

1st IMAS Data Mapping workshop

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Short report

- Very much appreciate ability to **pip install** imas-python, imas-idstools on my MacBookPro (M1)
- Endless discussions
 - But progress is being made!
- Concretely, still working on getting the UDA mappings to function
 - Now using libtokamap, libtokamap-uda-datasource, libtokamap_demo
 - Have written the program to read AUG shot data
 - Further testing held up
 - Currently requires python ≥ 3.13
 - But EB/2023b python is 3.11
 - Work around – use a more recent python (lose EB compatibility)

Python proof of principle working ...

- python aug_demo/uda_mapper.py
 - Calling LibTokaMap version: 0.2.4
 - With context = {'shot': 33724}
 - magnetics/ids_properties/homogeneous_time: 0
 - Requesting shot 33724(1) of AUGD:FPC 33724(1)
 - magnetics/ip[0]/data: [111.76636 -105.73755 -395.74268 ... -8660.889 -9023.3955 -8805.892]
 - Requesting shot 33724(1) of AUGD:FPC 33724(1)
 - magnetics/ip[0]/time: [-2.0027161e-05 8.0108643e-05 1.7929077e-04 ... 7.9997787e+00 7.9998798e+00 7.9999790e+00]
- ~/src/read_ip | head -3
 - Requesting shot 33724(1) of AUGD:FPC 33724(1)
 - -0.000020 111.766357
 - 0.000080 -105.737549
 - 0.000179 -395.742676
- ~/src/read_ip | tail -3
 - Requesting shot 33724(1) of AUGD:FPC 33724(1)
 - 7.999779 -8660.888672
 - 7.999880 -9023.395508
 - 7.999979 -8805.891602

Python proof of principle working ...

- {
- "ids_properties/homogeneous_time": 0,
- "ip[0]/data": {
- "map_type": "DATA_SOURCE",
- "data_source": "AUG",
- "args": {
- "experiment": "AUGD",
- "diagnostic": "FPC",
- "signal": "Ipi",
- "time": false
- }
- },
- "ip[0]/time": {
- "map_type": "DATA_SOURCE",
- "data_source": "AUG",
- "args": {
- "experiment": "AUGD",
- "diagnostic": "FPC",
- "signal": "Ipi",
- "time": true
- }
- }
- }
- }