

Proposal for a STSM

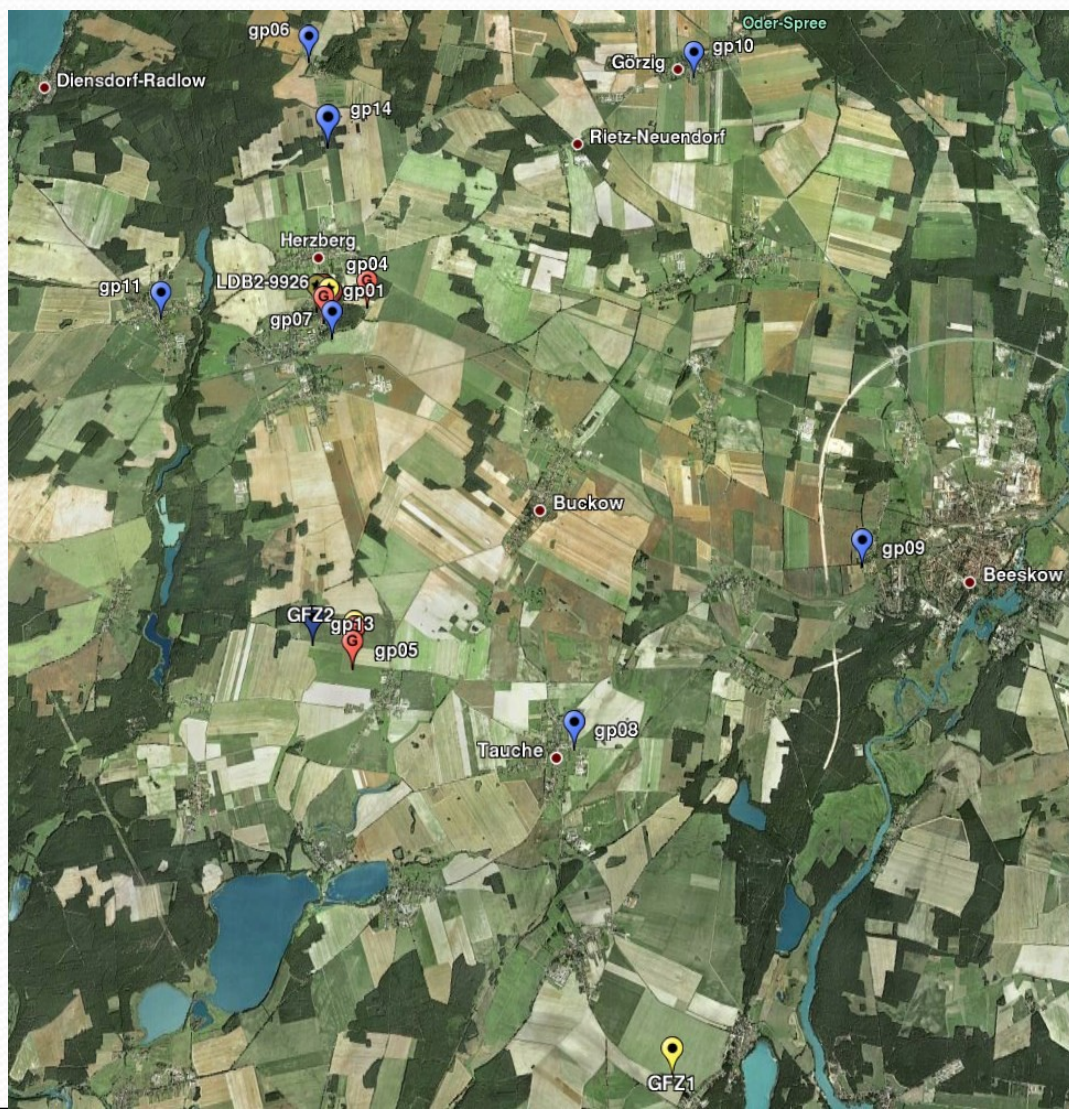
LUAMI & GPS Tomography

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For
GFZ, LaMP and DWD



The LUAMI Experiment

- LUAMI GPS network : total 18 stations (4 dual + 14 mono frequency)
- Set of validation instruments: microwave radiometer and profiler, radiosondes, lidars,



Tomography approaches and challenges

- Network geometry
- Network of mono-frequency receivers

	LaMP	GFZ
Methodology	Matrix inversion	Iterative resolution
Input	ZTD or STD	STD
Initialization	GPS IWV and profiles available (RS, lidar, etc.)	COSMO-DE
Output	Water vapor density field	Refractivity field

Water Vapor Measurement Methods

- Who : Mathieu Reverdy (LaMP)
- Where : GFZ Potsdam
- What : GPS tomography, comparison and analysis of software performances on selected cases
- Data: DWD, Lindenberg, LUAMI campaign
- When : in the April / May 2009 timeframe
- How long: 2 weeks

Thank You for Your Support !

