MONITORING AND EARLY WARNINGS
IN MOUNTAIN SOCIAL-ECOLOGICAL SYSTEMS
Krasnoyarsk – Gorno-Altaisk, Russian Federation
15th – 29thJuly, 2018

Outline

01. Organizers

The School was coorganized by Gorno-Altaisk State University and Siberian Federal University in cooperation with Russian and international partners.

02. School participants

Totally the School gathered 47 participants from Russia, India and EU countries.

SUNRAISE project partners

- *Russian State Hydrometeorological University, Russia*
  - Korobchenkova Ksenia
  - Skorik Yana
  - Bubnova Olga
  - Alexeev Denis
  - Eduard Podgaiskii
  - Ershova Alexandra
- *Siberian Federal University, Russia*
  - Rubleva Marina
  - Pribura Anastasia
  - Sporykhina Tatiana
  - Kondrasheva Yulia
  - Polatarina Tatiana
  - Tarasova Albina
  - Blednova Anna
  - Gette Irina
  - Rodionova Alexandra
  - Shashkova Tatiana
  - Garmash Anastasia
  - Pakharkova Nina
  - Sorokina Galina
  - Viktar Kireyeu
  - Bezkorovainaia Irina
  - Zlotnikova Olesya

Panko Yulia

- *Gorno-Altaisk State University, Russia*
  Erzhanova Nurgul
  Lenskii Artem
  Koroteev Ivan
  Kolesnikov Ivan
  Dvoretskii Rotsislav
  Kireeva Daria
  Iurkova Natalia
  Zhuravleva Olga
  Klimova Oxana
- *Jawaharlal Nehru University, India*
  Kumar Praveen
  Mangalasseril Mohammad Anees
- *Salzburg University, Austria*
  Schmid Astrid
  Proell Petra
  Anderl Tobias Julian
- *Estonian Life Science University, Estonia*
  Valdo Kuusemets
  Kadri Kask
  Kristel Kirsimäe
  Jaak Kliimask
- *NGO Altai-Sayan Mountain Partnership, Russia*
  Tatiana Yashina
- *Erda Research Technology Education, The Netherlands*
  Anton Shkaruba

Participants from other institutions

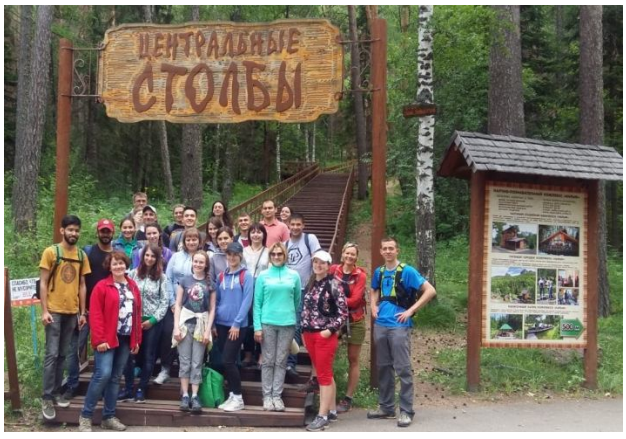
- *Moscow State University, Russia*
  Leonova Glafira
- *Pskov State University, Russia*
  Olga Likhacheva
- *Polytechnic Institute of Santarem, Portugal*
  Rodrigues Silva Samartinho João Paulo
  Martins Jacob Maria do Ceu

03. School objective

The School was designed as an "action school" aimed at the study and solution of real life problems. That is why its program included not only theoretical material, but also practical course in research methodology and group work on various multidisciplinary projects. The discussions were primarily based on the EU experience that was analyzed for its applicability in socio-economic, political, and biophysical contexts of the Altai Republic.

04. School description

The School started in Krasnoyarsk, where the participants had some introductory lectures followed by a research excursion and a wrap-up seminar in Stolby Nature Reserve.



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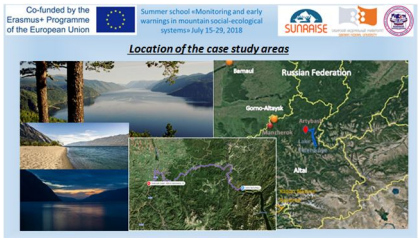
Then, the group moved to the Altai Republic, where the main school activities were held. In the tour camp Manzherok, the school's primary location, European and Russian faculty delivered lectures on key school themes.

In order to facilitate the choice of case study projects, GASU faculty introduced the case study areas and told the students about the socio-economic and ecological problems typical for the Altai Republic as a mountain region.



At the next stage, the participants were divided into three groups in accordance with the location of their case studies: the Lake Teletskoye Group, the Katunskiy Reserve Group, and the Manzherok Group.

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Much attention was also paid to the work with local stakeholders. For example, the Lake Teletskoye Group met with the Head of Artybash Rural Settlement Aleksey Kirshin and members of the local Ecological club. The Katunskiy Reserve Group visited office of the Reserve and the Administration of Ust'Koksa District (administrative subdivision). The Manzherok Group worked closely with the director general of LLC "Solar Energy" Andrey Yalbakov, specialists of the solar power station in Maima, and personnel of Gorno-Altaisk airport weather station.

Meeting with the
Head of Artybash Rural Settlement A. Kirshin

A. Ershova (RSHU) delivered a lecture "Marine Litter" and told the children from the Ecological Club of Lake Teletskoye about plastic waste and micro-plastics in the oceans.

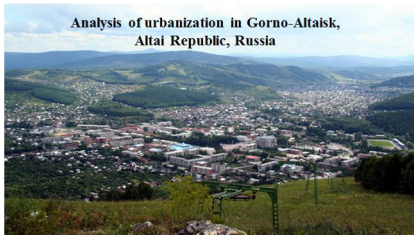
Lecture of A. Yalbakov

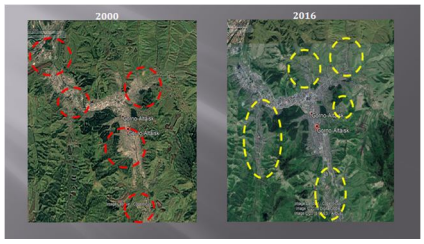
Visit to the Solar power station in Maima

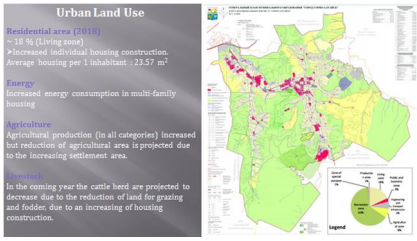
05. Results

After the practical part of the School, all the participants came back to the tour camp Manzherok to present their findings. Finally we got 7 very interesting projects.

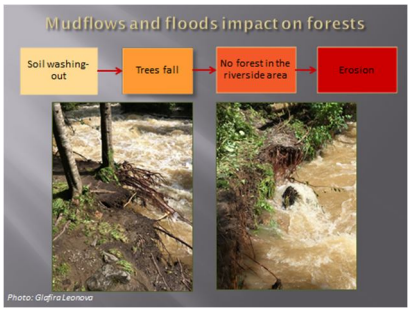
1. Analysis of Urbanization in Gorno-Altaisk, Altai Republic, Russia



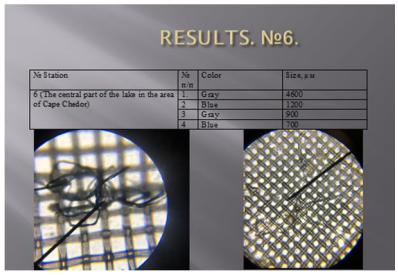




2. The Climate Changes on Lake Teletskoye and Its Landscape and Socio-Economic Consequences

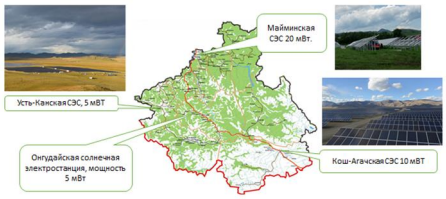


3. Lake Teletskoye: Modern State and New Challenges



4. Problems and Prospects of Tourism Development in Arybash Rural Settlement

5. Alternative Energy Development in High Mountainous Areas



6. Impacts of Eco-Tourism on Katunskiy Biosphere Reserve

7. Dynamics of Mountain Landscapes of the Katunsky Biosphere Reserve and Adjacent Territories