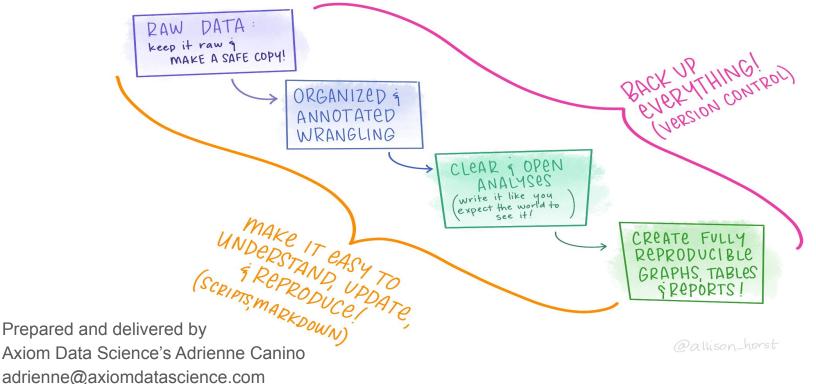
## EPSCOR Fire & Ice 2023 State of the Data



### Data governance goal, in short

- 1. Each PI should have a Research Workspace account setup
- 2. Each 'Collection Effort' should have a data management plan (one plan can name multiple efforts)
  - These DMPs should include expected timeframe
- 3. Within 6 months of identified field season, preliminary files are in the RW, and preliminary metadata are started
- 4. Within 12 months, datasets are finalized, metadata are finalized and imported to EPSCoR metadata catalog
  - This is a good time to identify particular data visualization products for the portal
- Within 18 months of the end of field season, Data and Metadata and finalized post Axiom review, these data will be published to the portal, and archived with DataONE, where a DOI is minted
  - So that's a 18 month embargo

Jargon	Portal 🔜	A portal is an organized, searchable tool for finding data and metadata. Typically a portal allows users to perform in-portal data analysis and data visualization such as through a web browser. The portal includes a catalog and a map.					
busting	Published <b>V</b>	Any data that is available for download in the Fire & Ice portal is considered published data. These data files are assumed to have been reviewed for completeness and accuracy (QA/QC) by their contributor (e.g. project PI), authorized for publication through a written agreement, and described by an ISO-compliant metadata record. Note that metadata for data files that are currently under embargo may be displayed in the Fire & Ice data portal, though data files themselves will not be available for download until the embargo period ends.					
	Archived	Final data and data products are stored in a data repository for long-term preservation. Versioning possible.					
Full Data	Metadata 🖶	Metadata is the data about the data, and describes the data temporally, geographically, data collection and analytical methods, and data contributors in detail. The record in RW is a gray 4 box icon next to a folder name.					
Governance Document Linked	Research Workspace (RW) Δ	A secure, web-based data management tool used to store and share Fire & Ice data and other associated information for exclusive access by Fire & Ice PIs and their designated collaborators.					

### Status Report

"State of the data" Updated January 2023

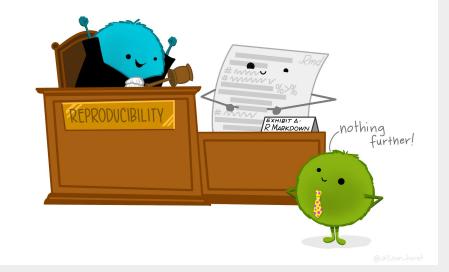
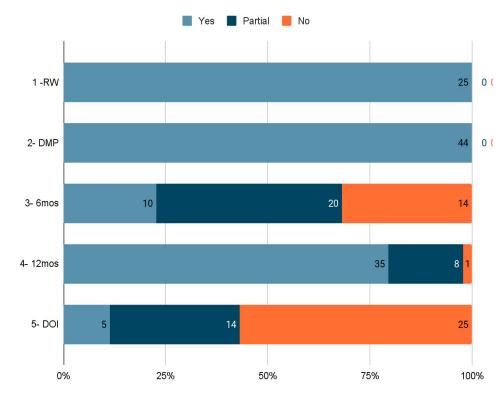


Image by Allison Horst, stats-illustrations. https://github.com/allisonhorst/stats-illustrations/

### The 'rubric' - ideal state

- 1. A RW account for all EPSCoR Pls
- 2. A DMP for each data collection effort/project
- 3. Preliminary data and metadata uploaded within 6 months
- 4. Finalized data and metadata uploaded within 12 months
- 5. Data are archived with DOI minted

#### Ideal State of the Data February 2023

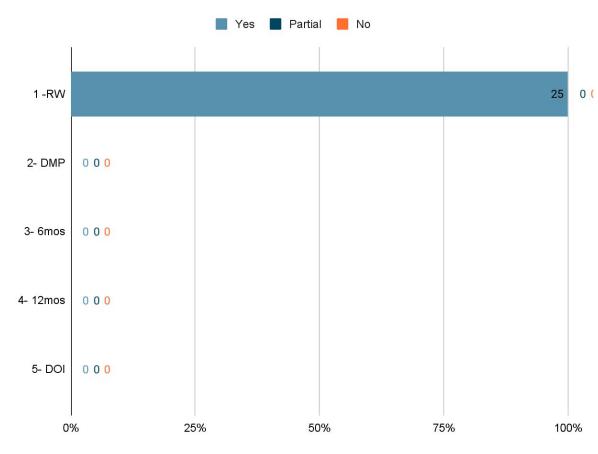


#### State of the Data Feb 2023

### 1. A RW account

As a best guess, let's go with +/- a few people. I also know there are new people, particularly students, joining frequently.



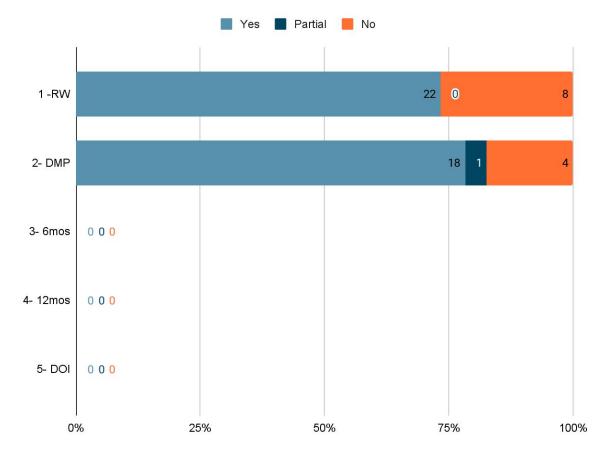


## 2. A DMP for each data collection effort

This does not include DEW projects, SEED Grant, which may or may not opt to create a DMP and archive data products with us.



#### State of the Data Feb 2023



## 3. Preliminary data available

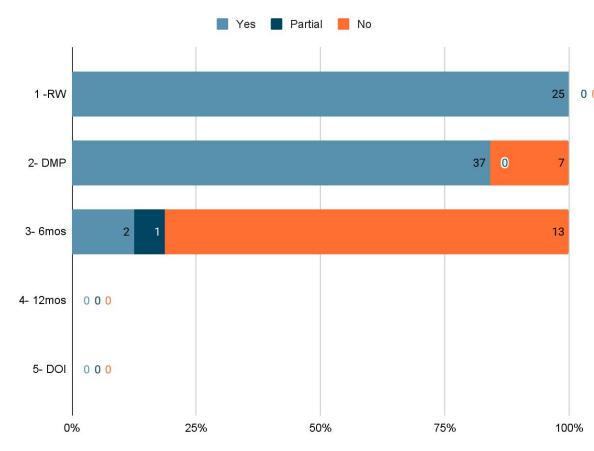
If the 6 months from field season has been met. For our 'yearly' kind of schedule, this essentially refers to 2020 data, more recent.

For a dataset with data but no metadata, this was counted as 'Partial'.

For a dataset that is expecting one data product, of 5 years data together, 'no' is given if there are not yearly uploads but they are expected/unknown.



#### State of the Data Feb 2023



#### State of the Data Feb 2023

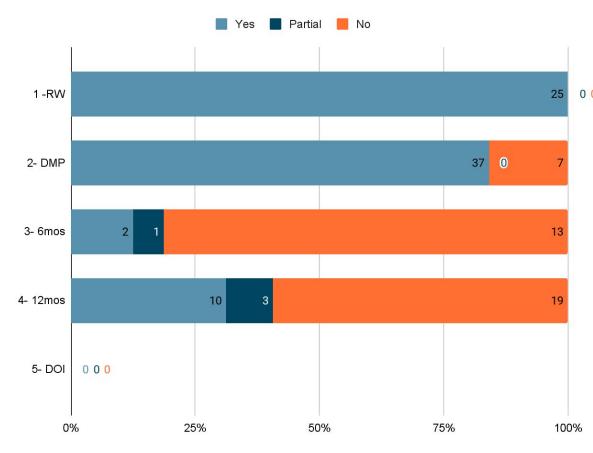
## 4. Finalized data available

If the 12 months from field season has been met. For our 'yearly' kind of schedule, this essentially refers to 2019 data.

Projects with data but not metadata were 'Partial' credit.

These numbers do NOT exclude the most recently added datasets, that may not have met the 6 month requirements either. So there's a growth curve in number of datasets that need finalization. Therefore we expect this to be a more 'No' column.





## 5. Data archived with DOI minted

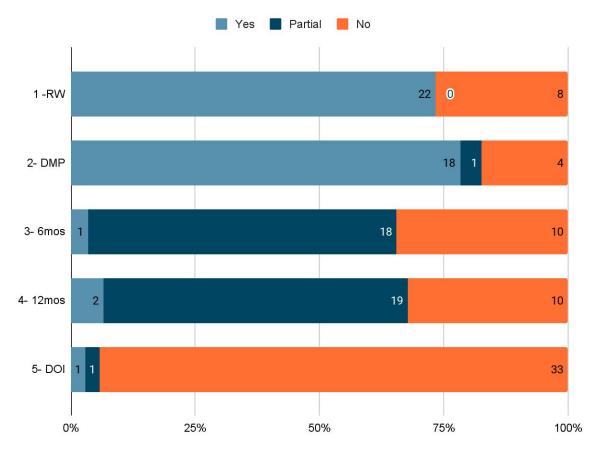
Again, the numbers compound.

So it's not unexpected to see a large 'No' percentage, because the 2019 and 2020 year datasets are not all going to be ready for release from embargo.

But the goal is to have any that have completed the 12 month check mark, count as 'Partial' in the DOI column.



#### State of the Data Feb 2023

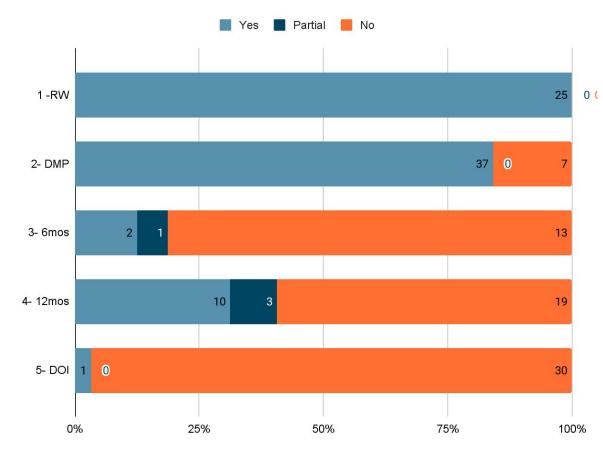


#### State of the Data Feb 2023



We made great progress!

The 6 month and 12 month milestones are not helping us, it may be worth planning different milestones in future data governance frameworks.



### A peak behind Adrienne's data coordinator curtain

📄 EPSCoR F&I main data inventory 2019-2023 🖈 🖽 🗠

The spreadsheet is looking way more full, hooray!

The 44 data collection efforts listed on the spreadsheet shared with PIs for data tracking is the base for these comparisons



	- <i>f</i> x   doi															_
A		Coastal or		• M 2019 data in	2019 Metadata in	0 2020 data in	P 2020 Metadata in	0 2021 data in	R 2021 Metadata in	S 2022 data in	2022 Metadata in	0 2023 data in	2023 Metadata in	W .	Z	
7		Boreal 🔫		RW 🔻	RW 7	RW T	the RW	RW T	the RW	RW T	the RW	RW 7	the RW	the portal	DOI	Collect
8	Estuary: coho diet data	Coastal Margins	https://researchworkspace.com/p roject/6615711/files	N/A	N/A	N/A	N/A	unknown	N/A	unknown	N/A	unknown	N/A	N		after 2
4	Curriculum Development	DEW	N/A data will not be shared N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
23	Indigenous Science Workshop	DEW	N/A data will not be shared N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
34	Science Identity Study	DEW	N/A data will not be shared N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
35	Science Identify Survey	DEW	N/A data will not be shared N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
38	Systems Thinking work	DEW	N/A data will not be shared N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
41	Emerging Anthropogenic Influences on the Southcentral Alaska temperature and precipitation Extremes related to free in 2019	Boreal Fire	https://researchworkspace.com/pr N	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Partially		comple
42	Stadent-centered leadership for a newly established olizen science belags monitoring project in Cock Inlet, Alaska	Seed grant	https://researchworkspace.com/p roject/7534782/files	Y	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
43	The thermotolerance of Broad Whitefish Coregonus nasus	Seed grant	https://researchworkspace.com/p roject/7580196/files	Y	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N		
21	Hyperspectral	Coastal Margin:	https://researchworkspace.com/pr	N	N	N	N	unknown		unknown		unknown		N		Aug 2
2	Benanza Creek LTER imagery	Boreal Fire	https://researchworkspace.com/pr	N	N	N	N	N/A	N/A	N/A	N/A	N/A	N/A	N		Sum 2
22	Hyspecs data for biomass, moisture content, fuel condition	Boreal Fire	https://researchworkspace.com/pr	N	N	N		unknown		unknown		unknown		N		WGS
24	KB intertidal geochemistry data	Coastal Margins	https://researchworkspace.com/pr	Y	N	Partial	N	planned		planned		planned		N; embargoe	1	Marci
28	LC intertidal geochemistry data	Coastal Margins	https://researchworkspace.com/pr	Y		Y		planned		planned		N/A	N/A	N; embargoer	1	2019
6	Drone for hyperspectral in McKinley & Montana	Boreal Fire	https://researchworkspace.com/p	N		unknown		unknown		unknown		unknown				
36	Season to season forecasts for fire weather predictions	Boreal Fire	N	N		unknown		unknown		unknown		unknown				
14	Fire Survey data	Boreal Fire	https://researchworkspace.com/project/6333	N/A	N/A	unknown		unknown		unknown		unknown				
16	Fuel Treatment & ecosystem	Boreal Fire	https://researchworkspace.com/project/657	N		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
17	Fuels Treatment Management Data	Boreal Fire	https://researchworkspace.com/project/6322	N/A	N/A	unknown		unknown		unknown		unknown				n/a p
19	Household survey data related to fire	Boreal Fire	https://researchworkspace.com/project/657	N		unknown		unknown		unknown		unknown				
81	Moose hunting and boreal fires	Boreal Fire	https://researchworkspace.com/project/657	unknown		unknown		unknown		unknown		unknown				
33	Public Wildfre Data	Boreal Fire	https://researchworkspace.com/project/6333	unknown		unknown		unknown		unknown		unknown				
3	Burn sevenity for Shovel and Nagget Creek fres	Boreal Fire	https://researchworkspace.com/project/657	Y		N		unknown		unknown		unknown				
12	Estuary: invertebrate / algae community data	Coastal Margins	https://researchworkspace.com/project/5353	×		Y		unknown		unknown		unknown				

# So, what next? 2023 version

- Metadata
  - Start writing READMEs and metadata
  - Sign into research workspace and make the folder structure or uploads necessary
- If there are targeted publications, review their article/ data requirements
- Contact Adrienne (Data Coordinator)- E-mail: <u>adrienne@axiomdatascience.com</u>
- Contact Karina (Project Manager) E-mail: <u>karina@axiomdatascience.com</u>



Image by Allison Horst, stats-illustrations. https://github.com/allisonhorst/stats-illustrations/tree/master/rstats-artwork

### References and resources

• EPSCoR Fire and Ice Data Governance Guidelines:

https://docs.google.com/document/d/15atFkD \_nszZ31aHretLdouqcImDQTGOF8X-0MmXdy AM/edit?usp=sharing

- YouTube playlist with short clips on the Research Workspace: <u>https://www.youtube.com/playlist?list=PLk6IIY</u> <u>H-I4WCLSgVbXhZkO\_aUx7kwvndC</u>
- Help docs for Research Workspace, including tutorials: <u>https://researchworkspace.com/help/</u>
- Data Management Workshop 2021
  Slidedeck: <u>https://bit.ly/3ELGQFP</u>

 Introduction to Data Management Best Practices:

https://www.axiomdatascience.com/best-p ractices/DataManagementBestPractices.ht ml

- Metadata Best Practices:
  <u>https://www.axiomdatascience.com/best-p</u>
  <u>ractices/MetadataBestPractices.html#meta</u>
  <u>data-best-practices</u>
- UAF OGCA Data Management Plans and Data Sharing details: <u>https://www.uaf.edu/ogca/lifecycle/3-devel</u> <u>op/data-management-plans-and/</u>