

Agora Metalica
Wednesday 14:00
Grand Challenges in Terrestrial Carbon Research

- Session Convenor (s) Diego Fernandez Prieto, Matthias Drusch, Espen Volden, Dirk Schuettemeyer, Klaus Scipal, Frank Martin Seifert, Stephen Plummer,

- Agenda Points

- ESA activities and plans in EO Terrestrial Carbon research
- preparation for the scientific exploitation of FLEX and BIOMASS

- Session scope/description:

The next launch of BIOMASS and FLEX represent a major opportunity for terrestrial carbon research. The potential synergies offered by the complementary use of FLEX, BIOMASS, S2, S2, S3, SMOS, TerraSAR-X and other non-European missions (e.g., GEDI, NISAR) will open an unique opportunity to address the main knowledge gaps in terrestrial carbon science. The ESA Carbon Science Constellation Initiative aims at preparing the community for the fast exploitation of the synergic capabilities provided by these missions. With this approach ESA aims at fostering new developments in terms of novel joint retrievals, innovative multi-mission products, advance modelling and new scientific results that non a single mission can achieve alone. In this context, this session aims at consulting with the community to establish such an initiative and collect feedback and recommendation that may guide ESA investments in the coming future. The session will present the results of preliminary discussion with the scientific community (e.g., IGARSS 2018) and ESA current activities and plans to address this issue in 2019. The ultimate target of the session is to collect recommendations from the community to launch a dedicated 1MEuro Invitation To Tender in 2019.