



LOFAR Chilbolton

Derek McKay-Bukowski

d.j.mckay@rl.ac.uk

Space Science & Technology Department
Rutherford Appleton Laboratory

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LOFAR-UK consortium (22 institutes providing £50k each):

Southampton, Liverpool John Moores, Portsmouth, Oxford, Edinburgh, Cambridge, RAL/Chilbolton, Hertfordshire, Durham, Manchester, Glasgow, UCL / MSSL, Cardiff, Kent, Leicester, OU, QMUL, Sheffield, Sussex, Aberystwyth, Birmingham

SEPnet (UK's South-East Physics Network) providing special funding



Two associate members:



Site & facility management (RAL/Chilbolton, STFC):



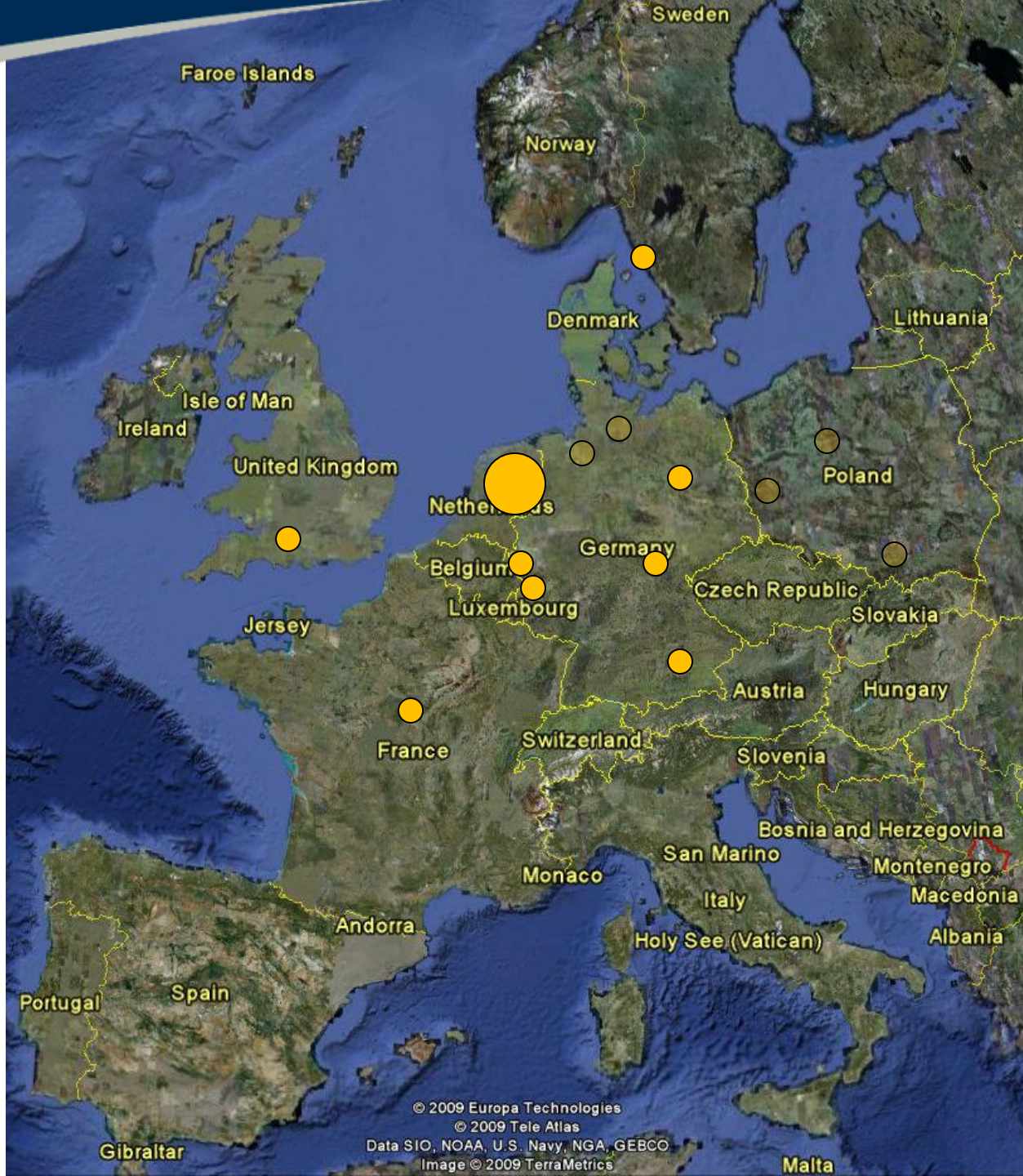
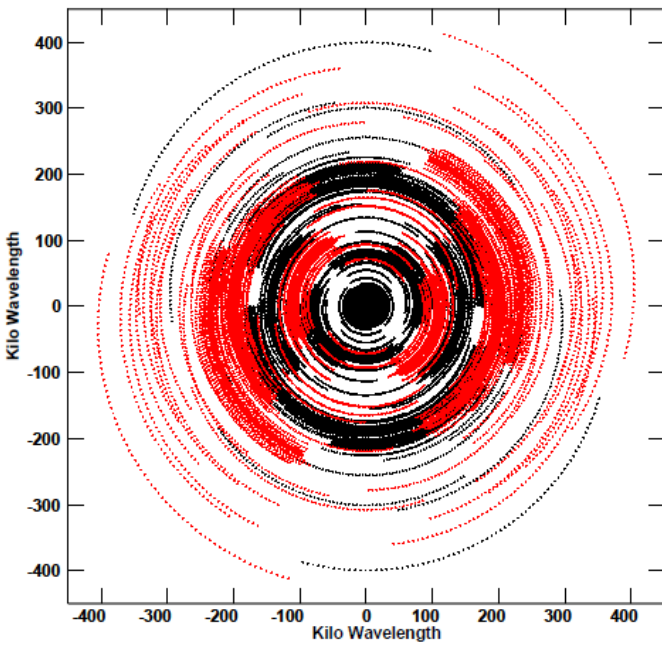
Four sites were considered, but the final decision was made to fund a single LOFAR station, to be placed at the Hampshire site.

LOFAR-IS-UK1 (RS608) – Chilbolton





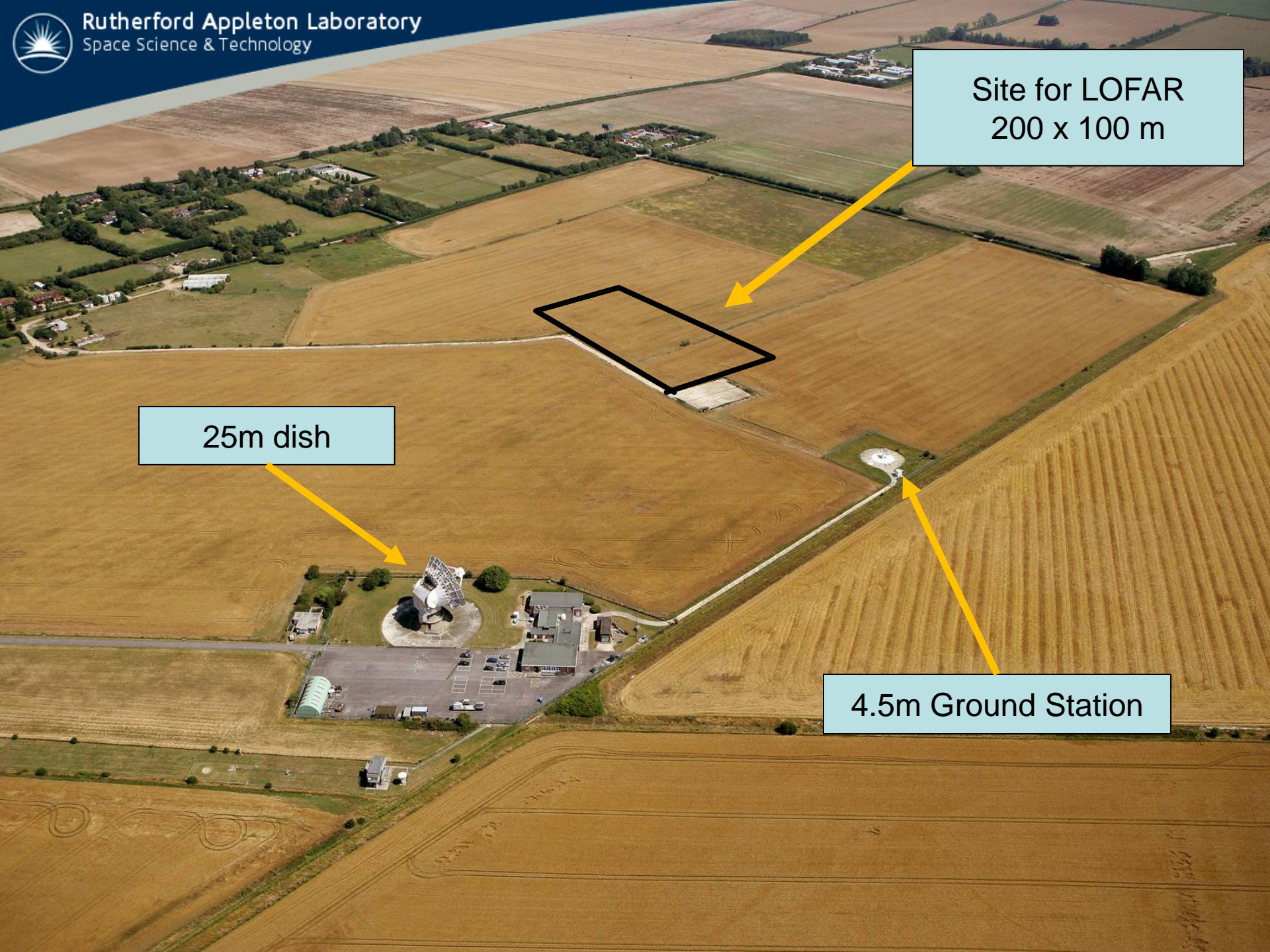
Chilbolton, providing the westernmost station for the LOFAR International Telescope.



Site for LOFAR
200 x 100 m

25m dish

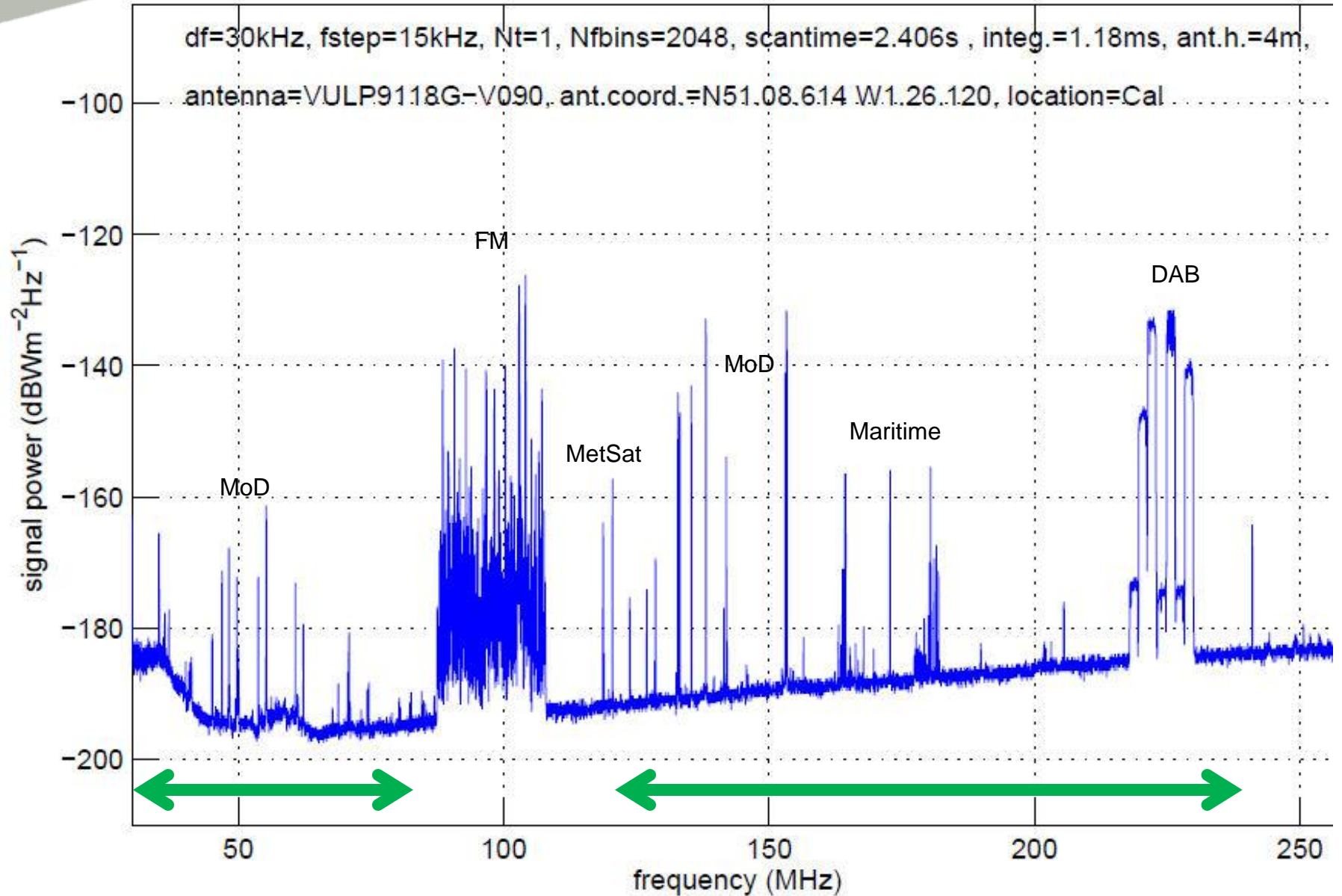
4.5m Ground Station





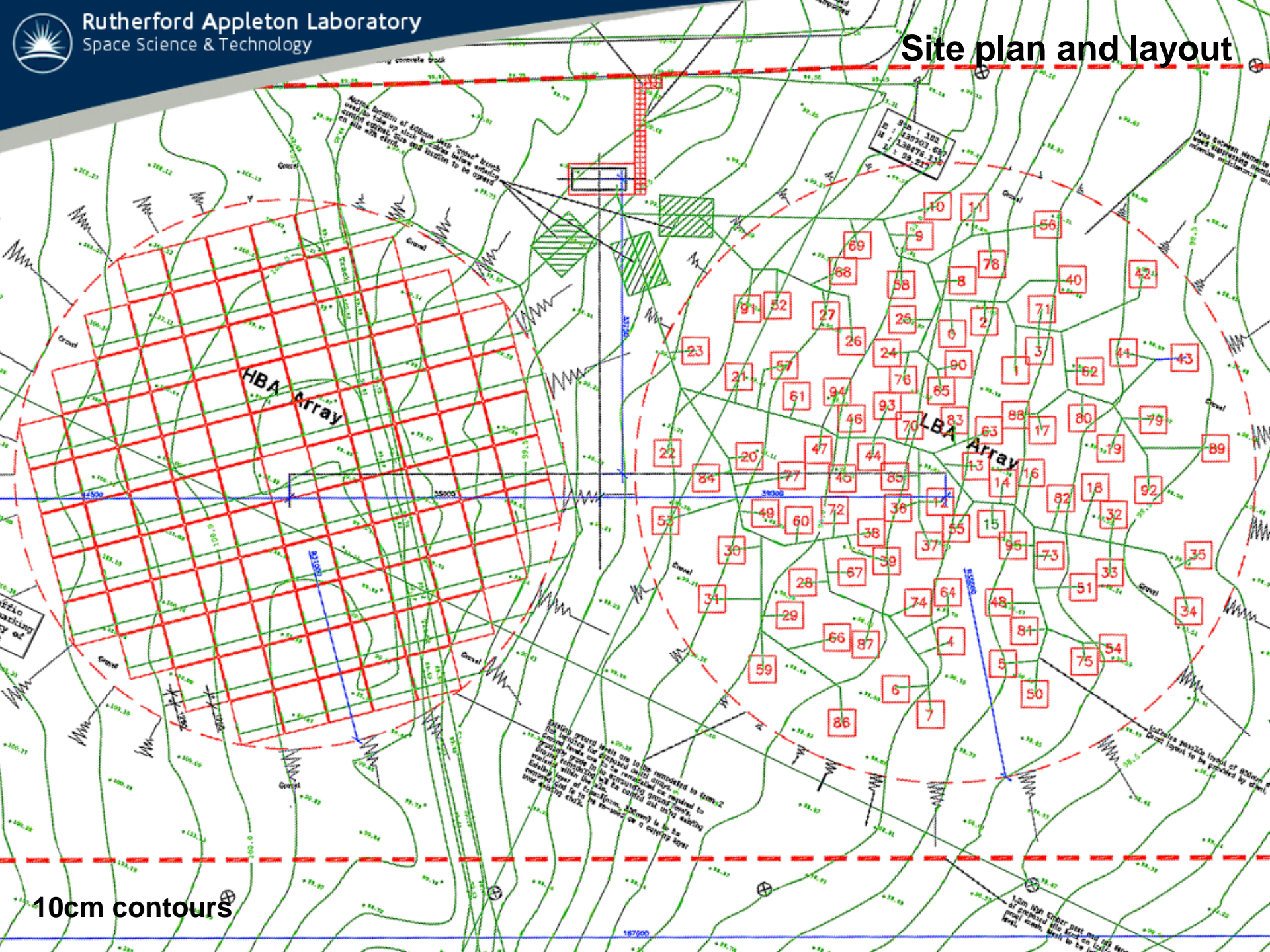
Chilbolton RFI survey (linear)

Chilbolton1 (Beton vlakke), 06-Jul-2007





Site plan and layout

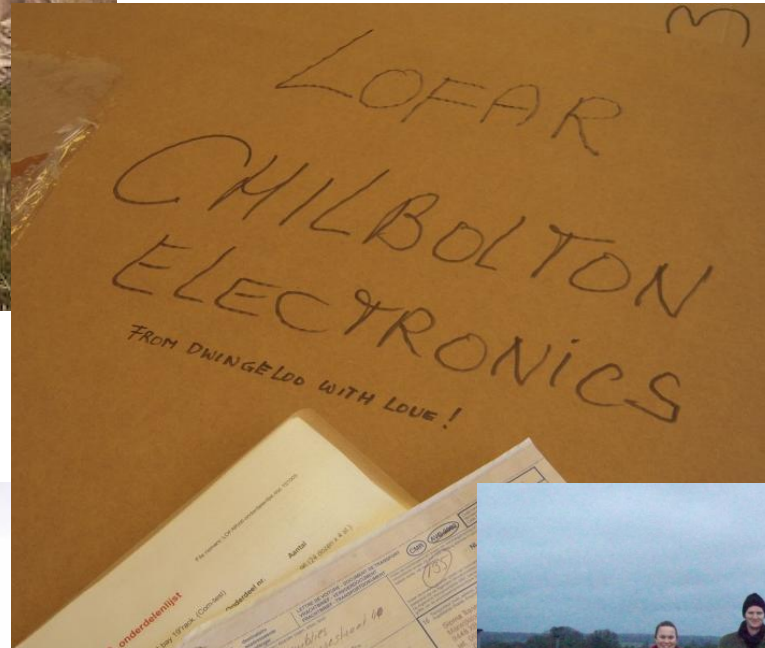


10cm contours

1.0m Non other part and the level of structural steelwork on the ground level.

Things were going well...

site delivery, survey complete, test builds done, and Dwingeloo still loves us...





Delays in planning permission

STFC funding crisis

- Threat of losing 118k in-kind
- Uncertainty over the site

Departure of Owain Davies

Ground-works contract problems

Currently:

- Mike Willis (station manager, 20%)
- Derek McKay (commissioning/operations, 100%, but not yet)
- Harry Smith (planning & QA, 40%)
- Plus others at less than 5% each (for the purposes of the build), e.g.:
- Bob Nichol, Mike Byrne, Adrian Shepherd, Adrian Lewis

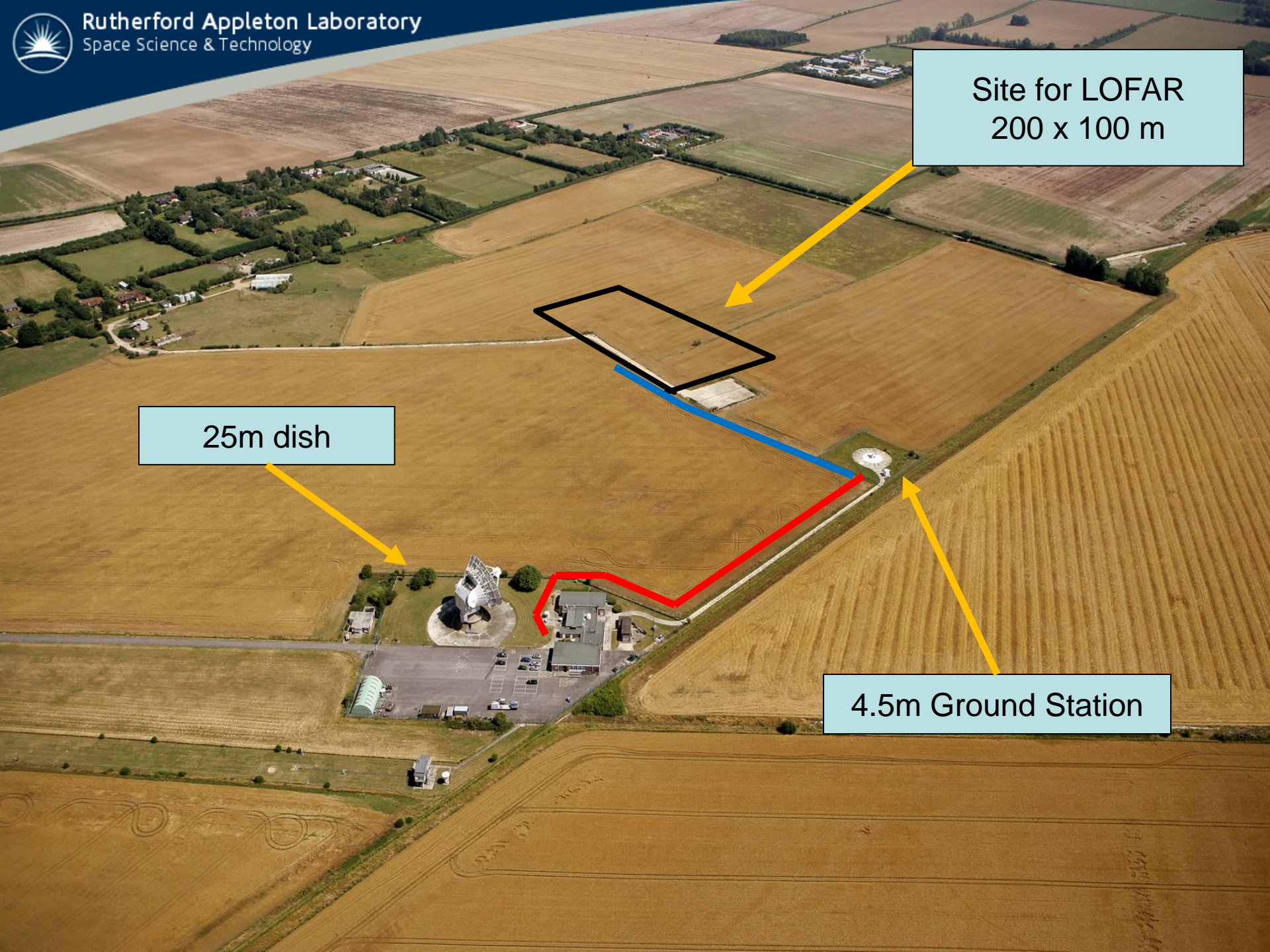
Placed with Kier-Moss, via tender process.



Site for LOFAR
200 x 100 m

25m dish

4.5m Ground Station



Cable trenches completed by RAL / Chilbolton



Kier-Moss begin ground works (approx. 2 months behind schedule)





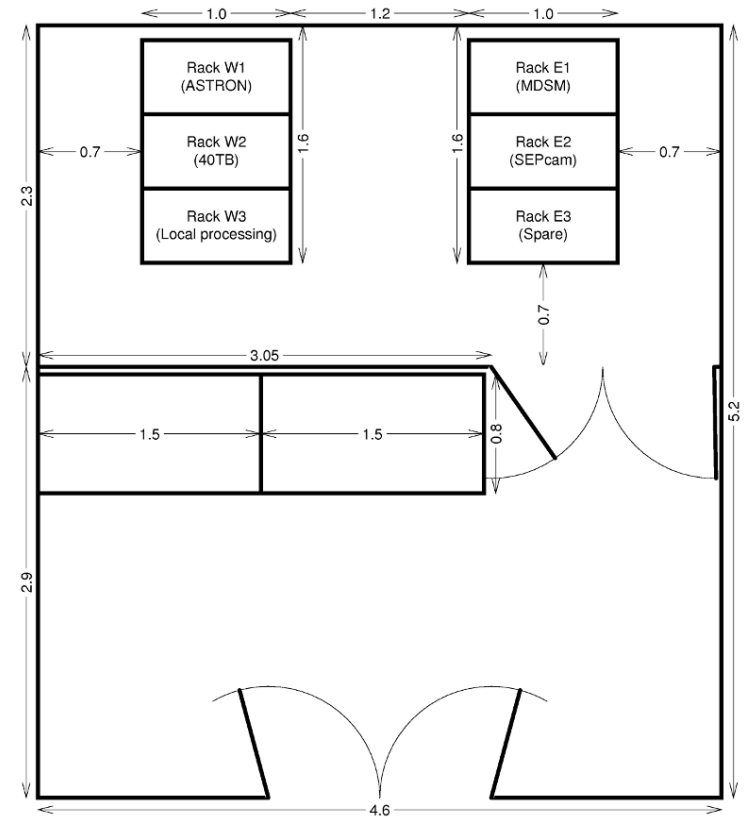
Planning for a control & server room

Interface to 3rd party instrumentation

- SEPCam
- MDSM

HBA / ASTRON commissioning

- Potsdam
- Nançay
- Unterweilenbach-bei-Garching-bei-München
- Chilbolton
- Onsala





Thanks for the site guides!

Anchor pegs

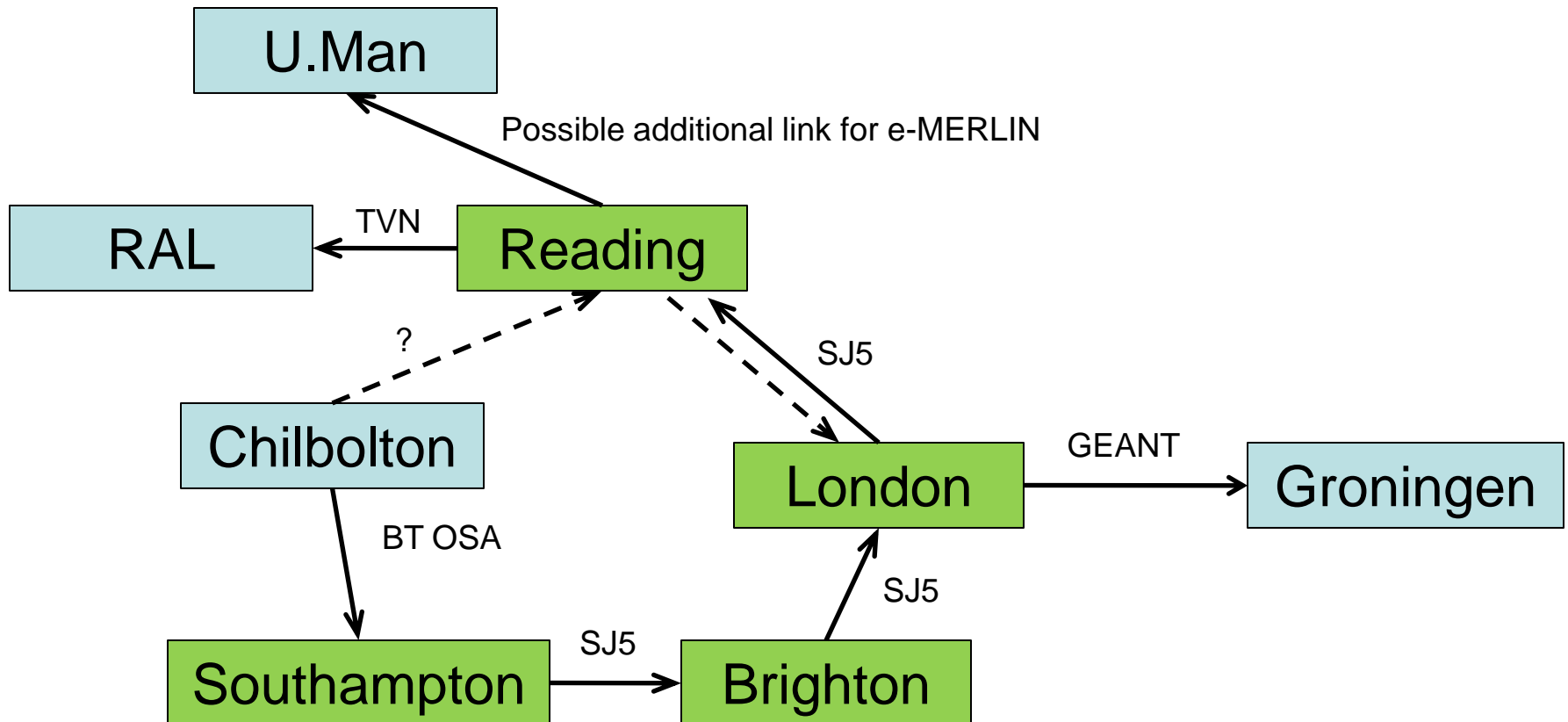
Storage for HBA tiles

Every site has an animal problem... (boar, elk, mice, etc.)

- Overall site fence (anti-personel)
- Local ditch (hare coursing) and fench (rabbits)

Data connection (next...)

4 x 32 MHz beams, 12-bit digital output at 200 MS/s, 3GbE data
BT OSA (Optical Spectrum Access) P2P, up to 70km, 16 x 10 GbE (multiwavelength), LeNSE
Contingency for a link back to RAL Computing Centre (c.f. Jülich)
Possible Chilbolton 25m use for e-MERLIN





Chilbolton LOFAR Radio Telescope 2010-03-22 18:25:24

