

# Pangeo European Coffee

 Meetings: Tuesdays 9:00-10:00 or 16:00-17:00 CET


Zoom link:

<https://numfocus-org.zoom.us/j/81977735338?pwd=pVM3UvnSAJORc2p4Oad39TESPvBzV5.1>

This document pub link

[https://docs.google.com/document/d/e/2PACX-1vS4pYSPFaRz31QQRHeTy4lwzbHlu3w5vLv cMybem7FEtPfmGff\\_Vg38CbJQcv0fFfZVJciaEH3j1YHc/pub](https://docs.google.com/document/d/e/2PACX-1vS4pYSPFaRz31QQRHeTy4lwzbHlu3w5vLv cMybem7FEtPfmGff_Vg38CbJQcv0fFfZVJciaEH3j1YHc/pub)

For those of you who want to edit:

 european coffee notes

 Discord:

- invite: <https://discord.gg/ex5qqEyyTz>
- discourse thread:  
<https://discourse.pangeo.io/t/pangeo-chat-discord-slack-zulip-element-etc/3840/2>

 What's next for Pangeo?

- <https://discourse.pangeo.io/t/pangeo-showcase-whats-next-for-pangeo/3870/5>
- Check out for different discussions;
  - [software-production-visualization](#)
  - [data-management](#)
  - [software-geospatial-bridge](#)
  - [cloud-partner-managed-infrastructure](#)
  - [cloud-pangeo-managed-infrastructure](#)
  - [democratization-science-community](#)
  - [scientific-publishing](#)
  - [software-massive-scale](#)
  - [software-regridding](#)

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18 November 2025 16:00 CET

- Ola / @ofk123

11 November 2025 09:00 CET

- Ola / @ofk123

21 October 2025 16:00 CET

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14 October 2025 09:00 CET

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7 October 2025 16:00 CET

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23 September 2025 16:00 CET

- BIDS hachathon ;
  - <https://eopf-sample-service.github.io/EOPF-Zarr-BIDS25/>
- BIDS tutorial:
  - <https://pangeo-data.github.io/pangeo-bids25/intro.html>

16 September 2025 9:00 CET

-  EGU26- PANGEO session

2 September 2025 09:00 CET

- [BIDS25](#) Pangeo contribution list:

- Sprint
  - Topic DGGS
  - 
  - Other topics
  -
- Tutorial: <https://www.bigdatafromspace2025.org/satellite-event-submission>
  - Monday 9:00-12:30 Scalable Earth Observation Data analysis with Pangeo and EO4EU
    - pre-meeting 02.09.25 : 12:00-
    - Description:
      - 
      - github page => <https://github.com/pangeo-data/pangeo-bids25>
      - Infra: pangeo-eosc
      - <https://pangeo-data.github.io/pangeo-igarss2024/users-getting-started.html>
      - Organisers and expected contributors: Vasileios Baousis (European Centre for Medium-Range Weather Forecasts (ECMWF)), Anne Fouilloux (Simula), Tina Odaka (ifremer), Mohanad Albughdadi (ECMWF), Claudio Pisa (ECMWF), Armagan Karatosun (EUMETSAT)
      - 
      -
  - Monday 13:30-17:00 EOPF Sample Service -getting started with Zarr
    - Description:
      - Content to be prepared: ?
    - github page =>
    - Organisers and expected contributors:
      - Gisela Romero Candanedo (thriveGEO GmbH), Anne Fouilloux (Simula), Tina Odaka (IFREMER), Konstantin Ntokas (Brockmann Consult), Julia Wagemann (thriveGEO GmbH) ,
  - Tuesday 9:00- 12:30 Julia
    - Organisers and expected contributors:
      - any help needed ??
      - github page?
      - Felix Cremer (Max-Planck Institute for Biogeochemistry), Gans Fabian (Max Planck Institute for Biogeochemistry), Anshul Singhvi (JuliaHub), Lazaro Alonso (Max Planck Institute for Biogeochemistry)
  - Tuesday 13:30-17:00 JupyterGIS: Collaborative Geospatial Analysis in the Cloud.
    - Description:
      - <https://jupytergis.readthedocs.io/en/latest/>
    - github page =>?
      - Infra? Galaxii: (pangeo-eosc is not accepting collaborative mode, so we can't use it.

- Galaxy:
  - [https://usegalaxy.eu/?tool\\_id=interactive\\_tool\\_jupytergis\\_notebook&version=latest](https://usegalaxy.eu/?tool_id=interactive_tool_jupytergis_notebook&version=latest)
- Organisers and expected contributors:
  - Anne Fouilloux (Simula Research Laboratory), Elifsu Filiz (Simula Research Laboratory)
- Tuesday 13:30-17:00 FAIR and Open Science in Action: An Introduction to EarthCODE with SCANEO for intelligent satellite image labeling: a hands-on tutorial
  - Description:
    -
  - github page =>? ask dean?
  - Organisers and expected contributors:
    - Deyan Samardzhiev (Lampata), Anne Fouilloux (Simula Research Laboratory), Tina Odaka (IFREMER), Anca Angheloa (ESA), Ewelina Agnieszka Dobrowolska (Serco), Chandra Taposeea-Fisher (Telespazio UK), Garin Smith (Telespazio UK)
- Hackathon <https://www.bigdatafromspace2025.org/satellite-event-submission>
  - Tuesday 9:00-17:00 EOPF Zarr Hackathon: From exploration to optimisation in cloud-native Earth
    - Description:
      -
    - github page =>
      - jupyterlab
    - Organisers and expected contributors:
      - Anne Fouilloux (Simula Research Laboratory), Tina Odaka (IFREMER), Konstantin Ntokas (Brockmann Consult GmbH), Jean-Marc Delouis (CNRS/IFREMER), Julia Wagemann (thriveGEO GmbH), Felix Cremer (Max Planck Institute for Biogeochemistry)
    - Idias:
      -
- Demo:
  - Thursday 02 October 15:35-15:50
    - Scalable Earth Observation with DGGS and Zarr for Cloud-Native Environment Analytics



Wednesday 01 October	Thursday 02 October	Friday 03 October
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- Papers (posters)
- 
- Icon model on healpix/zarr format:  
[https://easy.gems.dkrz.de/Processing/healpix/pyicon\\_healpix.html](https://easy.gems.dkrz.de/Processing/healpix/pyicon_healpix.html)
- Arpege: ZSW
  - power focust for energy resources; (timeseries analysis)
  - repackaging grib2 (arpege) it to zarr:
    - timeseries analysis so zarr is better than grib
    - share the workflow in github???
  - <https://fsspec.github.io/kerchunk/modules/kerchunk/grib2.html>

28 July 2025 09:00 CET

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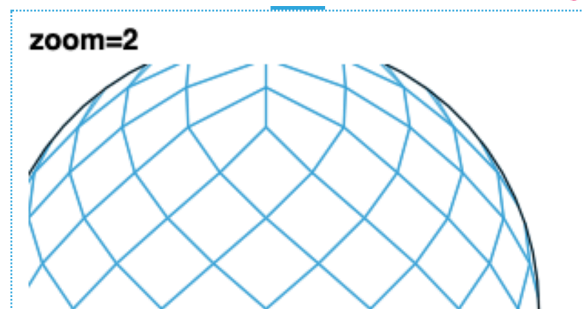
22 July 2025 16:00 CET

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15 July 2025 16:00 CET

- safe format
- <https://github.com/EOPF-Sample-Service/>
- zarr migration zarr2 -> 3
  - documentation link : [https://zarr.readthedocs.io/en/latest/user-guide/v3\\_migration.html](https://zarr.readthedocs.io/en/latest/user-guide/v3_migration.html)
- Parcels hackathon/conference: <https://oceanparcels.org/blog/10year-event>
- [tina.odaka@ifremer.fr](mailto:tina.odaka@ifremer.fr)
- uxarray treats healpix data as straight edges <https://uxarray.readthedocs.io/en/latest/user-guide/healpix.html>
- [https://eopf-dggs.github.io/LPS25\\_demo/intro.html](https://eopf-dggs.github.io/LPS25_demo/intro.html)

- (° °) ^ — — —



- Nick - I've never worked with lower level languages - and recs for learning lower level, performant scientific coding concepts?
  - <http://www.idris.fr/media/formations/mpi/idrismpi.pdf>
  - mpi python
  - Optimise before parallelise
  - profile before optimise

## 8 July 2025

- voting for having 9:00 meeting once in a 2 weeks continues!! . (please write your name)
  - yes:Tina, Xavier
  - no:
- If yes wins, i propose first 9:00 meeting on 15.07.2025

## 1 July 2025

- voting for having 9:00 meeting once in a 2 weeks. (please write your name)
  - yes:Tina, Xavier
  - no:
- If yes wins, i propose first 9:00 meeting on 15.07.2025

## 17 June 2025

- Talked about the LPS-programme (Ola, Xavier)
  - New chunking strategy in netcdf4:  
<https://lps25.esa.int/programme/programme-session/?id=C49D0393-3447-4478-B36C-6853550FBC37&presentationId=6A893851-3338-4EB1-8C7A-A8F01D0179E7>

## 10 June 2025

- Marimo notebook : <https://marimo.io/>

## 3 June 2025

-

## 27 Mai 2025

- <https://www.ogc.org/initiatives/ai-dggs-pilot/>
  - disaster control, use of LLM, ML/AI to get info from EO data in DGGS.
  - DGGS, at least 2 different kind of system. (interoperability)
  - deadline 20.06
  - call is challenging.

## 20 Mai 2025

- Compression: chunkindex library <https://github.com/CNES/netCDFchunkindex> defines sub-chunks in compressed netcdf-4 datasets. It allows loading only parts of chunks that lie between two index points without the need to load the full chunk. The price to pay is the indexation and the storage of the index : 32kB window per index point. It may be seen as the inverse of sharding in that it splits large chunks where sharding is used to group small chunks.
- zarr v3 Sharding. Does there exist a notebook somewhere explaining with examples how to do sharding?
  - To enable sharding with xarray, put "shards": (1, shard\_size\_dim1, shard\_size\_dim2) into the variable encoding dict. E.g.:

```
ds = ...
ds.to_zarr(
    path,
    encoding={
        "var1": {
            "shards": (1, shard_size_dim1,
shard_size_dim2)
        }
    }
)
```
- LPS:
  - Pangeo events:
    - DGGS-Poster Session Tuesday
    - DGGS-Session Thursday afternoon
    - chunkindex poster on Friday noon
  - km-scale global hackathon:
    - spherical screen:



- gridlook:
  - [https://gridlook.pages.dev/#https://swift.dkrz.de/v1/dkrz\\_41caca03ec414c2f95f52b23b775134f/reanalysis/v1/ERA5\\_P1M\\_7.zarr](https://gridlook.pages.dev/#https://swift.dkrz.de/v1/dkrz_41caca03ec414c2f95f52b23b775134f/reanalysis/v1/ERA5_P1M_7.zarr)
  - link to the repo <https://github.com/d70-t/gridlook>

## 13 Mai 2025

- LPS:
  - Pangeo events?
  - Pangeo Eosc Custom Image: use your own image
  - PANGEO@EOSC capacity for a user: RAM: 32GB and disk space: ?

## 6 Mai 2025

- feedback EGU
- Hachathon
  - access to mattermost
  - access to pangeo-eosc & dkrz account

# 29 April 2025

(lots of people are at EGU and may not be able to join)

# 22 April 2025

- EGU
- Datatree for drifter data
- Hackathon possibilities
  - <https://cesoc.net/hackathon-on-machine-learning-for-the-earth-system/>  
Machine Learning for the Earth System - Hackathon  
27-29 .08 2025 Bonn Germany
  - <https://github.com/digital-earths-global-hackathon/hk25-teams>
    - Get access:  
<https://pangeo-data.github.io/pangeo-eosc/users/users-getting-started.html>
    - Pangeo team will propose a new team: tk25-Generic\_DGGS
      - Work proposition. An extended activities from our former hackathon [hack4riomar](#) for Sentinel 2 L2A dataset.
        - Zarr 3 sharding and optimal chunking on HEALPix data. (icechunk, zarr 3 python )
        - Multi resolution S2 data as an example of Pyramidal representation
        - S2L2A , Tina will ask zarr eopf to be available on the cloud (same year as the ( For the time of the test. (UTM10 => HEALPix)
        - CF convention / GEO ZARR for HEALPix/Zarr (Collaboration with ICON/HEALPix-Zarr format specification)
        - (maybe we can bring some more HELAPix/Zarr data observation on storms with cfsat....)
      - Support material
        - <https://github.com/LAOCEA/regridding-ecosystem-overview>
    - infrastructure => ask EGI
      - How many people will we be?
        - Simula: Even Magnus Henrik ? Anne
        - Nick?
        - Jean Marc
        - Liege Xarray team : Justus, Benoit, Scott
      - **Is** it possible to have access to Hamburg node from a virtual team?
      - Tina plans to join the Tokyo node.
    - 13 &14 Benoit+ justus working in liege
  - We can also plan other hackathon
    - BIDS [Big Data from Space 2025](#)

- Tutorial EOPF:  
<https://docs.google.com/document/d/1ilMlvWA5si2hNCYHbDkgk15qlbeue5F4/edit?usp=sharing&oid=117642930190987755261&rtpof=true&sd=true>
- Hachathon DGGS (+EOPF) :  
<https://docs.google.com/document/d/15NnKmh-3C5u5dU02EEgUFpbLGYDWHo47/edit?usp=sharing&oid=117642930190987755261&rtpof=true&sd=true>
- LPS : (Anne, Tina will participate)
  - Schedule:[https://lps25.esa.int/wp-content/uploads/2025/04/LPS25\\_overviw\\_programmeOK\\_250415.pdf](https://lps25.esa.int/wp-content/uploads/2025/04/LPS25_overviw_programmeOK_250415.pdf)
  - DGGS: C01.05 Thursday 16:15- 17:30
  - ORAL:
    - When??: Pangeo Europe: A Community-Driven Approach to Advancing Open Source Earth Observation Tools Across Disciplines
    - XDGGs: Integrating Xarray with Discrete Global Grid Systems for Scalable EO Data Analysis
      - Thursday 16:15- 17:30
    - Global Fish Tracking System (GFTS): Harnessing Technological Innovations for Conservation and Sustainable Resource Management
      - D.01.02 Technological Innovations for a Digital Twin of the Earth system 14:00-15:30, 16:15-17:30
    - MOOC??
    - Fair2adapt??
  - Poster: When??
    - Advancing Earth Observation Analytics: Leveraging HEALpix, rHEALpix, and DGGS for Spherical Data Representation, Power Spectrum Analysis, and Multiscale Insights
      - JM, Lionel, Justus, Tina
    - Convolution in Discrete Global Grid Systems (DGGS): Example in Healpix
      - Justus, JM, Tina
  - Fair and Open Science with EARTHCODE integrated Platforms  
D.03.15 : Sunday 17:00-18:20
  - Earthcode 101 Hands-On training Earthcode 101 Hands-on Workshop : D03.10 Monday 9:00-10:20
  - Open Science in the making : discussion on DGGS and Zarr (kind of hackathon ) : Open space : Every Morning, Tuesday to Friday.
  - Demonstration: when ??
    - Exploring Copernicus Sentinel Data in the New EOPF-Zarr Format
    - DGGS: Scalable Geospatial Data Processing for Earth Observation

## 15 April 2025

- EGU
- Tutorial planning:  
<https://docs.google.com/document/d/1hSrQLd1a67lChBkA4uYAAFe2fdjH0-FemU8ztnSdYA/edit?tab=t.0>
- Who will be there? write down you name and your presentations if it is not in the pangeo session here please? (including demo at ESA booth for example)
  - Monday:
    - FAIR2Adapt: Advancing Climate Change Adaptation Strategies through FAIR and open data sharing and Research Infrastructures by Anne Fouilloux and Barbara Magagna, Session ITS3.11/ERE6.3  
<https://doi.org/10.5194/egusphere-egu25-5215>
    - **Evening: Social ([Bermuda Bräu](#))**
      - **Guillaume EB**
      - **Scott H!**
      - **Brest team (JM, Tina, Justus, Etienne)**
  - Tuesday:
    - Poster Session EarthCODE: <https://doi.org/10.5194/egusphere-egu25-7070>
  - Wednesday:
    - Demo, noon?, ESA booth, Tina + Anne, DestinE GFTS project (pangeo-fish)
    - Ross S. [Talk](#) 09:25 Room 1.61/62 - More glaciology focused but using pangeo tools
  - Thursday:
    - Demo ESA Booth: Real-time Collaboration for GIS Workflows with JupyterGIS 16:00 - 16:20
    - [tutorial. 19:00-20:00. Room -2.62. SC 4.14. Pangeo tutorial](#)
  - Friday:
    - [Poster Hall X4 , 8:30-12:30, ESS12.15 Pangeo session](#)
    - [Orals Room -2.32 14:00-15:43, 16:15-18:00 ESS12.15 Pangeo session](#)
    - Guillaume EB :14:55–15:05 EGU25-1195 Room -2.92 [Session ESS11.5](#)

## 08 April 2025

- Bring your own image: <https://github.com/pangeo-data/pangeo-eosc/issues/96>
- Pangeo@EOSC object storage:  
<https://github.com/pangeo-data/pangeo-eosc/blob/main/users/users-getting-started.md>
- UK data facility: <https://jasmin.ac.uk/>
- CDSE: <https://browser.stac.dataspace.copernicus.eu/?language=en>
-



## 01 April 2025

- Big Data From Space
  - 29 September - 3 October 2025 | Riga, Latvia
  - <https://www.bigdatafromspace2025.org/>
  - Deadline for the paper submission 02.05.2025
  - 25.04.2025 Deadline for Tutorial Hachathon and challenge submission.
- <https://github.com/pangeo-data/pangeo-eosc/blob/main/users/users-getting-started.md>
- Tina: I can't attend this time zone since I always have meetings... Can we do like alternative time (like US , alternate morning 9:00, and 16:00 ?)
- 

## 25 Mar 2025

Chat between Wietze Siujker and Guillaume Eynard. **Topics below not covered.**

- LPS 2025: Open Science in the making @ LPS (see presentation [here](#))
  - Who is planning to attend LPS?
  - Could you please propose some “topic” where you think it could be useful to concentrate one full or half a day? We would need these as soon as possible, ideally by the end of this week, so we can start preparing the days.
- EGU : status?
- Guillaume : sharing CNES on-going work
  - JupyterGIS and others
  - Introducing work to come Open Planetary Engine 😊
- <https://discourse.pangeo.io/t/tips-for-platform-for-teaching-climate-data-analysis-with-python/5005/6>: EGI Pangeo-EOSC Solution?

## 18 Mar 2025

- Valentin pull request to Pangeo Docker
  - <https://github.com/pangeo-data/pangeo-docker-images/pull/600>
    - Allow installing heavy applications e.g. visual studio
- Discussion on Pangeo Docker
- ZARR
  - Versions
- VirtualZarr

## 11 Mar 2025

- EGI25
  - EGI hosts Pangeo-EOSC
  - looking for submission for EGI2025 to talk about your sage of Pangeo-EOSC
  - Deadline is March 20 2025
  - <https://www.egi.eu/article/egi2025-submit-your-proposal/>

- <https://indico.egi.eu/event/6638/abstracts/>
- Looking for feedbacks on EOPF ZARR
  - <https://github.com/EOPF-Sample-Service/>
  - check out EOPF Zarr backend for xarray
    - <https://github.com/EOPF-Sample-Service/xarray-eopf>

## 4 Mar 2025

- European conferences
  - EGU25
    - who is coming?
  - EGI25
  - one ocean science congress
  - oceans 2025
  - LPS25
  - FOSS4G
  - BIDS
    - Riga: <https://www.bigdatafromspace2025.org/>
  - ECMWF Sept
- suggestions for European pangeo talks
  - EOPF Zarr sample services.
    - <https://eopf-sample-service.github.io/eopf-sample-notebooks/sentinel-1-l1-grd-product-format-prototype>
      - xarray-datatree is archived, we should use the datatree in the xarray function.
      - no need to import datatree
      - datatree.open\_datatree → xr.open\_datatree
    - <https://zarr.eopf.copernicus.eu/>

## 18 Feb 2025

- EGU
  - Should we start creating a repo for Jupyter book?
  - Do we reuse last contents ( igarrs?)
  -

# 11 Feb 2025

A few folks just chatting....

Max J, Rich S, Justus M, Ola FK, Valentin G

- Chat about pangeo-notebook like images:  
<https://github.com/CNES/datalabs-docker-images/blob/master/pytorch-notebook/environment.yml>
- [developmentseed/veda-optimized-data-delivery-image](#): Curated Docker Image for the VEDA optimized data delivery team

Launching VScode in Jupyter: [code-server – VEDA Documentation](#)

Valentin did a demo of the CNES JupyterHub setup (thanks Anne for jumping in and assigning the host role so he could share!)

Chat about long-running notebook jobs. Nebari uses this: [Submit notebook jobs with jupyter-scheduler | Nebari](#)

# 4 February 2025

A few folks just chatting.... Justus M, Rich S,

# 28 January 2025

- EGU Pangeo session update
  - Session merging with ESSI2.4 Seamless Transition Between High-Performance Computing (HPC) and Cloud Computing in Earth Observation and Earth Modeling Data Processing
  - Deadline for completing merge is Tuesday 28th
  - Now have enough abstracts for a full oral session
- Data cubes: Where to start to build data cubes from scratch in Zarr format. The idea is to merge tif files over a large area. ([Webinar: Building a Planetary Scale Earth Observation Data Cube in Zarr](#))
- There's a conference at <https://www.geobusinessshow.com/> in London - planning to submit an abstract about Pangeo (TBD document)
- [2025 List of Remote Sensing / Geospatial Conferences / Workshops](#)

## 21 January 2025

- Is Tuesday evening really good? (pangeo US is wednesday, just in 24 hours, what about we do it on monday evening? (proposition by tina)
- 
- EGU Pangeo session update
  - Session: 14 submissions
- ESA Living Planet
  - <https://lps25.esa.int/>
- Fair2Adapt workshop: <https://github.com/FAIR2Adapt/Hack4RiOMAR>
  - Blog post: <https://fair2adapt.github.io/Hack4RiOMAR/workathon/blog/>
- Round of intros
  - Justus Magin
  - Ross Slater
  - Travis Hathaway
  - Valentin Genin
  - Ola Formo Kihle
  - Alejandro Coca-Castro

## 14 January 2025

- Round intros
  - Ross Slater
  - Matt Brown
  - Alejandro Coca-Costra, Alan Turing Institute
  - Jean-Baptiste Barré, Independent Contractor, working for labs, especially cryosphere satellite data
  - Ola Fk : University of Washington (Oslo)
  - Benjamin Schumacher (new)
  - Kevin Kopecky
  - Guillaume Eynard-Bontemps : CNES, Snow detection and overall library development for satellite data processing
- Where to start?
  - Join discourse
  - Explore educational resources e.g. <https://projectpythia.org/>
- Egu25 Pangeo session!! We need more submissions to keep the session open!!!
  - Deadline is 15th Jan
  - If you have any problem plz ping in discord ! <https://discord.gg/ex5qqEyyTz>
  - Also ESA LPS this year in Vienna... Cheaper, lot of people from the community will be there
- Question on Pangeo devs for vector data
  - Xvec, <https://xvec.readthedocs.io/en/stable/>
- Pangeo Europe and Model data?

- At the beginning, European community was more on EO Data.
- Digital Twins buzzword: mix models and observations.
  - CNES examples <https://www.spaceclimateobservatory.org/scoast-dt>, <https://www.spaceclimateobservatory.org/flooddam>
- Pangeo-EOSC
  - Some issues for deployments
  - Potential for Survey!

## 7 January 2025

- **IMPORTANT: We are moving our weekly meeting from 9:30 CET to 16:00 CET**
  - Post it in discord (Anne)
  - Update website (Ola)
    - Done in this PR: [Moving weekly Europe & Africa community meeting from 9:30 to 16:00 CET by ofk123 · Pull Request #72 · pangeo-data/pangeo.io](#)
- Submit your abstract to the Egu25 pangeo session!! We need more submissions to keep the session open!!!
  - Deadline is 15th Jan
  - If you have any problem plz ping in discord !
- DGGs inputs from community: [https://docs.google.com/document/d/1roWfszLqjO\\_bZevfOWxTmjsCwAXUyiaZ2s7BrBmJcM/edit?usp=sharing](https://docs.google.com/document/d/1roWfszLqjO_bZevfOWxTmjsCwAXUyiaZ2s7BrBmJcM/edit?usp=sharing)
- Start a doc to compile different use cases where DGGs is in need (Jean Baptiste).
- JupyterGIS: <https://github.com/geojupyter/jupytergis>
- **DO NOT FORGET: The next meeting is on Tuesday 14th January at 16:00 CET**







## 10 December 2024

- EOPF-ZARR : Is Sentinel1 data involved in the test sets ? which geometry : SAR or Ground ?
- Advertise again EGU'25 session (LinkedIn, etc.)
- Overall "agreement" for moving the Coffee meeting at 16:00 CET and host Pangeo showcase (once every 2 months) -> plan is to change the time in January
- Testing/using Pangeo deployment in Europe with Pangeo@EOSC: <https://pangeo-data.github.io/pangeo-eosc/>
- DGGs inputs from community: [https://docs.google.com/document/d/1roWfszLqjO\\_bZevfOWxTmjsCwAXUyiaZ2s7BrBmJcM/edit?usp=sharing](https://docs.google.com/document/d/1roWfszLqjO_bZevfOWxTmjsCwAXUyiaZ2s7BrBmJcM/edit?usp=sharing)

## 3 December 2024

- XDGGGS showcase tomorrow by Justus 22:00 CET, 21:00 UTC
- **When do we change meeting time, as mentioned last week.**
- Destination Earth and EO data
  - DGGGS for EO.
  - EOPF-ZARR
  - Healpix and rhealpix
- EGU
- Waiting for review and will ask Maxrjones tomorrow in the US meeting. In the meantime, if you have any input to the adding of the EGU-events in pangeo.io, let me know: <https://github.com/pangeo-data/pangeo.io/pull/54>
- Potential event in London that might be relevant:  
<https://sessionize.com/state-of-open-con-2025/> - abstract draft:  
[https://docs.google.com/document/d/12O1qe8LmG-GYC1oGjwQRv1fzCH\\_mYIZzV6tbsl3NHkl/edit?tab=t.0](https://docs.google.com/document/d/12O1qe8LmG-GYC1oGjwQRv1fzCH_mYIZzV6tbsl3NHkl/edit?tab=t.0)

## 26 November 2024

- Pangeo roadmap, main achievement and lessons learned:  
<https://docs.google.com/document/d/1vtMJL-QxZfOuo7u5KgDXCMpUMXztkKtKrLTyE9wirhk/edit?usp=sharing>
- Living Planet Symposium 2025, <https://lps25.esa.int/> Draft abstracts See [https://docs.google.com/document/d/1GS7DNGmVIWuxOUmEiHPzri52CiRD\\_UEH9Q9S-aCA-ZU/edit?usp=sharing](https://docs.google.com/document/d/1GS7DNGmVIWuxOUmEiHPzri52CiRD_UEH9Q9S-aCA-ZU/edit?usp=sharing) (add your name if you want to be authors/co-authors by Thursday 28 November)
  -  D.03.05: Open Scientific Computing for Earth Observation across Languages
  -  C.01.07: Discrete Global Grid Systems (DGGGS)
  -  D.04.06: Advancements in cloud-native formats and APIs for efficient management and processing of Earth Observation data
  -  D.03.02: Free Open Source Software for the Geospatial Domain: current status & evolution
  -  D.03.03: Impact through Reproducibility in Earth Observation Science and Applications
  -  D.03.04: Innovative technologies, tools and strategies for scientific visualisation and outreach
- Pangeo LinkedIn company profile account
- <https://discourse.pangeo.io/t/you-are-invited-to-provide-feedback-on-the-pangeo-showcase/4710/3>
  - Pangeo European hosting show case once in a month or once in two month??
    - do we want it?
    - if yes do we keep tuesday 9:30 or we change the time?
      - Tuesday afternoon 16:00 (CET) (NY is 10:00 , England 15:00,
  - On the European side we can propose to move our informal coffee meeting to Tuesday 16:00(CET) and can host once in a month ( or in two months) the showcase.

- Next week we keep the same 9:30(CET)
- 

## 19 November 2024

- Feedback from last week hybrid meeting
- Discussion tiler-xarray
  - Use python and xarray for tiling datasets in different formats (COG, zarr, netCDF)
  - Similar approach in Julia (Felix), example with QGIS, loading tiled dataset using <http://pyramids.fairsendd.eodhosting.eu/{z}/{x}/{y}.png>
- EOPF zarr: <https://discourse.eopf.copernicus.eu/>
  - Some relevant info of the product/project: <https://cpm.pages.eopf.copernicus.eu/eopf-cpm>
  - <https://github.com/bopen/xarray-sentinel>
  - Which ZARR specification?
    - zarr 3 is still beta
    - Are there European zarr developer?? <https://github.com/zarr-developers>:
      - <https://github.com/meggart>
      - Bio-imagery community?
        - <https://github.com/DimitriPapadopoulos>
        - <https://github.com/alimanfoo>
- I added EGU-sessions as events on pangeo.io, in this PR: <https://github.com/pangeo-data/pangeo.io/pull/54>

## 12 November 2024

Pangeo weekly coffee meetings go hybrid thanks to CNES!

 Pangeo and CNES Meeting



Check out the note of today in the above google doc.

## 05 November 2024

- European meeting at Paris
  - Checking availability for in-person attendance
- Workshops
  - Materials/tutorials listed in [Pangeo-EOSC](#) have a dedicated GitHub repo with MIT license
- Living Planet Symposium 2025, <https://lps25.esa.int/>
  - Submission by 1st December
  - Fees:
    - 1. Regular fee - 100 EUR/Abstract
      - no per person limit

- 2. Reduced fee - 30 EUR/ Abstract (for students or LDC member <https://unctad.org/topic/least-developed-countries/list>)
  - 3. ESA Staff / Contractor - no fee (please register using your ESA email for easy identification)
- List of related session for Pangeo communities
  - Open Science and Open Innovation
    - D.03.01 Harnessing Open and Community-Driven Innovation in Times of Emergencies
    - D.03.05: Open Scientific Computing for Earth Observation across Languages
  - Digital Twin
    - D.01.02 Technological Innovations for a Digital Twin of the Earth system
    - D.01.04 Using Earth Observation to development Digital Twin Components for the Earth System
- Tutorial submission (20-50 people)
  - Call 01.2025
    - Felix: Cross language
    - Pangeo European Tutorial ?
    -
- Pangeo CNES meeting, do not forget to singne up for hang out Monday evening.
  - The place and time will be written int the google doc
- EGU25
  - Submission by
  - Fees:
    - 50 Euros/Abstract
      - 1 abstract per person.

## 29 October 2024

- EGU 25 :
  - Proposing to create pangeo Linkedin account
  -  ad\_socialmedia
- european meeting at paris
  - in 2 weeks now!!
  -  Pangeo and CNES Meeting
  - asking CS group to make presentation on the status of EOPF ZARR
    - <https://eopf.copernicus.eu/>
    - Closed forums, need to send request to this e-mail: [contact\\_dpr@c-s.ro](mailto:contact_dpr@c-s.ro)
      - <https://discourse.eopf.copernicus.eu/>
      - <https://gitlab.eopf.copernicus.eu/>
    - <https://eopf-public.s3.sbg.perf.cloud.ovh.net/product.html> - public examples of Zarr stores for ESA products




## 22 October 2024

- Report from the 3rd Destination Earth User eXchange:
  - data lake + dask cluster (EuroHPC 3 sites + cloud infra such as cloudferry)
  - <https://platform.destine.eu/> (free default access but limited access to data)
- EDITO (Digital Twin for the ocean): EMODNET (copy data in s3 in parquet + STAC)
- LPS'25 23—27 JUNE 2025, VIENNA, AUSTRIA (Tutorials starting 22 June PM)
  - ideas of tutorials, paper submission? (deadline 1st December)
- EUMETSAT'25 ( EUMETSAT Meteorological Satellite Conference) will take place in Lyon, France on 15 - 19 September.
  - Ideas of paper submissions, workshops, etc.
  - See [submit your proposals](#)
- EarthCODE (Earth Science Collaborative Open Development Environment), funded by ESA, started at the beginning of October. Pangeo Europe is contributing in the workstream on Community.
- <https://github.com/orgs/NERC-CEH/projects/13/views/1> (need to make this public 🤗) Project based on pangeo-ferry, creating a tool to allow easy-ish conversion of data to ARCO (Zarr). Also diagram here: [https://github.com/NERC-CEH/dri\\_gridded\\_data](https://github.com/NERC-CEH/dri_gridded_data) Part of FDRI project: <https://fdri.org.uk/>
- EGU 25 (submission open until Jan?):
  - Pangeo
    - Pangeo Session - ESSI2.15  
<https://meetingorganizer.copernicus.org/EGU25/session/52079>  
Pangeo showcase: Geoscience using a Community Driven Approach  
Convener: Tina Odaka  
Co-conveners: Anne Fouilloux, Alejandro Coca-Castro, Dean Summers, Ross A. W. Slater
    - Pangeo short course - SC 4.14  
<https://meetingorganizer.copernicus.org/EGU25/session/53638>  
Harnessing the Power of Pangeo: Enhancing Your Scientific Data Analysis Workflow with scalable open source tools  
Convener: Anne Fouilloux  
Co-conveners: Tina Odaka, Scott Henderson, Max Jones, Justus Magin
  - FAIR & reusability ESSI3.2  
<https://meetingorganizer.copernicus.org/EGU25/session/52068>  
One decade of FAIR Principles: Data Reusability and Impact in Earth System Sciences  
Convener: Barbara Magagna  
Co-conveners: Ivonne Anders, Karsten Peters-von Gehlen, Anne Fouilloux, Jie Dodo Xu

- Pangeo Europe Meeting (hosted by CNES)
  - <https://discourse.pangeo.io/t/pangeo-europe-meeting-and-cnes-use-cases-and-collaboration/4550>
- xdggs: Justus is preparing a new version and needs help.
  - <https://github.com/xarray-contrib/xdggs/issues/75>

## 15 October 2024

## 8 October 2024

- EGI2024 update
  - Repository: <https://github.com/pangeo-data/egi2024-demo>
  - Interesting projects (potential collaborations)
    - <https://www.coastpredict.org/globalcoast/>
      - Interested in Pangeo for cloud processing/analysis
      - <https://indico.egi.eu/event/6441/contributions/19423/>
  - Slides:  pangeo-eosc-egi-coastal
  - Booth EODC, DesitinE
- Going through the registration process to Pangeo-EOSC
  - <https://pangeo-data.github.io/egi2024-demo/users-getting-started.html>
  - Repository: <https://github.com/pangeo-data/pangeo-eosc>
- EGU25 Pangeo Session
  - Promotion Ads,
    - [https://docs.google.com/document/d/1WVW3wDyPEGh9slmqXKqBSobS\\_Jghu8twHbVjUHe17AY/edit#heading=h.29qw9phazrjo](https://docs.google.com/document/d/1WVW3wDyPEGh9slmqXKqBSobS_Jghu8twHbVjUHe17AY/edit#heading=h.29qw9phazrjo)
- New version of Climate Data Store ERA5 downloading website (with NetCDF)
  - <https://cds.climate.copernicus.eu/>

## 1 October 2024

-

## 24 September 2024

- cancelled

## 17 September 2024

- EGU25
  - Key dates:
    - Abstract submission opens from 23 Oct 2024
    - Deadline for support travel applications [02 Dec 2024, 13:00 CET](#)

- Support application assignment & rating (convenor) [03–12 Dec 2024](#)
- Programme Committee Support application ranking /selection  
13-09 Jan 2025
- Deadline for receipt of abstracts [15 Jan 2025, 13:00 CET](#)
- Advertising plan
  - Banner (up to date, missing the new QR code),  
[https://docs.google.com/presentation/d/1uBNXjZcHxxP2pgt7pLvUQBYrU04gsL25cvccA-MyBjE/edit#slide=id.g2a04dcaf2f2\\_1\\_0](https://docs.google.com/presentation/d/1uBNXjZcHxxP2pgt7pLvUQBYrU04gsL25cvccA-MyBjE/edit#slide=id.g2a04dcaf2f2_1_0)
  - Communication / Social media
    - [Social media](#) (up to date, missing URL to the session)
      - Twitter (X)
        - Can we get pangeo twitter access? (Tina will ask)
      - LinkedIn
      - Discourse
    - [Mail](#) (up to date, missing URL to the session)
- Sentinel1
  - gamma software - <https://www.gamma-rs.ch/>
  - <https://github.com/umr-lops/xsar>
  - [https://github.com/umr-lops/xsar\\_slc](https://github.com/umr-lops/xsar_slc)
    - <https://cerweb.ifremer.fr/datarmor/sarwave/documentation/processor/sar/xsarslc/html/>
- <https://spatial-data-science.github.io/2024/>
- <https://github.com/pangeo-data/egi2024-demo>
  - EGI2024 September 30th - October 4th 2024, Lecce, Italy

## 10 September 2024



- Round of intro (we have many new people today!)
- **Pangeo@EOSC** - <https://pangeo-eosc.vm.fedcloud.eu/> upgrade on Wednesday 11 September between 4pm and 5pm CEST today.
- Anne's new NGO: Terra Nova
- Anne engaging in Climate Fresk <https://climatefresk.org/> (outreach, education) and would be interested to create and organise more data oriented workshops (for citizen)
- Scott Henderson: I'm working for a year remotely in Oldenburg, Germany, feel free to reach out! [scottyh@uw.edu](mailto:scottyh@uw.edu)
- EGU25
  - Short course and session submitted! Thanks for your help!
  - Deadlines: [https://www.egu25.eu/about/deadlines\\_and\\_milestones.html](https://www.egu25.eu/about/deadlines_and_milestones.html) - expecting response to session proposal by 9 October and some activity before, e.g., request to merge
- Numfocus zoom update
  - [pangeo.europe@gmail.com](mailto:pangeo.europe@gmail.com) added to NumFocus for easier convening
- SatSummit (organised by Development Seed, in Lisbon)

- Planning session at SatSummit Lisbon 18-19 November on cloud-optimized climate data <https://satsummit.io/2024-lisbon/> - goal: illustrate possibilities and explore opportunities for more efficient climate science with streaming-friendly file formats
- Want to organize a session about ARCO for model data: <https://www.meeo.it/> (Simone Mantovani)
- Copernicus Marine Service
  - <https://github.com/iaocea/cmems-stac>
    - try with stac browser: <https://radianteearth.github.io/stac-browser/#/external/keewis-copernicus-marine.hf.space/>
    - Different chunking options
  - UK CEDA - presentation at BIDS
- For the oceanographers here: Pure Python OGCM beating Fortran on performance (with JAX backend): <https://veros.readthedocs.io/>
- EGI demo repo, please share your notebooks that you use in pangeo-eosc for demo ;-)
- <https://github.com/pangeo-data/egi2024-demo>
  - [https://juliadatacubes.github.io/datacubes\\_in\\_julia\\_workshop/](https://juliadatacubes.github.io/datacubes_in_julia_workshop/)
- 

## 3 September 2024

- Earthcode
- 2025 conference dates
  - EGU: 27 April - 2 May
    - Submit this week the short-course & pangeo-session.
    - Make pub of short-course on
  - Living Planet Symposium: [23–27 June 2025](#).
  - BIDS: organise hackathon, sprint code, etc. (collaboration with OsGeo)

## 27 august 2024

- [EGU 2025 27 April - 02 May 2025](#)
  - 01.07 - 09.09 2024: call-for-session-proposals (incl. short courses, US, GDB)
  -  EGU25-pangeo short course - Check descriptions of other short courses from previous years to make sure our description fits with EGU expectations.
  -  EGU25- PANGEO session
  - 23.10.2024 - 15.01.2025: Abstract submission.
- OSM26 - similar to EGU but for Ocean.

- Jonas mentioned [Pangeo Forge](#) as a project Development Seed has supported in the past
- Preparation of the next Pangeo Steering council meeting: we need your input/feedback:
  - [Pangeo Showcase: "What's next for Pangeo?"](#)
  - [What's Next - Democratization - Science/Community](#)
  - [What's Next - Cloud - Partner-managed Infrastructure](#)
  - [What's Next - Scientific Publishing - Open Science](#)
    - <https://data.agu.org/notebooks-now/>
  - In addition, we are asked to reply to the following questions:
    - What do you think the mission of Pangeo should be? (Bonus: There is a lot of trust in the Pangeo brand, how should we leverage that?)
    - What changes or challenges would you like to see addressed in the Pangeo community in the next year or beyond
    - How would we bring about those changes or address those challenges?
- Julia Datacubes tutorial:
  - [https://juliadatacubes.github.io/datacubes\\_in\\_julia\\_workshop/](https://juliadatacubes.github.io/datacubes_in_julia_workshop/)

## 20 august 2024

- Access to Pangeo Google calendar: <https://pangeo.io/meeting-notes.html> to add Pangeo Europe Coffee meetings.
- rasterio, rioarray for reading sentinel data geotiff, maybe jpeg 2000? It would be interesting to get some examples with jpeg2000.
- Preparation for [EGI 2024 conference](#):
  - Demo <https://github.com/pangeo-data/egi2024-demo>: Jean-Marc will push a notebook, We can reuse the ones from IGARSS
- NFDI4EARTH workshop next week (Julia & datacubes)
- ESA Zarr call (18 months):
  - Atmosphere
  - Marine
  - Land
  - Climate Change
  - Security
  - Emergency

## 13 August 2024

- ESA Zarr call is issued see the following documents:
  - [https://drive.google.com/drive/folders/1BkddgkGduOVbSdCL7NXmqDqUAcz6nfDu?usp=drive\\_link](https://drive.google.com/drive/folders/1BkddgkGduOVbSdCL7NXmqDqUAcz6nfDu?usp=drive_link)
- PyramidScheme (Julia)
  - Comparison with DataShader

- Suited to vector, with some support to Gridded data
- Limited to a single resolution
- Zarr multiscale proposal:  
<https://forum.image.sc/t/multiscale-arrays-v0-1/37930>





## 30 July 2024


- Juliacon. videos (talks) will be available (at some point), including mini-symposium on earth-Science
- Geo-location: <https://github.com/JuliaGeo/GeometryOps.jl>
- ESA Zarr upcoming call: **SENTINELS EOPF SAMPLE SERVICE**: The re-engineering of the existing Copernicus Sentinel Data Processors will introduce a major paradigm shift for user-level data provisioning, harmonising the data format amongst the Sentinel missions, architecting for scalable processing on cloud platforms, designing for direct compatibility with data science programming frameworks, and fundamentally facilitating take-up by providing access, analysis, and information-ready data. However, due to the massive take-up of Sentinel data within the Earth Observation Ecosystem, the change of format needs to be managed with a significant overlap with existing operations and motivate the adoption of the new format by users. The Sentinels EOPF Sample Service shall facilitate the early adoption of the new data format (Zarr/STAC) by providing significant "live" data collections accessible to users. The data is to be re-formatted from the nominal Sentinel data production using reformatting modules.
- This live data collection shall be accompanied by communication means that demonstrate the advantages and ease of adoption and dedicated open-source libraries for facilitating the integration of the new format to existing businesses or workflows.
  - Anne will try to find out which providers would be interested.
  - Felix is taking part in the Geo-Zarr standardisation meetings/discussions: Geo-Zarr tries to manage both netcdf CF conventions & geotiff.
  - <https://github.com/zarr-developers/geozarr-spec>
  - Bi-weekly meetings (see info at <https://zarr.dev/community-calls/> and minutes from the meetings: <https://hackmd.io/t2DWpX1iQEWMKx1Fi4Px7A>)
- Geo-Zarr & OME-Zarr, etc. Maybe one interesting focus could be on multi-scale Zarr.
  - Try to find a multi-scale OME Zarr dataset (not too big).
  - Hackathon 4-8 November (Hybrid) <https://biohackathon-europe.org> with a group planning to work on OmE-Zarr and Geo-Zarr

## 23 July 2024

- Fair2Adapt
  - Pangeo activities: 1/8 of it. (Simula + Ifremer)
  - We need to plan the activities to make sure they benefit to the entire Pangeo community.
- ESA Zarr project?
  - <https://esastar-publication.sso.esa.int/ESATenderActions/details/92136>
- NumFOCUS
  - We followed up and they are working on establishing an EU “entity” but the timeline is just not going to be immediate;
  - What alternative do we have?
    - For the last ESA call, we used Lampata UK. However, it can add a lot of overhead and responsibility to Lampata which may not be sustainable in the long term. At least we should find ways to support/help them.
- How to promote open source? What is available and where?
  - <https://openuk.uk/> (Dean has contact and can get more information/connect with Amanda)
  - <https://openlifesci.org/>
  - <https://astera.org/>
  - <https://investinopen.org/>
- [DestinE 3rd User Exchange](#)
  - Who is going? who is submitting an abstract? (deadline 18th August).

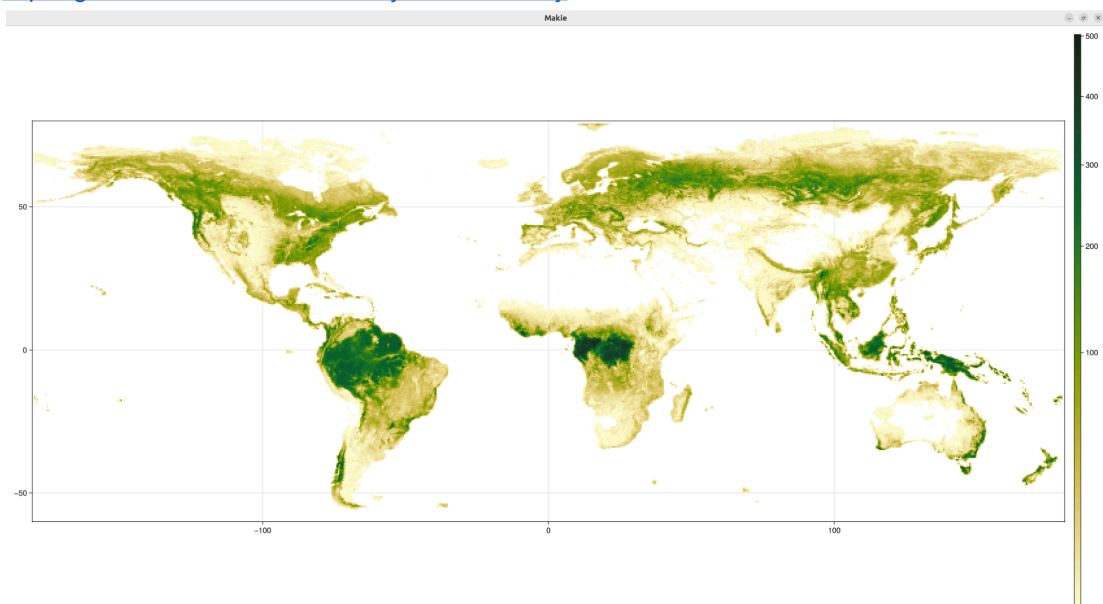
## 16 July 2024


- <https://github.com/pangeo-data/pangeo-igarss2024/> finished
- EARTH-Code proposal has been submitted: Pangeo is under the umbrella of Lampata UK because NumFOCUS France was not fully registered yet.
- EGI started drafting an "EGI Node" response in the following document: <https://docs.google.com/document/d/1y0fb4xQSWrEU0GStlyxaQMFvd4P5DvYcgKMkuzuWdcw/edit?usp=sharing>
  - We are wondering if we should add Pangeo@EOSC (Anne will try to find out)
- Upcoming events for submitting session
  - [DestinE 3rd User Exchange](#)
    - Poster : XDGGs and GFTS
      -  Abstract GFTS (Deadline **18 August 2024.**)
      -  **DestinE 3rd User Exchange**
      -  **Abstract XDGGs**
      - **Poster**
  - [EGU 2025 27 April - 02 May 2025](#)
    - 01.07 - 09.09 2024: call-for-session-proposals (incl. short courses, US, GDB)
    -  EGU25-pangeo short course

-  EGU25- PANGEO session
- 23.10.2024 - 15.01.2025: Abstract submission.
- [Living Planet Symposium 23-27 June 2025](#)
  - Call for abstract 14.10—22.11 2024
    - GFTS
    - XDGGs
    - Pangeo-EOSC
    -
  - Call for Tutorials December 2024
  -
- BiDS'25:
  - Organise a hackathon with OsGeo, numFOCUS? Ask Cocal if interested in sponsoring/contributing to this event.
  - To coordinate with Stefanie Lumnitz
- Projects we would like to get money for the Pangeo community:
  - xddgs
  - Zarr 3

## 2 July 2024

- Felix is going to JuliaCon next week and will show <https://github.com/JuliaDataCubes/PyramidScheme.jl>



- 
-  Screenshot from 02.07.2024 10:07:14.webm

## 25 June 2024

- <https://pangeo-data.github.io/geo-open-hack-2024/intro.html>
  - <https://iiasa.ac.at/events/jun-2024/geo-open-hack-2024-big-geospatial-data-hackathon-with-open-infrastructure-and-tools>
- Earth-Code 006+007+002



- :
- WS1: network of resources.
- WS2: reproducible Open Science Platform?  
<https://www.osgeo.org/projects/eoepca/??>
- WS3: Community management.
- <https://nasa.github.io/Transform-to-Open-Science/>
- Julia?
- AI Japan
  - <https://events.linuxfoundation.org/ai-dev-japan/>
  - 10th of July.

## 18 June 2024

- Pangeo (via NumFocus) is aiming at taking part in the call Earth Code Please be informed that Tender Action Package for the Non-ESA Tender Action 24.TSVE.002 - EARTH-CODE: EARTH SCIENCE Collaborative Open Development Environment has been published. In order to see the Tender Action details, please click at the following link: <https://esastar-publication-ext.sso.esa.int/nonEsaTenderActions/details/13691> and <https://earthcode.esa.int/>
  - meeting on Wednesday 19th June at 11:00 CEST. Contact [annef@simula.no](mailto:annef@simula.no) if you want to join the meeting and discuss the Pangeo contribution to this call.
- Geo-Open-Hack 2024 next week (see <https://iiasa.ac.at/events/jun-2024/geo-open-hack-2024-big-geospatial-data-hackathon-with-open-infrastructure-and-tools>)
- ML ecosystem in Julia: <https://github.com/SciML>, <https://github.com/ODINN-SciML/ODINN.jl>
- JuliaCon 2024: <https://juliacon.org/2024/> (joint with pyData)

## 4 June 2024

- Julia project update
  - xarray tutorial translation to julia on the way, feedback welcome
    - <https://github.com/JuliaGeo/JuliaGeoTutorials>
- Chunking tutorial
  - [https://github.com/linamaes/chunking\\_tutorial/tree/main](https://github.com/linamaes/chunking_tutorial/tree/main)
  - <https://edutrain.nfdi4earth.de/>
- <https://projectpythia.org/pythia-cookoff-2024/>
  - Pythia cookoff organiser is looking for folks that could serve as breakout leaders in the EU timezone.

## 28 May 2024

- Next training for IGARSS 2024: <https://github.com/pangeo-data/pangeo-igarss2024/>  
IGARSS 2024 conference website: <https://www.2024.ieeeigarss.org/>
  - Update links for conda-micromamba?
  -
- 28th June  
<https://iiasa.ac.at/events/jun-2024/geo-open-hack-2024-big-geospatial-data-hackathon-with-open-infrastructure-and-tools>
  - geo open hack 2024
  - half day Friday Morning:
    - Presenting Pangeo
    - Xarray, chunking Dask.
- Teaching material
  - Can we do some automatic check?
- Any new call possibilities?
  - Earth Code Please be informed that Tender Action Package for the Non-ESA Tender Action 24.TSVE.002 - EARTH-CODE: EARTH SCIENCE Collaborative Open Development Environment has been published. In order to see the Tender Action details, please click at the following link:  
<https://esastar-publication-ext.sso.esa.int/nonEsaTenderActions/details/13691>
  - <https://earthcode.esa.int/>
  - Info on the call is available at  
[https://drive.google.com/drive/folders/1CO4ccKhSnC4JuTc15n0s0b\\_YcnxScNT?usp=sharing](https://drive.google.com/drive/folders/1CO4ccKhSnC4JuTc15n0s0b_YcnxScNT?usp=sharing) (please read the documents if you are interested)
- Pangeo-EOSC MinIO disk problem. See issue  
<https://github.com/pangeo-data/pangeo-eosc/issues/77>
- <https://github.com/pyvista/pyvista-xarray>

## 21 May 2024

- EGI is asking for testimonials to add in the EGI annual report 2024 (2-3 sentences are required, to be sent by the end of this week. Any suggestions? if not I (Anne F) will come up with something...

## 14 Mai 2024

- PANGEO@EOSC new SLA has been extended to support your research activity until 30th June 2027.
- What is the most recent pangeo tutorial?
  - <https://pangeo-data.github.io/pangeo-openeo-BIDS-2023/intro.html>
  - Introduction to Pangeo
  - Unlocking the Power of Space Data with Pangeo & OpenEO
- Chunk Tutorial to

## 30 April 2024

- Deadline moved to May 6th Abstract to be submitted to [EGI2024 conference](#).
- Welcome to Dean and Krasen
- backup your data ON PANGEO@EOSC: For instance using rclone(<https://rclone.org/>) because pangeo@EOSC scheduled maintenance window on 7th May, 2.30pm - 3.30pm. Action: Add some information at <https://discourse.pangeo.io/t/whats-next-cloud-partner-managed-infrastructure/3885/2> (also ask Sebastian from EGI in the loop > open an issue in pangeo-EOSC?)
  - Access should work for everyone beyond Europe
- how do we collaborate and on what topics:
  - Informal collaboration (through Pangeo coffee meetings)
  - Develop package together (such as xddgs)
  - collaborate on Pangeo infrastructure deployment (Pangeo@EOSC)
  - Submit proposals together (ESA, EU proposals, Destination Earth).

## 23 April 2024

- Deadline 24th April. Abstract to be submitted to [EGI2024 conference](#).  
[https://docs.google.com/document/d/1\\_jsEGBFuaD3E\\_EkSZnrr7i0fZJ03L7iz8chp2npzQKs/edit?usp=sharing](https://docs.google.com/document/d/1_jsEGBFuaD3E_EkSZnrr7i0fZJ03L7iz8chp2npzQKs/edit?usp=sharing) (please review asap and add your name if you agree with the text. Thanks!)
- Pyramiding:
  - <https://github.com/mapbox/mercantile>
  - <https://developmentseed.org/morecantile/>
  - <https://github.com/zarr-developers/geozarr-spec>

## 9 April 2024

- IGARSS 2024:  
<https://docs.google.com/document/d/1qyO1QqAk4BdepiO6aQ7Tlipgd1sQZeD-1rkQM5D1PM4/edit#heading=h.mx6dv7favfhu>
- <https://nordic-rse.org/>
- <https://agile-gi.eu/>
- <https://confluence.ecmwf.int/display/DDCZ/DestinE+ClimateDT+Parameters>
- geoopenhack: 24-28 June. (pangeo friday 9:00-12:00 ) :  
<https://docs.google.com/document/d/1IXx9CikuBKnfU6X1-8Uq4aazWmw1DZ0Y0UxLHnia2lc/edit#heading=h.kau6urvvgj5l>

## 2 April 2024

- Data lake, data space and Digital twin applied to Ocean data  
<https://youtu.be/hXXgf2RIAgc>
- Copernicus Sentinels Data Access Worldwide Benchmark Test Suite  
[esacdacdab-testsuite: Copernicus Sentinels Data Access Worldwide Benchmark Test Suite is the software suite used to run Test Scenarios for benchmarking various Copernicus Data Provider targets. \(github.com\)](https://github.com/esacdacdab-testsuite)
- Xarray-DGGS dev meetings, Mondays, 14:00-14:30 CEST starting with April 8th, 2024
  - <https://discourse.pangeo.io/t/xdggs-development-meetings/4109>

## 26 March 2024

- EGU
  - Poster printing service: <https://nimmerrichter.com/egu2024/>
    - any way to print on tissue?
    - \
- OSCARS call: <https://oscars-project.eu/oscars-first-open-call>
- DGGS
  - OGC
  - <https://github.com/iaocea/xarray-healpy>
- <https://b-cubed.eu/b-cubed-hackathon>
- The Copernicus Data Space Ecosystem is organizing a first **User Review Meeting**. This free hybrid event will take place April 15, 2024 in parallel with EGU 2024 and is dedicated to **enhancing the Copernicus Data Space Ecosystem through valuable user insights**.

## 19 March 2024

- pangeo-fish presented in international biologging conference (<https://bls8tokyo.net/>)  
<https://zenodo.org/records/10809819>
  - pangeo environment is useful for biologies who use geospatial information to study biology.
- XDGGs
- **EGU 14-19 April**
  - **[pangeo session tuesday morning room 0.51, 8:30-10:30](#), poster tuesday evening hall X3**
  - booth at NFDI4Earth project to make pangeo presentation.
  - pangeo meet up organisation!! which day? tuesday? monday?
  - copernicus data space ecosystem side event [Copernicus Data Space Ecosystem - User Review Meeting | Copernicus](#)

- -
- OGC delft netherlands, 25.03- 28.03
  -
- Foss4G
  - tartu this year
- CDSE user review survey
  - [Copernicus Data Space Ecosystem - User Review Survey \(surveymonkey.com\)](https://surveymonkey.com)

## 12 March 2024

- Veni vidi vici
- xdgs planned short meetings from april

## 5 March 2024

- Post fata resurgo

## 20 February 2024

- Recap of Jan-Feb 2024 meetings
  - Showcases
    - Kerchunk, interesting, but it seems the recording isn't available
      - Actually, a portion of the recording available [here](#)
- Talking about governance in Pangeo, <https://pangeo.io/about.html#governance>
  - Sponsors, <https://github.com/pangeo-data/governance/blob/main/governance.md#fiscal-sponsor-project-funds-and-project-sponsors>
  - Steering council, [https://github.com/pangeo-data/governance/blob/main/steering\\_council\\_membership.md](https://github.com/pangeo-data/governance/blob/main/steering_council_membership.md)
- What's next in Pangeo (see notes [19 December 2023](#)),
  - Meeting mostly focused on developments/activities in US
  - Added to the summary section of this online document
- Pangeo deployments
  - 2i2c, <https://pangeo.io/cloud.html> , [Pangeo cloud deployment](#)
  - Pangeo-EOSC, <https://pangeo-eosc.vm.fedcloud.eu/hub/login?next=%2Fhub%2F>

## 13 February 2024

- Performance issues with dask. Interesting package for groupby: <https://flox.readthedocs.io/en/latest/>; Justus is also following a working group on Xarray looking at backend to increase performance.
- Copernicus Marine: copernicusmarine Python package (Demo from Tina)
  - pip install copernicusmarine
  - <https://data.marine.copernicus.eu/products?facets=areas%7EAtlantic%3A+Iberia-Biscay-Ireland--tempResolutions%7EHourly>
- Showcase events restarted.
- Proposition for new time of pangeo show case;
  - 16:00 (CET) - 15:00( England & Pt) 10:00 (east coast) - 7:00 (west coast)
  - 9:00 (CET) - 8:00( England & Pt) 3:00 (east coast) - 00:00 (west coast)
  - European suggestions
    - The new copernicus marine services
    - XDGGS, Argopy, Xsar , pangeo-pyinterp, EUDAG
    - Creating tutorials and user guides for 'easy' object storage use: [https://github.com/NERC-CEH/object\\_store\\_tutorial](https://github.com/NERC-CEH/object_store_tutorial)
    - kerchunk&cmip6 (in UK)

## 6 February 2024

- EGI-ACE open call Next cut-off date: 15 May 2024:  
[https://www.egi.eu/egi-open-call/?mtm\\_campaign=20240205\\_egi\\_open\\_call&mtm\\_source=slack&mtm\\_medium=social](https://www.egi.eu/egi-open-call/?mtm_campaign=20240205_egi_open_call&mtm_source=slack&mtm_medium=social)
- Climate Informatics 2024 hosted by the Alan Turing Institute, 22-24 April, Hybrid (London / Online),  
<https://alan-turing-institute.github.io/climate-informatics-2024/>
- Countmap comparison, Julia and Python
  - Julia: <https://github.com/meggart/DiskArrayEngine.jl> and <https://github.com/meggart/DiskArrayEngine.jl/blob/main/devscripts/countmap.jl>
  - Python
    - ```
import xarray as xr
import numpy as np
from flox.xarray import xarray_reduce
import dask
ds = xr.open_dataset("/home/fgans/data/LC_CCI/C3S-LC-L4-LCCS-Map-300m-P1Y-2020-v2.1.1.nc", chunks={'lon':2025,'lat':2025})
onearray = dask.array.ones_like(ds.lccs_class.data)
xr.ones = xr.DataArray(onearray,dims = ds.lccs_class.dims,coords = ds.lccs_class.coords)
r =
```

```
xarray_reduce(xrnes, ds.lccs_class, func="sum",
expected_groups=np.arange(0,256), dtype='int64'
) rc = r.compute()
```

- Writing NetCDF4 using HDF5 chunk behind is possible with Xarray?
  - <https://docs.hdfgroup.org/archive/support/HDF5/doc1.8/Advanced/DirectChunkWrite/index.html>
  - <https://docs.h5py.org/en/stable/high/dataset.html#chunked-storage>
    - According to this link, it is possible to use iter\_chunks method which returns an iterator that can be used to perform chunk by chunk reads or writes:
    - The question is can Xarray write NetCDF4(hdf5) file in chunked way (following the Xarray's chunk?)
    -

## 30 Janvier 2024

- EOSC, what is CO2 emission of EOSC infra?
  - infra we've used as pangeo-europe
    - cesnet
    - eodc (sentinel 1 data, file path.)
  - is it Renewable energy resource?
- Trade off of accuracy and CO2 consumations?
- Julia: <https://github.com/JuliaDataCubes/PyramidScheme.jl>
- DGGs
  - <https://deepmind.google/discover/blog/graphcast-ai-model-for-faster-and-more-accurate-global-weather-forecasting/>
  - <https://github.com/google-deepmind/graphcast>
  - icosahedron (5 triangle on the top and down, 10 in the middle = 20) as the zero degree
    - 20 triangle => 12 corners in total
    - 20 x 4 => 80
    - 80 x 4 =>

## 23 Janvier 2024

- Creation of a Pangeo Europe working group to develop further Pangeo in Europe and seek for opportunities for the whole Pangeo community.
  - Who is interested? Add your name below:
    - Anne Fouilloux

- Alejandro Coca
- The idea is to meet every 1, 2 or 3 months (outside pangeo coffee meetings) and report back to Pangeo coffee meetings 3 times a year. (or similar)
- What do you think about this idea?
- Anyone having technical issues or willing to work on specific technical challenges?

## 16 Janvier 2024

- EGU merge sessiin
  - move all abstracts from one of the sessions to target session( tina
  - Please also discuss your panel of conveners. Best practice is to have up to five conveners, but up to seven are possible for large sessions. Please also note that conveners cannot have an oral presentation in their own session.
    - We are 5, hpc is 3
    - We need to at least drop 1
- pangeo showcase looks for participants from Europe.
  - Any idia?
    - XDGGS
    - presentation from Quanstack? related with jupyter?
    - Development seeds in european side?
    - Norway?
    - France?
    -
- Roadmap for pangeo europe.
- meeting at Paris related with ORAP?
- OGC & Open Science  
[\(https://www.ogc.org/requests/ogc-releases-open-science-persistent-demonstrator-request-for-information/\)](https://www.ogc.org/requests/ogc-releases-open-science-persistent-demonstrator-request-for-information/):
  - Wednesday 24th January at 1 pm CET / 7 am EST
  - **Wednesday 24th January at 4 pm CET / 10 am EST**
    - tina ok
  - Wednesday 24th January at 5 pm CET / 11 am EST
  - Wednesday 24th January at 6 pm CET / 12 am EST
- ESA
  - 3 idias to present. time lines to p
  - meeting with openeo team
- INFRA-EOSC-01-03 Horizon2020
  - Looking for project to make the pangeo-eosc sustainable?
  - infra-eosc-0105
- <https://catalog.pangeo.io/browse/master/ocean/ECCOV4r3/>
  - ask pangeo us meeting to see if google can put this data in non paying space?
  - copernicus marine service datalake in stead?
- How to make Copernicus data “accessible” to EOSC?
- How to get Julia Kernel to the Copernicus platform? [Topics – Copernicus Data Space Ecosystem Documentation Portal](#)



## 9 Janvier 2024

- Copernicus data space ecosystem and Copernicus Services

## 19 December 2023

- Whats next for pangeo
  - <https://discourse.pangeo.io/t/pangeo-showcase-whats-next-for-pangeo/3870/5>
  - Check out for different discussions ;
    - [software-production-visualization](#)
    - [data-management](#)
    - [software-geospatial-bridge](#)
    - [cloud-partner-managed-infrastructure](#)
    - [cloud-pangeo-managed-infrastructure](#)
    - [democratization-science-community](#)
    - [scientific-publishing](#)
    - [software-massive-scale](#)
    - [software-regridding](#)
    -
- EGU24 - Ad is live please share 🙏
  - Linkedin,  
[https://www.linkedin.com/posts/alejandro-coca-castro\\_xarray-iris-dask-activity-7135333711897628672-d6Ch?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/alejandro-coca-castro_xarray-iris-dask-activity-7135333711897628672-d6Ch?utm_source=share&utm_medium=member_desktop)
  - Missing
    - Twitter/Mastodon, draft here
    - Email:
      - Add research network [here](#) to distribute the invite

## 5 December

- EGU24 - Ad is live please share 🙏
  - Linkedin,  
[https://www.linkedin.com/posts/alejandro-coca-castro\\_xarray-iris-dask-activity-7135333711897628672-d6Ch?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/alejandro-coca-castro_xarray-iris-dask-activity-7135333711897628672-d6Ch?utm_source=share&utm_medium=member_desktop)
  - Missing
    - Twitter/Mastodon, draft here
    - Email:
      - Add research network [here](#) to distribute the invite
- EOSC in practice story (it was prepared by EGI and it need to be filled by us; deadline not fixed but it would be nice to have it before Christmas):

<https://docs.google.com/document/d/1MQBvZm7151q49kiNIL-DnwKB85snTgfV0rmMD1i1LuQ/edit?usp=sharing>

- Alex@Brest finished yesterday. Some updates in discord xdgg thread
  - <https://github.com/xdggs/examples> Plan for creating example notebooks to work with DGGS, may be in jupyterbook format
  - blog post almost done
  - paper writing overleaf, link will be sent.

## 28 November

- Welcome Matt (UKCEH): <https://mattjbr123.github.io/>
  - Working on making object storage easier to use for gridded datasets/ND datasets, for UKCEH (and maybe the wider world!). Created a github repo with a demo workflow and chunking strategy, contains notebooks and scripts as a starting point. [https://github.com/NERC-CEH/jasmin\\_object\\_store](https://github.com/NERC-CEH/jasmin_object_store)
- Pangeo@EOSC, <https://github.com/pangeo-data/pangeo-eosc>, from dev to op
  - Operational aims to be used more widely
  - We need to fill and return the two following documents:
    - [Privacy Policy Pangeo@EOSC](#)
    - [Acceptable Use Policy Pangeo@EOSC](#)
    - See examples provided by Sebastian:
      - Examples for the Privacy Policy:
        - \* Infrastructure Manager:  
<https://im.egi.eu/im-dashboard/static/privacy.html>
        - \* EISCAT JupyterHub:  
<https://portal.eiscat.se/privacy.html>
        - \* C-SCALE FedEarthData:  
<https://wiki.c-scale.eu/C-SCALE/c-scale-services/fedearthdata/fedearthdata-privacy-policy>
      - Examples for the Acceptable Use Policy:
        - \* Infrastructure Manager:  
<https://im.egi.eu/im-dashboard/static/terms.html>
        - \* C-SCALE FedEarthData:  
<https://wiki.c-scale.eu/C-SCALE/c-scale-services/fedearthdata/fedearthdata-tou>
  - Actions
    - Anne will share the policies next week, feedback would be welcome
    - Update README, see <https://github.com/pangeo-data/pangeo-eosc/issues/65>
  - EGI published the news item at <https://www.egi.eu/article/scaling-new-heights-with-pangeo-openeo-pangeoeosc-meets-earth-observation-experts-at-bids-2023/>.
- The fossdem conference in Feb 2024 might be of interest for the Pangeo community, in particular the following devrooms:

- Open research, include OSS, <https://research-fosdem.github.io/> (deadline 10th Dec) > xarray-dggs?
- HPC, Big Data, and Data Science, <https://hpc-bigdata-fosdem24.github.io/> (deadline 1st Dec) > Pangeo@EOSC?
  - Submit BiDs23 abstract?
- Other dev rooms, <https://fosdem.org/2024/schedule/>
- Actions
  - Alejandro will submit an abstract to HPC, Big Data and Data Science
    - Presenter (TBC)
- [EGU pub slide](#) finalise? make pub?
  - Actions
    - Alejandro, add QR and message (including this session....)
- Funding: <https://destination-earth.eu/how-to-respond-to-esa-tenders/>
- Alex@Brest for DGGS
  - [Alex@Brest for DGGS organisation](#)
  -
- tina will send the feedback BIDS tutorial to BIDS organisation today. if you want to update, please do so in the morning.

## 21 November

- Zoom link:
  - Need to update the website
  - Need to add alternative hosts: who wants to be added? (tina.ifremer@gmail.com)
  - Need to refine settings (screen sharing)
- Julia, Xarray and Zarr quick discussion on differences and similarities
  - Would need to clarify a bit in the future
- BiDS'23 debrief documents:
  - official debrief for BIDS organization:
    - [BiDS Satellite Events - Feedback](#)
  - internal doc:
    - [Scaling Big Data Analysis with Pangeo and OpenEO: Unlocking ...](#)
  - blog for EGI on Pangeo & OpenEO tutorial:
    - [https://docs.google.com/document/d/1dAHeA7Ceiti3J6qV84JR8q6GiWUbVBL\\_70nyy8v9sM/edit?usp=sharing](https://docs.google.com/document/d/1dAHeA7Ceiti3J6qV84JR8q6GiWUbVBL_70nyy8v9sM/edit?usp=sharing)
- GEO-OPEN-HACK-2024:
  - Pangeo (Friday 28 June 2024, Vienna)
  - [Big Geospatial Data - 2024 hands-on workshop](#)
  - We need to decide who can go and suggest a draft program one day training/workshop/hands-on (deadline to fill the document is end of November)

- Proposal (please provide feedback before November 28th):  
*The Pangeo training will be delivered as a mix of presentations, hands-on exercises, group activities and group discussions (including showcasing successful projects based on the Pangeo ecosystem).*
  - **Unlocking Pangeo for Geospatial Data Science**
    - Introduction to the Pangeo and its significance in big geospatial analysis
    - Different ways to setting up a Pangeo environment for geospatial applications
    - Accessing and loading large geospatial datasets using Pangeo
    - Understanding data storage options & best practices
  - **Scalable geospatial analysis with Pangeo**
    - Leveraging Pangeo for scalable geospatial analysis
    - Exploring parallel computing capabilities of Pangeo using Dask and Xarray
    - Applying machine learning models to geospatial data within the Pangeo environment
- EGU'24:
  - Prepare communication material to advertise the Pangeo session and plan for a communication campaign (timeline, etc.)
    - who will be there: Tina
    - Image and text here for you to contribute: need update from 2023  
[https://docs.google.com/presentation/d/1x0aevwdNtLV0sef4qqBfgMtzYSUazsNu4Pnd\\_cVBKk4/edit?usp=sharing](https://docs.google.com/presentation/d/1x0aevwdNtLV0sef4qqBfgMtzYSUazsNu4Pnd_cVBKk4/edit?usp=sharing)
    - List of destination for announcements
      - LinkedIn
      - twitter?
      - BIDS23 tutorial attendee, Clivar
      - AGU pangeo community
      - EDS book
    - Lightning talk -> sprinter meetings?
      - how to apply to have a sprinter meetings time slot?
      -
- Blog/summary report on Xarray DGGS
  - Blog (should be short)
  - Current document:  
[https://docs.google.com/document/d/1g3xoi1QMLP3odWB29tz4hVSf\\_XceYSb-ZdbIZxHRHUc/edit](https://docs.google.com/document/d/1g3xoi1QMLP3odWB29tz4hVSf_XceYSb-ZdbIZxHRHUc/edit)
  - The “longer” version + info from Benoit, etc. could become a position paper
  - Call for papers:  
[https://think.taylorandfrancis.com/article\\_collections/international-journal-of-digital-earth-discrete-global-grid-systems-for-developing-digital-earth-systems/](https://think.taylorandfrancis.com/article_collections/international-journal-of-digital-earth-discrete-global-grid-systems-for-developing-digital-earth-systems/)
  -
- Pangeo@EOSC from dev to op (Sebastian email)
  - Anne asked for help to understand the documents
  - Any on-going training?

- When registering, make sure they add something in the description as we got recommendation from Sebastian to reject anyone who does not add any description
- IMT (<https://www.imt-atlantique.fr/fr>) Master student Nov 21st afternoon description is indicated as "Pangeo: dask and chunking tutorial at IMT 2023"
- 
- Call for ideas for the [upcoming ESA new/current Permanently Open Call](#):
  - Write your ideas in the document: [https://docs.google.com/document/d/19eQ5MwmqndO1J8fDjLFwMt3dj2EhaBXORonKmR\\_sp2g/edit?usp=sharing](https://docs.google.com/document/d/19eQ5MwmqndO1J8fDjLFwMt3dj2EhaBXORonKmR_sp2g/edit?usp=sharing)

## 14 November

- BiDS'23 Bofs & OSGeoSprint debrief:
  - dggs implementation in Xarray:
    - hackmd [https://hackmd.io/@pangeo/xarray\\_dggs](https://hackmd.io/@pangeo/xarray_dggs)
    - [dggs xarray](#) ; (design docs: [https://github.com/benbovy/xdggs/blob/main/design\\_doc.md](https://github.com/benbovy/xdggs/blob/main/design_doc.md))
    - [Join the Pangeo Discord Server!](#)
    - Present it to OGC (March 2024): Peter will organize a special online meeting (January/February) where different people can exchange and discuss (Ask Lorenzo when we need to involve Peter)
    - Write a blog post about the code sprint (where to publish it?), + call to action. Who is writing it? (Alex will start it)
      - Shared document to write the blog post: [https://docs.google.com/document/d/1g3xoi1QMLP3odWB29tz4hVSf\\_XceYSb-ZdbIZxHRHUc/edit?usp=sharing](https://docs.google.com/document/d/1g3xoi1QMLP3odWB29tz4hVSf_XceYSb-ZdbIZxHRHUc/edit?usp=sharing)
      - Overview
      - Status
      - Sprint > link to the Design Doc
      - Example notebooks showcasing different applications
  - [Zarr Bof](#)
- Pangeo needs to push for increased usage of Pangeo in the OpenEO backend:
  - Understand the needs for new developments so we can seek for funding for developers (Lead: Lorenzo)
- BiDS'23 OpenEO & Pangeo Tutorial:
  - [Fill the doodle for debrief](#) (mostly likely on Thursday at 10:00 CET)
  - First round of feedback: overall it went well; we could use slides to explain the concept of chunks for kerchunk
- Preparation of [IGARSS 2024 tutorials](#) (deadline November 15, 2023):
  - [Pangeo & OpenEO common tutorial proposal](#) (add your name if you want to contribute/deliver the training): this training will be very similar to the one we gave at BiDS'23 (we will improve it by taking into account the feedback we got, etc.)
  - [Pangeo & AI4Copernicus tutorial proposal](#) (same here; add your name, etc.): the main goal of this training is to combine Pangeo (ML) with AI4Copernicus

tools and methodologies. Their current training material is available at <https://ai4copernicus-bids2023.github.io/> (with a [pdf file for the hands-on](#)). The goal is also to promote our approach (Jupyter book, etc.).

- ESA new/current Permanently Open Call:
  - A novelty is that ESA has the Digital Innovation activity line that they are managing and they are happy to iterate early on some initial ideas.
  - <https://eo4society.esa.int/2023/09/15/future-eo-1-segment-2-open-call-for-proposal-for-eo-innovation/>
  - Next cut off date is January 2024.
- We need a platform for chatting: we can open a discussion in discourse to discuss
  - Different options: slack numfocus, discord, zulip, element, etc. (Action: Benoit will open a discussion)
- Geo OpenHack Week 24-28 June, 2024  
<https://docs.google.com/document/d/1IXx9CikuBKnfU6X1-8Uq4aazWmw1DZ0Y0UxLHnia2lc/edit#heading=h.kau6urvvgj5l> (fill the Pangeo section part by the end of November)
- We should have a better strategy to cover costs for conferences, tutorials, etc.
- Climate Informatics may be in London next year (April? before EGU24). Potential to have opportunity to have Pangeo as a training workshop
- living planet symposium 2024 (not sure where yet)

## 07 November

## 31 October

we are at

<https://cnrs.zoom.us/j/99757705862?pwd=YWNnZ0NXNlpFRFBnaHl5akhwRWlvdz09> today

## 21 October

- OSGeoSprint
  - [https://wiki.osgeo.org/wiki/OSGeo\\_Community\\_Sprint\\_2023](https://wiki.osgeo.org/wiki/OSGeo_Community_Sprint_2023)
  - Agenda
    - Basecamp
- OpenStack
- 

## 17 October

- Planning Pangeo-OpenEO
  - Which platform?
    - CDSC:
  - balance of content for shared session

- which topic for synergy section.

## 10 October

- <https://julialang.github.io/IJulia.jl/dev/>
- <https://biopal.org/>
- Which link is today?

## 3 October

- Discussion EOSC for research and production & Creodias
- BiDS training discussion & plan: [BiDS training2023](#)
- Who is using [snapista](#)?

## 26 September

- EGU23 Special Issue?
  - [https://www.advances-in-geosciences.net/publish\\_your\\_volume.html](https://www.advances-in-geosciences.net/publish_your_volume.html) ?
- DESP
- BiDS Sprint - preparation and meeting with the OpenEO group
- Get access to EX3 (Norwegian experimental HPC): <https://www.ex3.simula.no/>
- <https://github.com/CliMA/>
- I forgot to mention in meeting that I am trying to understand this at the moment (<https://dask.discourse.group/t/how-do-i-avoid-distributed-client-warning-couldnt-gather-keys-rescheduling/2116/10> )

## 19 September

- EGU23
  - Pangeo session submitted
    - Potential to include submissions as a Special Issue. Two options:
      - EGU/Copernicus journals
        - [Geoscientific Model Development](#)
        - [Geoscience Communication](#)
      - <https://www.advances-in-geosciences.net/>
    - Environmental Data Science (Cambridge University Press)
- BiDs23
  - pangeo-eosc paper accepted
    - need to update the paper with the comments from the reviewer (see [here](#))
  - Was asked by Anne to make a notebook showing how to upload code to cluster-workers. I made [this](#) so far. Let me know what I can/should change. (Ola)
- Climate Informatics Reproducibility Challenge

- Almost all notebooks are online.
  - [Learning the underlying physics of a simulation model of the ocean's temperature \(CIRC23\)](#) - published 4 September
  - [Deep learning and variational inversion to quantify and attribute climate change \(CIRC23\)](#) - published 11 September
  - [Variational data assimilation with deep prior \(CIRC23\)](#) - to be published 19 September. Tina was one of the reviewers!
- Working on a blog post for [the Turing blog](#) about the relevance of Reproducibility in Climate and Environmental Science. We will highlight the Pangeo-EOSC and C-SCALE project.
- Events
  - Workshop on Correctness and Reproducibility for Climate and Weather Software, November 9-10, \$25. Further [info](#).
  - Workshop on Reproducible Software Environments for Research and High-Performance Computing (HPC), November 8–10, Free. Further [info](#).

## 12 September

## 5 September

- BiDS'23
  - On-site instructors: Tina Odaka, Anne Fouilloux, Justus Magin
  - Contributors & organisers:
    - <https://github.com/pangeo-data/pangeo-openeo-BiDS-2023#contributors->
    - And add Ola Formo Kihle (ofk123), Justus Magin (keewis)
    - And add OpenEO people for the afternoon
  - Sprint
    - 9:00 - 13:30 every day.
    - Each person who will participate the Sprint needs to register in two website
      - <https://nikal.eventsair.com/bids23/bids-reg-portal/Site/Register>
        - and click for 'sprint yes'
      - add your participating request here
        - [https://wiki.osgeo.org/wiki/OSGeo\\_Community\\_Sprint\\_2023#Participants](https://wiki.osgeo.org/wiki/OSGeo_Community_Sprint_2023#Participants)
        - Alex can add all info from pangeo community here??
        - If you will add by yourself, you need to 'request account'. The procedure is
          - x send e-mail to mantra following <https://id.osgeo.org/ldap/create>
          - mantra sent by e-mail to your e-mail address?
          - get log in??
- Notebook from the winning team of the Reproducibility Challenge is [online](#)



## 29 August

- [https://distributed.dask.org/en/stable/api.html#distributed.Client.upload\\_file](https://distributed.dask.org/en/stable/api.html#distributed.Client.upload_file)
  - may be we can make example for tutorial in openEO-pangeo tutorial.
- Best software practices with CodeRefinery: <https://coderefinery.org/> and <https://coderefinery.org/workshops/upcoming/>
- <https://www.cost.eu/how-to-apply/>
- BiDS training:
  - [ ] By September 6th: one point of contact for your satellite event should provide us (email to [events.organisation@esa.int](mailto:events.organisation@esa.int) Subject: "BiDS'23 - Satellite Event") with:
    - the list of on-site instructors (and separately all contributors)/organisers we shall publish associated to the online event description;
    - a link to a repository, webpage or other online resource containing further information for prospective participants (technical requirements, material and tools): this will be added to the online event description and allows you the flexibility to directly change information to pass on to participants.
    - We have the github repository (<https://github.com/pangeo-data/pangeo-openeo-BiDS-2023>) and corresponding web page <https://pangeo-data.github.io/pangeo-openeo-BiDS-2023/intro.html> but we need to populate it with relevant information for the training.
- construction of training
  - <https://github.com/pangeo-data/pangeo-openeo-BiDS-2023>

## 22 August

- OpenEO BIDS
  - <https://github.com/pangeo-data/pangeo-openeo-BiDS-2023>
- CDSC OpenEO platform
  - <https://dataspace.copernicus.eu/>

## 15 August

- Discussed issues with dask and memory leaks
  -
- How to add dask dashboard in Binder
  - <https://discourse.jupyter.org/t/gesis-hub-blocks-dask-dashboard/3019/9>
- How to avoid the rescheduling of tasks
  - <https://dask.discourse.group/t/how-do-i-avoid-distributed-client-warning-couldnt-gather-keys-rescheduling/2116>

## 8 August

- Discussion on ZARR
  - Caching
    - intake, <https://intake.readthedocs.io/en/latest/catalog.html#id1>
  - Chunking
    - Rechunking, <https://rechunker.readthedocs.io/en/latest/>
  - Example with a refactored notebook to be published in EDS book working with ZARR
    - [https://github.com/acocac/repro-challenge-team-3/blob/main/notebooks/notebook\\_zarr.ipynb](https://github.com/acocac/repro-challenge-team-3/blob/main/notebooks/notebook_zarr.ipynb)
- Discussion with scatter
  - Try to use broadcast=True
- OpenEO
  - Will follow-up for training material for BiDS'23
  - may be based on <https://open-eo.github.io/openeo-python-client/cookbook/localprocessing.html>
- 

## 1st August

- Training material for BiDS'23: Lorenzo will contact the openEO team to get feedback from their joint meeting. <https://github.com/pangeo-data/pangeo-openeo-BiDS-2023>
  - Talk about read/write ARCO
  - how to append to existing zarr
  - how you can mount s3
  - Performance with minIO for Pangeo@EOSC
  - Usage <https://rclone.org/>
  - Tests from Ola:  
<https://discourse.pangeo.io/t/best-practice-to-store-and-load-data-columns-of-equal-length-from-gcs-data-not-on-a-regular-grid/3591>
- Copernicus platform & dask: Lorenzo sent a request for a local dask; and a ticket has been opened. If solved this would allow us to run the training material on this platform too.
- EUROGI webinar on Thursday 3rd 12:00 PM – 1:45 PM CEST  
<https://positio-lehti.fi/tapahtumat/eurogi-webinar-pangeo-project/>
  - Slides in preparation (please provide feedback/inputs):  
[https://docs.google.com/presentation/d/1I\\_H1bZiMmi8y19kuK1546UouO7RS\\_GOUx\\_8TCaWEmKwE/edit?usp=sharing](https://docs.google.com/presentation/d/1I_H1bZiMmi8y19kuK1546UouO7RS_GOUx_8TCaWEmKwE/edit?usp=sharing)
- Documentation on Pangeo@EOSC in pangeo.io ([pangeo cloud](https://pangeo.io))?
- Julia:
  - <https://github.com/Open-EO/openeo-julia-client>
  - [https://github.com/linamaes/chunking\\_tutorial](https://github.com/linamaes/chunking_tutorial)
- Use Google calendar to add events we are listing in the notes.

- Code Sprint OsGeo at BiDS'23: [https://github.com/pangeo-data/bids2023\\_codesprint](https://github.com/pangeo-data/bids2023_codesprint)

## 25 July

- Object storage: what is the best strategy?
- Load ZARR from GCS: [https://github.com/ofk123/dataloading-example/blob/main/pangeo\\_loading\\_data\\_into\\_workermemory.ipynb](https://github.com/ofk123/dataloading-example/blob/main/pangeo_loading_data_into_workermemory.ipynb)
  - Different ZARR files by pressure level
  - Suggestions
    - Nested ZARR archive
- Discussion writing ZARR to minIO buckets
  - Slow
- JupyterCon23 recordings are available!
  - <https://www.youtube.com/@JupyterCon>
- Authorization to use the hub

## 18 July

- NumFocus application submitted 🎉
- Timeline:
- BiDS'23:
  - Tutorial (1day) with OpenEO
    - <https://github.com/pangeo-data/pangeo-openeo-BiDS-2023>
      - jupyterbook
      - explanation to connecting platforms
        - introduction
        - how-to
          - eos, ok
          - open-eo ?
          - copernicus
    - <https://dataspace.copernicus.eu/#:~:text=Welcome%20to%20the%20Copernicus%20Data%20Space%20Ecosystem%2C%20an.more%20on%20our%20planet%E2%80%99s%20land%2C%20oceans%20and%20atmosphere>
  - Tutorial with Julia
  - How to co-develop training material: <https://cdh.carpentries.org/>
  - OsGeo sprint code
  - Pangeo Presentation
  - Poster Julia (C-SCALE use case)
- [Horizon EU Call](#)
  - Research Object
  - in support of Climate mitigation and actions.
  - Searching for strong use cases.

- Cross-language (R, Python, Julia) 2 days hackathons/workshops (deadline 7 August)
  - <https://r-spatial.org/sdsl/> 18-19 September, 2023, Münster
  - DGGs ?
  - kerchunk in Julia?
    - extension from <https://github.com/JuliaIO/Zarr.jl/pull/115> ?
- <https://github.com/ecmwf/polytope>
- Workflow management
  - <https://snakemake.readthedocs.io/en/stable/index.html>
  - <https://discourse.pangeo.io/t/june-9-2021-streamline-data-science-projects-with-ploomber/1546>
- EUROGI
  - Webinar planned for August 3rd
- Promised last week to provide example for my question on how to best repeatedly (embarrassingly parallel) load zarr-files from GCS. I put an example here: [https://github.com/ofk123/dataloading-example/blob/main/pangeo\\_loading\\_anomalies.ipynb](https://github.com/ofk123/dataloading-example/blob/main/pangeo_loading_anomalies.ipynb). Is there a way to load the data faster?

## 11 July

- pangeo@eosc under maintenance. Pangeo@EOSC will be re-deployed on k8 bare metal. We would like to deploy a similar infrastructure on creodias (Lorenzo & Anne).
- Benchmark for testing “Pangeo deployments”.
- NumFocus submission: presented the current draft to get feedback by Tuesday evening
- OpenEO & Pangeo joint tutorial: [https://docs.google.com/document/d/1zEYJi\\_hRHJOSkxgahQn9uPFKHIQoLQVkaHl8qhdTXPo/edit?usp=sharing](https://docs.google.com/document/d/1zEYJi_hRHJOSkxgahQn9uPFKHIQoLQVkaHl8qhdTXPo/edit?usp=sharing)
- OsGEO Code Sprint at BiDS'23: [Open](#)
- Reproducibility challenge: preparing notebook to be published but problem with [one notebook](#) where data is a bit too large (> 20 GB). We need more “permanent” storage (more like an archive).
  - We need more notebooks from Pangeo.
  - Strong interest and need to improve.
  - Collaboration and coworking meetings with EDSBook <https://edsbook.org/community/about.html#meeting-dates-and-calendar>
  - Annotations
- Ola is working with ARGOS data and would like to discuss how to improve data access. He will provide some examples.

## 4 July

- Jupyter notebook and the OpenEO editor now on Copernicus platform <https://dataspace.copernicus.eu/> and <https://dataspace.copernicus.eu/analyse/open-eo-editor>
- BiDS:

- openEO and Pangeo one day tutorial (Tina to send an email to all those involved in training)  
<https://github.com/pangeo-data/pangeo-openeo-BIDS-2023>  
Description:  
[https://docs.google.com/document/d/1zEYJi\\_hRHJOSkxgahQn9uPFKHIQoL\\_QVkaHI8ghdTXPo/edit?usp=share\\_link](https://docs.google.com/document/d/1zEYJi_hRHJOSkxgahQn9uPFKHIQoL_QVkaHI8ghdTXPo/edit?usp=share_link)
- Pangeo@EOSC paper: <https://www.overleaf.com/6187627159jsyqnfqwrth> (4 pages maximum) (paper will be submitted on Friday 7th July evening)
- Sprint: [https://github.com/pangeo-data/bids2023\\_codesprint](https://github.com/pangeo-data/bids2023_codesprint)
  - openEO & Julia
  - DGGS (Python & Julia)
  - Description of Sprint activities for Pangeo:
    - [https://docs.google.com/document/d/1trRvk3kEDBp\\_QblyjJ04\\_FlvXlhm-ihMWbvK0iq\\_kPI/edit?usp=sharing](https://docs.google.com/document/d/1trRvk3kEDBp_QblyjJ04_FlvXlhm-ihMWbvK0iq_kPI/edit?usp=sharing)
- Felix > Sept? might be happening workshop on vector data cubes??

Talk about Raster data handling in Julia:

- <https://mailchi.mp/3049e24f90db/join-the-oemc-science-webinar-6044354>

## 27 June

- Code Sprint @BiDs organised by OSgeo community in collaboration with Pangeo on DGGS&Xarray
  - we are looking for sponsors
  - pub about it on discourse soon.
  - Link with julia!!
  - <https://www.osgeo.org/foundation-news/join-osgeo-community-sprint-2023-at-bids/>
  - [https://wiki.osgeo.org/wiki/OSGeo\\_Community\\_Sprint\\_2023#BIDS23](https://wiki.osgeo.org/wiki/OSGeo_Community_Sprint_2023#BIDS23)
  -
- Pangeo eossc cluster
  - <https://github.com/eds-book/reproducibility-challenge-2023/blob/main/challenge/preparation/setup.md>
  - <https://pangeo-eosc.vm.fedcloud.eu/>
  - write : pangeo-european community
    - Hi! I registered using the setup.md in the link above, then tried accessing the <https://pangeo-eosc.vm.fedcloud.eu/>. I am not authorized currently, but I guess I just need to wait until I get authorization from the administrator?

 jupyterhub

403 : Forbidden

Sorry, you are not currently authorized to use this hub. Please contact the hub administrator.

## 20 June

### Update

- Hi Ola
- Code Sprint @BiDs on DGGS&Xarray

- thursday 10:30 - 11:00
- Webinar: <https://eurogi.org/> July ? eurogi
  - Pangeo for the eurogi community: 30 min
  - explain that lots of provided geospatial (e.g. land use, forestry), climate and satellite data processing and analysis software stack in cloud based on Pangeo stack
  - satellite angle ( not only Sentinel/Landsat, but also Airbus, Planet/Satellogic? ), SAR with Pangeo, polarimetric (water e.g.) and/or interferometry (Insar, Dinsar, GRD SLC ?
    - [https://cyclobs.ifremer.fr/static/sarwing\\_datarmor/xsar/](https://cyclobs.ifremer.fr/static/sarwing_datarmor/xsar/)
    -
  - data processing.
  - cloud computing.
- DGGS: discrete Global Grid System.
  - BiDs
  - CNES
- Pangeo Cloud
  - google cloud
  - what about adding pangeo-eosc cloud here in the list?
    - <https://github.com/pangeo-data/pangeo-cloud-federation> ??
- EGI-ACE conference Pangeo presentation
  -

## 13 June

### Update

- Cloudferro
  - software setup
    - openstack -> no default kubernetes cluster.
    - some info for making kubernetes
  - shared disk space setup?
    - nextcloud, minio??
  - how to get access?
    - open call for earth observations.
    - <https://www.copernicus.eu/en/news/news/observer-discover-copernicus-data-space-ecosystem>
  - hardware
    - good GPU, CPU, disk
  - not a lot of data available
  - Price
    - 3 small machine 1000 euros/month
    - no free access
- Everyone is welcome to the Share-out and Teams celebration event of the CI2023 Reproducibility Challenge. Register in [Eventbrite](#). 30 days of hard work compressed into 30 minutes of insight!

- scheduler
  - <https://airflow.apache.org/>
  - <https://towardsdatascience.com/data-pipelines-luigi-airflow-everything-you-need-to-know-18dc741449b7>
- Bids November June 16th deadline.
  - We are proposing co-tutorial session with OpenEO
    - <https://docs.google.com/document/d/1GQlubK0Fd05ISDW5iObYLn8gt5TYBmM9s0RfYPicY3w/edit>
  - OSGeo hack sprint,
    - what about DGGS sprint?
  - julia
    - felix
  - presenting pangeo EOSC and EGI and C-scale configurations?
    - <https://www.overleaf.com/6187627159jsyqznzfqwrth>
    - contents
      - reproducibility challenge
      - it is based on european open source
- Alex:
  - eurogi? july. Could someone present Pangeo?
- ESA machine learning data sets
  - thursday

## 6 June

### Update

- [CI2023 Reproducibility Challenge](#) (Anne and Alejandro)
  - 3 submissions in total, teams from America, Europe and Asia
  - Winning team to be announced on 15th June
  - All notebooks will be published in EDS book throughout summer
  - 6 Talk with Experts (Guest Speakers) sharing knowledge in a broad range of topics (Scientific Programming, Cloud Computing, Reproducible and Collaborative Data Science) > See recordings and shared notes [here](#).
    - Alex resources
      - <https://agile-online.org/conference-2023>
      - <https://agile-giss.copernicus.org/articles/3/index.html>
- NumFOCUS (Steering Committee, Anne)
  - Requirements
    - [Roadmap](#) (under construction for Pangeo)
    -
  - It'll make easier to distribute funding
  - Some suggestions (Floris) for the Pangeo numfocus grant application:

- 1) Integrate pyramiding policies within the framework to enable fast and interactive analysis. In the current implementation of Dask, the scale (pixel resolution) is determined based on the input, which can introduce latency and hinder real-time exploration. By incorporating pyramiding policies similar to those found in Google Earth Engine, where the scale (pixel resolution) [is determined by the output](<https://developers.google.com/earth-engine/guides/scale>) , Dask can significantly enhance the speed and responsiveness of interactive analysis workflows.
- 2) While Dask offers robust support for partitioning through the ``repartitioning()`` method, a challenge arises when a dataset includes geometries. With repartitioning the data can be chunked into partitions of equals size using the ``partition_size`` argument. However, as [Dask perceives only a small pointer to a C object](<https://github.com/geopandas/dask-geopandas/issues/210>) , failing to capture the actual memory requirements of complex geometries. To address this limitation, it would be valuable to extend Dask-Geopandas with a method to estimate the size of geometries to enable geospatial repartitioning that ensures equal chunks of geospatial data.
- 3) Add methods to Dask for spatial and temporal partitioning schemes.

- Floris
  - Network meeting in Coastal science in US
  - Shared his experience using STAC
- Alex
  - DGGs in conda-forge!
  - Tina to Alex, icon model's grid
- Anne, Alex, Tina and Alejandro > Potential to host a reproducibility event in FOSS4G 2024
- BiDS Nov 6-9
  - deadline:
    - satellite events (tutorial, hackathons, challenges) : 16th June
    - Paper : 16th June
      - **Pangeo paper**
      - <https://www.overleaf.com/6187627159jsyqnfqwrth>
  - co-tutorial session with OpenEO?
    - waiting for answer from OpenEO
    - poster about pangeo-EOSC ?
- SC23 Nov 12-17
  - research poster submitting deadline AUG 5, 2023
  - BoF JUL 7, 2023
    - proposition for BOF:
      - <https://docs.google.com/document/d/1ZKOxHa7EUiuDCVnGVtowMxacZnJAeK92kgHKX1nWP80/edit>
  - Workshop :
    - <https://sc23.supercomputing.org/presentation/?id=wksp155&sess=sess146>



- paper notification Sep 8. (?) when is submission??
- Interactive HPC Workshop 2019 could publish paper with a talk.

## 30 May

### Update

- ESA call (deadline extended June 6th).
- DGGS

## 23 May

### Update

- EGI Pangeo presentation: <https://www.egi.eu/event/egi2023/#speakers>
- ESA call (deadline May 30th). Still discussing if we are submitting an application (IFREMER, Development Seeds and Simula).

## 16 May

### Update

- EOSC Future, Anne presenting today at [this webinar](#)
- Discussing Felix use case on deforestation monitoring
- Reproducibility Challenge
  - Don't miss this week, Talk with the Expert, Friday 16:00-16:30 UTC+1, The Turing Way, <https://www.eventbrite.co.uk/e/talk-with-the-expert-reproducible-inclusive-collaborative-data-science-tickets-634543134597?>
  - Recordings of previous Talk with the Expert available at EDS book [YouTube channel](#)
- How to archive videos in RoHub:
  - <https://reliance.rohub.org/>
- Archiving EGU23 Pangeo oral presentations and posters
  - Individual Zenodo repositories (Tina will mail, with the example of felix)
  - Then all them in RoHub
  - Blog post
  - EGI Pangeo presentation: <https://www.egi.eu/event/egi2023/#speakers>

## 9 May

### Update

- We were invited to present Pangeo as EGI-ACE / C-SCALE use case during [this webinar](#) organised by EOSC Future, taking place on May 16.
- EGI-ACE selected Pangeo as one of the most outstanding examples of EGI-ACE use cases. In practice, this means that we have been asked to contribute to the EOSC Portal's section dedicated to the [EOSC in practice stories](#). Document has been prepared and is available [here](#).
- Reproducibility Challenge?
- Upcoming events
  - BiDS Satellite events
    - <https://www.bigdatafromspace2023.org/satellite-events>
    - What about a pangeo tutorial session using pangeo-EOSC?
      - Tutorial slot is short :multiple of 1.5 hours
  - OpenEO wanted to do something with us
    - Open EO and Pangeo co-organisation challenge of exploration of integrated Open EO ecosystem with Pangeo community? (based on tina's personal curiosity what can we do with Open EO and how can best make use of both developments to empower geo-science community)
    - Challenge: Monday 6th November, for a duration of 3 to 6 hours
- EGU feedback
- DGGS
  - <https://github.com/conda-forge/staged-recipes/pull/21947>

## 2 May

### Update

- EGU23
  - 10 oral presentations / 8 posters
    - Tina asked presenters if they can share slides and posters
      - Some of them have replied
  - DestinationEarth, two calls to contribute, <https://esastar-publication-ext.sso.esa.int/nonEsaTenderActions/details/12992>
    - Use cases: Tina, Anne
    - Training infrastructure as a Service
  - Potential collaborations
    - IBM Zurich
  - Action
    - Blog

- NASA
  - <https://www.jafic.or.jp/service/ebisukun/>
- Reproducibility Challenge, <https://eds-book.github.io/reproducibility-challenge-2023>
  - Registration for participants closed last Friday
  - Registration for reviewers still open (Deadline 13 May) > Application [here](#)
  - Schedule, [here](#).
  - Kick-off this week, ~20 participants, 7 papers
  - C-Scale infrastructure
  - Guest speakers from Open Science (The Turing Way), Infrastructure (EGI Foundation) and Software Development & Education (Pythia Project,

## 18th April

### Technical Info

- Benchmarks
  - Dask
  - Object Storage
    - SWIFT, slow for writing/reading
    - MinIO, used in C-SCALE project\
  - Previous work
    - Tina's paper on Benchmarking the Pangeo Ecosystem on HPC
      - [https://doi.org/10.1007/978-3-030-44728-1\\_12](https://doi.org/10.1007/978-3-030-44728-1_12)
- ESA deployments
  - Copernicus data space ecosystem (openstack with kubernetes)

### Update

- EGU23
  - Machine Learning for Earth System Modelling will invite session presenters and audience for a hangout/dinner at [7 Stern](#) at 19:00. We don't need to book for groups less than 10 people. Conveners are happy to have Pangeo folks. Would it be ok to update about the place/time on Pangeo Discourse > Alejandro
  - Posters:
    - READY [Using FAIR and Open Science practices to better understand vegetation browning in Troms and Finnmark \(Norway\)](#), <https://doi.org/10.5194/egusphere-egu23-2579>, 2023
    - READY [FAIR Notebooks: opportunities and challenges for the geoscience community](#), <https://doi.org/10.5194/egusphere-egu23-13768>, 2023
    - READY [Pangeo framework for training: experience with FOSS4G, the CLIVAR bootcamp and the eScience course](#), <https://doi.org/10.5194/egusphere-egu23-8756>, 2023
    - READY [Pangeo@EOSC: deployment of PANGEO ecosystem on the European Open Science Cloud](#), <https://doi.org/10.5194/egusphere-egu23-9095>, 2023

- Julia splinter presentation:  
[https://docs.google.com/presentation/d/1DU06KP8CYBwNvoeMs2MwbsP20sI5z\\_IyBzL8kFyQvDM/edit?usp=sharing](https://docs.google.com/presentation/d/1DU06KP8CYBwNvoeMs2MwbsP20sI5z_IyBzL8kFyQvDM/edit?usp=sharing)
- NASA TOPS [Open Science Success Stories](#) at EGU 2023 Presentation of Pangeo community (6 minutes):  
<https://docs.google.com/presentation/d/1n443Vs9iQB8kQ4Sk3-mzHJWiQwEFUO5n0CDSRxg7XKE/edit?usp=sharing>
- Reproducibility Challenge
  - Infrastructure provided by C-SCALE
    - Deployment, four flavors: Pangeo dask gateway, Pangeo ML-Tensorflow, Pangeo ML-Pytorch, Data Science (Julia, R, Python kernels)
    - MinIO storage
  - Deadline to participants will be extended to Friday 28th April.
    - To promote in EGU Pangeo session and others where possible
  - Pangeo submissions deadlines soon.
    - Madrid <https://www.opensciencefair.eu>, DL 24th April
      - Open Educational resources (OERs)
      - Lightning talk:
        - <https://www.conftool.org/opensciencefair2023/>
        - 300-500 words.
    - BigData <https://bigdatafromspace2023.org/>,
      - Pangeo Tutorial DL 5th May
        - Morning, Intro
        - Afternoon, Advance
        - format?
      - Pangeo Paper DL 16th June
    - Super computing Poster DL 5th August
      - pangeo EOSC -EGI
      - peer review abstract: submitting format  
<https://www.overleaf.com/latex/templates/acm-conference-proceedings-primary-article-template/wbvngbjbwpc.pdf>

## Potential work

- Pangeo Workshops as-a-service
  - Existing services, <https://github.com/uwhackweek/hackweeks-as-a-service>

## 11th April

## Updates

- Pangeo showcase
  - Good reception of EDS book presentation, 20-25 attendees

- Potential collaboration with Pythia Project
- **Reproducibility Challenge Climate + ML + AI**
  - C-SCALE will provide cloud resources: Pangeo image (python), R, Julia
  - Suggestions
    - Advertise
      - Bring other papers in Ocean science
      - Research Software Engineers slack channel EGU23
      - Maillist
        - France
    - Clinics/Talk with Experts (30min-60min)
      - 1st week, 1st-5th May
        - GitHub, Turing Way
        - Python, Kerchunk/Dask (Tina)
        - Julia, Ask Felix?
        - R, Expert?
- [EGI-ACE success story](#) sent to EGI
- EGU23
  - Pangeo for NASA TOPS Open Science
    - [NASA TOP Open Science session will be on Tuesday, April 25 19:00–20:00 \(CEST\), in Room 1.61/62.](#)
    - Oral session (Tina, Anne & Alejandro)
    - Poster (Tina & Anne)
  - Pangeo Dinner, Monday
    - Alejandro, Ask ML4ESM conveners if ok to join for post-session drinks
  - Pangeo [discourse](#),
    - List of related presentations
    - Announce post-session activities, drinks + dinner
  - Posters to prepare (preferably by Friday 14th and Thursday 20th at the latest):
    - [Using FAIR and Open Science practices to better understand vegetation browning in Troms and Finnmark \(Norway\)](#), <https://doi.org/10.5194/egusphere-egu23-2579>, 2023
    - [FAIR Notebooks: opportunities and challenges for the geoscience community](#), <https://doi.org/10.5194/egusphere-egu23-13768>, 2023
    - [Pangeo framework for training: experience with FOSS4G, the CLIVAR bootcamp and the eScience course](#), <https://doi.org/10.5194/egusphere-egu23-8756>, 2023
    - [Pangeo@EOSC: deployment of PANGEO ecosystem on the European Open Science Cloud](#), <https://doi.org/10.5194/egusphere-egu23-9095>, 2023
  - Presentations and Posters
    - Ask presenters their approval to upload their material (CC-BY) in Zenodo
    - announcements of EGUs at discourse
      - <https://discourse.pangeo.io/t/egu-2023-pangeo-session/2722>
- BiDs, <https://bigdatafromspace2023.org/>, 6-9 November
  - Interest in a Pangeo tutorial/workshop
  - Confirm resources with Sebastian

- How to cover travel expenses for 2 instructors?

## Technical Info

04th April

## Updates

- [European digital twin article \(good summary\)](#)
- ESA Digital Twin Earth: Call for expressions of interest: <https://dte.esa.int/> (deadline May, 15th)
- EGU posters to prepare (Tina can print):
  - both online and printed.
  - Folder for the posters (contains a copy of the LPS22 poster): **MUST BE IN LANDSCAPE MODE**  
[https://drive.google.com/drive/folders/1pD-3M93M-9aER\\_O6\\_FA6O7JkOoNkacSm?usp=share\\_link](https://drive.google.com/drive/folders/1pD-3M93M-9aER_O6_FA6O7JkOoNkacSm?usp=share_link)

### On-site poster boards

- Poster boards are in **landscape format**, and authors can make use of the full dimensions of 1978 mm width × 1183 mm height.
- Pins are used for attaching the poster to the poster board. These are available at the poster board. In case of missing pins, please consult our staff at the facility desk in the respective poster area.
- Conference assistants in the poster area may assist authors in putting up or taking down their posters.
- For each poster board, there is a desk to place a private laptop or other device for additional presentations. European-type power sockets are available.
- The number of each poster abstract and of its corresponding poster board is provided in the appropriate session programme. The first part of this number indicates the poster area and the second part the running number of the respective poster board in that area. The poster area indicators are A, for posters on the second floor (Red Level) in Hall A; X2, and X3, for posters in the basement (Brown Level) in Halls X2 and X3; and X4, and X5, for posters on the ground floor (Yellow Level) in Halls X4 and X5.
- Presenters taking part in the OSPP contest are asked to download a [QR code for their abstract](#) and add it to the poster to allow attendees to easily access the judging form.

### Virtual poster boards

- The scheduled virtual posters have a reserved virtual poster board in Gather.Town. The number of each poster abstract and of its corresponding virtual poster board is provided in the appropriate session programme.
- A link to access to the Gather.Town space will appear in the programme of the session.
- Virtual posters are grouped in specific clusters where the first part of the poster board number indicates the virtual poster area and the second part the running number of the respective virtual poster board in that area.
- Presenters taking part in the OSPP contest are asked to download a [QR code for their abstract](#) and add it to the presentation to allow attendees to easily access the judging form.

- 4 posters to prepare?:
  - [Using FAIR and Open Science practices to better understand vegetation browning in Troms and Finnmark \(Norway\)](#), <https://doi.org/10.5194/egusphere-egu23-2579>, 2023
  - [FAIR Notebooks: opportunities and challenges for the geoscience community](#), <https://doi.org/10.5194/egusphere-egu23-13768>, 2023
  - [Pangeo framework for training: experience with FOSS4G, the CLIVAR bootcamp and the eScience course](#), <https://doi.org/10.5194/egusphere-egu23-8756>, 2023
  - [Pangeo@EOSC: deployment of PANGEO ecosystem on the European Open Science Cloud](#), <https://doi.org/10.5194/egusphere-egu23-9095>, 2023

- [EGU Julia splinter session moved](#) (Monday at 2:00 CEST)
- Next Pangeo Showcase by Alejandro: **Wednesday April 5th: Environmental Data Science Book: a computational notebook community showcasing open and reproducible environmental science**
- Online, free and running over May 2023: **Reproducibility Challenge Climate + ML + AI**
- [EGI Success story](#) (deadline April, 7th). 28th March






## Technical Info

- Ongoing work with C-SCALE: make screenshots (we will need some for writing a success story).
- <https://doi.org/10.3390/rs14030562>
- could reuse Felix processing pipeline for the Arctic?!

## 28th March

## Updates

- C-scale:
  - news from Felix - pipeline works (VM 64 cores and 256 GB). EGI C-Scale allowed to test pipeline with easy access to data. Results will be shown at EGU (oral presentation)
- Splinter Meeting at EGU about Julia :
  - <https://meetingorganizer.copernicus.org/EGU23/meetingprogramme/5179#>
- Please find below the material for the last C-SCALE tutorials
  - \* Earth Observation Metadata Query Service (thanks to Stefan Reimond from EODC!)
    - - video: [https://youtu.be/cebnrOgoX\\_I](https://youtu.be/cebnrOgoX_I)
    - - slides and notebooks: <https://github.com/c-scale-community/c-scale-tutorial-eo-mqs>
  - \* How to use ROHub in C-SCALE (thanks to Raul Palma from RELIANCE!)
    - - video: <https://youtu.be/aWF-eala5zk>
    - - slides: <https://drive.google.com/file/d/1yFWi1DatX4P-sbJQMjjHvNWmF46Kj9RU/view>
  - \* Introduction to Slurm
    - - video: <https://youtu.be/2d0B9o43Pgg>
    - - slides: [https://docs.google.com/presentation/d/1Qo\\_Zpqe9MT6X6s7o2Mz\\_8PpIET28\\_WAf/edit](https://docs.google.com/presentation/d/1Qo_Zpqe9MT6X6s7o2Mz_8PpIET28_WAf/edit)
- See you on 24th April for the introduction to CUDA:
  - <https://github.com/c-scale-community/discussions/discussions/29>

- EDS book submitted to Pangeo showcase.
- CI2023 Reproducibility Challenge: organized in partnership between EDS book (Alejandro & Anne), EDS Journal and CI2023 conference.
  -  Registration Deadline: 22 April
  -  Challenge: 1-31 May
  -  Location: Online
  -  Fields: Climate + ML + AI
  -  Website: <https://bit.ly/ci-2023-rc>
  - Anyone interested to review notebooks? Please contact Alejandro and/or Anne if you want more information@
- Tina: meeting with IPSL to present how to use Kerchunk to share data stored on HPC
- One person can be sent to attend [EGI2023](#)
- Submit abstract for <https://www.opensciencefair.eu> 25-27 September 2023
- BiDs, <https://bigdatafromspace2023.org/>, 6-9 November
  - Call for satellite events (deadline to submit 5 May): they are also looking for ideas for hackathons... Any fun ideas?
- **Technical info:**
  - Problems with Iris and pangeo-docker images, <https://github.com/pangeo-data/pangeo-docker-images/issues/448>
    - Anne, install via pip3 install scitools-iris
  - Open datacube: <https://www.opendatacube.org/>
  - Need a benchmark **for end-users** to help them to see the performance on different platforms
  - Future call
    - <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-infra-2024-eosc-01-01;callCode=null;freeTextSearchKeyword=infrastructures;matchWholeText=true;typeCodes=0,1,2,8;statusCodes=31094502;programmePeriod=null;programCcm2Id=null;programDivisionCode=null;focusAreaCode=null;destinationGroup=null;missionGroup=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>
- 

## 21th March

- **Updates:**
  - Abstract submitted EGI2023, 'Open big data geoscience with Pangeo@EOSC' Thank you Anne and Sebastian!!
  - Training using C-scale in May (in which occasion? user type?)



## 14th March

- Updates:
  -
- Events:
  - EGI 2023 (19-23 June, Poznan, Poland):  
<https://indico.egi.eu/event/6071/abstracts/>
    - Deadline to submit an abstract: 20 March 2023.
    - Could we “recycle” one of our abstracts to showcase Pangeo@C-SCALE or Pangeo@EGI or Pangeo teaching?
  - Any interest in creating a team and participate to [the 5th CASSINI Hackathon](#)? **info session 14 March at 17:00 CET. Deadline to register is 17 March (1st prize: 5000 euros)**
  - EGU 23 NASA TOPS Open Science:  
<https://meetingorganizer.copernicus.org/EGU23/session/47689> Any volunteers to contribute & participate?
  - BiDs, <https://bigdatafromspace2023.org/>, 6-9 November
    - Call for satellite events (deadline to submit 5 May): they are also looking for ideas for hackathons... Any fun ideas?
  - Call for papers (deadline to submit 16 June 2023): **should we submit a paper on teaching experience with Pangeo?**
  - [Open Science FAIR](#)
    - Call for proposals to open 14th March 2023, (workshops, lightning talks, demos, posters). **Deadline for submission: 24th April 2023**
  - [Science communication of RDA calls in the context of EOSC](#)
    - **Open call (funding 15000 Euros), deadline April 10th**
- Technical info:

## 7th March

- Updates
  - EDS book will soon release a new version supporting notebooks with R and Julia kernels
    - Reminder to Felix
- Events
  - EGU23
    - Alejandro might attend virtually.
  - Open-Earth-Monitor <https://earthmonitor.org/gw2023/>
  - BiDs, <https://bigdatafromspace2023.org/>, 6-9 November
    - Call for tutorials, potential submissions:
      - Python (regular Pangeo workshops)
      - Julia (Felix)
      - Reproducibility (EDS book)
  - JupyterCon23, <https://www.jupytercon.com/>
    - Proposal of EDS book talk accepted (Alejandro & Anne)
- Pangeo Europe Roadmap, contributions and thoughts are welcome!

- <https://docs.google.com/document/d/1vtMJL-QxZfOuoi7u5KgdXCMpUMXztkKtKrLTyE9wirhk/edit#heading=h.mbjblphsgrft>
- <https://documentation.dataspace.copernicus.eu/#/README>
  - <https://cloudferro.com/en/>
- link with OpenEO and Pangeo community.

## 28th February

- News & updates:
  - OGC
    - **Earth Observation Exploitation Platform DWG**
    - **Discrete Global Grid Systems DWG**
    - **DGGS DWG**
  - c-scale tutorial?
  - [Cloud-Native Experts "Ask Me Anything" at ESIP Cloud Computing Cluster February 27 - News & Announcements - Pangeo](#)
  -
- Technicalitys:

## 14th February

- News & updates:
  - C-SCALE tutorial: SLURM 24th February
  - EGU pangeo session
  - SOS! please vote for an updated logo for the EDS book
    - <https://github.com/alan-turing-institute/environmental-ds-book/issues/125>
  - Pythia cookbooks, citation, please contribute
    - <https://discourse.pangeo.io/t/making-cookbooks-citable-best-practices/3170/1>
- Technicalitys:
  - Pangeo-forge
  - Xarray and parallelisation. By-weekly meetings to standardization approach.
    - <https://discourse.pangeo.io/t/new-working-group-for-distributed-array-computing/2734>
    - [https://docs.google.com/document/d/1\\_FkLZ3NjXlzc7p4mr1GtWuPGKN3-E991dQEdPv6bNc/edit](https://docs.google.com/document/d/1_FkLZ3NjXlzc7p4mr1GtWuPGKN3-E991dQEdPv6bNc/edit)
  - Xarray-Datatree presentation in pangeo showcases
  - Destination earth question:
    - <https://stories.ecmwf.int/destination-earth-to-hold-its-first-user-exchange-at-esa-esrin-facilities-in-italy/>

- Presentation 5 minutes: Building on communities to foster adoption of Open Science practices in the DestinE initiative
- *Block 2: We could facilitate onboarding of users if users can work collaboratively. What would you want to use in the DESP environment to collaborate with others? (concrete list of services)*
- *Block 3: DestinE is a long term project, how can we build a community that can last and grow, how do we ensure a safe, inclusive and diverse space that people can interact in?*
- Dedicated EGU session
  - [CO Meeting Organizer EGU23 \(copernicus.org\)](https://www.copernicus.org/egu23/meeting-organizer)
- Pangeo is not yet suitable for EO experts (See a recent twitter thread [here](#)).  
Potential developments?
  - napari - multi-dimensional image viewer for python
    - <https://github.com/napari/napari>
    - integrated with dask
    - Would it make sense to join training such as <https://gallantries.github.io/video-library/events/smorgasbord3/>?
  - xcube
    - [Overview — xcube 0.13.1.dev1 documentation](#)
  - dask demo day in february:  
<https://github.com/dask/community/issues/304>

## 7th February

- C-SCALE user meeting:
  - <https://docs.google.com/presentation/d/1zRrvR02yTQsJWLJcOfcXCicqr4e4-ldNpC7UNkSNLVQ/edit?usp=sharing>
  - Please review and add info. Who is presenting what?
  - 8th February, 9.30am CET  
<https://us02web.zoom.us/j/89507914436?pwd=VEI6MXo2cjhBS1lqNWYvNkpsWFVXZz09>
  - greeness: HPC
  - julia: virtual machine on top of openstack.
    - can
  -
- News:
  - Latest version of distributed Dask has incompatibility with click. Solution: revert to an older version of click e.g. to version 8.0.4
  - Lorenzo attended a workshop organized by EOSC C-SCALE on PaaS. Similar interface to IM dashboard. Did not contain Pangeo deployments.
  - Action: could we get Pangeo added to C-SCALE PaaS?
  - COPERNICUS DATA SPACE ECOSYSTEM Data and Services have a look to the new strategy [Angebot für Eumetsat ITT#3 \(copernicus.eu\)](#)
  - dggs conda-forge package under way (next step needs to be reviewed). (link??)

- Loarenzo and Alex will participate to the OGC member meeting in Frascati 21-22 February [OGC Meetings](#)
- Geo datacube working group in OGC. Probably interesting to contribute.
- ESSI2.8 HPC and cloud infrastructures in support of Earth Observation, Earth Modeling and community-driven Geoscience approach PANGEO
  - Orals: Mon, 24 Apr, 08:30-12:30 (CEST), room 0.16
  - Posters virtual: Mon, 24 Apr, 16:15-18:00 (CEST)
  - Posters on site: Mon, 24 Apr, 16:15-18:00 (CEST)
- DestinE User Exchange meeting Wed. 15 February: Building on communities to foster adoption of Open Science practices in the DestinE initiative
  - What do we want to convey? Any inputs?
- [EOEPCA](#) - Tiger Team initiative, finding synergies between EOEPCA building blocks, openEO, EDC, Pangeo, OGC APIs
- <https://eodc.eu/eodc-forum-2023-save-the-date/>
- other funding opportunities...
- C-scale meeting
- In person Pangeo-EU meeting?
  - Organized at ESA?
- Working groups:
  - help me (lorenzo) deploying Pangeo on the delena.surfsara.nl SLURM based for the C-SCALE project.
    - Doodle to organize a working group session for deploying Pangeo on HPC Surfsara. <https://doodle.com/meeting/participate/id/bk2KZMJJa>
    - <https://github.com/umr-lops/dask-hpcconfig> can may be help.
    - Documentation for using Jupyter services on SURF HPC (national Dutch HPC system): <https://servicedesk.surf.nl/wiki/pages/viewpage.action?pageId=30660252#JupyterNotebooksonSnellius/Lisa-ThesoftwareenvironmentonLisa'sJupyterHub>
      - check
  - DMPs for C-SCALE:
    - [https://docs.google.com/document/d/1gxe4gNZ1eONx5Y6eC3oj\\_hRB\\_RG5ghZMX0-61il9AeZk/edit?usp=sharing](https://docs.google.com/document/d/1gxe4gNZ1eONx5Y6eC3oj_hRB_RG5ghZMX0-61il9AeZk/edit?usp=sharing)
    - [https://docs.google.com/document/d/1vvyB0oyrS2e5jq9atFtBv8L2dZ\\_MqmGkPeN0Wn7VcJAU/edit?usp=sharing](https://docs.google.com/document/d/1vvyB0oyrS2e5jq9atFtBv8L2dZ_MqmGkPeN0Wn7VcJAU/edit?usp=sharing)
    - <https://docs.google.com/document/d/13lyGrN29XhxbEcosgnK2r1ZosVvfdtC51VjctgezYyk/edit?usp=sharing>

## 31st January

- Welcome to Floris Calkoen
- Proposal to better organize Pangeo Coffee:
  - Use Pangeo coffee for on-boarding new members
  - News (point to documents such as 1-page summary with Pangeo EU activities and/or collaborations)
  - General discussions

- Updates on working groups/sessions
  - Proposal to create working group or more technical focused meetings and/or on funding proposals;
- 1-page summary with Pangeo EU activities and/or collaborations
- PANGEO-EOSC on C-SCALE and EGI-ACE.
  - Objective: deploy binder with Dask on kubernetes.

## 24th January

- Pier and Alex suggest to have some discussion on focussing activities in terms of community engagement and popularization in Europe, which avenues to explore:
  - e.g. EGU / European Science community of course
  - Alex proposed OSGEO and FOSS4G, Alex in conference program committee 2023, and conference organizer for 2024 in Tartu, Estonia
  - Alex is also European Co-Chair of the OGC [University Domain working group](#), and in the [EUROGI Education group](#) (and through those associated with [EO4GEO Alliance](#))
  - we should plan outreach and capitalize on our available networks
- EGU23
  - Merged with HPC-CLOUD-EDGE session.

## 17th January

- EGU23
  - 15 abstracts, we'll merge with another ESSI session.
    - Contact ESSI organizers
    - Potential sessions to merge with:
      - ++ ESSI2.7 From HPC to Cloud and Edge computing in Earth Observation and Earth [Modelling](#)
      - + ESSI3.7 Open-Source Digital Twins for the [Earth](#)
    - Tuesday (most preferred day)
    - <https://docs.google.com/document/d/1riaQ2S8UIaROmHn5ID3Zok0fzE7u1nKGB8wovrdG5Jc/edit>
- EU projects
  - Dec 07, 2022 Build on the science cluster approach to ensure the uptake of EOSC by research infrastructures and research communities ID: HORIZON-INFRA-2023-EOSC-01-01: Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. Given that the financial support to third parties is a primary aim of the action, and taking into account the nature of the work to be supported and the cross-RI, cross-domain nature of the intended open science projects and services, the maximum amount to be granted to each third party is EUR (100-to ) 250 000.
- What are the other potential funding sources? (global)
  - Chan Zuckerberg
  - Bezos Earth Fund

- Sloan Foundation
- C- scale, where are we?
  - Waiting for EGI to come back with offer on provider.

## 10th January

- EGU23
  - 2 abstract submitted
  - 14 abstract submitted in the PANGEO session
- C-Scale meeting tomorrow 11:00
- Interesting session at ESIP23: [Bringing Cloud-Native Science "Down to Earth"](#)  
January 25! (see <https://2023januaryesipmeeting.sched.com/event/1EwXf/bringing-cloud-native-science-down-to-earth>)

## 3rd January

- EGU23 proposals: who can submit ? please review drafts:
  - [Pangeo deployment on EOSC](#) Guillaume, Jean and Sebastian, + et al.
  - [Pangeo framework for training: experience with FOSS4G, CLIVAR bootcamp and eScience course](#): Lorenzo, Alejandro, Anne, Tina + et al.
- C-SCALE Pangeo Kick-off : Wednesday, 11 January · 11:00am – 12:00pm
  - who can attend: Anne , Tina
  - Check timeline  
<https://docs.google.com/document/d/1EvMqgowsIZwwUuPhlUsMEgYBorFt9x-8u9xjP7RUEd0/edit?usp=sharing>
  - Involve EU companies (Basile?)
- Add Pangeo EOSC deployment on Pangeo website (<https://pangeo.io/cloud.html>)

## 27th December

- EGU23: Proposals on
  - [Pangeo deployment on EOSC](#) Guillaume, Jean and Sebastian, + et al.
  - [Pangeo framework for training: experience with FOSS4G, CLIVAR bootcamp and eScience course](#): Lorenzo, Alejandro, Anne, Tina + et al.
- 1 j, 1 j, 2 e, 1(a+a)
- C-SCALE document to finalize timeline:  
<https://docs.google.com/document/d/1EvMqgowsIZwwUuPhlUsMEgYBorFt9x-8u9xjP7RUEd0/edit?usp=sharing>
  - Here is a pol (meeting with C-SCALE beginning of January)!: <https://doodle.com/meeting/participate/id/eE8zQ1Wd/vote>

## 20th December

- EGU23: deadline to submit a proposal, January 10th
- Internships:
  - JRC: : <https://recruitment.jrc.ec.europa.eu/>
  - Simula: <https://www.simula.no/education/simula-internships> (for 2023)
- c-scale
  - 4 use case (with us) JRC+ESA vegetation, SAR:terradyne geohazards
  - Info to fill, etc:  
<https://docs.google.com/document/d/1EvMqgowsIZwwUuPhlUsMEgYBorFt9x-8u9xjP7RUEd0/edit?usp=sharing>
- pangeo european meeting:
  - Next year (2023?)

## 13 th December

- EU call discussions
  - Going back to the discussion Pangeo Europe as an entity

## 6th December

- Some interesting links
  - <https://s2gm.land.copernicus.eu/>
  - <https://land.copernicus.eu/pan-european/clc-plus>
  - [https://github.com/eea/CLMS\\_Production\\_System](https://github.com/eea/CLMS_Production_System)
- Future EU calls:
  - **Draft Call: HORIZON-INFRA-2024-EOSC-01-01: FAIR and open data sharing in support of the mission adaptation to climate change (RIA, 6-18M€ per project, 2 projects funded, 100% funding, 06/12/2023-12/03/2024)**
  - links to draft calls
    - [Cluster 4 – Digital, industry and space](#)
    - [Cluster 5 – Climate, energy and mobility](#)
    - [Research infrastructures](#)
- How do we make 'pub' of our activities
  - Have a slideDeck with prepared slides to introduce Pangeo & activities/roadmap + focus on European strategy. (AF will create a folder for the slide deck in the pangeo Europe drive).
  - Gather conference calls, etc.

## 29nd November

- Grid

- <https://discourse.pangeo.io/t/discrete-global-grid-systems-dggs-use-with-pangeo/> Lots info thread
- <https://healpy.readthedocs.io/en/latest/>
- <https://github.com/manaakiwhenua/rhealpixdggs-py> (rHealPix)
- <https://juliapackages.com/p/healpix>
- <https://github.com/sahrk/DGGRID> (Kevin Sahr base tool)
- <https://github.com/allixender/dggrid4py> (Python wrapper for cmd tool)
- <https://github.com/r-barnes/dggridR/> (R C++ wrapper)
- indexing in xarray? juria?
- EU projects funding lists :
  - [Climate, Energy & Mobility](#)
  - [Digital, Industry & Space](#)
  - [Food, Bioeconomy, Natural Resources, Agriculture & Environment](#)
  -
- c-scale
  - <https://docs.google.com/document/d/1EvMqgowsIZwwUuPhlUsMEgYBorFt9x-8u9xjP7RUEd0/edit>
- 

## 22nd November

- On-boarding procedure to Pangeo EOSC: started to draft document <https://hackmd.io/@simula/onboarding>
- News item for Pangeo Use Case in EGI-ACE (deadline: before Christmas): <https://docs.google.com/document/d/1qfkzj5tNkfhvZIBAtYgfggwMBu21qNrfNx-C69sCg/edit?usp=sharing>
  - It would be fantastic if you chip in where the titles are highlighted, in particular:
    - the description of the community
    - if there's anything you would like to add to the challenge
    - the quote, if you'd like to leave a statement on the collaboration - you'll find an example [here](#)
    - any additional information that you'd like to see as a highlight (I was thinking of a box with pointers to the training delivered and another one with a pointer to your GitHub repository)
- C-Scale (deadline 30th November): <https://docs.google.com/document/d/1EvMqgowsIZwwUuPhlUsMEgYBorFt9x-8u9xjP7RUEd0/edit?usp=sharing>
- <https://aircentre.github.io/JuliaEO/> (online attendance possible).  
Introductory Workshop for Geodata management in Julia

## 15th November

- Workflow Management Systems (airflow, celery, CWL, ecflow, Galaxy workflow management system, etc.): advantages/disadvantages. Pangeo Show & Tel on this topic? Ask airflow?



- EGU 2023 Pangeo session. Alejandro made a flyer  
[https://docs.google.com/presentation/d/1\\_XaknwbLj4VhVE0KVxK6LjRIW0gO4ZcEDdR467O63Mg/edit?usp=sharing](https://docs.google.com/presentation/d/1_XaknwbLj4VhVE0KVxK6LjRIW0gO4ZcEDdR467O63Mg/edit?usp=sharing)
- <https://agile-online.org>
- <https://www.osgeo.org/initiatives/geo-for-all/>
- EOSC Symposium  
<https://eosc-portal.eu/events/eosc-symposium-2022-livestream-available-here>
- Prepare email to EGI for summarizing the last 2 events, submit C-SCALE and discuss with EGI for potential EU call.
- CMIP6 data
  - <https://github.com/fsspec/kerchunk/issues/242>

## 8th November

- EGU23 Pangeo session accepted!!
  - <https://meetingorganizer.copernicus.org/EGU23/session/45427>
  - Call for abstract open
    - **Vienna, Austria & Online | 23–28 April 2023**
    - [Apply for financial support](#) by submitting your abstract by 1 December 2022, 13:00 CET.
    - Submit your regular abstract to the [session format of your choice](#) by 10 January 2023, 13:00 CET.
    - See here for how to submit the abstract ([https://egu23.eu/programme/how\\_to\\_submit.html](https://egu23.eu/programme/how_to_submit.html))
- EO4GEO: Innovation solutions for Earth Observation/Geoinformation training
  - <http://www.eo4geo.eu>
  - What about finding funding from the educational aspect of Pangeo-Europe? (link with EOSC?)

## 1st November

- Any interest in using LUMI-C and run benchmark for Pangeo?
  - LUMI-C is free of charge for Norwegian researchers and we consider if this could be an opportunity to run “pangeo/dask” benchmark at scale? Contact [annef@simula.no](mailto:annef@simula.no) if interested.
- Open Innovation for Earth Observation Programmes, 2–4 November 2022, ESRIN, Frascati – Italy.
  - Presentation of Pangeo:  
<https://docs.google.com/presentation/d/19YtPYVlsJwbA1CPj6HtAlpG6rdh9CfOB/edit?usp=sharing&ouid=117642930190987755261&rtpof=true&sd=true>  
(still under development)

- Pangeo Show & Tell for November 2022: do we have someone? Can we invite “end-users” to showcase their usage of Pangeo?

## 25th October

- OpenEO & dask on HPC
  - Generally, interest to work on HPC dask deployment.
- Pangeo Steering council meeting was held online on 18th October 2022.
- Upcoming EU call. Should we apply for Pangeo Europe?
  - Draft Call: HORIZON-INFRA-2023-EOSC-01-01: Build on the science cluster approach to ensure the uptake of EOSC by research infrastructures and research communities (RIA, 25M€, 1p, 100%, 22/12/2022-28/03/2023)
  - Draft Call: HORIZON-INFRA-2023-EOSC-01-02: Development of community-based approaches for ensuring and improving the quality of scientific software and code (RIA, 8,5M€, 1p, 100%, 22/12/2022-28/03/2023) .

## 18th October

- Discussion about OpenEO
- Reporting Clivar

## 4th October

- Pangeo Show-and-Tell, Alexander Knoch, October 6, 2022 14:00 CEST (**please promote it!**)
- Pangeo Showcase, pyOpenSci, October 5, 2022, 18:00 CEST
- CLIVER :
  - link with other pangeo members?
    - jessica? [JessicaS11](#)
    - Julius / @jbusecke
  - Which CMPI6 dataset? What is the size? Are they already in cloud?
    - Anne will try to make a table
  - Contents
    - Xarray part anne, based on cmpi6 data , tina will link dask/kerchunk to anne's part.
- Pangeo-EGI-ACE platform
  - new elastic one created by guillaume
    - <https://github.com/pangeo-data/pangeo-eosc/issues/22>
    - <https://pangeo-elastic.vm.fedcloud.eu>
    - Tina will do a dask test.

- EGU23
  - Open Science session, FAIR forum
  - Next Meeting - Pangeo Open Science Working Group, Friday 7 October, 17:00 CEST (see [previous notes](#))
- EU projects?

## 27th September

- EGI ACE configuration
  - Guillaume started a benchmark, see ryan's comment
- New notebook in the EDS book, fetches a land cover dataset discovered from Microsoft Planetary STAC collection.
  - [https://the-environmental-ds-book.netlify.app/gallery/exploration/general-exploration-landcover\\_io/general-exploration-landcover\\_io.html](https://the-environmental-ds-book.netlify.app/gallery/exploration/general-exploration-landcover_io/general-exploration-landcover_io.html)
- CLIVER :
  - Where do we have CMPI6 dataset?
    - not in planetary
    - xmp (preprocessing)
    - Where do we find intake catalogue for cmpi6??
      - <https://pangeo-forge.org/catalog>
      - <https://esgf-node.llnl.gov/projects/cmip6/>
  - outcome of notebook might be of interest EDS community.
- Pangeo Show-and-Tell, Alexander Knoch, October 6, 2022 14:00 CEST (**please promote it!**),
  - Discourse link: <https://discourse.pangeo.io/t/october-6-2022-dggs-and-their-potential-impact-in-geoscience-and-geospatial-communities/2759>
- Pangeo Showcase, September 28, 16:00 EDT / 22:00 CEST
  - My ERA5 Journey: From API-to-ARCO

## 20th September

- EGU 2023
  - showcase session and short course submitted.
- Join Pythia project to ask about Pangeo Gallery and Resource Gallery (Pythia project) : to add/advertise the Environmental Data Science Book.
- Justus joined the new working group “explore alternative parallel computing frameworks to dask, such as apache-beam/cubed/ramba”:
  - Check the [Notes](#)
- Clivar bootcamp:
  - Similar infrastructure but with more nodes (more students)
  - Training material based on FOSS4G: <https://pangeo-data.github.io/foss4g-2022/intro.html>
- STAC & Pangeo:
  - Justus is investigating how to use STAC.
  - <https://github.com/radianteearth/stac-spec/blob/master/item-spec/item-spec.md>

- <https://stacspect.org/en>
- EGI ACE configuration
  - ask jean to shutdown non egi jupyterhub
  - create a new DNS with pangeo-eosc.... name to keep the same name for any events/courses and research work.
  - s3 access work now
    - <https://github.com/pangeo-data/pangeo-eosc/blob/main/EGI-CLI-Swift-S3.md>
  - CLIVER bootcamp
    - <https://www.clivar.org/events/arctic-processes-cmip6-bootcamp>
  - CMIP6 data availability in ARCO ?
    - <https://github.com/orgs/pangeo-forge/repositories>
  - <https://pangeo-forge.org/dashboard/feedstock/7>
  - <https://storage.googleapis.com/cmip6/pangeo-cmip6.json>

## 13th September

- Presentation for [ICAS22](#):  
<https://docs.google.com/presentation/d/1z0t8FZweVFGgecB0EISe0QQvPIRJ6xgwywyFJpw5-M8/edit?usp=sharing>
- EGU 2023
  - showcase session: all ok, Tina will submit  
<https://docs.google.com/document/d/1riaQ2S8UIaROmHn5ID3Zok0fzE7u1nKGB8wovrdG5Jc/edit>
  - Open Science session, no update
  - Short course, add Justus.
- Pangeo Show-and-Tell November

## 6th September

- Pangeo Show-and-Tell
  - Felix Cremer, RO,  
<https://reliance.rohub.org/overview?ro=a802f7dc-f3f4-4eac-b69f-748fb90958fb&activetab=overview>
- EGU
  - Open science meeting ..
  - Deadline next week?
    - [EGU23-pangeoshowcase](#)
    - [EGU23-pangeo short course](#)
- Infrastructure EGI-ACE
  - Updating infrastructure?
    - URGENT: we need to use less CPU when we do not use it.
      - while waiting to know how to have elastic configuration, we need to 'stop' the non-EGI configuration
      - shrink the EGI version to 5 nodes?

- and have documentation on how to shrink and add nodes.
  - 
  - Nest tutorial session:
    - 11-21 October.
      - 12th: presentation.
      - 24 participant.
      - full week
      - Group work.
      - <https://www.clivar.org/events/arctic-processes-cmip6-bootcamp>
      - How much data do we need to push on the infrastructure?
        - user data: MIN-IO in denmark.
        - CMIP data: which data
          - List data which does not exist on pangeo cloud, then contact Ryan to push it by pangeo-forge?
      - Examples
        - IceNet demonstrator in the EnvDS book (uses CMIP data). Tested in the Pangeo binder, but it should work in EOSC.
          - <https://the-environmental-ds-book.netlify.app/gallery/modelling/polar-modelling-icenet/polar-modelling-icenet.html>
    - How can we keep the infrastructure for next years.
      - EGI- ACe will finish in 2023 March-June (?)
      - Can EGI keep the infrastructure ?
      - EuroScienceGateway (ESG)
        - <https://galaxyproject.eu/freiburg/projects.html>
  - Funding
    - other EU project?
      - Can we include UK?
      - Norway
      - EGI?
    - Example in COST (UK and Switzerland)
      - <https://www.cost.eu/eligibility-switzerland-uk/>

## 30th August

- FOSS4G take-aways
  - Workshop
    - Overall, positive feedback.  
(<https://hackmd.io/@nicest2/foss4g-pangeo>)
    - EGI login (not all were used to it or like it), cache problem.
    - Very useful to have a backup infrastructure.
    - Low standard sound system in the workshop room (affected remote presentations).

- Length, 4 h, was ok, but it was suggested to split in 2 separate workshops (basics and advance).
  - Concepts
    - Audience familiar with Xarray, but not fully aware of functionalities and some underlying concepts e.g. chunking
  - Potential examples
    - Terrain model
  - Blog post?
    -
- Infrastructure EGI-EOSC
  - Discuss in monthly [JupyterHub/BinderHub meetings](#), next 20th September 2022
  - Priority
    - rebuild the infrastructure on elastic kubernetes cluster-> link with production instance of check-in.
    - small resources: test binder integration-> (which use jupyter hub created from dask)
    - Dates for the future events.
      - Anne : Oct , Nov when?
      - Tina: December
- Show-and-tell
  - 1st September
    - Contact Felix to confirm all ok with his presentation
    - Details:
      - <https://discourse.pangeo.io/t/september-1-2022-handling-large-geo-data-with-julia/2656>
  - Potential speakers:
    - October, DGGS, Alex Knoch [@allixender](#)
    - November, OpenEO, Matthias Mohr, [@matthmohr](#)
    - December, IFREMER, Tina Odaka
- EGU23, <https://meetingorganizer.copernicus.org/EGU23/provisionalprogramme>
  - DL, 19 September
  - session submission
    - Pangeo-europe
      - show case
      - EGU23 proposal
        - [EGU23-pangeoshowcase](#)
    - formation (Short course)
      - [2022 guideliens](#)
        - 1.5 hours x2 max
        - [EGU23-pangeo short course](#)
    - Joint session?
      - Great Debate
        - <https://discourse.pangeo.io/t/egu2022-great-debate-on-os/1818>
      - The evolving open-science landscape in geosciences

- <https://discourse.pangeo.io/t/egu2022-session-the-evolving-open-science-landscape-in-geosciences/1850>
- Pangeo Open Science working group
  - [https://docs.google.com/document/d/1mMDIFbIBOeEmHnhaZZfgaMJvuzpw28ro3uyJngeY\\_jk/edit#](https://docs.google.com/document/d/1mMDIFbIBOeEmHnhaZZfgaMJvuzpw28ro3uyJngeY_jk/edit#)
- Contact
  - OpenEO (Anne)
  - Great Debate Open Science, Francesca Pianosi (Alejandro)

## 23th August

- FOSS4G

## 16th August

- FOSS4G
  - Timeline workshop
    - Self-presentation (5 min) [Alejandro, Anne, Guillaume, Jean, Lorenzo, Tina, Tom & Jerry]
    - Introduction to Pangeo (10 min) [ , ]
    - Hands-on on the infrastructure (10 min) [ , ]
    - --- Short pause to re-align users ---
    - Handling multi-dimensional arrays with xarray & Interactive plotting with HoloViews (5 min)[ , ]
      - exercise 1.1 (45 min + 15 pause) [ , ]
        - Data loading
        - Selection
        - Basic math
        - Visualization (matplotlib and hvplot)
        - Question time and exercise ?
    - ---- Long Pause ----
    - Data access and discovery (30 min)[ , ]
      - LTS introduction
      - Preparing and discover online datasets
    - Data chunking and compression (45 min + 15 pause)[ , ]
      - Global LTS
    - ---- Long Pause ----
    - Parallel computing with Dask
      - Parallelize with Dask
  - - -- exercise 1.3 (20 min )
    - -- analyze data between two DataArray,
    - -- advanced visualization
    - --- (optional) Add a different mask (15 min)

- --- (optional) Scale to the national level ()
- Infrastructure
  - Contingency plan if EOSC doesn't work
    - Galaxy
    - Local
  - JupyterHub
    -
- GitHub repo
  - Open Issues
  - Sections
    - Timeline
    - BEYOND THE WORKSHOP
      - Resources
        - Pangeo Cloud
        - Other training
        -
- Logistics
  - Ad:
    - Twitter: [@foss4g](#) [#FOSS4G2022](#)
    - LinkedIn
    - Pangeo [discourse](#)
  - Message to participants (see draft [here](#)).
  - HackMD for Q&As
  - Sticky notes (to bring with 2 different colors)
  - image for chunking
    - <https://drive.google.com/drive/folders/1NibcvGid2YirXW8CTncdjPkhOpvKyxNR?usp=sharing>

## 9th August

- Felix added bio for his presentation in September (see below).
  - zoom meeting link
    - <https://cnrs.zoom.us/j/94270013019?pwd=eVB1OUJ6SW5lQ0N5MVB4aGhBWUNGUT09>
- FOSS4G preparation.
- CMIP6 bootcamp Denmark 11-21 October. Need one person to teach a crash course on Pangeo (will also use Pangeo EOSC infrastructure):  
<https://www.clivar.org/events/arctic-processes-cmip6-bootcamp> (most likely need to be there on Wednesday 12 October).

## 2nd August

- FOSS4G preparation
  - tutorial notes
  - (kerchunk



## 26th July

- 1st european Show and tell
  - 1st of September 14:00 Felix Cremer, title “Handling large geo data with Julia“
  - <https://meet.jit.si/pangeo-europe>
  - bio:
  - **Felix Cremer** received his diploma in mathematics from the University of Leipzig in 2014. In 2016 he started his PhD study on time series analysis of hypertemporal Sentinel-1 radar data.
  - He currently works at the Max-Planck-Institute for Biogeochemistry on the development of the JuliaDataCubes ecosystem in the scope of the [NFDI4Earth]([www.nfdi4earth.de](http://www.nfdi4earth.de)) project.
  - The **Earth Data Lab (EDL)** is a data cube framework in Julia for the efficient handling of raster data. It is based on the **YAXArrays.jl** package. YAXArrays.jl provides functionality to deal with labelled arrays, similar to the xarray python package and it also provides efficient and easy multithreading and distributed computation of user defined functions along arbitrary slices of the data.
  - EarthDataLab.jl uses **DiskArrays.jl** in the backend to deal with out of memory datasets. In this Show-and-Tell I am going to give a short introduction into the EarthDataLab.jl package for raster data handling in Julia.
  -
- [DSEnv Book](#) (+ issue related to other programming languages )
- <https://github.com/felixcremer/Sen4REDDTutorials/tree/main/notebooks>
- <https://mybinder.org/v2/gh/felixcremer/ESDLTutorials/HEAD>
- [https://juliaocean.github.io/MarineEcosystemsJuliaCon2021.jl/dev/MITgcm\\_tutorial\\_global\\_oce\\_biogeo.html](https://juliaocean.github.io/MarineEcosystemsJuliaCon2021.jl/dev/MITgcm_tutorial_global_oce_biogeo.html)
- ( EGU, winter hackathon and summer hackathon, organisation might be needed to do data controller (GDPR) for EOSC?)

## 19th July

- FOSS4G preparation

## 12th July

- FOSS4G preparation
  - Final number of participants, beginning August
  - Repository in pangeo-data, <https://github.com/pangeo-data/foss4g-2022>
    - Example 1 local
    - Example 2 stac
    - Example 3 merge climate and land data

- resampling, merging

## 5th July

- OpenEO and Xarray

## 28th June

- Anne participating as a Content Subject Matter Expert in [NASA Transform to Open Science \(TOPS\)](#)
  - Developing a curriculum in Open Science
  - Programme to everyone, not only Geoscience
  - AGU & NASA partnership, see [here](#)
  - Tina suggests contacting [EGU's ESSI - Earth and Space Science Informatics - Structure](#)
- FOSS4G preparation
  - Lorenzo proposes organizing a separate slot
  - Monday 4th, 11th, 18th and 25th July, 10:00 CET
  - Meeting link: <https://meet.jit.si/pangeo-europe>
- EOSC
  - Anne mentions issues with missing ports
  - We need documentation 'how to start jupyter-hub + dask' from IM dashboard, but also from scratch openstack.
  -

## 21th June

- FOSS4G preparation.
  - only the conference fee will be free for one person
  - [https://docs.google.com/document/d/1Kp3UXP9Ia7MSIXltbDnwlPaaZyjKO1CW4r1ypN\\_Gf-w/edit](https://docs.google.com/document/d/1Kp3UXP9Ia7MSIXltbDnwlPaaZyjKO1CW4r1ypN_Gf-w/edit)
  -
- JupyterHub/BinderHub community meeting..
  - <https://hackmd.io/@sgibson91/hubs-team-meeting>
    - Add issues in <https://discourse.jupyter.org/>
- EOSC
  - <https://docs.google.com/document/d/1a01-8DGFRK8y3il8UwTo7CZ08Wbk3YzFxcIBmpukSQL/edit#>

## 14th June

- FOSS4G
  - Questions: How many resources do we need for tutorial sessions
    - number of people? to ask Alex or Peter Lowe,
    - size of each resource?

- Abstract of the tutorial:
  - <https://talks.osgeo.org/foss4g-2022-workshops/talk/review/F77K9RY7RQUJWFVJJWCPKS3ZAQCFJAWY>
- contents possibilities ( 4 hours)
  - Use cases
    - General audience?
    - Geolocation/Satellite applications
    - Meteorological/Climate
  - Input data, <https://github.com/ecmwf/climetlab>
  - Computation, use case
- Will the EOSC infrastructure be ready?
  - Alternatives: standard Binder, GESIS binder, Pangeo Binder? EGI?
  - Galaxy cluster?
- Go on discussion next Tuesday
- Pangeo 2i2c Binder, <https://us-central1-b.gcp.pangeo.io/>
  - Request access through an [online form](#)
- [Environmental Data science Notebooks](#):
  - Example in oceanography
    - <https://the-environmental-ds-book.netlify.app/gallery/modelling/ocean-modelling-litter-philab/ocean-modelling-litter-philab.html>
  - How to submit
  - <https://github.com/alan-turing-institute/environmental-ds-book>
  -

## 7th June


- Discussion of the maturity of Julia and Python
  - Julia, fast but not mature yet for production.
    - Felix Cremer (MPI Jena)
      - Example of xarray implementation in Julia
      - <https://github.com/JuliaDataCubes/YAXArrays.jl>
      - Support netcdfs, zarr, and everything that is openable by gdal
      - <https://github.com/JuliaDataCubes/ESDLTutorials/blob/main/overallintro.ipynb>
      - Could “show and tell/tutorial” in September (after summer).
  - OpenEO
    - Incl. most of programming languages, except Julia
    - YAXArray.jl team in conversation with OpenEO as backend solution
- Lorenzo proposes monthly general meeting, instead of weekly coffee meetings
  - half, discussion
  - half, showcase (similar to show&tell of the [EnvDS community?](#))
  - start date, Fall 2022, 19th September
    - Speakers
      - Felix, YAXArrays.jl (ok, 1st-4th September, double check conflicts with Pangeo showcase/workshop meetings), 1
      - Alex, H3Geo (ok, October TBC)

- Anne, preparations for FOSS4G
  - Ask 2i2c support to deploy Pangeo in EOSC
    - Separate meeting on Thursday morning 10:00 CEST  
[meet.jit.si/pangeo-europe](https://meet.jit.si/pangeo-europe)
  - Lorenzo ask if the problem is with Kubernetes
  - Separate meeting to discuss progress and challenges
  - [Workshop date](#), Tuesday 23th Aug, 2pm - 6 pm
  - Contact [Peter Lowe](#) for advise
  - Interested: Lorenzo, Anne, Alejandro, Justus/Tina (TBC)
  - (optional) deploy a Julia kernel to disseminate YAXArray.jl

## 31st May

- updates EGU22 and LPS22
  - connection with Julia programming language community,
  - pangeo sessions in EGU (ca 50 person)
  - Great debate on Open Science.
    - <https://great-debate-open-science.github.io/EGU2022/>
- organize a regular meeting every month. Proposal the first Thursday @ 17.00

## 17th May

- Refining the presentations for EGU22 and LPS22
  - Include Pangeo impact and usage in the private sector e.g. Basil company
  - Poster LPS22:
    -  LPS22-Pangeo
  - Presentation LPS22:
    - [https://docs.google.com/presentation/d/1wCLz\\_KiTdu9NQHKiu5DXtHRve9lfr\\_-x/edit#slide=id.p1](https://docs.google.com/presentation/d/1wCLz_KiTdu9NQHKiu5DXtHRve9lfr_-x/edit#slide=id.p1)
  - Pangeo session EGU22:
    - [https://docs.google.com/presentation/d/1chWrH26CoJaXnOM-cSeLODgaWGuQxIAA7Go3WbKS7H0/edit#slide=id.g12716ea2248\\_0\\_47](https://docs.google.com/presentation/d/1chWrH26CoJaXnOM-cSeLODgaWGuQxIAA7Go3WbKS7H0/edit#slide=id.g12716ea2248_0_47)

## 10th May

- Preparation for presentations for EGU22 and LPS22
  - 16th (monday) Mai 14:30-
  - contributions
    - [https://drive.google.com/file/d/1RMUb1nLqGjclCGwylq\\_gdwgOj5NBP\\_Aqv/view?usp=sharing](https://drive.google.com/file/d/1RMUb1nLqGjclCGwylq_gdwgOj5NBP_Aqv/view?usp=sharing)
      - Infrastructure

- Definition : place we can put 'data' & compute , physical
  - stakeholders
  - Examples : DIAS (WiKEO, ONDA, CREODIAS, Sobloo [Data and Information Access Services | Copernicus](#)) EOSC, etc
- APIs
  - Definition
  - Examples: OpenEO
- Data services
  - Examples: copernicus,
- Projects
  - Examples: Bluecloud, EOSC Pillar , Reliance, ...digital twin, digital ocean twin,
  - link
- Visions (
  - <https://docs.google.com/presentation/d/1Dt0qg6hRTmUMjqSIFkSsk8ywS3NUaUrKU3MFAQ93efg/edit?usp=sharing>
  - [https://docs.google.com/presentation/d/1gGPDw2p5c38\\_B2KyE7PsmPr1T\\_HUdTBqC5wnnb\\_wqH8/edit?usp=sharing](https://docs.google.com/presentation/d/1gGPDw2p5c38_B2KyE7PsmPr1T_HUdTBqC5wnnb_wqH8/edit?usp=sharing)
- chunk discussion.

## 03rd May

- Iacopo Ferrario (JRC, Italy): working with dask on a local cluster.
- <https://2022.foss4g.org/> FOSS4G workshop on Pangeo Dask (introduction)
- LPS22:
  - Landscape in Europe (all the “clouds, software stack): [https://drive.google.com/file/d/16Vs7v4iB\\_qh-99iw0eJXs7LkR4TEQz10/view?usp=sharing](https://drive.google.com/file/d/16Vs7v4iB_qh-99iw0eJXs7LkR4TEQz10/view?usp=sharing)
  - Software developers in Europe (working on Pangeo)
  - Pangeo deployment on EOSC
  - how can we optimize (maximize the return to funding) the development of europe for EO
    - how can we avoid re-inventing the wheel
  - is there virtual attending possibilities?
  - 15 min with Q&A 4:10-4:25
- EOSC
  - Met online EGI to get support to deploy Pangeo.
    - Kubernetes configuration on EOSC using IM .
- EGU22
  - Wednesday

- Prepare 5 mn presentation on Pangeo (Tina) [tina.odaka@ifremer.fr](mailto:tina.odaka@ifremer.fr) ← Make same presentation than for LPS , 13:20-13:25 Pangeo introduction for <https://meetingorganizer.copernicus.org/EGU22/session/42046>
- 14:43 – 14:50 Pangeo Discussion , who can join?
- hackathon
  - <https://www.campusmer.fr/hackathon-2022-4222-0-0-0.html>
- Preparation for presentations for EGU22 and LPS22
  - Diagram
    - [https://drive.google.com/file/d/1RMUb1nLqGjclCGwylq\\_qdwgOj5NBP\\_Aqv/view?usp=sharing](https://drive.google.com/file/d/1RMUb1nLqGjclCGwylq_qdwgOj5NBP_Aqv/view?usp=sharing)
  - Oral
    - <https://docs.google.com/presentation/d/1Dt0qg6hRTmUMjqSIFkSsk8ywS3NUaUrKU3MFaq93efg/edit?usp=sharing>
  - Poster
    - [https://docs.google.com/presentation/d/1gGPDw2p5c38\\_B2KyE7PsmPr1T\\_HUdTBqC5wnnb\\_wqH8/edit?usp=sharing](https://docs.google.com/presentation/d/1gGPDw2p5c38_B2KyE7PsmPr1T_HUdTBqC5wnnb_wqH8/edit?usp=sharing)
  - work a-syncro until Monday 9th 14:00 CEST on above links.
    - meet at <https://meet.jit.si/pangeo-europe>
    -

## 26th April

- Hi Akshay! Data scientist.
  - feedbacks from actual pangeo websites.
    - Gallery is more showcases than entry point.
    - For trying out you can also use Pangeo notebook from [Galaxy](#)
    - ATT binder does not work.
      - testing at [http://gallery.pangeo.io/repos/pangeo-gallery/example-gallery/01\\_example-notebook.html](http://gallery.pangeo.io/repos/pangeo-gallery/example-gallery/01_example-notebook.html)
      - [https://binder.pangeo.io/v2/gh/pangeo-data/pangeo-docker-images/master?urlpath=git-pull%3Frepo%3Dhttps%253A%252F%252Fgithub.com%252Fpangeo-gallery%26urlpath%3Dlab%252Ftree%252Fexample-gallery%252F01\\_example-notebook.ipynb](https://binder.pangeo.io/v2/gh/pangeo-data/pangeo-docker-images/master?urlpath=git-pull%3Frepo%3Dhttps%253A%252F%252Fgithub.com%252Fpangeo-gallery%26urlpath%3Dlab%252Ftree%252Fexample-gallery%252F01_example-notebook.ipynb) does not work...



- 
- Binder Pangeo does not work anymore.

- can use <https://mybinder.org> with the path to github repo
- LPS22
  - Mid-may internal meeting to discuss how to present Pangeo to LPS22
  - <https://lps22.esa.int/frontend/index.php>
  - Accepted presentations on Pangeo
    - 25th Mai, Wednesday, Oral 04:10 pm
      - **Pangeo an open, inclusive, reproducible and scalable EO data analytic platform**
      - [https://express.converia.de/frontend/index.php?page\\_id=18446&v=List&do=0&day=3996#](https://express.converia.de/frontend/index.php?page_id=18446&v=List&do=0&day=3996#)
        - search for pangeo.
    - Poster on the 26/05/2022
      - [Poster List - Day 4 – Living Planet Symposium 2022 \(converia.de\)](#)
      - **Pangeo, an Open source driven community for Big Data geoscience**
    - 26/05/2005 8:30-9:55
      - Agora session. Anne.
      - **Enabling interoperability across cloud-based EO platforms: Open standards and protocols**
      - [https://express.converia.de/frontend/index.php?page\\_id=18446&v=List&do=15&day=all&ses=21016#anker\\_session\\_21016](https://express.converia.de/frontend/index.php?page_id=18446&v=List&do=15&day=all&ses=21016#anker_session_21016)
    - Alex Agora session DGSS
      - x
- Lorenzo test case
- FOSS4G: news about workshops on May 10th.

## 19th April

- Preparation meetings for LPS22: meeting 26 April 12:00 - 16:00 CEST? Let me know if it is OK and who can attend
- Website meeting: 27 april 12:00 - 16:00 CEST? Let me know if it is OK and who can attend
- 

## 12th April

- Website restructuring:
  - Plan to work intensively on the website: May 11-June 6.
  - Vision about Pangeo
  - Contributing to Pangeo:
    - Facilitate contribution: submitting notebooks (see Alejandro's [DS environment book](#)), collaborative exploration of new "features".

- Make software developers more visible: wall of fame?
  - Separate trainings from gallery and contributed material
  - Link to other existing training materials, etc.
- FOSS4G: news about workshops on May, 10th.
- LPS22 -
  - Agora confirmation "Enabling Interoperability across cloud-based EO Platforms", Thu 26/5 8:30-9:55
    - Pangeo an open, inclusive, reproducible and scalable EO data analytic platform is accepted as Oral Presentation for the session C5.02 Big EO data platforms
  - Pangeo, an Open source driven community for Big Data geoscience is accepted as Poster Presentation for the session C5.03 Open Source Science, toolboxes and Jupyter technologies in EO
    - What would you like to highlight?
    - Shared document:
   
[https://docs.google.com/presentation/d/1gGPDw2p5c38\\_B2KyE7PsmPr1T\\_HUdTBqC5wnnb\\_wqH8/edit?usp=sharing](https://docs.google.com/presentation/d/1gGPDw2p5c38_B2KyE7PsmPr1T_HUdTBqC5wnnb_wqH8/edit?usp=sharing)
- KERCHUNK
  - quick discussion about pre ingestion action [kerchunk/combine.py at b574b7e4715343d4150890865f6485c5e78f7963 · fsspec/kerchunk \(github.com\)](https://github.com/b574b7e4715343d4150890865f6485c5e78f7963/kerchunk)
- Paper "Global Community Guidelines for Documenting, Sharing, and Reusing Quality Information of Individual Digital Datasets":
   
<https://datascience.codata.org/article/10.5334/dsj-2022-008/>

## 5th April

- SAGEGRID proposal will be submitted today;
- SOURCE project proposal (binder related) ongoing (deadline 20th April)
- <https://pint.readthedocs.io/en/stable/>
- 1-day long **EOSC Compute Platform User Support Workshop**
  - <https://indico.eqi.eu/event/5822/>
  - 14:40 CEST - Clinic session: Containers
- Dask and efficiency: what approach should we advocate and to do what?

## 22nd March

- Discussion on SAGEGRID

## 15th March

- General discussion on Horizon SAGEGRID proposal
- Discussion about Dask
  - Lorenzo has Dask problems for large datasets
  - All files on NetCDF



- Memory errors due to chunks are not correct, but they are small.

## 8th March

- Best practice to avoid loop?
  - <https://pyvideo.org/pycon-us-2015/losing-your-loops-fast-numerical-computing-with-n.html>
  - for xarray: project pythia tutorial tomorrow (thinking with xarray)
    - [https://github.com/ProjectPythiaTutorials/thinking-with-xarray\\_2022\\_03\\_09](https://github.com/ProjectPythiaTutorials/thinking-with-xarray_2022_03_09)
- pyvideo.org: a great resource to learn something new
- ESA OpenIO: (ex-DSS)
- GaiaX [Implementation - GXFS.eu](https://www.gaia-x.eu/)
  - Open for plugging?
  - <https://www.gaia-x.eu/>
  - French Gaia
    - <https://www.data-terra.org/activites/projets-techniques-scientifiques/projets-nationaux/les-projets-du-programme-dinvestissements-davenir/>
- note for EGI-ACE
  - <https://docs.google.com/document/d/1TFR2cIGQXLX-dnxjwBuRPnGTPIF31oV0oz9mF4HTVOc/edit>
- DATA pangeo-europe

## 1st March

- Pangeo workshop to FOSS4G has been submitted
- Project for updating Pangeo website (not started yet!):
  - <https://docs.google.com/document/d/11JwBHs9cFX9qGxLdkysu9f6m7wyiapDeW1zM4VAnH0A/edit?usp=sharing>
- Pangeo contribution to EU project:
  - Task-1: Dask and binder. Task to develop/write.
  - Task-2: Education and on-boarding
- message on EGI-ACE:
  - At CESNET we provide primarily Sentinel data. There are three different scenarios:
    - 1. Czech National mirror: full history of Sentinel 1, 2, 3, and 5p, covering the Czech territory
    - 2. Custom datasets, made available on demand, based on request from our use cases. We primarily focus on Sentinel. We have never had a use case for other Copernicus data aside of Sentinel, but if we can find a reasonable way to cooperate, we are happy to have a look.
    - 3. Near-real time global coverage with Sentinel 1, 2, 3. We keep a short-term cache of all Sentinel products: full global coverage. We can make that accessible, or use it to fill a custom dataset as explained in point 2.
- What's the best way to deal with geographic data?

- world of 'model' and 'observation'
- <https://github.com/Esri/ggxf>
- dgs cells
- How's the situation with the EU project?
  - contact from Estonia?
  - contact from Anne ?
- We change our meeting point for european coffee whereby to jit.si
  - <https://meet.jit.si/pangeo-europe>

## 22th Feb

- Welcome Alex Kmoch and Holger Virro (department of Geography, Tartu, Estonia) (ETAIS and EOSC-Nordic & NeIC) <https://landscape-geoinformatics.ut.ee>
  - Hexbin project, <https://h3geo.org/docs/comparisons/hexbin>
  - Elexier <https://elixir-europe.org/about-us/who-we-are/nodes/germany>
    - bio-informatique version of Digital twin, Digital earth, destination earth
    - official instructor carpentries (<https://carpentries.org>)
- Discussion around possible funding for pangeo european community?
  - <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/top-ic-details/horizon-cl4-2022-data-01-04>
    - infrastructure
    - businessmodel data trading
    - DDS
- EOSC
  - piller
- EGI entity -> project ACE => cesnet , In2P3
- basil? <https://www.netcarbon.fr>

## 15th Feb

- [2022 EarthCube Annual Meeting | EarthCube](#)
  - [Notebooks | EarthCube](#)
    - Deadline: March 8
- Lucy is testing Alejandro notebooks
  - Suggest to create an issue if there are problems to run the notebooks in local machines
- Jasmin platform (UK HPC)

- CaaS for Pangeo, <https://help.jasmin.ac.uk/article/4735-cluster-as-a-service>
- [Climate Impact Explorer](#) ESA's Digital Twin Earth project uses Pangeo in Jasmin
- Needs of common benchmark set?
  - git hub repo of benchmarkset
    - with /without dask
    - data

## 08th Feb

- Digital Twin
  - ESA, EUMETSAT ,ECMWF
    - EUMETSAT: datalake, LUMI: computation
    - ESA : cloud computing
    - ECMWF:
    - Mercator ocean: digital twin for ocean?
  - <https://openeo.cloud>
  - Format of data?
    - EUMETSAT DataLake, DATA CUBE
  - Who pays computing
  - ex DIAS (copernics)
  - few entry points for users to download ? but no resource to compute?
  -
- Gaia-x ?
- out-leach
  - Florence deadline 20th of February [FOSS4G | Firenze 2022](#)
    - submitting document to be prepared here
      - <https://docs.google.com/document/d/1KXKFWFB1x08lw2cL5e5zvbSYDe-vIIAiZ-By9ZGR5qU/edit?usp=sharing>
    -
  - openscience <https://discourse.pangeo.io/c/open-science/25>
  - EGU
  -

## 01st Feb

- Conference
  - ESA living planet : probably rejected.
  - EGU :Waiting for final decision from EGU on mergers. Minimum abstract will be increased to 13 /15. we have 12. (EGU recommended us to merge with ESS12.5 & ESS12.7)

- EGI Resource
  - <https://doodle.com/poll/wd3f5rqyeg5axyeg>
- PANGEO @ UK
  - Turing
  - BAS
  - Microsoft
  - ECMWF
  - Met Office
  - Birmingham
- Tutorial / Demonstrators material
  - Galaxy
    - <https://gallantries.github.io/posts/2021/12/14/smorgasbord2-tapas/>
    - Training material for novices: PR under review (please review if you are interested)  
<https://github.com/galaxyproject/training-material/pull/3147>
    - To render the training material:  
<https://gitpod.io/#https://github.com/NordicESMhub/galaxy-training-material/tree/pangeo>
  - Pythia @ US
    - <https://projectpythia.org>
    - you find youtube videos
  - Earth and Environmental Data Science @ US
    - <https://earth-env-data-science.github.io/intro.html>
  - Environmental Data Science book @ Turing
    - <https://github.com/alan-turing-institute/environmental-ds-book>
- zoom link to continue our discussion
  - <https://cnrs.zoom.us/j/95432814658> password: Pangeo2EU)
- IoT and Pangeo ?
  - air quality
  - Africa
- metadata and discoverability for Jupyter notebooks - possible short seedcorn project at Aston University for a postdoc working on provenance documentation of models - could possibly work on some example notebooks
  - different approaches... ISO metadata inc. 19157 is heavy but complete, PROV-O...
  - post-hoc tagging of free descriptive text about projects, workflows or models (e.g. with element names, vocabulary terms) to make it machine readable while retaining the human-readable values / priorities inherent in the scientist/citizen's description of what they are doing and why.
- Citizen science organisations and working groups
  - <https://ecsa.citizen-science.net/>
  - <https://citizenscience.org/>
  - <https://eu-citizen.science/>
  - metadata standardisation efforts; <https://core.citizenscience.org/>

## 25th January

- Discussion of open-source vs private community driven geodata platforms
  - EODAG (Earth Observation Data Access Gateway), <https://pypi.org/project/eodag/>
  - Pangeo
    - Modular
- Invitation to Environmental Data Science Show and Tell meetings
  - <https://hackmd.io/@environmental-ds/show-tell>
  - When? 25 January 2022, 13:00 - 14:00 UTC
  - Next call: 22 March 2022
- Alejandro and Anne are working on [rohub](#), a Research object management platform supporting the preservation and lifecycle management of scientific investigations, research campaigns and operational processes.

## 18th January

- Intentions to organize a workshop for 2022 FOSS in Firenze, Italy (Deadline: 28/02/2022)
  - Previous workshop organized by Scott Herdenson, <https://callforpapers.2021.foss4g.org/foss4g-2021-workshop/talk/NMFGKD/>
  - Lorenzo will contact Pangeo US
- Updates of EGU22 Pangeo session
  - 10 submissions (9 oral, 1 poster)
- No news from Living planet symposium and EGI-ACE submissions.
- European pangeo project one day?
  - Grant in france for supporting the preparation of european project
  - <https://anr.fr/fr/detail/call/appel-a-projets-montage-de-reseaux-scientifiques-europeens-ou-internationaux-mrsei-edition-20/>
  - looking for partners for this.

## 11th January

- EGU 22 Pangeo session: deadline is tomorrow January 12th, 2022 at 13:00 UTC. See (<https://meetingorganizer.copernicus.org/EGU22/session/42428>).
  - detailed information on session organisation at EGU22 can be found here ([https://egu22.eu/guidelines/convener\\_guidelines\\_and\\_rules.html](https://egu22.eu/guidelines/convener_guidelines_and_rules.html))
- ERA5 data, how does everyone downloading/using it from xarray?
  - kerchunk?
  - how can we use kerchunk with slack?

## 04th January

- Don't forget to advertise and submit your abstract to EGU 2022 (deadline is very soon): Pangeo: The Modern Solution to Challenges in Earth & Space Science Using

a Community Driven Approach

(<https://meetingorganizer.copernicus.org/EGU22/session/42428> )

## 28th December

- As Pangeo, we would like to contribute to a world-wide online training event <https://gallantries.github.io/posts/2021/12/14/smorgasbord2-tapas/> We are preparing (and we need **Pangeo contributors**!) training material (introduction to Pangeo ecosystem and xarray for novices): to render the pages, follow instructions at <https://training.galaxyproject.org/training-material/topics/contributing/tutorials/gitpod/tutorial.html>
  - <https://github.com/NordicESMhub/galaxy-training-material/tree/pangeo/topics/climate/tutorials/pangeo> (without command line: the idea is to explain the concepts behind Pangeo; starting with Xarray to people who do not write Python code. So they can understand the concepts without being overload with Python syntax.
  - <https://github.com/NordicESMhub/galaxy-training-material/tree/pangeo/topics/climate/tutorials/pangeo-notebook> (with JupyterLab Pangeo notebook: very similar to <http://gallery.pangeo.io/repos/pangeo-data/pangeo-tutorial-gallery/xarray.html> ; the idea is to have an “entry” point in the Galaxy training (meet people where they are).
  - Galaxy training also has some training on Foundations of Data Science <https://training.galaxyproject.org/training-material/topics/data-science/> (similar to the Carpentries)
- We need contributors:
  - to write, review and test content
  - to write text (in slides) so that we can generate videos (automatically generated from text)
  - during the event 14-18 March 2022 to help out (asynchronous chat)

## 21th December

- Demo from Basile
  - Cool tools to find some sentinel 2 data (internal tool from netcarbon *[totally free of course]* ) :
  - <https://netcarbon-sentinel2.herokuapp.com/>
  - stackstack
  - some issues with dask\_geopandas

## 14th December

- Basile's new company!! (Congratulations!!)
  - NetCarbon is ready for launch :
    - [www.netcarbon.fr](http://www.netcarbon.fr)
    - <https://www.linkedin.com/company/netcarbon>
  - Our aim is to contribute towards carbon neutrality by offering farmers a free solution for measuring and monetizing their sequestered carbon based on satellite data and PANGEO architecture.
- <https://meetingorganizer.copernicus.org/EGU22/session/42428>
  - deadline Jan 12th 2022.

## 7th December

- Alejandro uses Pangeo stack (intake, dask, xarray) as part of a WIP scientific image analysis toolkit, [scivision](#), developed by the Turing
  - The tool is currently tested in a Data Study Group (collaborative hackathon), [Rapid identification of plankton using machine learning](#). Notebooks showcasing the tool can be found in the challenge GitHub [repo](#).
- Alejandro & Tina, discussing how Dask works in HPC and Cloud
  - Dask cloud provider
    - <https://cloudprovider.dask.org/en/latest/installation.html>
  - HPC
    - <http://jobqueue.dask.org/en/latest/>
    - Some tuning needed for using HPC: for example spill settings ( avoid dask workers to write to disk for HPC cluster without disk )

## 30th November

- Welcome to Yuvi!
- openEO: <https://openeo.org/>
- Federation of infrastructure for mybinder: mybinder.org is a good example of what we could achieve for Pangeo.
  - <https://mybinder.readthedocs.io/en/latest/about/federation.html> the mybinder.org federation
- Pangeo deployment with EOSC-ACE (<https://www.egi.eu/projects/egi-ace/>) : should try to use this opportunity to work on the federation
  - What standard do we have to get information on the location (storage) of data?
  - Can we use the IP address?
- Each country in Europe needs to "host" data related to their geographical area.
- <https://blog.cloudflare.com/introducing-r2-object-storage/> is a radical change here coming soon for egress costs.
- Proposals for Live Planet symposium <https://lps22.esa.int/frontend/index.php>

- two proposals in two different sessions:  
[https://docs.google.com/document/d/1Oe\\_VkTFb6q\\_bsemQesqCs8DIGAL-tr05Mijn\\_x6Lko/edit#](https://docs.google.com/document/d/1Oe_VkTFb6q_bsemQesqCs8DIGAL-tr05Mijn_x6Lko/edit#)
- The two sessions are:
  - C5.03 Open Source, data science and toolboxes in EO: Current status & evolution
  - C5.06 New Concepts towards Federated EO Platforms
- We would like to organize a meeting to finalize the two proposals. Lorenzo will make a doodle.
- **Please add your name and affiliations in the shared document for authorship.**

## 23rd November

- EGU22 <https://meetingorganizer.copernicus.org/EGU22/session/42428>
  - Poster? image and description.
    - target audience?
      - scientist/engineers or students who make developments using xarray, pangeo
      - eye catchy e-mail subject:
      -
  - repository
  - What about the format for abstract submissions?  
[https://egu22.eu/abstracts\\_and\\_programme/how\\_to\\_submit\\_an\\_abstract.html](https://egu22.eu/abstracts_and_programme/how_to_submit_an_abstract.html)
    - The abstract body should be short (100–500 words), clear, concise, and written in English with correct spelling and good sentence structure.



Reproducible, scalable, & shareable  
ENVIRONMENTAL DATA SCIENCE



- 
- Img from: [Illustrations from the Turing Way book dashes | Zenodo](#)
- Illustration by Scriberia as part of *The Turing Way* book dash in November 2021. Zenodo. <http://doi.org/10.5281/zenodo.5706310>
- **Anyone with illustration skills? (Need to merge Zenodo image with Pangeo-like logos)**
  - **Alejandro > happy to help on that (: DM!**
- ECMWF
  - Real time data => become free will be hosted by amazon, microsoft etc. announcement will be in Jan.
    - Available in the Planetary computer
    - Every 6 hours, Wind, geopotential, <https://www.ecmwf.int/en/forecasts/datasets/wmo-additional>
  - Project next year: GRIB2 Files be hosted also by EOSC?
  - Why GRIB?
    - Compress well.
  - Does chunk works on GRIB? => xarray can load .grib (engine=cfgrib) in a chunk fashion (chunks={'time':10, 'latitude':100, etc..}) (Not sure if this was the question!)
  - Investigate <https://github.com/fsspec/kerchunk>, please provide feedback as several people would be interested to know!
  - May be worth looking at STAC (start from <https://stacspect.org/>) for "exposing" available data and ease access.

## 9th November

- EGI-ACE response? After Nov 15th?
- <https://openeo.cloud> [Registration and Login \(Authentication\)](#)
- stac catalog versus intake catalog
- EGU22: write a draft to advertise and get abstract submissions. We can start a draft and it can be discussed during the next Pangeo Europe Coffee?

## 2th November

- EGU22, mario will create a pamphlet to promote the abstracts submissions
- Quick presentation of Mario's ESA ECMWF presentation
- Quick interaction on how to batch over xarray datasets ?
  - [pangeo-data/xbatcher: Batch generation from xarray datasets \(github.com\)](#)

## 26th October

- Reflections on the last Pangeo webinar, Microsoft Planetary Computer
  - STAC
  - <https://github.com/stac-extensions/datacube>
  - Still not clear how STAC works for data providers
- EGU22 confirmed
  - <https://meetingorganizer.copernicus.org/EGU22/sessionprogramme>
  - The abstract submission deadline is 12 January 2022, 13:00 CET.
- [GEO-Microsoft Planetary Computer Programme \(earthobservations.org\)](#)
- Pangeo Blog entry
  - [https://docs.google.com/document/d/1dfPkjwYIPA5iofFsSmAvL0zo4nmS8H\\_3u8BNUV\\_JCY/edit?usp=sharing](https://docs.google.com/document/d/1dfPkjwYIPA5iofFsSmAvL0zo4nmS8H_3u8BNUV_JCY/edit?usp=sharing)
  - We will work on this document during the next Pangeo Europe Coffee meetings (take 20mn each meeting to work on it?). However, feel free to add your inputs asynchronously.
  - What is Pangeo for us?
  - Why is a choice?
  - Use cases in Europe

## 19th October

- Living planet symposium proposal was rejected
- Open Real time data @ ECMWF
- OpenEO.cloud : Open-EO xarray code based on open data cube.
- <https://nordicesmhub.github.io/forces-2021>
- European monthly meeting agenda

- <https://docs.google.com/document/d/12P5vAvh7I5ohZwZiJ3z-HMitnKHt8dYLXPGCeWRsJ7Y/edit#>

## 12th October

EGI-ACE proposal:

- Mario asks the difference with other cloud resources/services.
- Meeting at <https://uio.zoom.us/j/68615382938?pwd=ekVvTGpkNkxZd1lrdW9CSktJMS9iUT09>

## 5th October

EGU Accepted.

[CO Meeting Organizer EGU22 \(copernicus.org\)](https://www.copernicus.org/organizers/egu22/)

Create pangeo/EGU-2022 repository.

Tina will send e-mail to ryan.

AGORA: no news.

Next Pangeo Monthly European meeting;

20th October 17:00- 18:00

Link:

<https://uio.zoom.us/j/68615382938?pwd=ekVvTGpkNkxZd1lrdW9CSktJMS9iUT09>

Lorenzo will make pub in discours, ..

Little meeting on submitting resource request for Pangeo-Europe

Friday morning 10:00 - 11:00

Link: zoom

We can use

<https://uio.zoom.us/j/68615382938?pwd=ekVvTGpkNkxZd1lrdW9CSktJMS9iUT09>

<https://docs.google.com/document/d/1OjJB-aOwTARkQAzmEQH9FHdqN1f-LYjCXn09G-pyyTs/edit>

## 28th September

- updates on EGU and AGORA?

EGU: Session programme finalization: 7 September–12 October 2021

AGORA: Feedback on scientific proposals will be provided by October 2021.

- Show case that we can contribute to pangeo -US notebooks.
  - DIAS: disk demanding request Peta bytes
  - EGI: computing resource
  - what is an good example can we show from europe?
    - possible option for dataset
      - <https://marc.ifremer.fr>
      - <https://www.isimip.org/>
      - [Home | Copernicus Global Land Service](#)
      - UK Met Office "UKCP18" <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/about> (climate projections up to 2080) - mostly zarr-ified on Azure cloud.
    - possible option for software-stack
      - [https://gitlab.ifremer.fr/naiad/eo\\_harvest](https://gitlab.ifremer.fr/naiad/eo_harvest)
      - TileDB <https://tiledb.com/> (similar to xarray, dense or sparse arrays)
      - [openEO](#)
    - what do we sell?
      - common frame work from between
      - cookie cutter ?
      - easy access on european cloud utilisation ( researchers can skip the process of creating cloud resource creation (like colid?))
- Next meeting doodle [Doodle | European Pangeo Meeting October](#)

## 21th September

- <https://coiled.io/>, <https://coiled.io/blog/democratizing-satellite-imagery-analysis-with-dask/>
- European public cloud computing resources
  - EGI
  - EOCS (Cloud approach, many services, DIAS)
  - Euro HPC
    - <https://www.etp4hpc.eu/news/221-eurohpc-call-for-the-procurement-of-pre-exasc.html>
    - ( convergency of HPC & cloud and we can may be use jupyter-lab and dask-jobqueue behind. With may be
    - PRACE => next scale
      - Norway; Lumi
      - France: GENCI (Joliot curie : CEA ROME)
      - Italy: CINECA
    - Datalake access possibilities from inside HPC & outside (http access )
    - Jupyterhub CNES: <https://jupyterhub.cnes.fr/hub/login?next=%2Fhub%2F>
- OpenOceanCloud
  - super interesting world approach
  - CS3: <https://www.cs3community.org/>

- Catalog of catalog:
  - <https://stacindex.org/catalogs>
  - <https://stackstac.readthedocs.io/en/latest/>
- Medium

## 14th September

- Submitted AGORA to Living Planet Symposium (Bonn, 23-27 May 2022).
  - **Title:** Pangeo-Europe: Europe's contribution to a global community driven approach aiming at providing an open source ecosystem facilitating processing of geospatial data at all scales
- Pangeo Europe is planning to request resources:
  - EGI-ACE (<https://www.egi.eu/projects/egi-ace/call-for-use-cases/>)
    - cloud and storage (storage is small)
  - EOSC-DICE for storage (<https://www.dice-eosc.eu/call-service-requests>).
  - Draft: <https://docs.google.com/document/d/1OjJB-aOwTARkQAzmEQH9FHdqN1f-LYjCXn09G-pyyTs/edit>
- Medium: <https://medium.com/@basile.earthobservation/how-to-write-a-story-on-medium-d299cb7712bf>
  - Please add your comments if there is anything unclear.
- Ask to Ryan to give access to the Pangeo Medium, <https://medium.com/pangeo>
- Mentoring & training program <https://openlifesci.org/>
  - Alejandro is participating with a WIP jupyter book with interactive Environmental use cases using Pangeo stack, <https://acocac.github.io/environmental-ai-book>
- Idea for having 'template pangeo' in a github repo that one can download to start writing their own pangeo code in a clean way : pangeo for dummies template.
  - like a [cookie cutter](#)?
  - lint, flake8(?) or such environment to 'clean' write python code
  - some 'test' environment which 'tests', examples in the [TuringWay](#)
  - precommit?
  - linked already github action (or explanation how to use that with this template)
  - pythia? <https://projectpythia.org>
  - <https://the-turing-way.netlify.app/welcome>

## 7th September

European official meeting will be the 9th of september @ 5 pm European Central Time  
Zoom <https://cnrs.zoom.us/j/95432814658> password: Pangeo2EU

**Call time:** September 9, 2021, Time: 17:00 Paris ([see in your time](#))

**Duration:** 1 hour

### **Agenda of 9th September;**

- Time keeper: Anne
- Google doc keeper: Tina
- Doodle for next meeting: Lorenzo

<https://docs.google.com/document/d/12P5vAvh7I5ohZwZiJ3z-HMitnKHt8dYLXPGCeWRsJ7Y/edit#heading=h.y6xkhtv73cva> for the agenda

[https://docs.google.com/document/d/1XNGsS3aGsh109xCbM6wskurVXmNwcuC0z5tfb-\\_nO/Do/edit?usp=sharing](https://docs.google.com/document/d/1XNGsS3aGsh109xCbM6wskurVXmNwcuC0z5tfb-_nO/Do/edit?usp=sharing)

## 31th August 2021

**How did you start using Pangeo?**

**What was your difficulty?**

**Communication for the next pangeo-european meeting.**

Use medium?

Write collaboratively a short blog/article about the Pangeo European meeting (to publish at [medium.com/pangeo](https://medium.com/pangeo) and possibly disseminate to other channels). This ad should highlight our goals e.g.

- on-board new members in Europe and help them to get up to speed
- Information about existing deployments in Europe
- Information on who is doing what with pangeo in Europe

## 24th August 2021

### **General meetings**

1st meeting in September

Find a date, select few dates

Lorenzo will create a [Doodle | Pangeo-Europe Meet and greet](#) to let people decide

### **Short informal presentations**

## Others

- A community's french remote sensing meeting is in the discussion. The format might be the same as meetup. Several meeting's about different topics each month or each week. PANGEO might be one topic. Basile

## 17th August 2021

### **How can we attract people to interact & participate in the European community?**

informal, inclusive, informative to make connections between european pangeo users to foster pangeo european community to have more european fundings/resources.

A new format for European coffee meetings?

(1min ?) Present yourself! (where are you from, why do you use pangeo, what is Pangeo for you?, your project (self-funding? European funding? national? .. [eventually with one or two slides]

(1min ?) Show me your Pangeo? (ONLY one of the following: workflow? code? how do you organise your data & parallelisation? Which machine do you use? interviews?

## 11th August 2021

### **What about submitting workshop on pangeo on**

<https://2021.foss4g.org>

<https://www.aimgroupinternational.com/newsroom/news/florence-will-host-the-international-foss4g-conference-2022>

submitting a schedule for next year?

<https://2021.foss4g.org/schedule/workshops.html>

### **European pangeo showcase?**

Answer from ryan@

<https://discourse.pangeo.io/t/showcase-host-duties/1374/82>

Join US showcase for starting? If the timezone is too hard, proposing a 3rd time slot in the future?

To volunteer for a showcase:

[https://docs.google.com/forms/d/e/1FAIpQLSddb5s\\_nM5So48mTk1SkTxRPKfE0fvdX73ZsyAt-v87BK3vw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSddb5s_nM5So48mTk1SkTxRPKfE0fvdX73ZsyAt-v87BK3vw/viewform)

### **Microsoft planetary computer**

<https://planetarycomputer.microsoft.com>

## 3rd August 2021

Pangeo and 2i2c

Pangeo in Europe since last Paris 2019 meet up

Zoom organisation: Tina will check how to add co-organisator (lorenzo) with institutional zoom service. Add Justus when he will have an account in France.

Post COST <https://www.cost.eu/funding/what-do-we-fund/>, at some point to discuss as a community proposal.

Find a date for the next monthly meeting. September? (Lorenzo will create a doodle)

<https://pangeo.io/meeting-notes.html> have twice European coffee meeting; tina will check with Wesley.

## 27th July 2021

European showcase (Alejandro)

- Follow the Pangeo format, <https://discourse.pangeo.io/t/showcase-host-duties/1374>
- Create a gmail account for Pangeo EU
- Potential slots (CET): 9AM (++) , 12PM (+), Afternoon (-)
- Send form to gitter to ask potential speakers

Computation with many Netcdf files (Lorenzo)

- size? 200-300 MB (each time dimension)
- How many? 2000 zone /a day
- Where do you want to analyse your data? HPC
- Your computation ? ingest 120 days at a time,
- Configuration of each file: lat, lon,
- every 10 days for
- Workaround?
  - Tina: increase the memory of 'master' nodes by placing master node in a compute node (for example by qsub -l)

Coffee (All):

- 3rd August 2021 10:00(CET)
- Once European gmail is made coffee notes will be moved to there.

## 20th July 2021

Conferences

- update on EGU



- Mario submitted.
- any other communities? conference?

Funding for storage? open call for storage, computing resources

- storage:DICE EOSC <https://www.dice-eosc.eu/>
- computing:EGI ACE <https://www.egi.eu/projects/egi-ace/>

Which data?

- Public data, like ?
- ERA5 data on Wekeo and on AWS (<https://registry.opendata.aws/ecmwf-era5/>)
- Other data: Climate monitoring data:  
[https://www.cmsaf.eu/EN/Home/home\\_node.html](https://www.cmsaf.eu/EN/Home/home_node.html)
- FluxNet, <https://fluxnet.org/>

Spatio-temporal catalogs

- STAC: <https://stacspect.org>

EMODNET:European Marine Observation and Data Network (EMODnet)

Infrastructure for Binder exist in EGI?

- AC requested info
- DICE has lots of storage.

Tasks:

- COST <https://www.cost.eu/funding/what-do-we-fund/>, **Mario** will check this.
- Showcase organisation. **Alejandro** will create a separate Google Docs to list potential speakers and set general rules for 2021 Pangeo EU Fall showcases.
- Start coffee next week 16:00 (CET) Tina

Showcase in European time?:

- organisation: copy the organisation from the US. (video recording, etc..)
- create showcase list

## 13th July 2021

Lorenzo: Preparing pangeo presentation for [2022 FOSS4G](#) in Florence

- Organise some showcase of pangeo european use cases?
- Pangeo is participating in 2021 FOSS4G (see <https://discourse.pangeo.io/t/pangeo-workshop-at-foss4g/1359>)

Tina: Funding opportunities for creating european research and innovation networks:

- COST: <https://www.cost.eu/funding/what-do-we-fund/>
- Eligibility
  - 7 countries (france, england, finland, italy, germany, ...)
  - 50% must be from the Inclusiveness Target Countries [Excellence & Inclusiveness | COST](#)

- czech dask?
  - international partner : US
- Previous applications:
  - JRC: [Connecting Science and Policy at joint COST-JRC seminar - COST](#)

Pangeo users in Europe:

- Italy: CMCC
- England: MetOffice, BAS, Turing
- 

Remote sensing data analysis new movement?

- Microsoft [Home | Planetary Computer \(microsoft.com\)](#) > Building upon Pangeo stack (dask, cloud optimized formats)
- DIAS [Data and Information Access Services | Copernicus](#) (will be replaced by a digital twin?? not clear.. , original idea was creating all copernicus data clone, and giving access to computational resources. The price today is too high compared to amazon or such private cloud?)
  - <https://www.wekeo.eu>
  - EGI? <https://www.egi.eu>
  - [ONDA User Portal \(onda-dias.eu\)](#)
- [JRC Earth Observation Data and Processing Platform \(JEODPP\)](#): limited access (only to JRC). contains copernicus product, jupyter lab, .., hosted in JRC HPC center building.
- Does EOSC european project categorised in DIAS?
  - <https://www.eosc-pillar.eu/>
  - <https://www.eosc-hub.eu>
  -

update on EGU?

- Lorenzo will get info from

Specific file Scanco ISQ format: is there any way to read it in intake/xarray?

- <https://corteva.github.io/rioxarray/stable/rioxarray.html>
- what about new xarray's
  - <https://xarray.pydata.org/en/latest/internals/how-to-add-new-backend.html>
- 

## 6th July 2021

Pier Lorenzo Marasco to Everyone

4:53 PM

<https://land.copernicus.eu/global/index.html>

<https://pypi.org/project/fsspec/>

Tina ODAKA to Everyone

5:11 PM

<https://www.youtube.com/watch?v=8TIAAZCJOVA>

Me to Everyone

5:16 PM

<https://pangeo.io/meeting-notes.html>

<https://github.com/pangeo-data/pangeo/blob/master/docs/meeting-notes.rst>

Tina ODAKA to Everyone

5:22 PM

[https://docs.google.com/document/d/1Vq1IJPRQYWF\\_uoKuleEhQyYreijAJ2QW6FELdlsiyDs/edit?usp=sharing](https://docs.google.com/document/d/1Vq1IJPRQYWF_uoKuleEhQyYreijAJ2QW6FELdlsiyDs/edit?usp=sharing)