

901502 - Passive Acoustic Sensing

Week 51

1. Brent Jones
 - a. Visit Sanctuary Exploration Center in SC to familiarize myself with MBARI whale exhibit.

Week 50

1. Danelle Cline
 - a. Added JSON metadata generation code to pypam-based-processing to simplify example use. We need to do further integration. Talks are planned in January with the broader community on handling data in GCP.
2. Carlos Rueda
 - a. Group mtg

Week 45

1. Danelle Cline
 - a. Team meeting. Pending work to add JSON metadata generation code to pypam to simplify example use.
2. Duane Edgington
 - a. Team meeting.
3. Carlos Rueda
 - a. Group meeting (also with couple of external collaborators as usual)

Week 44

1. Brent Jones
 - a. Meeting
 - b. Determined cause of loss of AOS serial data was due to config error in SIMRAD software

Week 43

1. Carlos Rueda
 - a. Completed notebooks for demonstration at today's (2023-10-25) Soundcoop workshop in Boulder (John R. is presenting, and I'm supporting him remotely). Several obstacles to get to this point due to various unexpected issues (dependency conflicts, incompatible packages in the JupyterLab space, etc.). However, John reports all went pretty well, with "a big impression on people who have been striving for these capabilities for a long time."

Week 42

1. Danelle Cline
 - a. Processed millidecade netCDFs for 2022 soundtrap recorders in AWS Batch service.
 - b. Assisting with slides and Dask parallelization to process multiple days for upcoming NOAA SoundCoop Workshop, Boulder, CO October 24-25 2023
2. Carlos Rueda
 - a. Preparations for NCEI workshop next week

Week 40

1. Duane Edgington
 - a. Meeting on prep for Oct demonstration Sept 29.
2. Brent Roman
 - a. Group meeting in preparation for NCEI workshop

Week 39

1. Brent Roman
 - a. Adjustments to [PBP](#) software

Week 38

1. Duane Edgington
 - a. Alexa monitoring

Week 36

1. Duane Edgington
 - a. Meet with Scott Viers of Orcasound, along with rest of 901502 team, Monday Sept 11
2. Brent Jones
 - a. Looking at clock skew between hydrophone and RBR logger

Week 35

1. Duane Edgington
 - a. Proposal response discussions.
 - b. Reviewing Alexa status
2. Carlos Rueda
 - a. Group meeting.

Week 33

1. Brent Jones
 - a. Processing Wire Walker hydrophone data

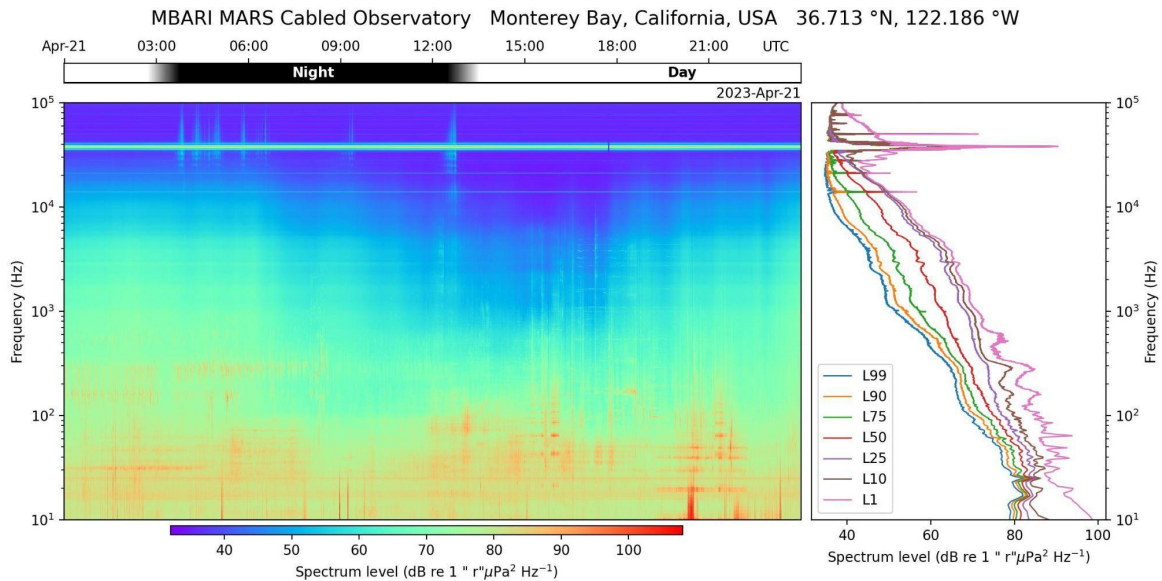
Week 32

1. Danelle Cline
 - a. Final millidecade netCDFs jobs for 2017-2023 in AWS. Further reduction in cost to 5 cents per day by running larger batch jobs. Wow!
 - b. Blue whale D check-in with Kanoe

Week 30

1. Danelle Cline
 - a. Processed millidecade netCDFs for 2021, 2022, 2023 in AWS. John Ryan confirms the results match the groundtruth exactly. Cost is 6.5 cents per day for the cloud workflow. Wow! Processing will be migrated to an automated flow in mid-August.
2. Carlos Rueda
 - a. Daily hybrid millidecade band spectra products have been generated for 2021, 2022, 2023, also with associated summary plots (plotting code provided by John R.). They are being put in a public AWS

bucket, most immediately for access by NCEI and Axiom.



- b. Did some repo cleanup at <https://github.com/mbari-org/>, including removal of our PyPAM fork (I was given additional permissions in the upstream repo).

Week 29

1. Danelle Cline
 - a. Continued support to run tests alongside on-premise tests using AWS CDK stack with AWS Batch with Fargate provisioning. So far, so good. The team is nearing finalizing the workflow, which supports running up to 256 days at a time in AWS.
2. Duane Edgington
 - a. Team meeting

Week 28

1. Duane Edgington
 - a. Proposal work

Week 27

1. Duane Edgington
 - a. Proposal work. Reading up on Orca sound classification.

Week 26

1. Duane Edgington
 - a. Team meeting, proposal process.
2. Brent Jones
 - a. Meetings

Week 25

1. Carlos Rueda
 - a. PyPAM based software and data processing continue (some aspects taking longer than expected).
 - b. Meeting with NCEI, mainly about metadata to be captured in the netcdf products.
 - c. Some revision of "mysticete symphony" paper draft.

Week 24

1. Carlos Rueda
 - a. PyPAM-based data processing continues

Week 23

1. Danelle Cline
 - a. Preparing for running select days in AWS of pypam netCDF generation
 - b. Fixed disabled cron check on recording computer that was not emailing during recording outages; Symantec flagging recording traffic as possible threat.
2. Duane Edgington
 - a. Team meeting June 7.
3. Carlos Rueda
 - a. Implemented handling of partial days in our [pypam-based-processing](#) software. Cloud based testing ongoing (thanks, Danelle!).
 - b. Provided well-received input to a [PyPAM PR](#).

Week 22

1. Carlos Rueda
 - a. Enhancements/adjustments to PyPAM based processing software continue.
 - b. Meetings (metadata discussion; Happywhale/AI brainstorming, etc.)

Week 21

1. Carlos Rueda
 - a. Processing of Chumash Heritage NMS data. Refinement of [software](#). Looking into proper metadata capture in the generated hybrid millidecade spectra product.

Week 19

1. Duane Edgington
 - a. Team meeting May 10

Week 18

1. Duane Edgington
 - a. Team meeting April 26
2. Carlos Rueda
 - a. PyPAM@NCEI meeting

Week 17

1. Duane Edgington
 - a. Team meeting April 26

Week 16

1. Danelle Cline
 - a. Generating wav metadata for entire 7 year archive in preparation for running the pypam netCDF generation
 - b. Livestream server was hung on Windows updates
 - c. Student discussion and some inquiry on pypam/oceansoundscape pip modules

Week 13

1. Carlos Rueda
 - a. Meetings. [Code](#) refactoring, adjustments, and some minor fixes.

Week 12

1. Duane Edgington
 - a. Assisted Danelle, Carlos with their PyPam evaluation AWS run with Cost Explorer reports from the days of their runs.
2. Carlos Rueda
 - a. [Pypam based data processing for generation of hybrid millidecade spectra data](#) seems now in pretty good shape, with satisfactory testing including cloud based processing (AWS), which Danelle is orchestrating (thanks, Danelle!)

Week 11

1. Danelle Cline
 - a. Team meeting
 - b. Working on demos for NOAA on using AWS Batch for pypam (open source acoustic package) processing. So far so good; test millidecade CDK fast working and next steps are daily processing CDK stack. Expect to have full cost accounting to report to NOAA sound archive head.
2. Duane Edgington
 - a. Team meeting. To participate in AWS cost analysis with Carlos and Danelle on recent PyPam runs for presentation Friday.

Week 10

1. Duane Edgington
 - a. Team meeting
2. Carlos Rueda
 - a. Pypam based processing development.
 - b. Met with Karl Watkins re his interest in contributing to pypam development.

Week 9

1. Carlos Rueda
 - a. Working on pypam-based data processing. Segment concatenation for timekeeping.
 - b. Providing some input re summer intern applications.
 - c. Group mtg.

Week 8

1. Duane Edgington
 - a. Attended AWS Alexa Skill Quality Coach webinar
2. Carlos Rueda
 - a. Working on pypam-based data processing code.

Week 7

1. Duane Edgington
 - a. Alexa MBARI Ocean Soundscapes: Verified live streaming restored after IS system patching and needed reboot
2. Carlos Rueda

- a. Putting together pypam-based data processing code, starting with parsing of timekeeping files (json) provided by Danelle. Some exchanges with Clea P.
- b. Group meeting

Week 6

1. Duane Edgington
 - a. Alexa Skill streaming of live stream is back up upon restoration of [shoutcast streaming](#)
 - b. Biweekly team meeting. Met with John Ryan to discuss AWS storage products and ideas for pypam processing of historical data on AWS.
2. Carlos Rueda
 - a. Pypam development. Group meeting.

Week 5

1. Duane Edgington
 - a. Shoutcast / Alexa Skill monitoring. Live stream is down.
 - b. Team meeting Feb 1.
2. Carlos Rueda
 - a. Pypam development / productive session with lead person. Some progress testing pypam under Colab and Sagemaker notebooks; also trying to set up an EC2 instance (thanks Duane for your help!), all of this as part of preparations for massive processing in the cloud.
 - b. Soundscape-analysis group meeting

Week 4

1. Duane Edgington
 - a. Team meeting Jan 18, 19
2. Carlos Rueda
 - a. Very productive work session with pyPAM's lead. New release will eventually be published soon.

Week 3

1. Danelle Cline
 - a. AWS 2023 streaming server windows updates
 - b. Wrote a colab notebook to demonstrate how to build and run the Earth Species AVES model for collaborator, Kano Aiu
 - c. Investigating multiple spectrogram representations for Blue Whale classification models
2. Duane Edgington
 - a. Team meeting Wednesday Jan 18.