

Software usage and citation through transparent and practical provenance



WHOLETALE

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Services: Data usage and citation

Zanne, Amy E., Lopez-Gonzalez, G., Coomes, David A., Ilic, Jugo, Jansen, Steven, et al. 2009. **Data from: Towards a worldwide wood economics spectrum.** Dryad Digital Repository. <http://dx.doi.org/10.5061/dryad.234?ver=2017-08-29T11:58:04.480-04:00>.



Citations 41

Downloads 0

Views 3

Copy Citation



The COUNTER Code of Practice for Research Data

The Code of Practice for Research Data Usage Metrics standardizes the generation and distribution of usage metrics for research data, enabling for the first time the consistent and credible reporting of research data usage.

COUNTER welcomes input and feedback from the community on this first iteration, so that it can be further developed and refined.



Services: Citations

Citations

Zanne, Amy E., Lopez-Gonzalez, G., Coomes
Towards a worldwide wood economics
ver=2017-08-29T11:58:04.480-04:00.

Citations

41

Downloads

41 Citations

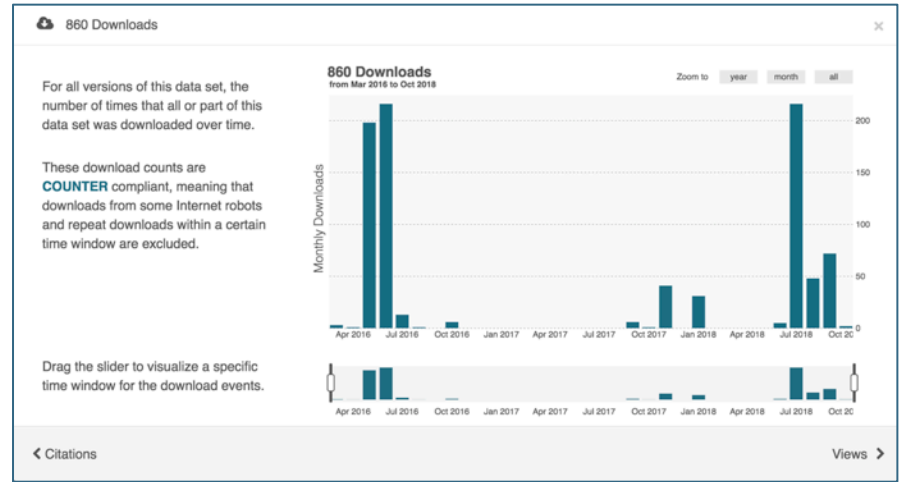
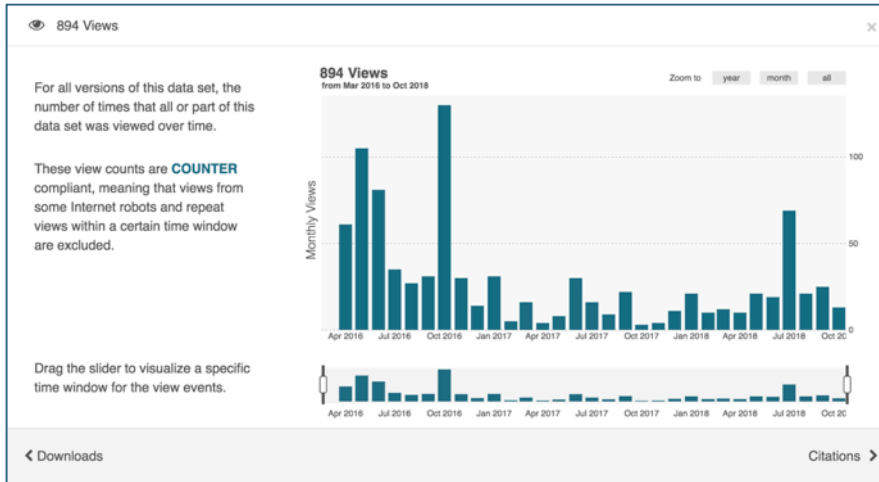
- Julia Chapman and Ryan McEwan. 2018. **The Role of Environmental Filtering in Structuring Appalachian Tree Communities: Topographic Influences on Functional Diversity Are Mediated through Soil Characteristics**. *Forests*. Vol. 9. pp. 19. <https://doi.org/10.3390/f9010019>.
- Beyene Belay, Elisabeth Pötzelsberger, Kibruyesfa Sisay, Dessie Assefa, and Hubert Hasenauer. 2018. **The Carbon Dynamics of Dry Tropical Afromontane Forest Ecosystems in the Amhara Region of Ethiopia**. *Forests*. Vol. 9. pp. 18. <https://doi.org/10.3390/f9010018>.
- Mengesteab Hailu Ubuy, Tron Eid, and Ole Martin Bollandsås. 2018. **Variation in wood basic density within and between tree species and site conditions of exclosures in Tigray, northern Ethiopia**. *Trees*. Vol. 32. pp. 967-983. <https://doi.org/10.1007/s00468-018-1689-9>.
- Sylvanus Mensah, Ben du Toit, and Thomas Seifert. 2018. **Diversity–biomass relationship across forest layers: implications for niche complementarity and selection effects**. *Oecologia*. Vol. 187. pp. 783-795. <https://doi.org/10.1007/s00442-018-4144-0>.
- Aida Cuni-Sanchez, Marion Pfeifer, Rob Marchant, Patrícia V. Pompeu, and Neil D. Burgess. 2018. **Harvesting fodder trees in montane forests in Kenya: species, techniques used and impacts**. *New Forests*. Vol. 49. pp. 511-528. <https://doi.org/10.1007/s11056-018-9632-x>.
- Onja H. Razafindratsima, Anecia Gentles, Andrea P. Drager, Jean-Claude A. Razafimahaimodison, Claude J. Razazampirenena, et al. 2018. **Consequences of Lemur Loss for Above-Ground Carbon Stocks in a Malagasy Rainforest**. *International Journal of Primatology*. Vol. 39. pp. 415-426. <https://doi.org/10.1007/s10764-018-0042-x>.
- Phil Wilkes, Mathias Disney, Matheus Boni Vicari, Kim Calders, and Andrew Burt. 2018. **Estimating urban above ground biomass with multi-**

Views

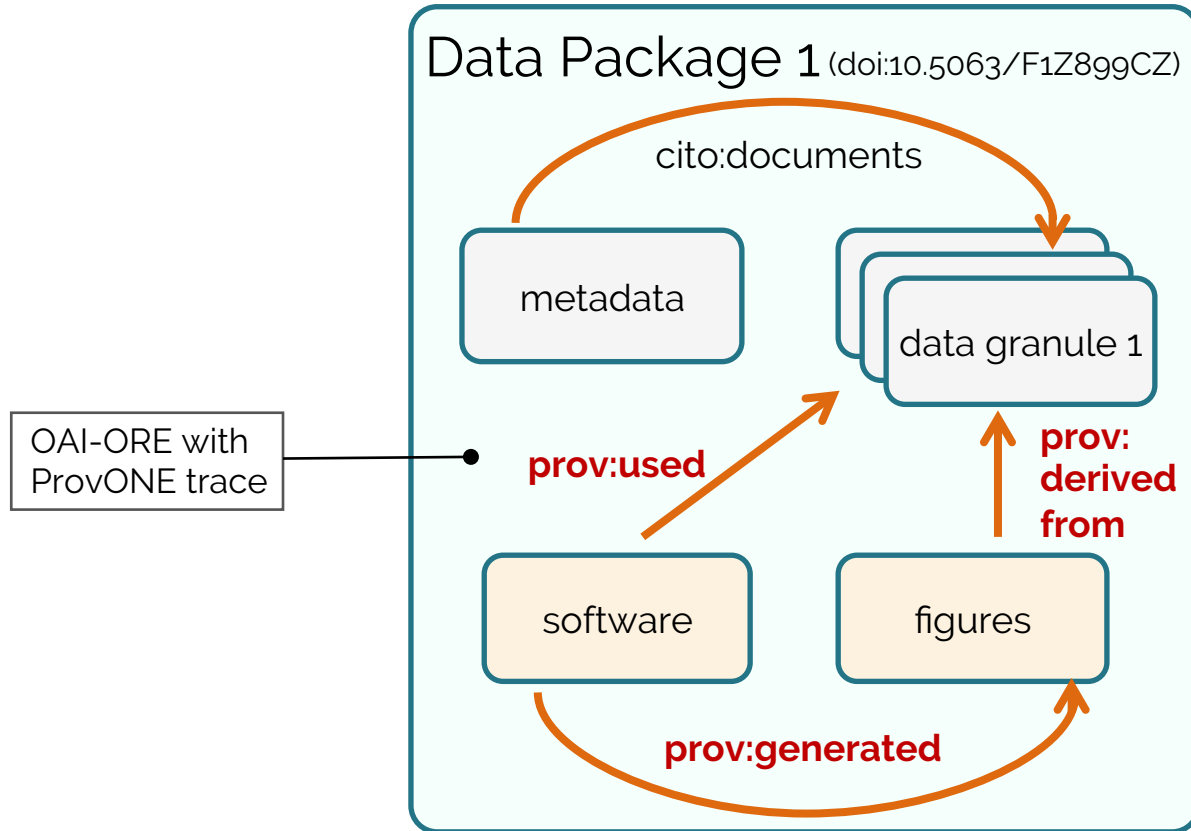
Downloads

Time Series of Data Usage

Views and Downloads



Data Package (aka Research Object) with Provenance



Practical Provenance in DataONE

Goal: Facilitate reproducible science

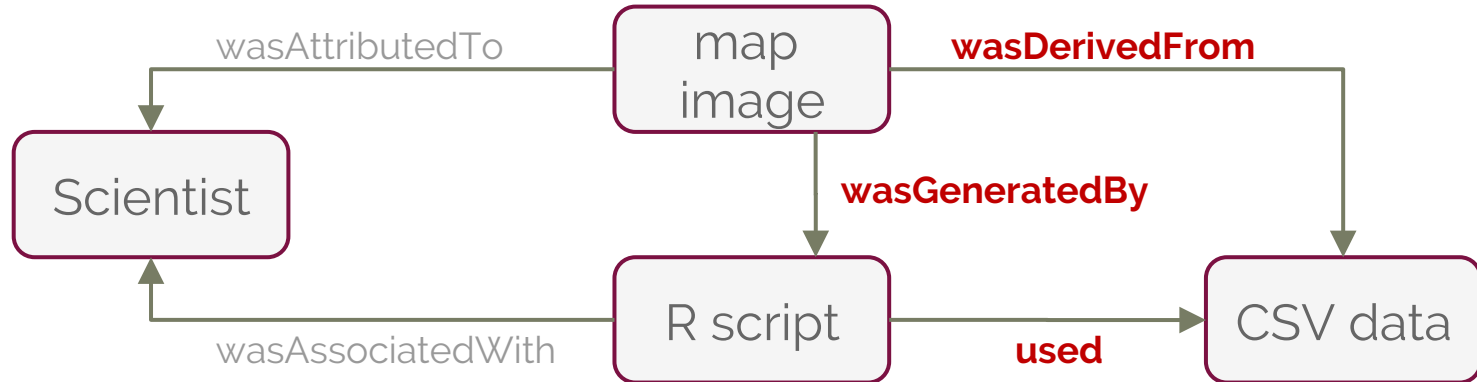
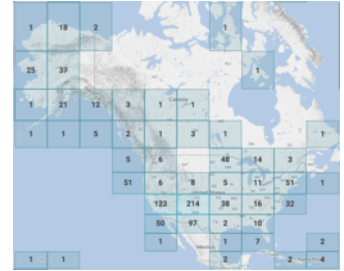
- Track **data derivation** history
- Track data **inputs** and **outputs** of analyses
- Track analysis and model **executions**
- Preserve and document software **workflows**
- Link all of these to **publications**

Provenance for Science Workflows

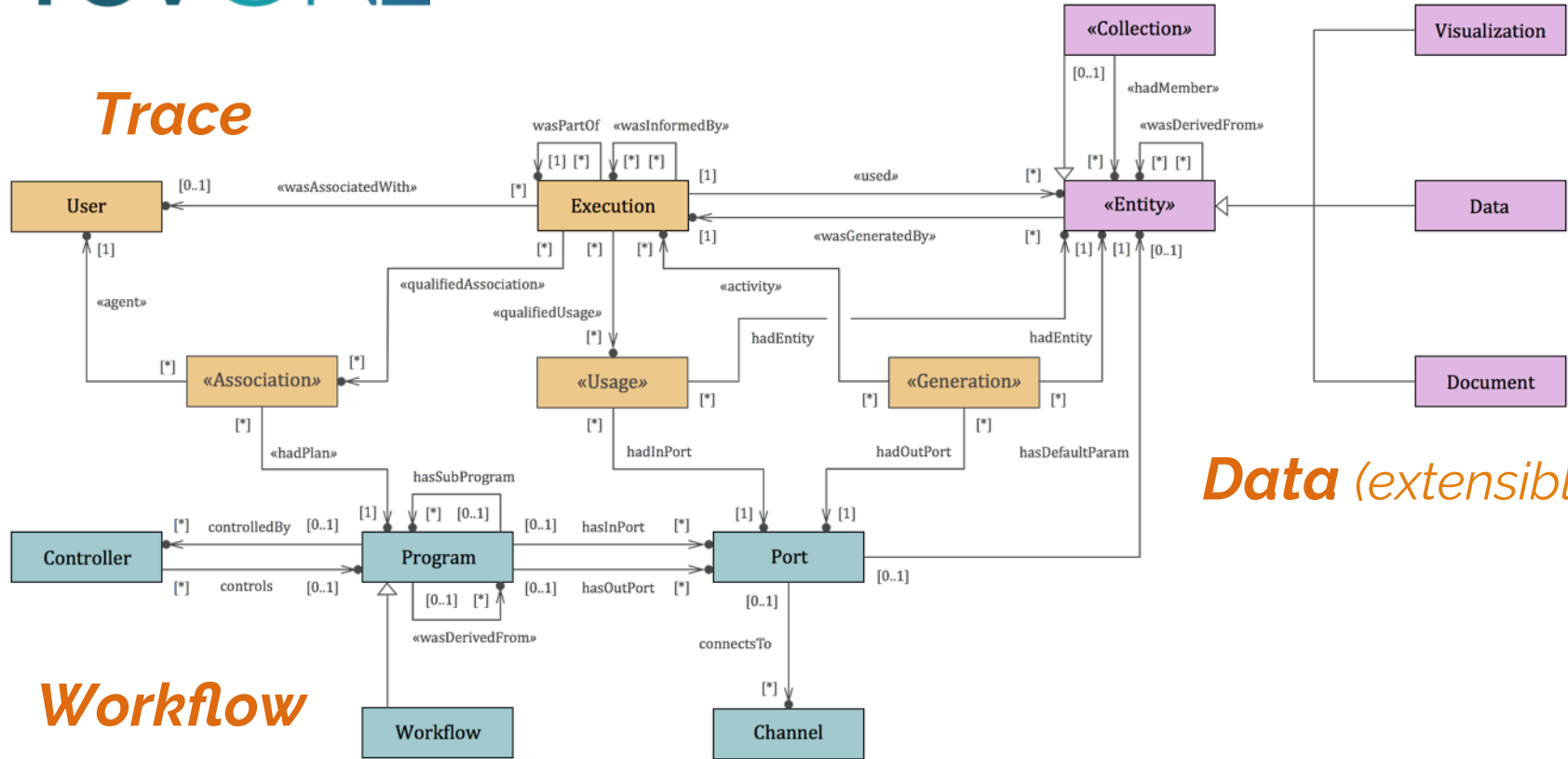


ProvONE – an extension of W3C PROV

See purl.dataone.org/provone-v1-dev



Trace

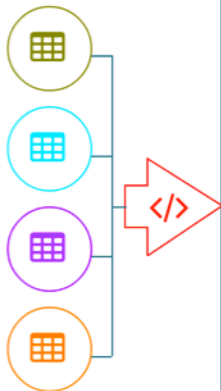


Data (extensible)

See purl.dataone.org/provone-v1-dev

Data Table, Image, and Other Data Details

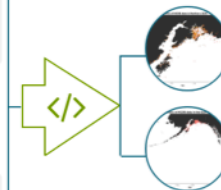
4 sources



Data Table

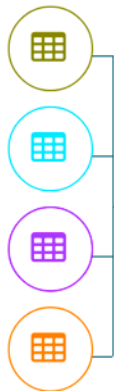
Entity Name	Total_Aromatic_Alkanes_PWS.csv										
	Download										
Description	Combined dataset from PAH, Alkane and Sample tables documenting samples collected after the Exxon Valdez oil spill in Prince William Sound, AK										
Object Name	Total_Aromatic_Alkanes_PWS.csv										
Online Distribution Info	https://cn.dataone.org/cn/v2/resolve/urn:uuid:44108e76-405d-4d58-b1b3-fb4b55e3fff9										
Size	2801033 byte										
Text Format	<table><tr><td>Number of Header Lines</td><td>1</td></tr><tr><td>Record Delimiter</td><td>#x0A</td></tr><tr><td>Attribute Orientation</td><td>column</td></tr><tr><td colspan="2">Simple Text</td></tr><tr><td>Field Delimiter</td><td>,</td></tr></table>	Number of Header Lines	1	Record Delimiter	#x0A	Attribute Orientation	column	Simple Text		Field Delimiter	,
Number of Header Lines	1										
Record Delimiter	#x0A										
Attribute Orientation	column										
Simple Text											
Field Delimiter	,										
Number Of Records	12142										

2 derivations



Data Table, Image, and Other Data Details

4 sources



Source Program

Total_PAH_and_Alkanes_GoA_Hydrocarbons_Clean.R

Citation

View »

This program generated the data you are currently viewing, Total_Aromatic_Alkanes_PWS.csv.

This program used PAH.csv, Sample.csv, Non-EVOS_SINs.csv and (and 1 more).

kanes_PWS.csv

from PAH, Alkane and Sample tables documenting samples collected after the ... in Prince William Sound, AK

anes_PWS.csv

org/cn/v2/resolve/urn:uuid:44108e76-405d-4d58-b1b3-fb4b55e3fff9

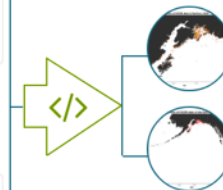
Text Format

Number of Header Lines	1
Record Delimiter	#x0A
Attribute Orientation	column
Simple Text	
Field Delimeter	,

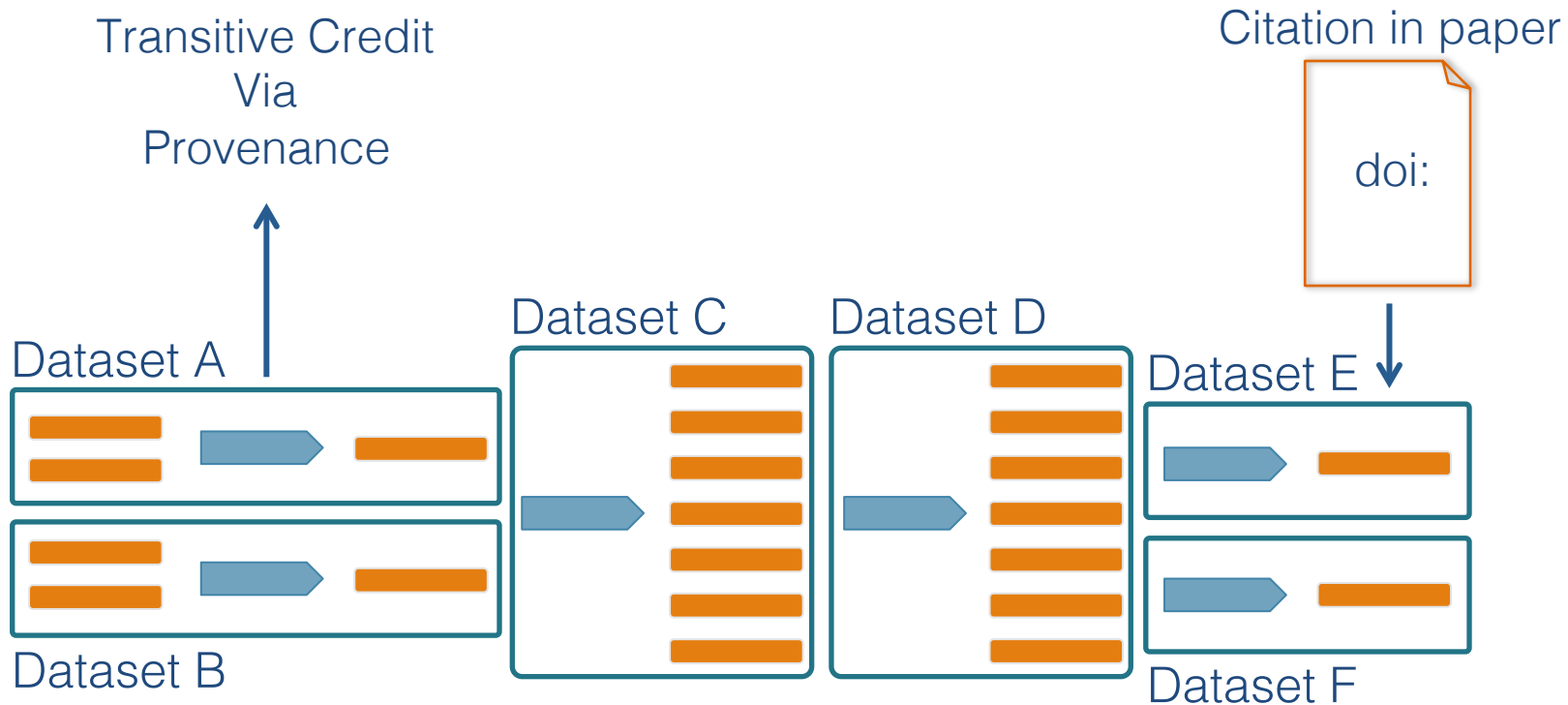
Number Of Records

12142

2 derivations



Citing multi-generational workflows



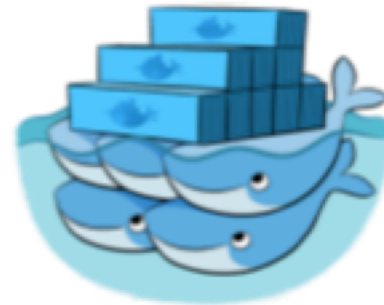
Konrad Hinsen: Scientific Software Collapse

Project-specific

Discipline

Scientific

Operating System



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DataONE



Software environment



Data



Narrative



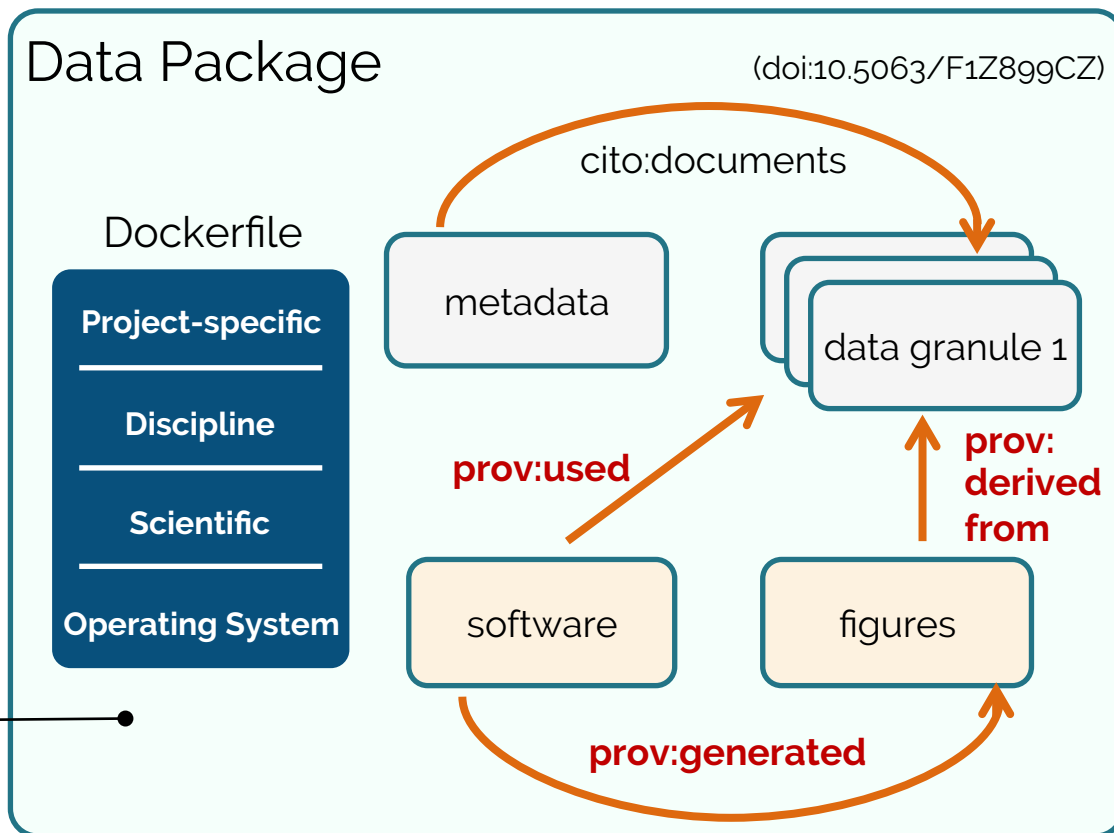
Tale:

A new type of preservable research object that combines data, software, and narrative into a single re-runnable package.

Publish

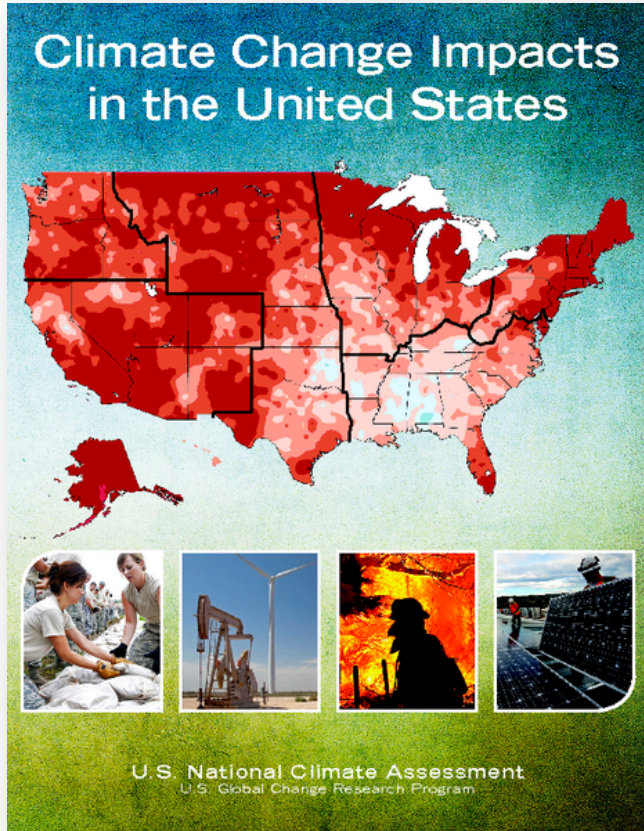
DataONE





3rd National Climate Assessment

<https://www.globalchange.gov>



Texas Summer 2011: Record Heat and Drought

Cooperative Institute for Climate and Satellites - NC
Laura Stevens

The **time range** for this image is January 01, **1895** (00:00 AM) to December 31, **2012** (00:00 AM).

This image was created on July 03, 2013.

The **spatial range** for this image is 25.83° to 36.50° latitude, and -106.65° to -93.52° longitude.

Attributes : Temperature, precipitation, observed, Texas.

This image **was derived from** dataset **nca3-cddv2-r1** **using** the **activity** **02c53cf7-nca3-cddv2-r1-process**.

This image is part of this figure :



data and "code" / method linked

alt formats

You are viewing /image/02c53cf7-75f8-4243-a925-f59a0025f04e in [HTML](#)

Alternatives : [JSON](#) [YAML](#) [Turtle](#) [N-Triples](#) [JSON Triples](#) [RDF+XML](#) [RDF+JSON](#) [Graphviz](#) [SVG](#)

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