

Sustainability of ground-based networks

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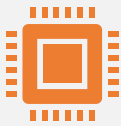
How ESE is it?



Establishing ground-based networks of distributed instruments requires – finding geophysically suitable sites, establishing reliable contacts, creating site-specific solutions, establishing modes of payments etc. *Recreating any of this is non-trivial.*



Sustaining the networks requires regular equipment maintenance – repairs, replacement parts, travel, associated labor.



Ensuring the continuous data availability from the networks requires robust data delivery systems – setting them up and maintaining them to keep things current, paying for servers/cloud-services and efficient software experts

What is needed?

- **Intentional development** of ground-based networks – consistency in supporting operations and maintenance from funding agencies
- **Optimal use of data** from the networks – ground-based networks take continuous data – important for space weather applications. How to make sure ALL data are used?
 - Intentional involvement of students and postdocs
 - Using data science to classify data for scientific research
 - Supporting data and metadata standards development
 - Intentional use of data in model validation and assimilative models