

Download data from Copernicus using MOTU Client...

Página para download e gerar API:

https://data.marine.copernicus.eu/product/WIND_GLO_WIND_L4_REP_OBSERVATIONS_012_006/download

Tutorial:

<https://help.marine.copernicus.eu/en/articles/6725319-how-to-download-data-for-a-recurring-period-over-several-years-via-the-motu-client>

← → ↻ data.marine.copernicus.eu/product/WIND_GLO_WIND_L4_REP_OBSERVATIONS_012_006/download

Home > Marine Data Store > Product > Download

Download Show API call

Dataset

Product identifier	WIND_GLO_WIND_L4_REP_OBSERVATIONS_012_006
Product name	Global Ocean Wind L4 Reprocessed 6 hourly Observations
Dataset	Single dataset in this product: CERSAT-GLO-BLENDED_WIND_L4_REP-V6-OBS_FULL_TIME_SERIE

Variables Add all Clear all

<input checked="" type="checkbox"/> Eastward wind speed <i>eastward_wind</i> [m/s]	<input checked="" type="checkbox"/> Wind speed <i>wind_speed</i> [m/s]
<input checked="" type="checkbox"/> Eastward wind speed root mean square <i>eastward_wind_rms</i> [m/s]	<input checked="" type="checkbox"/> Wind speed root mean square <i>wind_speed_rms</i> [m/s]
<input checked="" type="checkbox"/> Northward wind speed <i>northward_wind</i> [m/s]	<input checked="" type="checkbox"/> Wind stress <i>wind_stress</i> [Pa]
<input checked="" type="checkbox"/> Northward wind speed root mean square <i>northward_wind_rms</i> [m/s]	<input checked="" type="checkbox"/> Wind stress curl <i>wind_stress_curl</i> [N/m ²]
<input checked="" type="checkbox"/> Sampling length <i>sampling_length</i>	<input checked="" type="checkbox"/> Wind stress divergence <i>wind_stress_divergence</i> [N/m ³]
<input checked="" type="checkbox"/> Eastward wind stress <i>surface_downward_eastward_stress</i> [Pa]	<input checked="" type="checkbox"/> Wind vector curl <i>wind_vector_curl</i> [s ⁻¹]
<input checked="" type="checkbox"/> Northward wind stress <i>surface_downward_northward_stress</i> [Pa]	<input checked="" type="checkbox"/> Wind vector divergence <i>wind_vector_divergence</i> [s ⁻¹]
<input checked="" type="checkbox"/> Flag - 0:ocean - 1:earth/ice <i>surface_type</i>	

API copiada da página para usar como referência, especialmente para obter o 'serviceID' e 'productID' e o nome das variáveis!:

```
python -m motuclient --motu https://my.cmems-du.eu/motu-web/Motu --service-id  
WIND_GLO_WIND_L4_REP_OBSERVATIONS_012_006-TDS --product-id CERSAT-GLO-  
BLENDED_WIND_L4_REP-V6-OBS_FULL_TIME_SERIE --longitude-min -49 --longitude-max -40 --  
latitude-min -3 --latitude-max 1 --date-min "2019-12-31 18:00:00" --date-max "2019-12-31  
18:00:00" --variable eastward_wind --variable northward_wind --variable surface_type --out-dir -  
--out-name --user --pwd
```

In [1]:

```
import os  
import datetime  
import getpass  
import motuclient
```

É necessário obter um 'username' e 'password' para poder acessar e baixar os dados!

In [2]:

```
# Copernicus Marine Credentials  
USERNAME = 'cschettini'  
PASSWORD = getpass.getpass("Enter your password: ")
```

In [3]:

```
out_dir = f'{os.getcwd()}\\data'
out_name = 'wind.nc'

serviceID = "WIND_GLO_WIND_L4_REP_OBSERVATIONS_012_006"
productID = "CERSAT-GLO-BLENDED_WIND_L4_REP-V6-OBS_FULL_TIME_SERIE"

lon = (-49, -40)
lat = (-3, 1)

var = "--variable eastward_wind --variable northward_wind --variable surface_type "

start_date = datetime.datetime(2000, 1, 1, 12)
end_date = datetime.datetime(2000, 2, 28, 12)

query = f'python -m motuclient --motu https://my.cmems-du.eu/motu-web/Motu \
--service-id {serviceID}-TDS --product-id {productID} \
--longitude-min {lon[0]} --longitude-max {lon[1]} --latitude-min {lat[0]} --
--date-min "{start_date}" --date-max "{end_date}" \
{var} \
--out-dir {out_dir} --out-name {out_name} --user {USERNAME} --pwd {PASSWORD}'

os.system(query)
```

Out[3]: 0