



## Digital Belt and Road Program (DBAR) and Pan-Eurasian Experiment (PEEX) on-line meeting

**“Coordinated, comprehensive, long-term in situ component of land-atmosphere measurements for complementing the space borne Earth Observation”**

**Meeting Date:** 31 March 2022 (3 h meeting)  
**Meeting time:** 17:00-20:00, Beijing, Beijing time  
12-15 Helsinki time, Helsinki time (5 h time difference)

The Online Meeting of the Digital Belt and Road (DBAR) and Pan-Eurasian Experiment (PEEX) programmes on “*Coordinated, comprehensive, long-term in situ component of land-atmosphere measurements for complementing the space borne Earth Observation*” took place on 31 March 2022 between colleagues from the International Center of Big Data for Sustainable Development Goals (CBAS) / Digital Belt and Road Programme (DBAR) and the University of Helsinki (UHEL) / Institute for Atmospheric and Earth System Research (INAR) (Global Observatory / Pan-Eurasian Experiment (PEEX) Programme).

The meeting aimed to give an overview of CBAS – INAR and DBAR – PEEEX observation activities, e.g introduce the new CBAS Center and Sustainable Development Goals (SDG) for DBAR and to discuss future collaboration about the SDG-13 addressing by in-situ and remote sensing observations from both sides. A series of oral presentation included presentations about the DBAR programme and CBAS research activities; Giga city observations; Arctic SDGs addressing by Big Data; Studies on vegetation of the Earth’s three poles; Big Earth Data for SDG 13 Climate Action; INAR Asian collaboration activities; Arctic iCUPE datasets – products for research, stakeholders and end-users communities; Arctic research, Svalbard collaboration, SMEAR-I Värriö station observations.

These followed by discussions (chaired by Drs. Hanna Lappalainen, INAR and Yubao Qiu, CBAS) on a near future and long-term collaboration CBAS and INAR plans as well as discussions on organization of joint workshops (with invited speakers) with focus on in-situ and remote sensing observations/ data to meet SDGs (with focus on SDG-13 – Climate action) and data needs; workshop on data (4 May 2022) and workshop on SDG-13 (Sep 2022); topics for joint papers on bridging current observation activities, carrying out inter comparison between in-situ and satellite observations, especially for United Nation SDGs, Arctic firstly and connections of stations and experiments.

### Sumup Notes:

- CBAS / DBAR is a UN SDG-driven approach, INAR / PEEEX -activities are Grand Challenges-driven approach. Big data is crucial for both approaches. Space-borne observations (CBAS) vs. in-situ observations (INAR)
- CBAS (former RADI) together with BUCT and Univ. Nanjing - primary collaborators to INAR
- Potential topics for the CBAS and INAR collaboration:
  - Satellite data vs. in situ data inter-comparisons for SDG13,
  - Topical areas for joint publications,
  - Concrete plan or roadmap for DBAR–PEEX collaboration,
  - SMEAR collaboration,
  - HiMAC and its GEO Cold regions – Pilot services initiative.

### Next steps

- 4 May 2022 at 12 Helsinki time: Air-CAS – INAR online Data Workshop (WS) & plans for joint paper
- 7 June 2022 at 12-15 Helsinki time: Global Observatory online meeting
- date TBD (after Data WS) - CBAS – INAR bilateral online meeting
- Sep 2022 (date TBD) - 6th DBAR Conference
- Nov-Dec 2022 (date TBD) - PEEEX-DBAR conference or meeting.