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Session 7: Innovations in using observations.

Title: Opportunities for remote sensing in the rapidly evolving LEO Satellite Data Communications constellations

Recent massive expansion in LEO constellations that provide ubiquitous internet services are presenting new opportunities in remote sensing in the transport of data, but also in using the terminal as a sensor in itself. Techniques in tomography are currently applied in meteorological applications such as in radio occultation and rainfall measurements, benefitting from multiple path measurements, but they are often limited by the size or function of the measuring infrastructure. Conceptually new LEO communication systems provide an increase by an order of magnitude in path vectors that can be utilised for viable applications.