First Circular

The 2nd International Workshop

On

Observations and Understanding of Changes

in High Mountain and Cold Regions

(HiMAC2018)

29-30 October, 2018

Arctic Space Centre, FMI, Sodankylä, Finland

Organizers:

Arctic Space Centre, Finnish Meteorological Institute (FMI)
Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Science (CAS)
Digital Belt and Road Program on High Mountain and Cold Regions (DBAR-HiMAC)

Co-Organizers:

Ad hoc committee for IEEE at the North and South Poles (INSP)
GEO Cold Regions Initiative (GEOCRI)
Pan-Eurasian Experiment (PEEX)
International Society of Digital Earth (ISDE)

We are pleased to announce the 2nd International Workshop on Observations and Understanding of Changes in High Mountain and Cold Regions (HiMAC 2018), to be held on October 29-30, 2018, in Sodankylä, Finland. The workshop will bring together scientists from fields of Earth Observations, Meteorology, Climatology, Ecology and Biogeochemistry to discuss various in situ and satellite observations, data post processing, physical and biological processes that contribute to environmental changes over high mountain and cold regions on Earth. The workshop will contribute to the common understanding on identifying essential variables and their change processes, the role of EO systems, and its relevant big earth data analysis in tracking these for the optimum benefits of diverse science and societal applications.

The workshop also aims to foster connections and collaboration among multidisciplinary scientists and the Earth Observation community.

The HiMAC2018 workshop is organized around three themes:

- **Earth observations and data products for Arctic and high mountain and cold regions**
  - Ongoing initiatives addressing main observational gaps
  - Essential variables for the societal benefit areas over High Mountains and Cold Regions
  - Present capabilities and data products from Earth Observing satellites
- **New Earth Observing satellite systems for tracking variables in the Earth three poles (Arctic, Antarctic, High Asian areas)**
  - Upcoming observation systems/ Planned gap-filling satellite concepts
  - Role of ground-based reference observations in development of geophysical retrieval algorithms and validation
- **The role of variables in tracking climate, ecology and biogeochemical processes in the three poles**
  - Links of cryosphere processes to carbon cycle.
  - Arctic ecology in a changing climate
  - Linkage between Arctic warming and the mid-latitude weather and climate.

The meeting will be held at the Arctic Space Centre of the Finnish Meteorological Institute (http://space.fmi.fi/; www.fmi.fi), located in Sodankylä, Finland. For more information please contact:

Jyri HEILIMO, jyri.heilimo@fmi.fi

Juha LEMMETYINEN, juha.lemmetyinen@fmi.fi;

Yubao QIU, qiuyb@radi.ac.cn

Registration to the workshop will open in August 2018