

Notes of the Solid-Earth Geophysics Forum held on 13th May 2013 at the Royal Astronomical Society, Burlington House, Piccadilly

Attendees:

Barry Parsons (Oxford, Chair)
Victor Bense (UEA)
Jenny Collier (Imperial)
Andrew Curtis (Edinburgh)
Huw Davies (Cardiff)
Arwen Deuss (Cambridge)
Richard England (Leicester)
Fausto Ferraccioli (BAS)
Tim Henstock (Southampton)
Stephen Jones (Birmingham)
Mike Kendall (Bristol)
Sheila Peacock (AWE Blacknest)
Christine Peirce (Durham)
Jolyon Reburn (NCEO)
Andreas Rietbrock (Liverpool)
Lars Stixrude (UCL)
Graham Stuart (Leeds)
Vincent Tong (Birkbeck)
Chris Franklin (NERC)
Robert Massey (RAS)
Edmund Nickless (Geological Society)

Apologies received:

Jon Bull (Southampton) – Tim Henstock as representative
Peter Clarke (Newcastle)
Tony Morris (Plymouth)
Duncan Wingham (NERC) – Chris Franklin as representative

Welcome & Introductions

The Chair gave a brief explanation of how the Forum had been established. The RAS had looked at the successful Astronomy Forum, which provides an interface between the astronomy and space science communities and various public bodies, and had worked to set up similar bodies for geophysics.

The RAS President and Executive Secretary consulted the Geological Society and other societies and agreed to create two geophysics forums, as the range of interests was too large to put into one body. The main reasons for setting up the solid-Earth Geophysics Forum are to be pro-active in matters concerning UK SE geophysics and to set up a line of communication with bodies such as NERC. This is particularly timely as the process of agreeing spending for the financial year 2015-16 (and beyond) is now underway and this will have a major impact on NERC and the other research councils. The two geophysics forums can thus have a role in influencing NERC policy in this important area.

Duncan Wingham, the Chief Executive Officer of NERC, was unavailable for the meeting, so Chris Franklin would stand in for him. Chris would give a presentation and there would be an open discussion afterwards.

Members of the Forum introduced themselves.

Responding to the NERC Strategy (Mike Kendall)

Mike Kendall set out the NERC Strategy (not released at the time of the Forum). The research council is as much as possible committed to preserving funding for science but is being restructured. One consequence of this will be cuts in NERC administration.

He commented that scientists in other research disciplines are more pro-active in getting funding for their work. The Solid Earth community are seen as less good at working together than other groups and this doesn't help make their case.

Action: The Earth Science community use bodies like the Forums and become more involved with the RAS & Geological Society and engage with NERC. The community should also create (sub)committees and decide as a group on its funding priorities.

Infrastructure (Richard England)

NERC had organised a facilities and capability infrastructure programme through their Swindon office. From April 2014 the different facilities are to be managed by the NERC Centre deemed most appropriate. The Geophysical equipment facility is composed of 3 nodes; GPS, GPR, Geomagnetism and Laser Scanning (Edinburgh), Seismic Equipment (SEIS-UK, Leicester), Ocean Bottom Instruments (Durham & Southampton). The first two of these are to be managed by BGS and the last one by NOC. Some concern was expressed at the latter assignment as it was felt that marine geophysics was very much part of the solid earth geophysics community and the proposals to use such instrumentation best evaluated along with those for the first two †. Concern was also expressed at the lack of consultation with the academic community about the new arrangements. To mitigate the uncertainty and disruption to facility operations caused by the changes in management arrangements the formal review of the Geophysics facility has been delayed for one year.

† Post-meeting update: NOC and BGS have discussed the two ocean bottom instrument nodes and decided that they will also be managed through BGS along with the other two GEF nodes

All facilities managed through the BGS have had their funding cut by 8%. There is no longer a focussed capital budget for facilities so solid Earth Geophysicists need to make a case as a community if they need equipment and feed this through to the BGS via the Facility steering committee.

Services & Facilities are increasingly expected to cover their costs from NERC grants. At the recent meeting at BGS to discuss the changes in management it had become clear that the current overall rate of recovery was around 20% but the Geophysics facility recovers around 50% of its costs through the grant system and thus were in a reasonably good position.

Any request to use equipment that exceeds 10% of the capacity of the facility is unlikely to be supported unless there is a good NERC funding case for it§. PI's are now being pushed towards the case that you must have NERC funding before you can get access to facility equipment.

§ Post-meeting update: Discussion at NERC Facilities led to the following clarification. NERC would not expect the 10% rule to be strictly applied, and where a Steering Committee thinks there is a justifiable reason to allow projects with more than 10% of the capacity, NERC is happy to take their advice

Action: Needs more discussion between the community and NERC

Contributions to consultations and policy (Robert Massey)

Robert set out some of the ways in which the RAS engages with policymakers, including MPs and civil servants. He invited Forum members to adopt a similar approach to astronomers, who now often invite elected representatives to see their university research group or laboratory. The RAS also uses social media to alert its broad 'community' to various events (see @royalastrosoc).

One key current piece of work is the production of a booklet on the wider impact of geophysics, led by Sue Bowler, editor of A&G. The booklet will collate material from across the geophysics community in the UK, including innovative science, case studies of technology and examples of successful individual careers.

With support from NERC, the Society expects to publish the booklet later in the year and 2-3,000 copies will be sent to different parties within 12 months.

Action: Forum members to forward as many examples of stories highlighting the positive impact of research to Robert Massey and Sue Bowler.

Update from NERC (Chris Franklin)

Chris Franklin gave an update on NERC activity. His presentation can be seen at http://www.ras.org.uk/images/stories/ras_pdfs/geophysics_forums/Solid%20Earth%20Geophysics%20Forum%2011%2005%2013.pdf

He then answered questions:

Q: What will happen to the maintenance of data collections?

A: There will be no change in long term data storage and this will continue to be stored by the centre. Research centres have to make allowances for data curation. There will be a change in data processing but the full details are not clear at present.

Q. How much funding is there for NCEO and COMET?

A. This is not yet clear. COMET will have its own funding line administered through BGS.

Q. There is a shortage of qualified graduates in geophysics. How can NERC help?

A. NERC provides training and projects for postgraduates. Forum members can contact Kirsty Grainger and copy in Chris Franklin on any correspondence.

Q. How can the Forum contribute to helping NERC Strategy develop and be implemented?

A. Provide cases and identify the contributions made by the research involved.

Q. The Geophysical equipment facility was being expected to recover increasingly significantly larger proportions of their costs from research grants, particularly for large equipment loans (using >10%

of Facility capacity). This was impacting on the ability of the community to engage in large multi-national projects and causing an unintended increase in small equipment loans which were inefficient to manage. How can NERC help?

A. Send in a briefing paper to Chris Franklin.

There would be a loss of admin staff at NERC and they would like more help from the science community. Could they be more pro-active and brief NERC more frequently?

The Chair thanked Chris Franklin for his contribution.

Action: A future meeting to start to identify areas of research where a good case for significant funding can be made in response to the NERC strategy.

Any other business

The Chair closed the meeting by thanking the contributors and their level of effort. It is anticipated that the Forums would be held twice a year, perhaps in May & September. It was suggested that John Ludden, the Director of the BGS, should be invited to the next meeting to discuss with the SE Geophysics Forum the question of BGS's management of the geophysical equipment facilities, and engagement between BGS in European infrastructure programmes, e.g. European Plate Observing System (EPOS), and international programmes such as the Global Earthquake Model (GEM)*..

* Note made after the meeting: John Ludden has accepted an invitation to attend the next meeting of the Forum to give a brief presentation on the delivery by BGS of UK National Capability in geophysics, and to discuss engagement between BGS and the academic community.