

# Overview of lead center progress

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# Overview



- **Challenge**
- **Key achievements**
- **Action items**

# The Challenge



**GRUAN will be the reference network for key parameters water vapor and temperature (and many other parameters)**

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**GRUAN will be the reference network for key parameters water vapor and temperature (and many other parameters)**

**but**

**Reference instruments do not exist to meet the need**

# Key achievements

# Key achievements



## 1. LUAMI campaign:

- **Intercomparison between radiosondes, reference sondes, and remote sensing observations**
- **Testbed for lead center in handling inhomogeneous data set**
- **Details in presentation by F. Immler, Wednesday morning**

# Key achievements



## 2. GRUAN Web site:

**WWW.GRUAN.ORG**



**hosted by the German Weather Service**

- **Tool for communication within GRUAN community**
- **Documentation archive for GRUAN**
- **Link to data access (once available)**
  
- **Please bookmark [www.gruan.org](http://www.gruan.org) and navigate from there**

# Action items



# Objectives



## 1. Evaluation of radiation correction for radiosondes

# Objectives



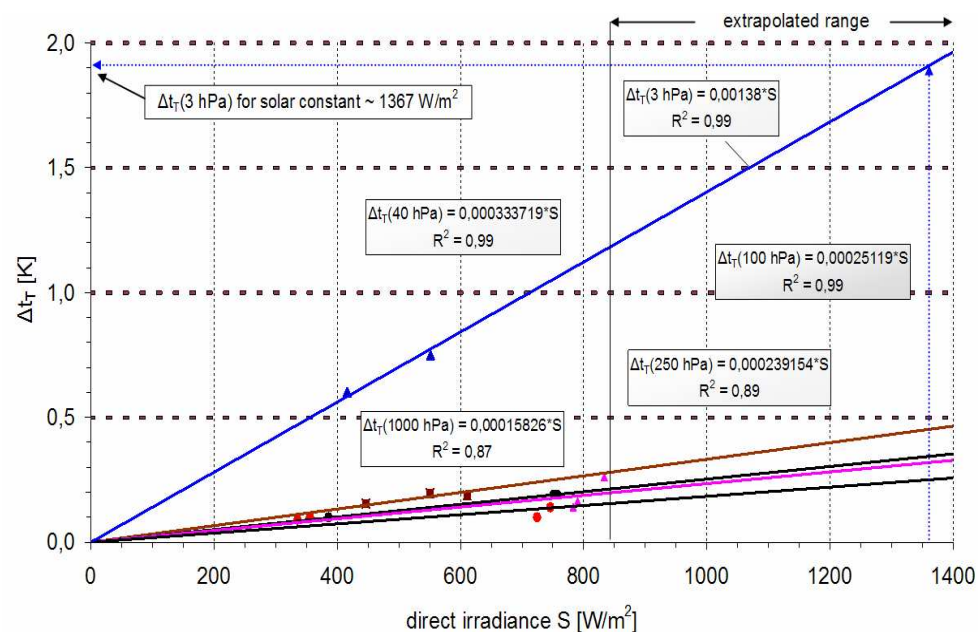
## 1. Evaluation of radiation correction for radiosondes

	<i>Radiation correction documented</i>	<i>Algorithm public</i>	<i>Radiation correction tested</i>
<i>Vaisala RS92</i>	Yes	No	Yes
<i>GRAW DFM-06</i>	No	Yes	No
<i>Meteolabor SRS C34</i>	Yes	No ?	No
<i>Intermet BAT-4G</i>	No	No ?	No

# Objectives



## 1. Evaluation of radiation correction for radiosondes Vaisala RS92



**Tool to quantify radiation correction for radiosondes**

# Objectives



## **3. Strategy for detecting change in the measurement quality at GRUAN site:**

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- **Establish vertically resolved measurement uncertainties**
- **Establish ground check independent of manufacturer**
- **Use vertically resolved uncertainties in intercomparisons**
- **Store raw physical measurements to allow reprocessing**
- **Use expert teams to evaluate measurement parameters**

## **3. Strategy for detecting change in the measurement quality at GRUAN site:**

### **Benefit of vertically resolved measurement uncertainties:**

- **Better insight into the quality of each sensor.**
- **Metric against which to evaluate sensor comparisons**
- **Indication for where critical weaknesses of sensors lie**
- **Metric to compare the performance of different sensors at different stations**
- **Information up to which altitude a quantity can be used (in particular water vapor), depending on application**
- **Documentation of known sources of uncertainty**



# Objectives



- 4. Intercomparison: LUAMI as preparation campaign (talk by Franz Immler Wednesday)**
- 5. Manual draft: Session on Wednesday**
- 7. Site criteria: Deferred to outcome of this meeting**
- 9.-11. Data policy and data dissemination: Session Wednesday afternoon**