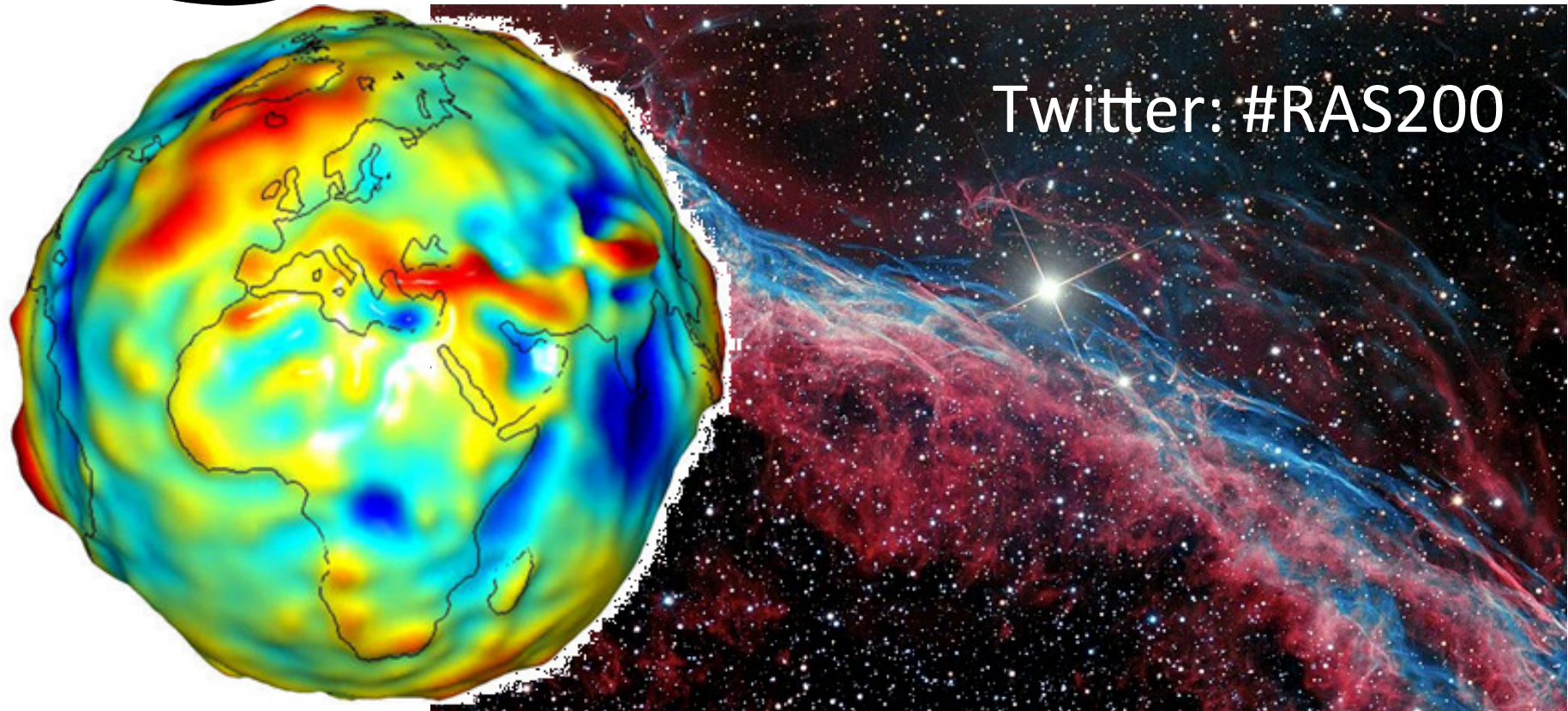


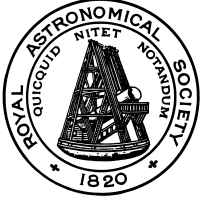
RAS200

Sky & Earth

**Building for the Bicentennial with
Outreach and Engagement**



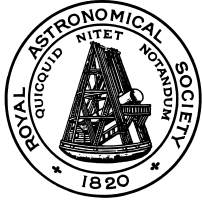
Twitter: #RAS200



RAS200: Sky & Earth

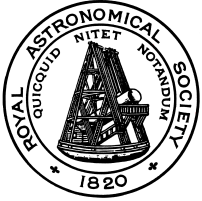
Purpose of today's meeting

- **To familiarise potential partners with RAS200: S&E**
- **To get your comments on our plans**
- **To enable potential partners to network**
- **To hear of any ideas for projects and / or town hall meetings**
- **To discuss the next steps**



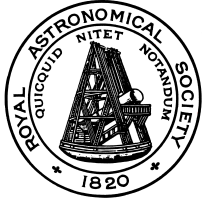
RAS200: Sky & Earth

Prince's Trust Trades Unions Congress Met Office @Bristol
Quilliam Foundation Church of England Woodcraft Folk
National Federation of Women's Institutes Canal & River Trust
National Autistic Society British Association of Planetaria
University of the Third Age Society for Popular Astronomy
Association of Swimming Associations Geological Society
Science & Technology Facilities Council Exscitec Limited
National Schools Observatory British Geophysical Association
Royal Museums Greenwich British Astronomical Association British
Geological Survey Workers' Education Association
Natural Environment Research Council British Sub-Aqua Club
Office of Astronomy for Development Glasgow Science Centre
London & SE Learning Consortium Schools Seismology Project
European Association for Astronomy Education 1001 Inventions
Sky@Night Federation of Astronomical Societies Rotary GB&I
British Science Association Space Connections Zooniverse
Association for Science and Discovery Centres Astronomy KnowHow



RAS200: Sky & Earth

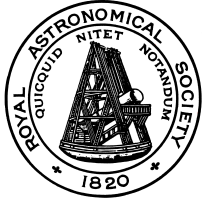
- **Major investment of £1 million from RAS reserves to outreach and engagement projects**
- **Grass roots projects that extend the reach and appeal of the Society into new areas of society**
- **Legacy of embedding astronomy and geophysics that will ensure our sciences retain their appeal**
- **Inspire young people and old alike**
- **Set the RAS on course for the next 200 years as an outward looking society.**



RAS200: Sky & Earth

Steering Group

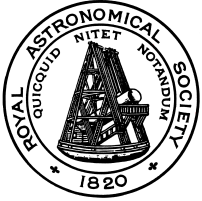
- **Councillors Steve Miller (Chair), Helen Fraser and Charlie Barclay**
- **Vice Presidents Barry Parsons and Andrew Norton**
- **Astronomy Secretary Mandy Bailey**
- ***Sky at Night* presenter Maggie Aderin-Pocock**
- **Executive Secretary Pamela Mortimer and Deputy Executive Secretary Robert Massey**



RAS200: Sky & Earth

Timetable 2014

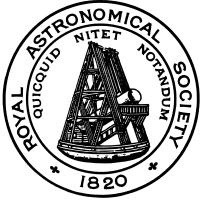
- **May 9, 2014: Official launch of *Astonishing Astronomy and Glorious Geophysics***
- **May 29, 2014: name change to *RAS200: Sky & Earth***
- **May – July, 2014: Targetted consultation of wider astronomy and geophysics communities**
- **July 16, 2014: “Stakeholders meeting” to further develop the overall shape of the project**
- **July – August 2014: Further dissemination**
- **Autumn 2014: Town Hall meetings in key locations.**
- **Autumn 2014: Call for short proposals “Letters of Intent” from consortia**



RAS200: Sky & Earth

Timetable 2015-16

- **Early 2015: ~10 consortia selected to submit full bid**
- **Spring 2015: Selection of ~5 projects for first tranche of funding**
- **Summer 2015: Further dissemination**
- **Autumn 2015: Town Hall meetings in key locations.**
- **Autumn 2015: Second call for short proposals “Letters of Intent” from consortia**
- **Early 2016: ~10 consortia selected to submit full bid**
- **Spring 2016: Selection of ~5 projects for second tranche of funding**

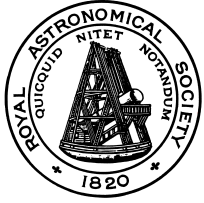


RAS200: Sky & Earth

Criteria for projects (not exclusive)

Five year projects – community commitment

- Long term legacy, high potential for ‘mainstreaming’ - endurance beyond bicentennial
- Engagement with diverse audiences
- Partnership with organisations that represent “new” communities to RAS
- Leveraging additional external sponsorship
- Benefits to RAS
- Plan for evaluation of the outcomes



RAS200: Sky & Earth

Example projects:



Beyond the Stars : Why Astronomy Matters



Pamela Mortimer

Beyond the Stars :

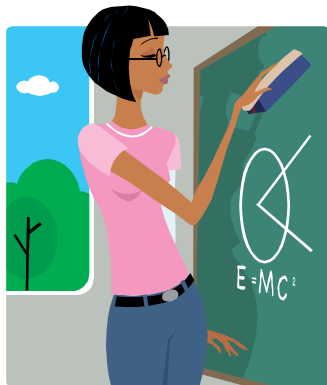
Why Astronomy Matters

- What has Astronomy ever done for us?
- Research
- Applications
- Careers in the Modern World

- Thoroughly recommend, copies at the back of the room

'Astronomy can assist difference'

- Diversity agenda (CDAG and EOD officer)
- Diversity embedded in our outreach and education agenda
- Understanding, discussion and dialogue in diverse sections of the community



Astonishing Astronomy

- Stimulus to engage and improve the learning environment for children with lifelong developmental disabilities
- Encourage them to enjoy and partake in science

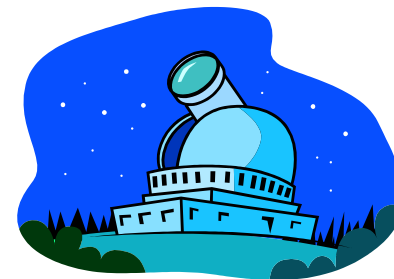
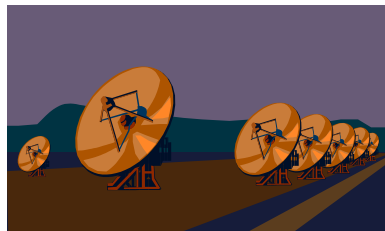
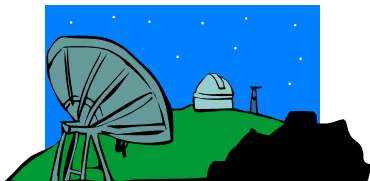


Improve specialist education

- Mainstream schools
- Special schools
- Specialist units attached to mainstream schools
- Enrichment curriculum

Enrichment programmes

- Workshops
- Visits to telescope sites
- Star watching events
- Etc etc – brainstorm -



Benefits :

- * more interesting school life
- * advance educationally
- * opportunity for a range of careers
- * celebrate difference



- * Altruism
- * Target and nourish the Herschel of the future
- * Encourage talented individuals into science and astronomy careers



Partnership

- Scope projects
- Generate educational/outreach tools
- Secure volunteer/Scientist/SME/Teacher time to implement enrichment activities

The music of the stars: Astronomy in the field



Andrew Norton

The music of the stars: Astronomy in the field

- Hundreds of outdoor music festivals every year in the UK
- Every style of music: Classical, Dance, Jazz, Folk, Metal, Pop, Rock, Country & Western
- From a few hundred people to almost 200,000 (e.g. Glastonbury)
- Mostly over the summer (June/July/August/September)

The music of the stars: Astronomy in the field

- Many music festivals are attended by predominantly young people (14 – 24)
- Target audience for inspiring an interest in Astronomy
- Attendees are generally on-site, camping over the entire weekend, and available to participate in 'stargazing' once the music acts have finished for the night!

The music of the stars: Astronomy in the field

- Suggestion:
 - Equip a van with portable astronomy kit (telescopes, binoculars, inflatable planetarium, solar scopes, solar projectors, meteorite samples, etc.)
 - Staff it with young people from local astronomy societies / university groups.
 - Tour around 20 (?) music festivals with a weekend at each = 40 evenings of activity



The music of the stars: Astronomy in the field

- Who might run such a project?
- Likely collaboration between youth group / music festival organiser / landowner of festival site ?
- Incentive to participate and run the event could be free entry to the festival in question, subject to agreement by the Festival organizers!?
- Would likely need an administrator / project manager to coordinate bookings, arrange access, provide logistical support...

“Star Splash”

A potential “idea” for a SKY & EARTH
Project

Helen Fraser

Exciting Families
Engaging 'non-traditional'
audience
Broad Applicability

- AIM = take something people already do & give it a STEM twist – using space & astronomy as hook
- AIM = take something that people already have an interest in and introduce them to a new experience via things they know / enjoy

Sense of Adventure

(regardless of age, ethnicity, ability)



Links to “Current” Events



- Major Tim Peake’s flight & stay on ISS (2015 & ?? 2017)
- Observational satellite launches (such as JWST in 2018)
- Planetary Transits or alignments (Mars Proximity 2016 / 2020)



Astronaut Skills



- Scuba Diving & Weightlessness (gravity)
- Buoyancy
- Fitness
- Why explore space?



Planet Splash Fun



- Planet Zorbing
- Planet Inflatables



Pool-Cinema I

- Themed Nights
- Simple Floats
- “spa” ships



Pool-Space Cinema II



- Classic vs. Recent Release
- Link to science (space exploration, planetary protection, astronaut safety & risk, life in the universe)



“Poolarium”

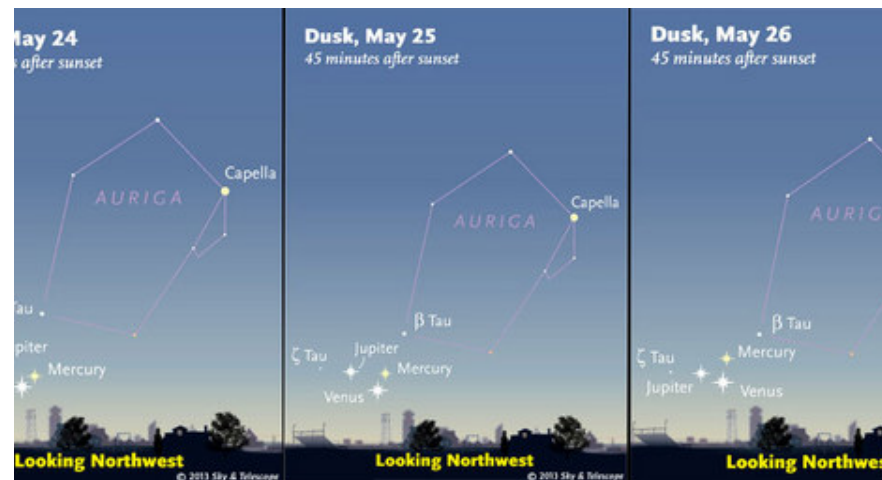


IMAX / 3D or 2D /
Planetarium releases



Pool'serving'

- Link to local astronomy groups – observing in pool grounds after in pool events (winter 4pm >)
- Link to pool café – café-scientifique type local academic / university talks or “ask the scientist”



“Star Splash”

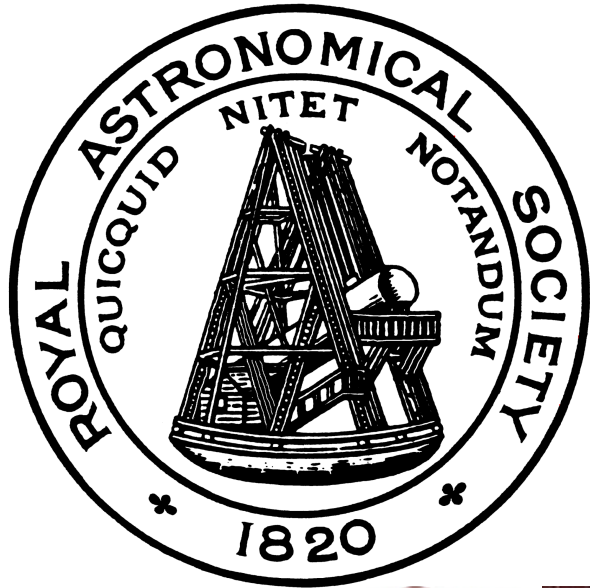
- Offers diversity of events – a pilot in one place need not include all elements, but can be molded to a country wide programme – ethnic / disability consideration
- Reaches a non traditional STEM audience – changes science literacy of all involved
- Utilises health and fitness - cross-over effect between STEM and lifestyle
- Entertaining and fun “something different”, multi-sensory experience
- Learning opportunity – in astronomy but also basic science concepts – engages amateur & professional astronomers, requires input from local planetaria . Science Centre's, councils (education), health & fitness providers, adventure sports

“Star Splash” – Open ?

- Involvement of voluntary groups – keep costs down
- Costs? Entrance fee? “free swim” model of many deprived areas?
- What is included in price – what is an extra?
- Where could matching funding come from?
- What is the benefit to other stakeholders?
- How to maintain the momentum – after the first event – RAs looking for a LEGACY (self-perpetuating organization by LOCAL (young) volunteers

Long Term Outcomes

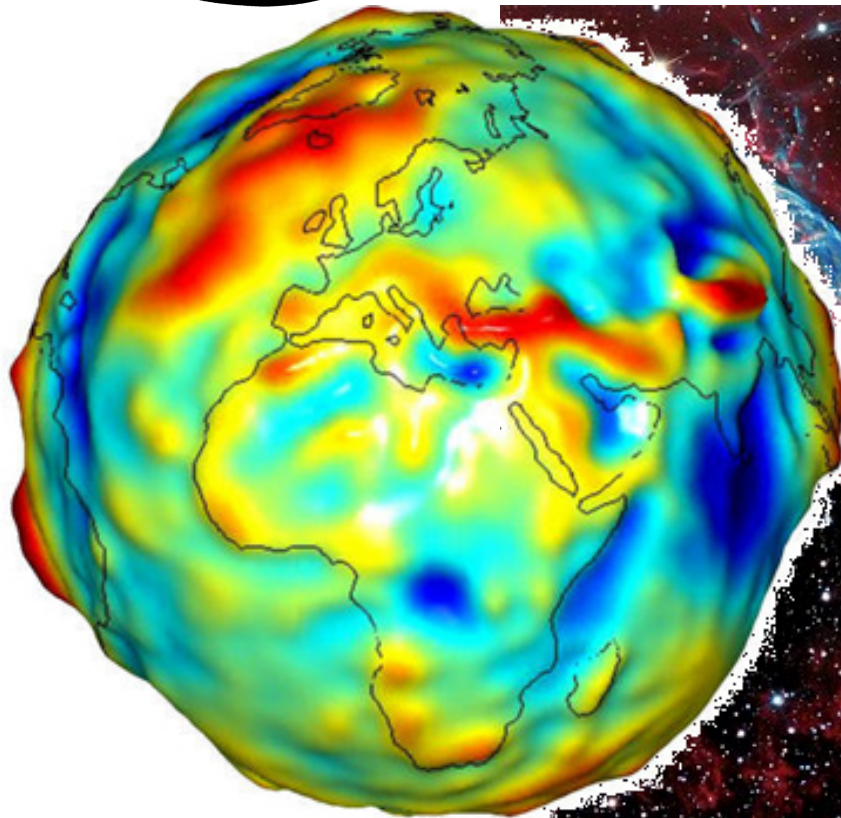
- Pool 'stronomy' as a hook to link different aspects of science / adventure and astronomy
- RAS = lasting legacy of larger interested amateur population, potential expansion for 200th anniversary of our 'friends' groups and events BEYOND London-centric
- 'Young astronomers' - the potential for the RAS to engage youth (and their parents) long before GCSE / A level (or equivalent) choices to STEM



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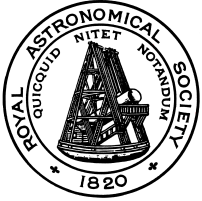
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Twitter: #RAS200

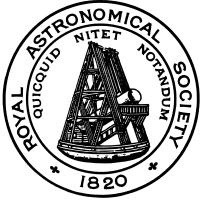
Discussion



RAS200: Sky & Earth

Timetable 2014

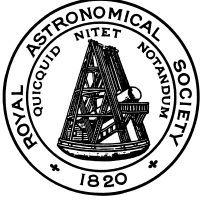
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Timetable 2015-16

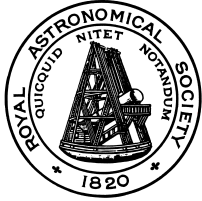
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RAS200: Sky & Earth

Actions for Potential Partners

- Potential partners – please send details, contacts *etc.* to Exec. Sec. and Deputy pm@ras.org.uk rm@ras.org.uk
- Potential co-sponsors – please send details, contacts *etc.* to Exec. Sec. and Deputy
- Bids for Town Hall meetings to Exec. Sec. and Deputy - *must* be well co-ordinated and widely supported
- cc. s.miller@ucl.ac.uk



RAS200: Sky & Earth

RAS200: Sky & Earth



In 2020 the Royal Astronomical Society (RAS) will be 200 years old. To celebrate our bicentennial, the RAS is establishing an Outreach and Engagement Fund of £1,000,000, to support projects using “Astonishing Astronomy and Glorious Geophysics” to create a real buzz about science – understanding, discussion and dialogue - in diverse sections of the community. And we want you and your organisation to be part of it.

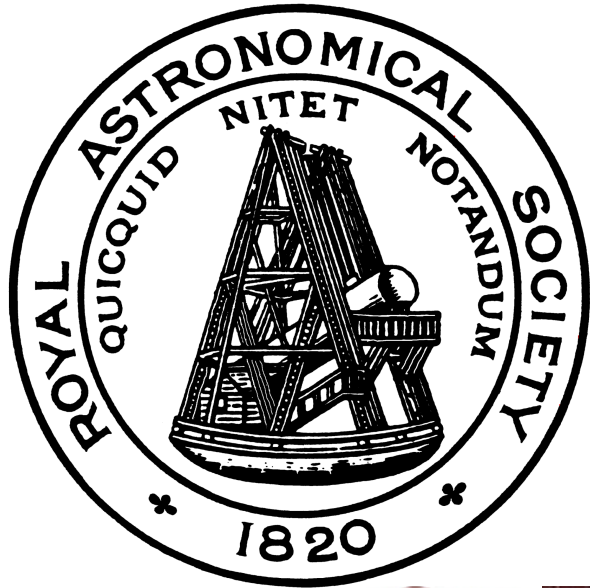
Spread the Word

Right now the RAS are seeking potential stakeholders to join in our venture. National and Local organisations who might benefit from our Fund are welcome. Partners who can add to the RAS £1 million fund, so that we can make a greater and more lasting impact, are also welcome.

On July 16th 2014 we will hold a Stakeholder Day, bringing together interested parties, explaining the project in more detail and the legacies we envisage for the 200th. In addition, this event will enable groups to network, and make initial commitments to projects in the geophysics community.

Flyer available

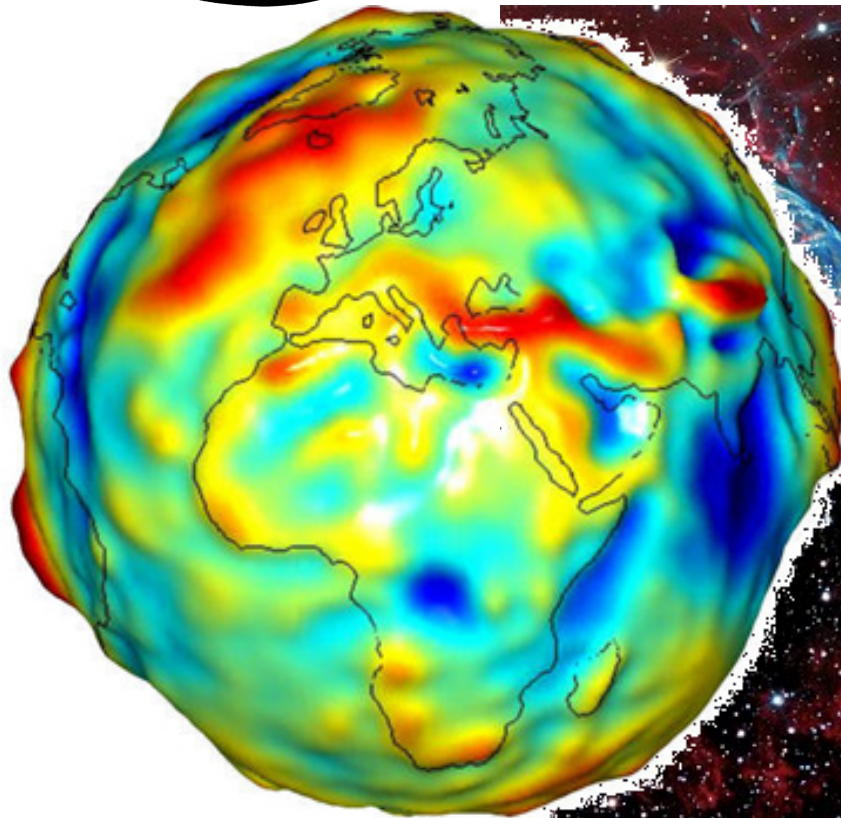
We anticipate that the RAS Fund itself will support up to 20 projects with sums between £50,000 and £100,000. The monies will be released in two calls – the first in 2015, the second in 2016, to initiate projects that run up to and beyond the RAS bicentenary.



RAS200

Sky & Earth

**Building for the Bicentennial with
Outreach and Engagement**



Twitter: #RAS200

Thank you!

