan University, ICIMOD and Kathmandu University.

It took the expedition crew four days to get to the Yala glacier moraine. Once there, the researchers acquired the glacial mass balance data using differential GPS and absolute height of the glacier surface using ground penetrating radar. Surface snow and snow pit samples were also collected at the Yala Glacier. Additionally, the operational status of two AWS machines at Kyangjin Gumpa (3900 m a.s.l) and Tarahara (119 m a.s.l), was checked to ensure normal function.

Periodic precipitation and river water samples from Kyangjin Gumpa and Langtang Valley were collected from local residents who were entrusted with the task of data collection over the past year. Meteorological data was downloaded and rain gauges were re-configured for the coming year. The expedition team also collected river water and soil samples en route for further study of water geochemistry.



► MoU signed Between ITP and Myanmar Geosciences Society

A Memorandum of Understanding (MoU) was signed on April 8, 2013 between ITP and Myanmar Geosciences Society (MGS) in Beijing. According to the MoU, ITP will strengthen cooperation with the MGS by jointly

establishing field GPS stations and AWS stations in order to understand tectonic activities and dominant climatic and environmental patterns in Myanmar, additional cooperation is expected through the collaboration of young talent cultivation.

The three delegates from MGS were invited by Prof. YAO Tandong. Signing of the MoU is conducive to further understanding climate and environment in the Third Pole region. It will also allow for deepened study of the tectonic plates in and around the Tibetan Plateau, thus contributing to the holistic understanding of the Tibetan Plateau uplift history.

► Professor from UCLA visits ITP

Invited by Prof. DING Lin, Mark Harrison, professor in the Department of Earth and Space Sciences, UCLA visited ITP on June 7. Internationally-recognized in geochemistry and Cosmochemistry, as well as in geology and tectonics, Prof. Harrison won the CAS Einstein Professorship program this year. While in Beijing, Prof. Harrison gave a presentation at ITP entitled "What Have We Learned About the Himalayan-Tibetan Orogeny From Thermochronology?"

► American scientist introduces research on African lakes at ITP

Invited by ITP Prof. HOU Juzhi, Prof. Robert E. Hecky of Large Lake Observatory, University of Minnesota Duluth, U.S., visited ITP in late May, 2013.

During his visit, Prof. Hecky gave a talk entitled "Global change impacts on the African great lakes: People, land use and climate". Using lake ecological evolution in Lake Victoria, Lake Malawi and Lake Tanganyika in east Africa as an example, he highlighted the impact of cultural eutrophication on total fisheries and lake fish biodiversity. Through the study of limnological sediment cores from Lake Victoria, he attributed the lake eutrophication to the increased input of phosphorous due to human activities, land use and global climate changes.

Prof. Hecky serves as Canadian commissioner for the Great lakes fishery commission, and editor-in-chief of the

Journal of Great Lakes Research. His rich experience in lake ecology in Africa can benefit ITP researchers in studying Tibetan Plateau lakes, both for the paleoclimatology and modern ecosystem/ biodiversity.

► Australian scientist shares research at ITP

On May 23, 2013, Prof. William Lindsay Griffin from the Australian GEMOC ARC National Key Centre of the Macquarie University visited ITP and gave a presentation entitled "Chromitite origin and subduction-A new door opening?" Prof. SHI Rendeng introduced Prof. Griffin and the lecture to the attendees, researchers from ITP, IGG and the Institute of Geology of the Chinese Academy

of Geological Sciences.

The presentation primarily focused on Chromitite origin in the ophiolite belt. Prof. Griffin first introduced current research activities in PGM and the implications on the research of the evolution of the mantle. He then presented the research results of PGM and the proposed chromite genetic model of the GEMOC research center.

Prof. Griffin is a world-renowned geo-chemist and petrologist. His career has contributed greatly to achievements in the fields of petrology and geochemistry of the deep crust and lithospheric mantle, geochemical and dynamic evolution of the crust-mantle system, magma generation and metasomatism in the crust and mantle, isotopic systems and their resetting etc.

TIBETAN PLATEAU OBSERVATION AND RESEARCH PLATFORM (TORP) ACTIVITIES

► Network for systematic monitoring of Alpine region to be established

The alpine regions of China have unique atmospheric, hydrological ecological processes. Long-term continuous monitoring of environmental changes and land surface processes in the alpine regions is important for advancing global change research and also supports local economic and social development. The Chinese Academy of Sciences therefore decided to optimize the integration of existing field stations in alpine regions and establish a network for systematic monitoring of land surface processes and environments in alpine regions (referred to as "alpine Network"). CAS will collaborate with field stations from the China Meteorological Administration, Chinese Academy of Geological Sciences, the State Forestry Administration and other departments and establish an "alpine region field station alliance".

► TPE database construction makes smooth progress

April 24, experts from the National Science & Technology Infrastructure Center visited ITP and inspected TPE's database construction. ITP director Prof. YAO Tandong briefed the visiting experts on the progress of the database construction. CAS member SUN Jiulin, head of the group of experts, approved of ITP's efforts in constructing the database and pointed out the importance of building such a platform to share scientific data. Experts encouraged ITP to further cooperate with relevant institutions, ministries, universities at home as well as partners abroad to collect more observation data that will serve research.