

Python ERA-interim examples

- [ERA-Interim Surface](#)
 - A basic example
 - Add 'format' : "netcdf" to request the data in NetCDF format instead of grib
 - Specify the desired sub-area of data to be extracted
- [ERA-Interim Monthly Means of Daily Means](#)
- [ERA-Interim Model Levels](#)
- [ERA-Interim Pressure Levels](#)



See [Brief request syntax](#) to understand each keyword.

We have created some request examples. You can see the explanation and then a link to the ECMWF Public Dataset web interface.

When click to the "ECMWF Public Dataset web interface" link, the values will be pre-selected. To see the script you have to use "**View MARS Request**" button.

ERA-Interim Surface

- 2m temperature(165.128), 10m u wind component(166.128), 10m v wind component(167.128).
- July 2014
- Time: 00,06,12,18 UTC
- Step: 0

[ECMWF Public Dataset web interface](#)

A basic example

```
#!/usr/bin/env python
from ecmwfapi import ECMWFDataServer

server = ECMWFDataServer()

server.retrieve({
    'stream'      : "oper",
    'levtype'     : "sfc",
    'param'       : "165.128/166.128/167.128",
    'dataset'     : "interim",
    'step'        : "0",
    'grid'        : "0.75/0.75",
    'time'        : "00/06/12/18",
    'date'        : "2014-07-01/to/2014-07-31",
    'type'        : "an",
    'class'       : "ei",
    'target'      : "interim_2014-07-01to2014-07-31_00061218.grib"
})
```

Add 'format' : "netcdf" to request the data in NetCDF format instead of grib

Same request NetCDF format

```
#!/usr/bin/env python
from ecmwfapi import ECMWFDataServer

server = ECMWFDataServer()

server.retrieve({
    'stream'      : "oper",
    'levtype'     : "sfc",
    'param'       : "165.128/166.128/167.128",
    'dataset'     : "interim",
    'step'        : "0",
    'grid'        : "0.75/0.75",
    'time'        : "00/06/12/18",
    'date'        : "2014-07-01/to/2014-07-31",
    'type'        : "an",
    'class'       : "ei",
    'format'      : "netcdf",
    'target'      : "interim_2014-07-01to2014-07-31_00061218.nc"
})
```

Specify the desired sub-area of data to be extracted

Same request NetCDF format

```
#!/usr/bin/env python
from ecmwfapi import ECMWFDataServer

server = ECMWFDataServer()

server.retrieve({
    'stream'      : "oper",
    'levtype'     : "sfc",
    'param'       : "165.128/166.128/167.128",
    'dataset'     : "interim",
    'step'        : "0",
    'grid'        : "0.75/0.75",
    'time'        : "00/06/12/18",
    'date'        : "2014-07-01/to/2014-07-31",
    'type'        : "an",
    'class'       : "ei",
    'area'        : "73.5/-27/33/45",
    'format'      : "netcdf",
    'target'      : "interim_2014-07-01to2014-07-31_00061218.nc"
})
```

ERA-Interim Monthly Means of Daily Means

- 2m temperature.
- May 2014 mean

[ECMWF Public Dataset web interface](#)

ERA-Interim Model Levels

- 2m temperature(165.128), 10m u wind component(166.128), 10m v wind component(167.128).
- June 2014
- Time: 00,06,12,18 UTC
- Step: 0
- 60 model levels

[ECMWF Public Dataset web interface](#)

ERA-Interim Pressure Levels

- Cloud cover, relative humidity, Specific cloud ice water content, temperature.
- All the pressure levels.
- March 2014

[ECMWF Public Dataset web interface](#)