



# BoF on “Weather, climate and air quality” interest group

7th RDA Plenary Meeting, Tokyo, 1-3 March 2016

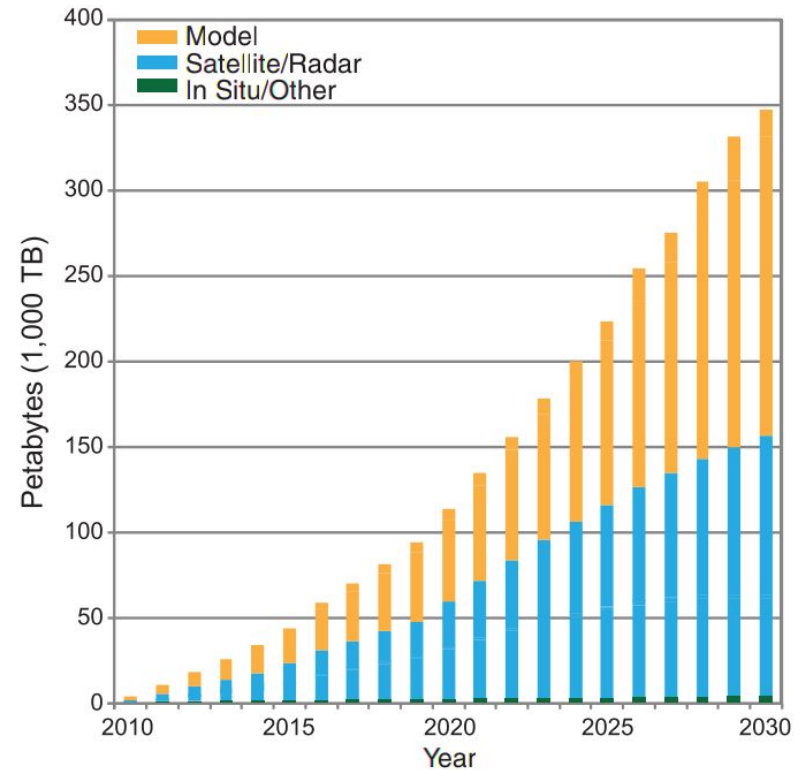
research data sharing without barriers  
[rd-alliance.org](http://rd-alliance.org)

Pierre-Antoine Bretonnière, Barcelona Supercomputing Center

- 11.00 - 11.10: **Introduction of the IG objectives**
- 11.10 - 11.40: Summary of the first kick-off workshop
- 11.40 - 12.10: Data challenges for the weather, climate and air quality communities:
  - 11.40 - 11.55: Using weather, climate and air quality data in transportation and disaster management" (Manos Chaniotakis - Centre for Research and Technology Hellas)
  - 11.55 - 12.10: Climate sciences data publication: the example of Scientific Data (Khodiyar Varsha, Scientific Data)
- 12.10-13.00: Discussion and next steps:
  - Objectives of the IG
  - Link with other IG/WG
  - Link with industry
  - Next steps

# Introduction of the IG objectives

- Recent and exponential increase of data volume and diversity leads to new problems in the earth sciences community.
- Need for new data solutions to avoid:
  - Having data “stuck” locally and difficult to share among institutions.
  - Too complex data indexing and discovery of big data repositories.
  - Undocumented datasets or lacking metadata.



Source: Overpeck et al. (2011), "Climate Data Challenges" in the 21st Century, Science

# Introduction of the IG objectives

- Some of these problems are common to other communities (data transfers, metadata, pids,...) but some others (ontologies, data organization, dynamic datasets,...) are very **specific to the weather, climate and air quality community**.
- **Strong pressure** from a **large user community** (urban air quality, climate-change adaptation, industry sensitive to environmental pressures).

# Introduction of the IG objectives

- Use RDA infrastructure to gather people from our communities but also data specialists and try to find answers to these data challenges.
- RDA should be seen as a unique opportunity for sharing data knowledge with other communities and push for political decisions in terms of data standards.
- Foster collaboration with other RDA IG/WG.



# Introduction of the IG objectives

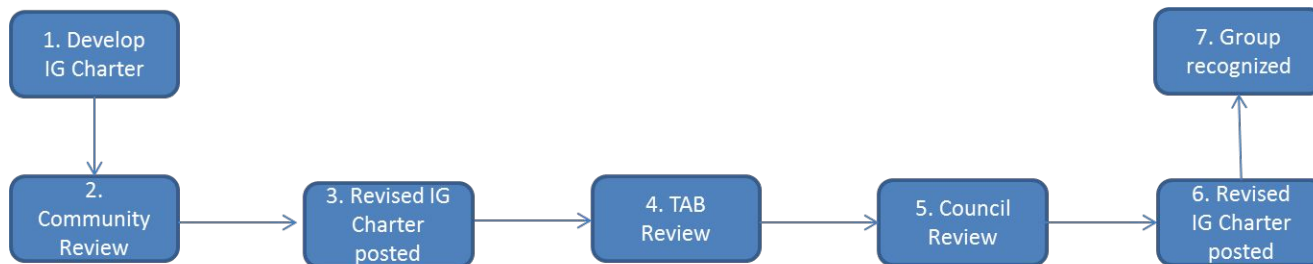
- In this Research Data Alliance Interest Group, we want to explore and discuss the challenges for the use and **efficient analysis** of **large** and diverse **datasets** from the **climate, weather and air quality** communities.
- Based on a collaboration between several **research** meteorological and European climate institutes and taking into account input from the **private** (renewable energy, satellite and agriculture sectors for example) **and public sectors**, this IG will suggest **practical and applicable solutions** for Big Data issues encountered by these communities, both at **technological and policy** level.

# Steps for the creation of the IG

Membership	Duration	Outcomes	RDA liaisons	Review process
All RDA members can join	As long as the group is active.	Possibly case statements for new WGs, coordination, communication.	1 Tab member 1 Secretariat member	Community review (4+ weeks), then review by TAB (2 weeks) and Council (2 weeks).

[https://rd-alliance.org/sites/default/files/attachment/RDA%20Interest%20Group%20Template%2014%20April%202015\\_ksf.docx](https://rd-alliance.org/sites/default/files/attachment/RDA%20Interest%20Group%20Template%2014%20April%202015_ksf.docx)

<https://rd-alliance.org/working-and-interest-groups/group-process-procedures.html>



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- Are you aware of **other RDA IG or WG** we should/could collaborate with and how?
- Do you see any overlaps with other IG or WG?

<https://rd-alliance.org/groups>

- Apart from the ones mentioned previously, do you think we should add **other objectives** to this IG?
- How do you see the **collaboration with the industries/private sector**?
- What added value could the **SMEs** bring to this IG?

- Should we consider involving **other entities or consortia** (IS-ENES, EUDAT, ESGF)?
- How do the **earth observations and satellites** communities deal with their data (ESA, EUMETSAT)?
- Ideas of **solutions**?

- Mailing-list for those interested: [earthsciences-rda-ig@bsc.es](mailto:earthsciences-rda-ig@bsc.es)
- Definition of clear list of objectives for the IG
- Co-chairs?
- Set up the administrative RDA work