

Call for grantee(s) within OpenSense Short-Term Scientific Mission Grant

The working group on Regional Climate and Hydrology at the Institute of Meteorology and Climate Research Atmospheric Environmental Research (IMK-IFU), Campus Alpin, Garmisch-Partenkirchen and the chair of Regional Climate and Hydrology at the Institute of Geography at University of Augsburg welcomes grantees for short term scientific missions (STSMs) related to topics of OpenSense Action. We work on opportunistic sensing of precipitation using commercial microwave links (CML) and, in collaboration with the University of Stuttgart, with personal weather stations (PWS).

We collect data from 4000 CMLs in Germany since 2017, work with open OS datasets (like OpenMRG), and can provide a variety of rain gauge and weather radar products. Our recent research activities consider the large-scale processing and merging of rainfall estimates derived from opportunistic sensors.

Grantees visiting IMK-IFU can contribute to one of the following topics:

- Contribute to the development of the OpenSense sandbox (https://github.com/OpenSenseAction/OPENSENSE_sandbox). This can include, but is not limited to, the optimization of usability, implementation of processing methods and datasets, visualization, etc.
- Contribute to a large-scale intercomparison experiment of processing methods for opportunistic sensors. Our expertise is mainly in CML processing methods but we are also interested in working with PWS or satellite microwave link data.
- Contribute to the dynamic visualization of multi-sensor hydrometeorological data similar to or based on https://github.com/cchwala/cml_data_explorer.
- Additionally, grantees may propose their own ideas fitting in the scope of OpenSense and the expertise of our working group.

Skills in programming and data analysis in R or Python are required. No own data has to be provided, but we are interested in testing our own methods on new datasets

The preferred duration of STSM is upon the applicant. However, the proposal has to meet all the criteria given in First Call for STSM (Short-Term Scientific Mission) – 2022 and also general eligibility criteria given by COST Association for STSM grants.

In case of interest contact Christian Chwala (christian.chwala@kit.edu)

About OPENSENSE (COST Action CA20136). OPENSENSE brings together scientists investigating different opportunistic sensors (e.g. microwave links, citizen science), experts from weather services, and end-users of rainfall products to build a worldwide reference opportunistic sensing community. Further details about the grants can be found here: <https://opensenseaction.eu/grants/mobility-grants/>