A need for long-term observations: Strategizing Data Rescue of Physical Environmental/Climate Data

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RDA Tenth Plenary, Montreal, Canada September 20th, 2017
Overview

• Rescue of physical environmental/climate data can help extend our long-term observations, to further explore the relationships between climate and snow/ice/ecosystem response.

• For the RDA Data Share Fellowship I am conducting a survey of data-at risk in the polar/environmental field, collecting examples of data-rescue projects, and identifying potential future needs.

• The results will (hopefully) be listed on an accessible website.

• Key organizations possessing data-at risk are being identified in addition to the survey, as well as potential funding agencies.

• The long-term aim is to develop a foundation for funding proposals to develop a Data-Rescue Center.
Background: Defining the Need

• Historical data are in jeopardy of being lost due to lack of a centralized archive and storage method.
• Historical trends in climate/environmental data could be used to identify ‘flash points’, globally.
• Large amounts of data not properly archived and digitized is in jeopardy of being lost. Oral knowledge as well.
Where does your data fall on this curve?
What is a potential metric to evaluate data risk vs. stability?
Social-economic tipping points as a result of environmental change and resource limitation can be explored through historical data, and predicted in the future.
Project Aim/Approach

• Survey organizations and the greater RDA community who are in possession of historical data that is at-risk.

• Do you have or know of environmental/climate data in need of rescue? Please fill out the survey at: http://bit.ly/2xrlxtV
Data ‘at-risk’ Survey Questions

1. Is the data you work with and/or process 'at-risk' of being lost? Lost can mean a variety of things such as deletion from a computer, paper copies thrown away, or oral/mental knowledge that is not passed on to the next generation.

   - In your opinion, how could the data be saved/rescued?

2. What type of data is it? (i.e. climate, hydrology, snow cover, etc)

3. What format is the data in? (i.e. digital, paper, oral/mental, etc)

4. Where is your data currently?

5. What is the name and contact information of the organization housing the data?

6. Was/is your data federally funded? If so, does your funding require you to make your data publicly accessible? And how?

7. Would you be willing to provide this data to an archive service? An open access repository?

8. Please list any successful data-rescue projects you know of.
Survey targets

Polar scientific organizations such as:

The Scientific Committee for Antarctic Research (SCAR)

The International Arctic Science Committee (IASC)
Survey targets

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- The International Arctic Science Committee (IASC)

High Mountain Study Sites, such as:
- International Center for Integrated Mountain Development
- The Mountain Research Institute
- Long Term Ecological Research Programs
Survey targets

• Organize survey results into a comprehensive list.
• Make survey results accessible and searchable on a website.
• Further develop ‘data-rescue’ networks.
• Identify potential funding opportunities and organizations to further dive into data-rescue projects.
Thank you!

Questions, examples of successful data rescue projects, or know of data that is in need of being rescued?

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