

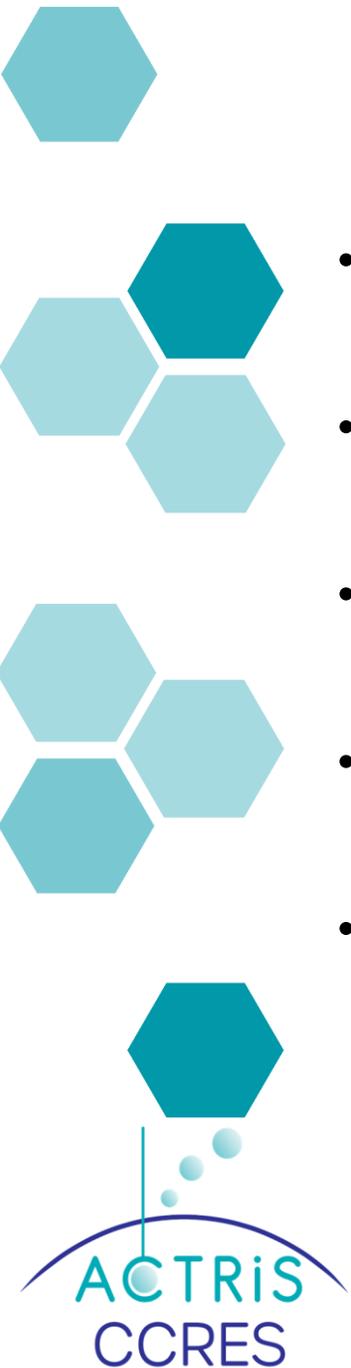
CCRES MWR Central Facility - Status & Updates

- **Python based processing software under development**
 - started with operational test run for Jülich
 - more stations will follow soon
- **In the process of acquiring 2 additional RPG MWRs**
 - low humidity (90 / 183 GHz)
 - replacement for operational MWR (G5 K / V Band)
- **Organized workshop on MWR operation and calibration in Jülich** (Bernhard Pospichal, Tobias Marke, Lukas Pfitzenmaier, Rainer Haseneder-Lind, Tobias Böck)



Discussion Points

- **Implementation of MWR processing software into CloudnetPy**
(processing chain can run using existing retrieval coefficients)
- **Setup of centralized calibration database**
(storage of absolute calibration LOG files)
- **HKD monitoring**
(define variables to be monitored and alert settings)
- **ACTRIS conformity**
(data levels, vocabulary)
- **Data visualization**
(dynamic quicklooks)



Next steps

- **Test and implement processing software; request retrieval coefficients**
- **Start raw data transfer from pilot stations (SIRTA, JOYCE, Lindenberg, ...)**
- **Retrieval development plans / first ideas**
 - Retrieval derivation with ERA5 input / compare to radiosonde based retrievals
 - Include passive channel of cloud radar (89 GHz)
 - Statistical retrieval method (Neural Network including auxiliary information)
 - Tests regarding shifts in center frequency / bandwidth (V-band)
 - Spectral consistency retrieval for off-zenith angles
 - MWR + IRT synergy retrieval for LWP
- **Work on data quality assessment strategy (+ documentation) for labelling**