Webinar: How NOAA Open Data Dissemination Weather Forecasts Are Boosting Grid Operations	
Question	Answer
Are the Camus ML models opensource ?	Camus has pushed a snapshot of our work on weather data accessability described in the presentation to a github repository for prototypes in collaboration with NOAA, IOOS and RPS. We are looking for oportunities like Google Summer of Code to generalize our work into supported open source projects like Kerchunk or VirtualiZarr. As a small VC funded green tech company our time is extremely precious and we are unable to directly support an open source community development model at this time. Please consider collaboration with Open Climate Fix or possibly EPRI and solar forecast arbiter though I think SFA only share and evaluate ML results, not model source code. We hope to contribute to open source development in the future as we grow.
David, it has been my understanding that object store such as S3 on AWS does not support specific byte range downloads. Is this not a limitation?	Both GCS and S3 support reading byte ranges (but not writing byte ranges). The fsspec clients for both sdks support the read_bytes method which is used in the kerchunk refspec as a zarr codec for the grib data. Pleas have a look at the Kerchunk case studies and docs. The fsspec and kerchunk github issues are a great place for technical questions and further community support.
Are their training sessions on how to retrieve and process the data?	Camus: We don't currently have any training sessions planned but the pangeo community might be a good resource. We did present a more hands on pangeo showcase demo using the classes and method we created in a colab notebook to retrieve and process data. The Kerchunk case studies are also a great starting point. I think NODD is working on adding example notebooks to their datasets.
	NODD: Each dataset is unique so this depends on the dataset. Some datasets have tutorials and jupyter notebooks listed on their landing page. For instance GOES data on AWS has a lot of tutorials and reference material. Check it out at https://registry.opendata.aws/noaa-goes/

This past year the NODD team has begun hosting Office Hours, which offer an opportunity for data users to join and connect with NOAA and cloud subject matter experts to learn how to access and process data from select datasets. To access materials from past events and register for future ones, please visit the NODD website at NOAA.GOV/NODD |

Is there a plan to move the HRRR Zarr database to aws as well? I see the current Zarr store lacks solar radiation fields (please correct me if I am wrong here).	The HRRR Zarr bucket is mananged by University of Utah. They can be contacted at atmos-mesowest@lists.utah.edu. They will be able to give information on additional ZARR files and what is contained within them.
Is there a single source available that compares the differences in the models offered by NODD, e.g., the data range, data resolution, time resolution, etc?	Camus: Camus has collected an unofficial model metadata document and shared it as part of the presentation. We agree that an offically curated catalog of available models would be extremely valuable.
	NODD: No. NODD is just the conduit for cloud dissemination. The data itself is owned by the individual data owners. We list all the available products on our website and then users can access informaiton for those datasets such as resolution and range on the data page which is linked.
David: Does your website have any demo for the ML for weather forecast and grid forecast? Thanks	We don't have a demo on our website but we do explain our grid forecasting in more detail. We also have a blog that explains our meter level forecasting product. Please reach out through our website to schedule a product demo - we look forward to hearing from you!
Are some of the commercial forecast providers such as TruePower, 3 Tier etc using these data	If these providers don't share publically what data they are using it is hard to speculate but they are almost certainly using NOAA or ECMWF models either directly, via blending with other sources, or as initial conditions & boundary conditions if they are running there own high resolution local forecasts. Unfortunately ECMWF does not have a public cloud data collaboration like NODD - their data is behind a pay wall.
is the index file is available for all grid files ? (edited)	Camus: We have found idx files for all the HRRR, GFS and GEFS products we have looked at. The NODD team may have more details on which products have idx metadata.
	NODD: We generate index files for multi datasets but not for every data holding. We recommend reaching out to our team at nodd@noaa.gov if you would like to better understand which datasets have index files associated with them.
Hi David, Does Camus's NODD work offer any new fire risk mitigation information? Are NODD data potentially helpful for coordinating resources?	The NOAA Global Systems Laboratory does extensive Fire Weather Research. I have no hands on experience with this complex topic but I would love to see the HRRRsmoke model results made available via NODD.