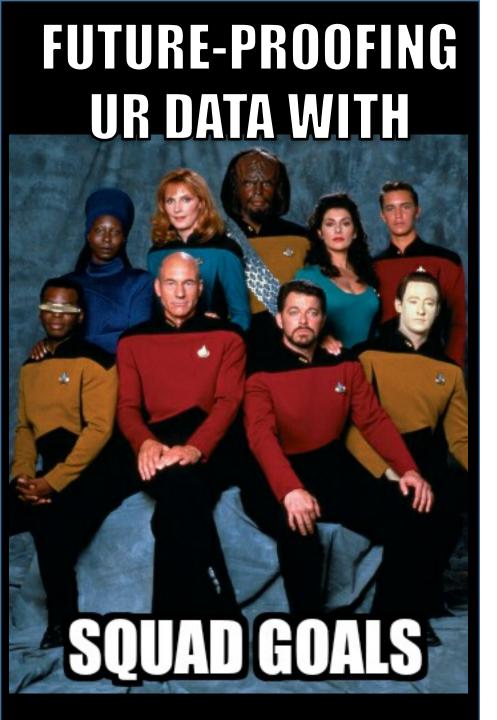
# FUTURE-PROOFING UR DATA WITH



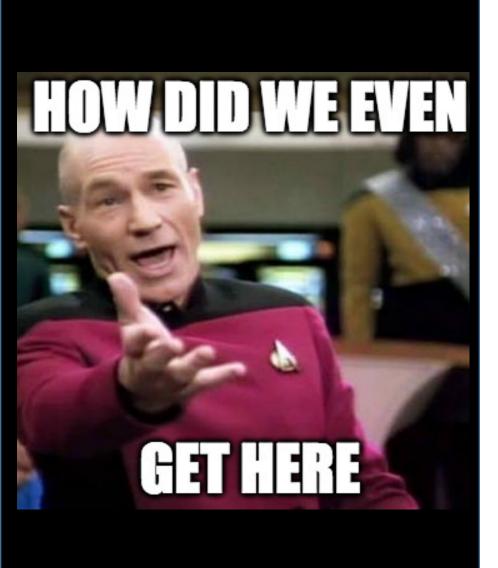


Structured!

Quantitative!

Universal Access to!

Data!



Piecemeal data infrastructure

Lack of standards

Functional as long as nothing changes

**Ummmm** 

...but then something changed

#### Index of /pub/data

<u>Name</u>	Last modified	<u>Size</u>	<b>Descri</b>
Parent Directory		_	
#rw-check	08-Jun-2012 14:09	0	
15min_precip-3260/	17-Mar-2016 10:02	-	
<u>96300w60</u>	16-Apr-1997 15:24	5.5M	
109020/	07-May-2015 14:20	-	
ASOS Station Photos/	03-Apr-2014 15:00	-	
EngineeringWeatherData CDROM	21-Mar-2014 07:12	-	
Impact/	21-May-2015 12:41	-	
Videoclip 50 years MCSS.wmv	08-Sep-2014 06:43	388M	
access.del/	21-Mar-2014 12:38	-	
aewc-v1/	16-Sep-2014 15:17	-	
airsea/	19-Aug-2014 14:58	-	
annualreports/	20-Jun-2014 09:18	-	
anomalie/	06-Sep-2012 06:28	-	
anomalies/	27-May-2014 14:27	-	
asos-fivemin/	03-Feb-2017 07:00	-	
asos-onemin/	03-Feb-2017 07:23	-	
blizzard/	27-Jun-2014 12:56	-	
ccd-data/	26-Sep-2016 14:26	-	
cdmp/	02-Jul-2014 12:12	-	
cdo/	20-Jun-2016 10:10	-	
cirs/	18-Aug-2014 09:29	-	
climgrid/	19-Apr-2016 10:05	-	
cmb/	09-May-2016 11:45	-	
		. ,	,

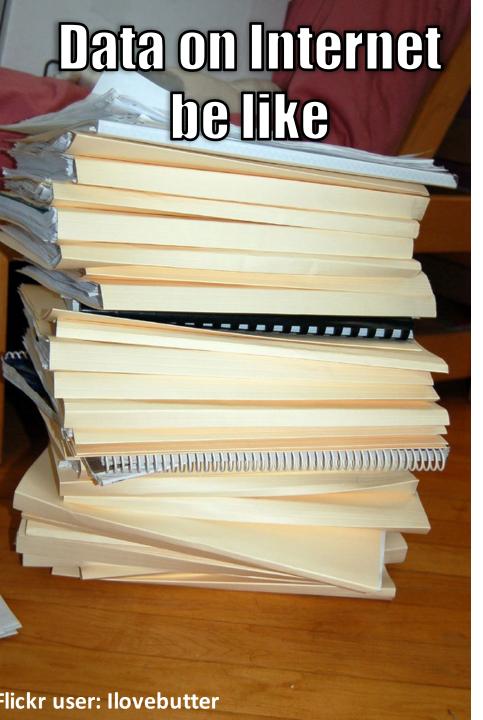
No machine readable metadata anywhere in this file structure

No agency pages link to this site

Only users know what/where

It's functional as long as nothing changes

https://www1.ncdc.noaa.gov/pub/data/



No complete list of data, dataset locations, data volume

No guarantee of datset backup

No way to assess changes over time

No way to ask questions of the national or global volume of data

#### Server Error

#### 404 - File or directory not found.

The resource you are looking for might have been removed,

### Avoiding data disaster

#### Server Error

#### 404 - File or directory not found.

The resource you are looking for might have been removed,

#### Server Error

#### 404 - File or directory not found.

The resource you are looking for might have been removed,

"The internet is a terribly unstable way to keep information available"

Laurie Allen

Assistant Director for Digital Scholarship PENN Libraries

DataRefuge

### Need wide adoption of **METADATA** standards

... and documentation/mirroring of data now

#### Server Error

# What do we want? / When do we want it?



## What do we want? / When do we want it?



Wide adoption of **MACHINE-READABLE METADATA** standards

**DOCUMENTATION AND MIRRORING** of datasets



Structured!

Quantitative!

Universal Access to!

Data!



Our CATS – the Cloud-Aerosol Transport System – is a small instrument ready to do big science on the space station after launch on January 6. CATS will use lasers to study clouds and tiny particles like dust and air pollution.



Come to Data Reuse session tomorrow to learn more about METADATA and the CATS dataset!

