

WebMARS

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What is WebMARS

- Web based catalogue browsing
- Web based data retrieval

- ECMWF implementation of WebMARS is tied to ECMWF web environment

Proposal: catalogue

- Implement a light weight version of WebMARS catalogue
 - Code is written in Python
 - It is simple to modify
 - Every site can customize the web pages look and feel
 - Will be available in GIT, so that modifications could be shared between MARS sites

Proposal: web retrievals

- Use the WPS OGC standard (Web Processing Service)
- The client will be standard (e.g. Python owslib)
- For the server, use pywps4.0:
 - Also written in Python: same environment as the catalogue
 - Issue to solve: management of intermediate results
 - Version 4.0 of pywps still under development (not yet ready)
- Experimentation with pywps3.0 would be welcome

Example WPS client

```
#!/usr/bin/env python
from owslib.wps import WebProcessingService, monitorExecution

wps = WebProcessingService('http://localhost:5000/wps')

inputs = [("request", "retrieve,date=-2")]
execution = wps.execute("mars", inputs=inputs)
monitorExecution(execution)
execution.getOutput("target.grib")
```

WebMARS framework

- Uses Flask, a Python web micro-framework
- Can be run standalone, for development
- Can be run with Apache mod_wsgi, for production