

*IAG Regional Conference on Geomorphology*  
*«Gradualism vs. Catastrophism in Landscape Evolution»*  
*Barnaul (Russia), 2-5 July 2015*

**Report on the IAG Regional Conference  
and Post-conference Field-trip and Intensive Course in the Altai Mountains**

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International Association of Geomorphologists (IAG) Regional Conference was held in Altai State University, Barnaul, Russia in cooperation with Russian Association of Geomorphologists and INQUA. The theme of the conference was “Gradualism vs Catastrophism in Landscape evolution”. The conference was held for 4 days from 2<sup>nd</sup> July 2015 to 4<sup>th</sup> July, 2015. The seminar was planned in 1 plenary session and 9 technical sessions. The time allotment for the talk was as such 40 minute for invited talk, 20 minutes for plenary talk, 20 minutes for keynote talk and 15 minutes for oral talk. During this conference 1 invited talk, 6 plenary talks, 7 keynote talks and 57 oral presentations were delivered. Among 57 oral presentations few presenters were absent. Total 24 posters were selected for the conference.

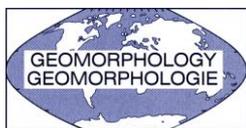
The conference was started with registration on 2<sup>nd</sup> July, followed by conference opening session. During conference opening the participants and dignitaries were addressed by Gennady Baryshnikov, RuAG president and organizing committee chairman; Sergei Zemliukov, Prof. and Rector Alatai State University and Eric Fouache, IAG president. The young geomorphologists (IAG and INQUA grant holders) were introduced by Mauro Soldati (IAG Vice president) and Andrei Panin (RuGA secretary).

The main part of the conference was started with the invited talk delivered by Victor Baker of University of Arizona. This informative and delighted talk covered historical and philosophical prospects of the extreme and catastrophic events. He also delivered keynote on the role of cataclysmic flooding in planetary Landscape evolution. Here he discussed different catastrophic events on moon, mars, venus and other planetary bodies. In plenary session 6 lectures were delivered by Paul Carling, Monique Fort, Juergen Herget, Goro Komatsu, Piotr Migon and Gerald Nanson. Paul Carling spoke about catastrophic deposition of gravel from outbreak floods and Juergen Herget gave presentation on reconstruction of Pleistocene outburst flood in the Altai Mountain. Prof. Monique Fort delivered her lecture on catastrophic mountain wall collapse in Nepal Himalaya. Goro Komatsu talks on Catastrophic flooding, paleolakes and late Quaternary drainage reorganization in northern Eurasia. Prof. Nanson gave a lecture on catastrophism and the principle of least action. Where Piotr Migon presented a case study from Poland about the catastrophism or gradualism evolution of cliffed escarpments in tableland. Each technical session started with one keynote. There were various interesting talks delivered by geomorphologists.

The technical sessions are grouped as follows: Sessions 1 and 2: Geomorphological Hazards and Cataclysmic events, past and present; Session 3: Gradualism and catastrophism in tectonic geomorphology (IAG Tectonic Geomorphology Working Group session); Session 4: Human aspects of geomorphology (joint session of Geomorphosites and Geoarcheology IAG WGs); Sessions 5 and 6: Extreme events and Gradual change in process geomorphology; Sessions 7 and 8: Cenozoic and Quaternary landscape evolution under rock and climate control; Session 9: Geomorphological techniques.

There are few interesting topics presented during the conference. For example: 1) Zhijun Zhao (China) presented a new technique of dating by comparison of cosmogenic burial dating to argon-isotope dating. 2) Prof. Leszek Starkel (Poland) presented about the heritage of permafrost expansions and retreats in C-E European landscape. 3) Marta Della Seta (Italy) explained about the deciphering climatic vs tectonic signature in the Quaternary morpho-evolution of active tectonic areas. And few other talks were also interesting.

The arrangement of the conference was excellent. The schedule is also well planned. By this report I would like to offer my sincere gratitude to the organizing staff for the effort to make this conference a grand success. The discussion between the talk was very informative and healthy. The



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scientific environment during the conference was very encouraging. The discussion in between the break and off conference talk was very helpful. Knowledge and ideas were also shared with the eminent geomorphologists and in return we received very useful suggestions.

One post conference field trip was organized in the Russian Altai. The 7 days intensive field course has been carried out in the Russian Altai Mountain Range in the Chuya, Katun Kuray basin and Biya River valley and Teletskoye Lake. The IFC is led and mentored by P. Carling and J. Herget along with G. Baryshnikov, A. Panin, A. Agatova, G. Adamiec and R. Nepop. The field trip was equipped with well designed field trip guide. The whole trip was well designed and there were three halting points in Artybash, Ongudai and Aktash. And total 17 stops and few extra stops were arranged during field trip. All total 57 person including 46 participant (16 young geomorphologists), 2 tutor, 6 guides and 3 assistant took part in this field. During the field trip we have visited different places like Princes of Ukok museum which is situated in the Grano Altai and few market and other places to get a glimpse of the culture, habitation, heritage history and pride of the people living in that region. During this trip we had also witnessed ethnographic entertaining programme in the Ongudai accomodation which was rarest, memorable and finest moments for us. The arrangement was extraordinary and organizing committee member was very helpful.

The field trip was organized in three parts. First part covered the geomorphological study of the outburst flood in the Biya River basin. Three sites which is crucial to understand the late Quaternary history of the event: 1) B1- The Yogach site is at the dam; 2) B2- Kebezen site is located in the Biya Valley 21 km downstream of the Former dam; and 3) B3- Yaylyu site situated 26 km upstream of the former morain dam at the northern bank of the Teletskoye Lake. The Biya River is interpreted to be experienced outburst flood but sedimentological evidences leads to another view. It is not possible to narrow down our observation by just one visit and detail sedimentological, tectonic, geomorphological study is required.

In the second part of IFC we have covered Middle Katun River Valley. Main geomorphological sedimentological features at this section are associated with two river terraces – High or Inya and low or Saldzhar terrace. In this section huge bars were observed which is mainly composed of few sets of alternate beds of gravel and sands. The presence of clay as matrix in gravel beds and planar structure in the sand beds raised a serious question about the mechanism of deposition and the extension of the megaflood. The first look of the orientation of the gravel may give an idea that the catastrophic event had came from Katun River. The forth stop in this section also infers gradualism rather than catastrophic megaflood of the Chuya Basin.

The last part of the IFC covered the Middle Chuya River Valley, Kuray and Chuya Basins. Due to constrain of the space here I am listing the different stops we have taken for our study very briefly: 1. in first stop we have examined the Early Holocene seismic fall and dammed lake formation at the Sukkhoy Brook. 2. in stop C2 late Pleistocene glacial damming of Chuya at kuetanar tributary valley. 3. In the stop C3, in the lower Chagan-Uzun River evidence for the Late Pleistocene Maximal Glacial advance has been studied. 4. In stop C4 and C5 we have studied the consequence of the 2003 seismic hazard in the Beltir Village and giant landslide in the Taldura valley. 5. In the C6 we have discussed and examined the Kuray dunes which are giant in size about their morphology, genesis and flow direction of flood. 6. In stop C7 we have discussed and examined about the well developed strandline in southern side of the Kuray basin. 7. In stop C8 the Early Holocene Lake in the western part of the Kuray basin is discussed. 8. In stop C9 and C10 the experts discussed about the Chuya spil way upstream from the Chibit town and about the age and mechanism of abandonment of the Old Chuya Valley.

Over all the IFC was very informative and well organized and planned field trip. It enhanced not only our knowledge of this area but also the geomorphological features of mega flood and glacier valley and also gave experience about the seismic hazard. My sincere acknowledgement will go to INQUA and IAG for giving me financial support and the organizing staff of Altai State University for taking the pain of organizing such a successful conference and beautiful field visit.