# CEOI Showcase
# Innovations in Remote Sensing

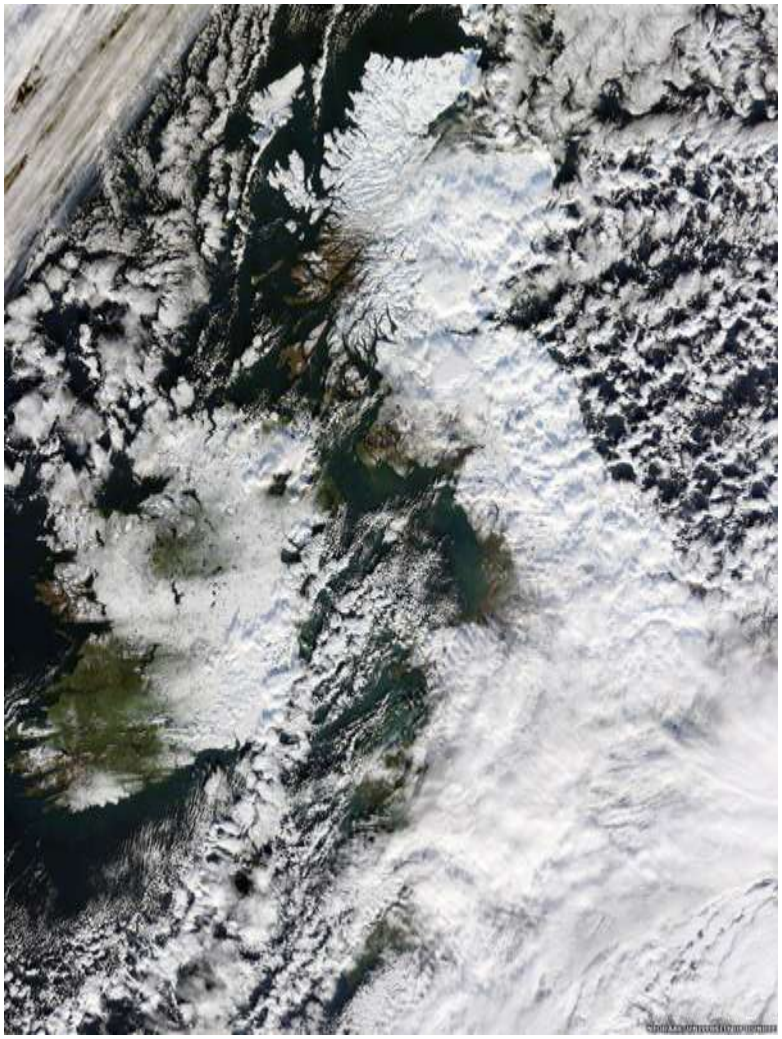
**Mick Johnson**

**CEOI Director**

**23rd January 2013**

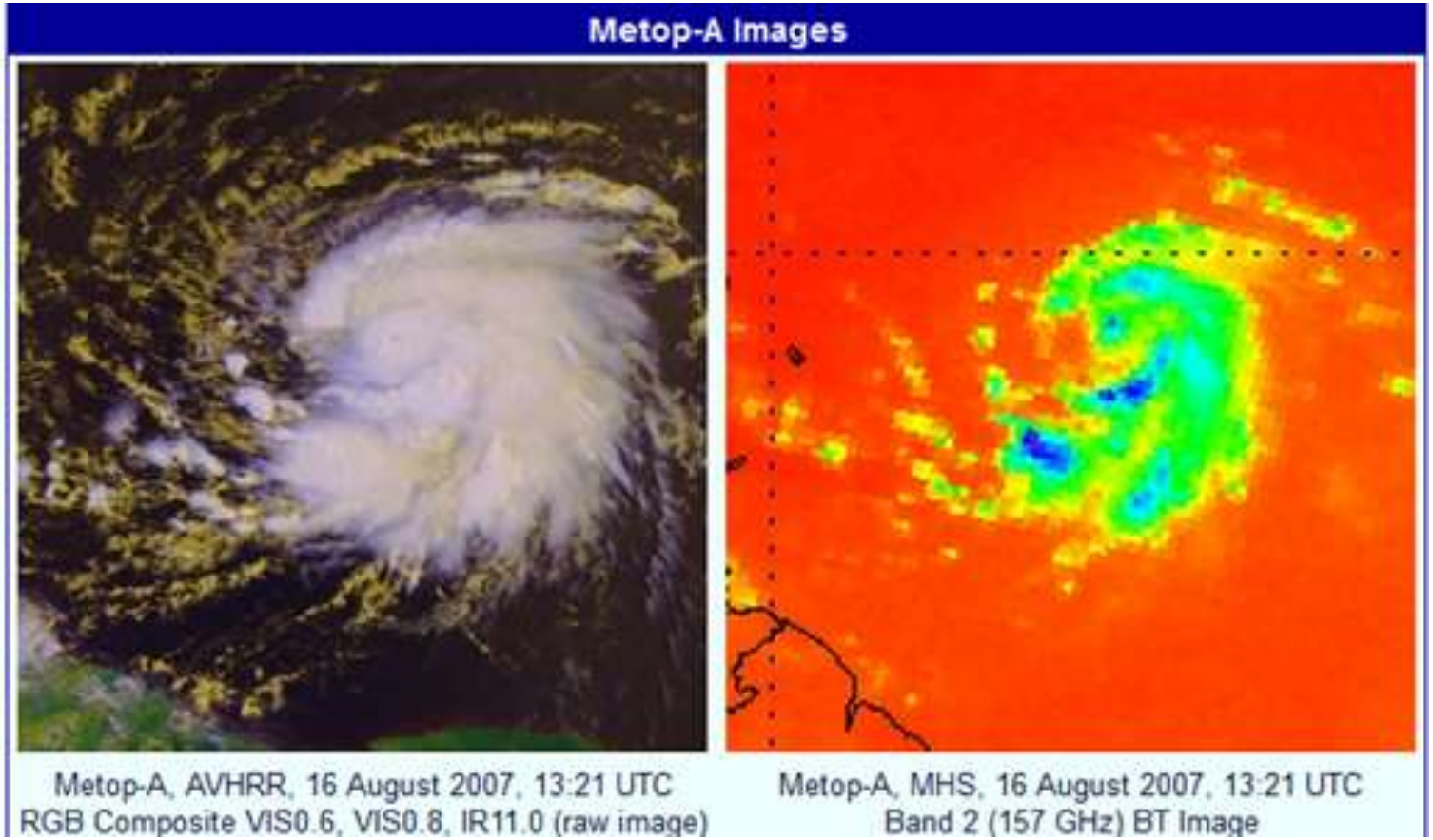
# Welcome

- Objectives for the day
  - Highlight collaborative opportunities emanating from remote sensing technologies in space
  - Outline the particular needs in Earth Observation for spin-in technologies
  - Showcase a number of CEOI projects
- Presentations and exhibition of CEOI projects
- Network opportunities throughout the day



"License, Collaborate, Supply"

# Why Earth Observation from space?

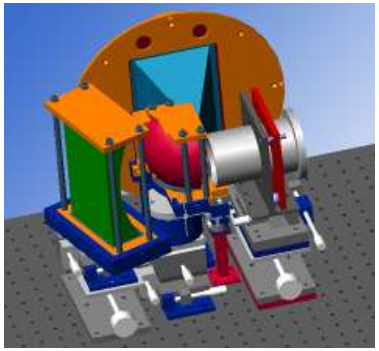



Hurricane Dean (Cat 2)

Courtesy Eumetsat

# What is the CEOI?

- UK Space Agency initiative ‘to boost UK capability and remain at the forefront of EO technology for space’.
  - Launched in 2007
  - Parallel industry investment, total approx £1.5M pa
- Programme focus on:
  - development of new EO instrumentation and technologies
  - horizon scanning and knowledge exchange
  - building highly capable academia/industry partnerships
  - training for next generation scientists and technologists
- Partnership led by Astrium with QinetiQ, STFC/RAL and University of Leicester

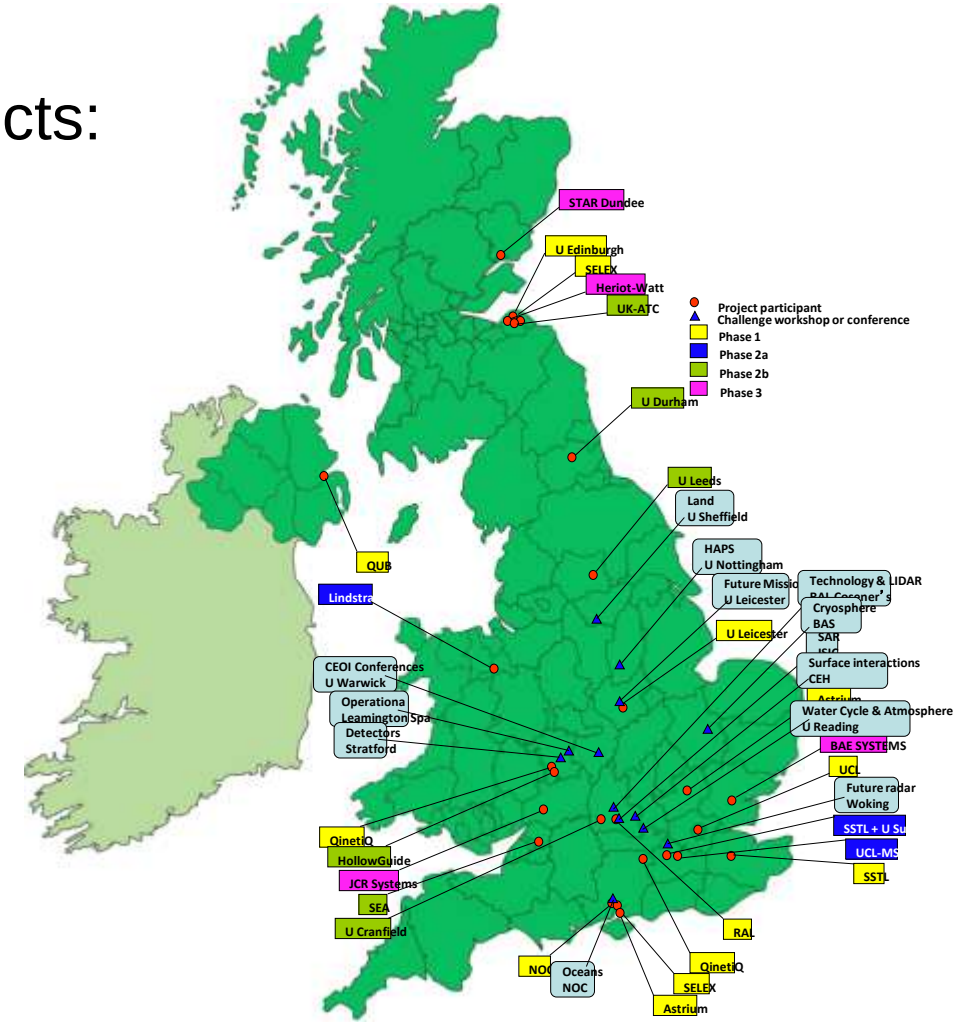


# CEOI Technology Programme

CEOI has funded over 40 projects:

- Phase 1 7 projects
- Phase 2a 8 projects
- Phase 2b 8 projects
- Phase 3a 8 projects
- Phase 3b 12 projects

## Engaging with organisations spread across the UK



# CEOI Meetings and Workshops

| Event | Date | Place |
|---|---|---|
| Instruments for UAVs, HAPs and CubeSats | 10 July 2012 | Nottingham |
| Joint NCEO/CEOI Conference | 17-20 Sep 2012 | Nottingham |
| Microwave Training Workshop | 9 Nov 2012 | RAL, Harwell |
| Calibration Technologies and Techniques | 20 Nov 2012 | RAL, Harwell |
| CEOI Knowledge Exchange Workshop | 23 Jan 2013 | London |
| Future EO Platforms Challenge Workshop | 28 Feb 2013 | Leicester |

# Agenda

| | | |
|---|---|---|
| **10.00** | Welcome and introduction | Mick Johnson, CEOI |
| **10.10** | Overview of Current UK Space Policy, Future Technologies & Satellite Applications Catapult Centre | Tim Just, TSB |
| **10.30** | Outline of Technology Challenges and Needs | Paul Monks, University of Leicester |
| **10.45** | Collaborative opportunities and overview of CEOI funded projects | Mick Johnson, CEOI |
| **11.25** | Remote sensing techniques for Urban Air Quality Monitoring | Roland Leigh, University of Leicester |
| **11.40** | Geostationary SAR Mission | Steve Hobbs, University of Cranfield |
| **11.55** | Lightweight Optics, Bonded Mirror Structures | Peter MacKay, Gooch & Housego |
| **12.10** | Innovative Satellite On-Board Data Handling Techniques | Alex Wishart, Astrium |
| **12.25** | Detectors - NSTP Pathfinder Project | Stuart Cripps, Selex Galileo |
| **12.40** | Fully Integrated Hollow Waveguide Laser Heterodyne Radiometer (non-space applications) | Damien Weidmann, STFC RAL |
| **12.55** | Questions & Lunch | |
| **14.00-16.00** | Technology Showcase and Networking | |