

Welcome to The Carpentries Etherpad!

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Links

Etherpad: <https://pad.carpentries.org/2023-ADACS-ECR-Workshop>

Workshop page: https://adacs-australia.github.io/2023_ASA_ECR_Python_Workshop/

Github for workshop: https://github.com/ADACS-Australia/2023_ASA_ECR_Python_Workshop

Webex link: <https://curtin.webex.com/curtin/j.php?MTID=m8903270a10c0a1b9fbcfc3327ehead2c>

Pauls' email for feedback / questions: paul.hancock@curtin.edu.au

Pre-workshop survey: <https://forms.gle/cpoHF72b4Ah4k8co9>

Post-workshop survey: <https://forms.gle/HJR4ERAJRDEHZiFc6>

PERTH

Adjusted schedule:

Monday 11:30 to 12:30 is Lunch/Journal club so we'll shift lunch earlier by 1/2 hour.

Thursday 11-12 there is a Seminar, so suggestion is tea-break -> seminar -> double session, open to suggestions.

How have you installed your python modules?
Pip (venv), or Anaconda (conda, miniconda etc)

Anaconda

Miniconda to build the base, then pip

pip

Anaconda

Pip

Pylint exercise:

from random import * -> from random import uniform

rename sky-sim.py to sky_sim.py

import at the top of the code

```
print("{0:07d}, {1:12f}, {2:12f}".format(i, ras[i], decs[i]), file=f) -> print(f"{i:07d}, {ras[i]:12f}, {decs[i]:12f}", file=f)
```

Constant variable should be upper case (e.g ra, dec -> RA DEC)

Maybe place all global variables up below the imports

Commonly used python modules

numpy, scipy, astropy, matplotlib

scipy, numpy, seaborn, astropy, matplotlib, os, pandas

matplotlib, numpy, pandas, astropy

numpy, matplotlib, sys, h5py, os

numpy, astropy, matplotlib, os

multiprocessing, datetime, pprint (useful for printing dictionary structures), sqlite3, logging

astropy, matplotlib, numpy

Project pitch ideas:

- a command line tool that will take an ra/dec and tell you which constellation it lies in,
- a tool to identify which satellites will be in your field of view during an observation,
- an anti-transient checker that will tell you if your transient is actually just the Moon/Jupiter/etc
- a pedantic radio astronomer's spell checker that will identify incorrect uses of flux vs flux density,
- a single player version of Set! to keep you sharp during long observing runs,
- transform flat-sky pixels to HEALPix projection
- Sky simulation and visualisation
- a code that takes in different ways to input ra and dec (hh:mm:ss, etc)

Groups for project work sessions

| group name | members | project description |

Breakout group 1: Jonghwan, Marcin, Nichole, Jason: Satellites in the field-of-view during an observation

Group 1: Nichole is setting up github: <https://github.com/nicholebarry/turbo-guide>

Please put your github name here: marcinglowacki cosmonomad JasonAhumada

A fine name

Are people able to join breakout session 1 and chat?

Sure

group2: Xi, Xiu, topic: a code that takes in different ways to input ra and dec (hh:mm:ss, etc)

name: super-rotary-phone

github name: XShao0062, Xiu0904

Group3: ?

DAY 2

If git complains about not knowing your username or email then do the following:

```
git config --global user.name <your user name>
```

```
git config --global user.email <your email address>
```

Day 3

tests for make_positions:

- check that the strings were split correctly
- check that DEC_STR and RA_STR exist
- test tolerance of ra, dec after conversion
- check that input ar indegrees, ie $ra < 360$ and $abs(dec) < 90$
- check the number of positions generated mtch the expected one

what other options would users like to have for the sky_sim script?

- An option to show plots

Day 4

Options:

- 1 - Break from 11-12 for Seminar,
- 2 - Regular schedule not breaking for Seminar X, x
- 3 - No preference,

3 I am also a different person

3 i'm a different person

3

Consensus - Regular schedule.

profiling

for statements are quite slow

Day 5

create a table called Subjects - solutions:

```
CREATE TABLE Subjects (  
  "subject id" int,  
  "title" varchar,  
  PRIMARY KEY ("subject id")  
);
```

options

- 1 - group project discussions after lunch and then feedback session followed by more work
- 2 - work after lunch and do discussion/feedback after the tea break (3:30)
- 3 -

Sorry, I din't get involved in the groups

Sorry I will have a meeting 12:30-1:30, so will come back 2:00