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SCIENCE *and* TECHNOLOGY POLICIES

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# The Social, Technical, and Policy Landscape of Research Data Management in Environmental Sciences in Turkey

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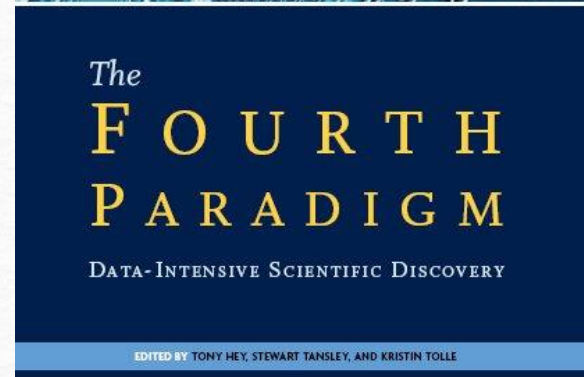
MIDDLE EAST TECHNICAL UNIVERSITY  
ORTA DOĐU TEKNİK ÜNİVERSİTESİ

# Introduction

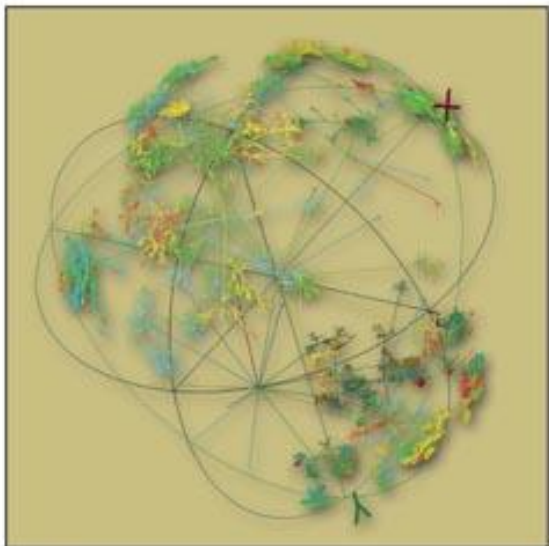
- Research Data Management (RDM)
- eScience in Turkey
  - RDM policy
  - Social & behavioural aspect
  - Tech infrastructure



# Background



CYBERINFRASTRUCTURE VISION  
FOR 21ST CENTURY DISCOVERY



National Science Foundation  
Cyberinfrastructure Council  
March 2007



OGY POLICIES

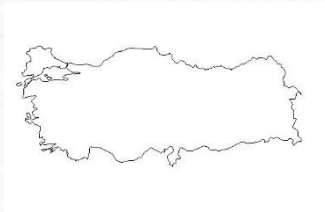


# Benefits of RDM

- Verification of results of data through re-analysis (crucial part of scientific process)
- Increasing the potential for cross-disciplinary research by allowing reuse of existing datasets by researchers from different domains;
- Retaining data integrity through proper preservation;
- Reduction in data collection costs through recycling existing datasets, better use of limited resources;
- Safeguards against misconduct (data fabrication & falsification) through data availability;
- Training tools for next generation of researchers through replication studies.



# Problem



# RDM policy



Open Access  
Infrastructure  
for Research in Europe

OpenAIRE

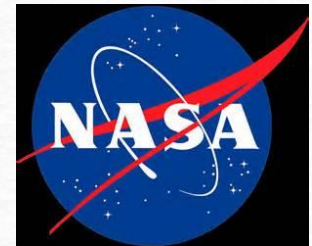




# RDM policy



# T Ü B İ T A K



# Social & Behavioral & Cultural

- Many scientists are interested in sharing data.
- There are many barriers to sharing data and conditions that must be met.
- The skill level of scientists and use & access to appropriate tools varies across the data life cycle.
- There are many ways that scientists can be assisted across the data life cycle.





# Where am I? (effectuation)

- **Connected** – METU, Hacettepe University, Gazi University, the Herbarium of NGBB, etc.
- **National Plan** – *“to develop human resources for science, technology, and innovation ... spreading multi-partnered and multidisciplinary collaborative culture ... enable international science and technology collaborations”* UBTYS, 2011.
- **Conjecture** – The fourth paradigm - data intensive science
- **Pressing problem** – Environmental problems

# Where am I?

- White paper for data management policy is ready
- Inventory of environmental researchers is ready, LIS is being prepared
- Interview instrument is ready, survey questionnaire is being prepared (+ human subject reviews)
- Ecoinformatics class is scheduled for Fall 2015
- Tech infrastructure - waiting
- Roadmap - waiting



# Results hoped for

- Create an inventory of environmental researchers and eScience & big data scholars;
- Create awareness of research data management best practices;
- Create synergy between environmental researchers and information science/data scholars and science and technology policy researchers;
- Direct Turkish environmental researchers to existing environmental research data repositories in E.U. and the U.S.;
- Create awareness of the resources that are available;
- Explore training opportunities (face-to-face and remote) in data informatics for Turkish environmental sciences;
- Provide input for environmental policy work.

# Questions?

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