



National Physical Laboratory

# GRUAN ICM-9 Measurement Scheduling and Combination Task Team Summary

Tom Gardiner and Fabio Madonna

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# Summary of activities

- Following review by the Science Coordinators of areas of common research interest across the network it was decided to extend the scope of the scheduling task team to cover the issues surrounding measurement combination.
- Aim to develop methodologies to optimally combine measurements of ECVs from multiple instruments to meet all GRUAN objectives including climate trend detection, satellite calibration/validation, and studies of local mesoscale processes and events.
- Provides a chance to refresh the task team membership and bring together the various measurement scheduling and combination activities across the network.
- Task team membership:
  - Tom Gardiner (co-chair), Fabio Madonna (co-chair), Dave Whiteman, Rigel Kivi, Lori Berg, Xavier Calbet Alvarez, Jordis Tradowsky, John Dykema, Alessandro Fasso, Tony Reale, Alexander Haefele, Richard Querel.

# Summary of activities

- Range of activities highlighted in presentation on ‘Developing Best Estimates of the Atmospheric State from Upper Air Measurements’, at International Conference on Metrology for Meteorology and Climate (MMC 2016), linked to CIMO TECO, Madrid, Sept 2016.
- Next step is to develop specific tasks and objectives for the task team.
- These will focus on the characterisation of the atmospheric column above each site through the combination of measurements from multiple instruments, taking into account relevant collocation effects, with a view to:
  - providing the best available estimate of the vertically resolved atmospheric column above the site;
  - ensuring continuous measurements of an atmospheric parameter without temporal gaps;
  - understanding and better quantifying the total uncertainty budget;
  - optimising the operational costs.