## **ICM-4 Japan Meteorological Agency**



# Bringing frostpoint soundings online as GRUAN data products

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### **Frostpoint reference observation**



## Requirements to bring in frostpoint observations:

- ✓ Is traceable to an SI unit or an accepted standard
- ✓ Is documented in accessible literature.
- ✓ Includes complete meta data description
- Is validated (e.g. by intercomparison or redundant observations)
- Provides a comprehensive uncertainty analysis



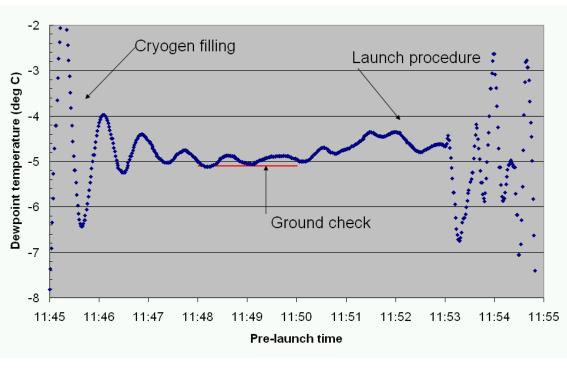


## **Frostpoint reference observation**



## Need for independent ground check:









#### Frostpoint reference observation



#### Open actions:

- Establish comprehensive uncertainty analysis
- Validation under all conditions including lab
- Document uncertainty analysis
- Establish feasible ground check

This will be an iterative process

First working product to completed within 6 months



