

00.Descarga_ERA5

October 29, 2022

1 Descargar datos de reanálisis ERA5

Los datos de reanálisis proporcionan la imagen más completa posible actualmente del tiempo y el clima pasados.

Son una combinación de observaciones con predicciones meteorológicas pasadas a corto plazo que se repiten con modelos modernos de predicción meteorológica. Son globalmente completos y coherentes en el tiempo y, a veces, se denominan “mapas sin espacios”.

Existen varias fuentes de datos de reanálisis disponibles (e.g., NCEP/NCAR, ERA5, ERA5-Land, etc). [Aquí](#) podemos encontrar un resumen de los datos de reanálisis disponibles.

¿Cómo se generan estos datos?

El reanálisis combina predicciones meteorológicas pasadas a corto plazo con observaciones a través de la asimilación de datos. El proceso imita la producción de pronósticos meteorológicos diarios, que utilizan un análisis del estado actual del sistema terrestre como punto de partida. El análisis es una combinación de observaciones físicamente coherentes con un pronóstico a corto plazo basado en el análisis anterior.

1.1 Reanálisis ERA5

ERA5 es el reanálisis del ECMWF de quinta generación para el clima y el tiempo global durante las últimas 4 a 7 décadas. Actualmente, los datos están disponibles desde 1950, divididos en entradas de [Climate Data Store](#) para 1950-1978 (extensión posterior preliminar) y desde 1979 en adelante (versión final más actualizaciones oportunas, esta página). ERA5 reemplaza el reanálisis ERA-Interim.

1.2 Registrarse en CDS

Si aún no estás registrado en el CDS, entrá [aquí](#) para registrarte. Es importante hacer este paso para descargar datos desde CDS!!!

1.3 Descargar ERA5 a través de la API de CDS

1.3.1 Instalar cdsapi

Si aún no tiene instalado el módulo `cdsapi`, instale usando el siguiente comando en **anaconda prompt**:

```
conda install -c conda-forge cdsapi
```

Luego configure tu computadora con tu usuario y clave proporcionados por el **CDS**. > Deberás crear un archivo **.cdsapirc** en tu home y copiar tu usuario y clave. Sigue los pasos [aquí](#) para hacer esto.

```
[ ]: # para instalar directamente las librerías podemos utilizar el siguiente comando
# cuidado, no olvide en colocar el --yes porque sino veras un mensaje de
    ↪ instalación que no podras responder
#!conda install -c conda-forge cdsapi

!conda install --yes -c conda-forge cdsapi
```

```
Collecting package metadata (current_repodata.json): done
Solving environment: done
```

```
## Package Plan ##
```

```
environment location: /home/georgynio/miniconda3/envs/geocat
```

```
added / updated specs:
- cdsapi
```

```
The following NEW packages will be INSTALLED:
```

```
cdsapi                conda-forge/noarch::cdsapi-0.5.1-pyhd8ed1ab_0 None
```

```
The following packages will be UPDATED:
```

```
openssl              pkgs/main::openssl-1.1.1q-h7f8727e_0 --> conda-
forge::openssl-1.1.1q-h166bdaf_1 None
```

```
The following packages will be SUPERSEDED by a higher-priority channel:
```

```
ca-certificates      pkgs/main::ca-certificates-2022.10.11~ --> conda-forge::ca-
certificates-2022.9.24-ha878542_0 None
certifi              pkgs/main/linux-64::certifi-2022.9.24~ --> conda-
forge/noarch::certifi-2022.9.24-pyhd8ed1ab_0 None
```

```
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
Retrieving notices: ...working... done
```

```
[ ]: !pwd
```

```
/home/georgynio/Envs/python_climatologia/book/dia6
```

1.3.2 Importar el modulo cdsapi

```
[ ]: import cdsapi

c = cdsapi.Client()

c.retrieve(
    'reanalysis-era5-single-levels-monthly-means',
    {
        'format': 'netcdf',
        'product_type': 'monthly_averaged_reanalysis',
        'variable': ['geopotential', '10m_u_component_of_wind',
↪ '10m_v_component_of_wind',
        '2m_temperature', 'total_precipitation',
    ],
    'year': '2020',
    'month': [
        '01', '02', '03',
        '04', '05', '06',
        '07', '08', '09',
        '10', '11', '12',
    ],
    'time': '00:00',
    'area': [ 2, -85, -20, -65,],
    },
    '../..data/test/era5_2020.nc')
```

```
2022-10-28 18:26:50,018 INFO Welcome to the CDS
2022-10-28 18:26:50,019 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:26:50,478 INFO Request is completed
2022-10-28 18:26:50,485 INFO Downloading https://download-0020.copernicus-
climate.eu/cache-compute-0020/cache/data2/adaptor.mars.internal-1666984288.00644
7-11904-7-77059a1f-702f-4b10-b6b7-0b12bf86c05f.nc to
../..data/test/era5_2020.nc (847.6K)
2022-10-28 18:26:53,227 INFO Download rate 309.6K/s
```

```
[ ]: Result(content_length=867904,content_type=application/x-netcdf,location=https://
download-0020.copernicus-climate.eu/cache-compute-0020/cache/data2/adaptor.mars.
internal-1666984288.006447-11904-7-77059a1f-702f-4b10-b6b7-0b12bf86c05f.nc)
```

```
[ ]: import numpy as np
```

```
[ ]: years = np.arange(1960, 2020, 1)
```

```
[ ]: for i in years[0:3]:
    print(str(i))
    print(f'era5_{str(i)}.nc')
print('más años')
print('más años')
```

```
1960
era5_1960.nc
1961
era5_1961.nc
1962
era5_1962.nc
más años
más años
```

```
[ ]: for i in years:
    c.retrieve(
        'reanalysis-era5-single-levels-monthly-means',
        {
            'format': 'netcdf',
            'product_type': 'monthly_averaged_reanalysis',
            'variable': ['geopotential', '10m_u_component_of_wind',
↪ '10m_v_component_of_wind',
            '2m_temperature', 'total_precipitation',
            ],
            'year': str(i),
            'month': [
                '01', '02', '03',
                '04', '05', '06',
                '07', '08', '09',
                '10', '11', '12',
            ],
            'time': '00:00',
            'area': [ 2, -85, -20, -65, ],
        },
        f'../../data/test/era5_{str(i)}.nc')
```

```
2022-10-28 18:33:12,696 INFO Welcome to the CDS
2022-10-28 18:33:12,705 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:33:13,008 INFO Downloading https://download-0015-clone.copernicus-
climate.eu/cache-compute-0015/cache/data3/adaptor.mars.internal-1666984316.05758
6-1101-2-aec7b1ad-5d27-42de-86ec-6bf98c57ff69.nc to ../../data/test/era5_1960.nc
(847.6K)
2022-10-28 18:33:15,627 INFO Download rate 323.7K/s
2022-10-28 18:33:16,112 INFO Welcome to the CDS
```

2022-10-28 18:33:16,116 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:16,500 INFO Downloading <https://download-0019.copernicus-climate.eu/cache-compute-0019/cache/data4/adaptor.mars.internal-1666984329.3809774-5899-2-5fee5d9a-9afa-4136-b0c8-63d828719287.nc> to
 ../../data/test/era5_1961.nc (847.6K)
 2022-10-28 18:33:19,490 INFO Download rate 283.7K/s
 2022-10-28 18:33:19,999 INFO Welcome to the CDS
 2022-10-28 18:33:20,001 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:20,272 INFO Downloading <https://download-0018.copernicus-climate.eu/cache-compute-0018/cache/data7/adaptor.mars.internal-1666984343.3644974-31891-11-0bd34b88-8c78-4c94-9901-3bb69c765446.nc> to
 ../../data/test/era5_1962.nc (847.6K)
 2022-10-28 18:33:23,170 INFO Download rate 292.6K/s
 2022-10-28 18:33:23,692 INFO Welcome to the CDS
 2022-10-28 18:33:23,693 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:24,008 INFO Downloading <https://download-0007-clone.copernicus-climate.eu/cache-compute-0007/cache/data1/adaptor.mars.internal-1666984736.899539-3900-3-85ab3e04-a2b7-4148-bcb8-6272a349bde9.nc> to ../../data/test/era5_1963.nc (847.6K)
 2022-10-28 18:33:27,506 INFO Download rate 242.4K/s
 2022-10-28 18:33:27,982 INFO Welcome to the CDS
 2022-10-28 18:33:27,984 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:28,291 INFO Downloading <https://download-0005-clone.copernicus-climate.eu/cache-compute-0005/cache/data5/adaptor.mars.internal-1666984865.9309266-13504-14-dbd12a984-ac23-46de-aa4d-8d44bc95ba02.nc> to
 ../../data/test/era5_1964.nc (847.6K)
 2022-10-28 18:33:33,253 INFO Download rate 170.8K/s
 2022-10-28 18:33:34,055 INFO Welcome to the CDS
 2022-10-28 18:33:34,056 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:34,330 INFO Downloading <https://download-0019.copernicus-climate.eu/cache-compute-0019/cache/data1/adaptor.mars.internal-1666984879.7170079-5899-6-7955f824-3117-47ba-8975-44a306b38b08.nc> to
 ../../data/test/era5_1965.nc (847.6K)
 2022-10-28 18:33:39,516 INFO Download rate 163.5K/s
 2022-10-28 18:33:40,096 INFO Welcome to the CDS
 2022-10-28 18:33:40,097 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:33:40,445 INFO Downloading <https://download-0018.copernicus-climate.eu/cache-compute-0018/cache/data0/adaptor.mars.internal-1666984893.6784875-31891-13-88f220b9-c265-4e2a-b974-bb2d30937a83.nc> to
 ../../data/test/era5_1966.nc (847.6K)
 2022-10-28 18:33:44,210 INFO Download rate 226.9K/s
 2022-10-28 18:33:45,604 INFO Welcome to the CDS
 2022-10-28 18:33:45,605 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:45,946 INFO Downloading <https://download-0015-clone.copernicus-climate.eu/cache-compute-0015/cache/data5/adaptor.mars.internal-1666984906.8878853-30600-6-a9bc4e22-c565-4896-938f-b13d5ede0d4b.nc> to
 ../../data/test/era5_1967.nc (847.6K)
 2022-10-28 18:33:50,178 INFO Download rate 200.3K/s
 2022-10-28 18:33:50,790 INFO Welcome to the CDS
 2022-10-28 18:33:50,791 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:51,076 INFO Downloading <https://download-0017.copernicus-climate.eu/cache-compute-0017/cache/data9/adaptor.mars.internal-1666984920.452777-28588-15-7e64e602-25d4-4f4a-b2c9-39387f42c222.nc> to
 ../../data/test/era5_1968.nc (847.6K)
 2022-10-28 18:33:53,802 INFO Download rate 311.2K/s
 2022-10-28 18:33:54,330 INFO Welcome to the CDS
 2022-10-28 18:33:54,334 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:54,675 INFO Downloading <https://download-0016.copernicus-climate.eu/cache-compute-0016/cache/data7/adaptor.mars.internal-1666984934.4414816-16391-9-0ea07594-3f87-46a9-998d-8a08677465a5.nc> to
 ../../data/test/era5_1969.nc (847.6K)
 2022-10-28 18:33:57,367 INFO Download rate 314.9K/s
 2022-10-28 18:33:57,888 INFO Welcome to the CDS
 2022-10-28 18:33:57,889 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:33:58,188 INFO Downloading <https://download-0015-clone.copernicus-climate.eu/cache-compute-0015/cache/data5/adaptor.mars.internal-1666984948.5507476-31344-6-c14c2e90-af42-4762-b2bc-d79c11f2e4d0.nc> to
 ../../data/test/era5_1970.nc (847.6K)
 2022-10-28 18:33:59,962 INFO Download rate 478K/s
 2022-10-28 18:34:00,440 INFO Welcome to the CDS
 2022-10-28 18:34:00,441 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
 2022-10-28 18:34:00,747 INFO Downloading <https://download-0020.copernicus-climate.eu/cache-compute-0020/cache/data9/adaptor.mars.internal-1666984960.7441187-12761-10-e633e310-30bc-41af-ba2f-07282e970c70.nc> to

```

../data/test/era5_1971.nc (847.6K)
2022-10-28 18:34:03,439 INFO Download rate 315K/s
2022-10-28 18:34:03,927 INFO Welcome to the CDS
2022-10-28 18:34:03,928 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:34:04,200 INFO Downloading https://download-0018.copernicus-
climate.eu/cache-compute-0018/cache/data7/adaptor.mars.internal-1666984974.88953
8-7710-12-fac0b080-9308-4120-ae5d-4359105eb29a.nc to
../data/test/era5_1972.nc (847.6K)
2022-10-28 18:34:06,085 INFO Download rate 454.2K/s
2022-10-28 18:34:06,559 INFO Welcome to the CDS
2022-10-28 18:34:06,560 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:34:06,893 INFO Downloading https://download-0019.copernicus-
climate.eu/cache-compute-0019/cache/data2/adaptor.mars.internal-1666984988.96975
61-8650-3-2de55a17-47fd-46ce-9f13-e848e6da4a86.nc to
../data/test/era5_1973.nc (847.6K)
2022-10-28 18:34:09,420 INFO Download rate 335.8K/s
2022-10-28 18:34:09,895 INFO Welcome to the CDS
2022-10-28 18:34:09,896 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:34:10,166 INFO Downloading https://download-0012-clone.copernicus-
climate.eu/cache-compute-0012/cache/data3/adaptor.mars.internal-1666985001.60219
6-20390-7-d6bf470f-f45b-44b2-8db3-3ca39ace2ee2.nc to
../data/test/era5_1974.nc (847.6K)
2022-10-28 18:34:12,802 INFO Download rate 321.6K/s
2022-10-28 18:34:13,303 INFO Welcome to the CDS
2022-10-28 18:34:13,306 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:34:13,592 INFO Downloading https://download-0015-clone.copernicus-
climate.eu/cache-compute-0015/cache/data7/adaptor.mars.internal-1666985015.53544
38-31521-7-0a00c5f6-2533-41c1-966c-afd8dbef92bb.nc to
../data/test/era5_1975.nc (847.6K)
2022-10-28 18:34:15,326 INFO Download rate 489K/s
2022-10-28 18:34:15,810 INFO Welcome to the CDS
2022-10-28 18:34:15,812 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:34:16,182 INFO Downloading https://download-0018.copernicus-
climate.eu/cache-compute-0018/cache/data5/adaptor.mars.internal-1666985028.83011
63-30419-20-2cdf7118-d3b7-476b-b2df-62aad02e25b3.nc to
../data/test/era5_1976.nc (847.6K)
2022-10-28 18:34:18,007 INFO Download rate 464.8K/s
2022-10-28 18:34:18,493 INFO Welcome to the CDS

```

2022-10-28 18:34:18,501 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:18,796 INFO Downloading <https://download-0019.copernicus-climate.eu/cache-compute-0019/cache/data4/adaptor.mars.internal-1666985041.017466-4571-7-cbc67306-8080-4185-9209-888121be2725.nc> to ../../data/test/era5_1977.nc (847.6K)

2022-10-28 18:34:21,336 INFO Download rate 333.9K/s

2022-10-28 18:34:21,924 INFO Welcome to the CDS

2022-10-28 18:34:21,926 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:22,239 INFO Downloading <https://download-0008-clone.copernicus-climate.eu/cache-compute-0008/cache/data3/adaptor.mars.internal-1666985054.9547539-29239-2-a8f8949d-38d6-4bf3-83ad-9f974bf19bc1.nc> to ../../data/test/era5_1978.nc (847.6K)

2022-10-28 18:34:26,685 INFO Download rate 190.7K/s

2022-10-28 18:34:27,186 INFO Welcome to the CDS

2022-10-28 18:34:27,193 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:27,543 INFO Downloading <https://download-0007-clone.copernicus-climate.eu/cache-compute-0007/cache/data4/adaptor.mars.internal-1666714173.3361368-20430-1-8ae74e5d-7572-4374-be2f-80787dbd6ec6.nc> to ../../data/test/era5_1979.nc (847.6K)

2022-10-28 18:34:30,547 INFO Download rate 283.3K/s

2022-10-28 18:34:31,050 INFO Welcome to the CDS

2022-10-28 18:34:31,051 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:31,352 INFO Downloading <https://download-0013-clone.copernicus-climate.eu/cache-compute-0013/cache/data5/adaptor.mars.internal-1666985073.008301-32201-13-8a2993e6-c08f-460d-88dd-e1fa562e3c75.nc> to ../../data/test/era5_1980.nc (847.6K)

2022-10-28 18:34:36,935 INFO Download rate 151.8K/s

2022-10-28 18:34:37,419 INFO Welcome to the CDS

2022-10-28 18:34:37,425 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:37,738 INFO Downloading <https://download-0004-clone.copernicus-climate.eu/cache-compute-0004/cache/data7/adaptor.mars.internal-1666985086.705175-16927-15-0d0da230-64e9-48ea-b29d-22f9b122724e.nc> to ../../data/test/era5_1981.nc (847.6K)

2022-10-28 18:34:40,364 INFO Download rate 322.8K/s

2022-10-28 18:34:40,838 INFO Welcome to the CDS

2022-10-28 18:34:40,840 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:41,111 INFO Downloading <https://download-0008-clone.copernicus-climate.eu/cache-compute-0008/cache/data6/adaptor.mars.internal-1666985099.4848049-26096-9-20fcb88e-5baf-490f-8f14-f156526be64f.nc> to
 ../../data/test/era5_1982.nc (847.6K)

2022-10-28 18:34:42,643 INFO Download rate 553.6K/s

2022-10-28 18:34:43,165 INFO Welcome to the CDS

2022-10-28 18:34:43,166 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:43,513 INFO Downloading <https://download-0020.copernicus-climate.eu/cache-compute-0020/cache/data9/adaptor.mars.internal-1666985111.5072749-11988-9-869d752b-58cc-4ef2-ac92-0be65eaaf56a.nc> to
 ../../data/test/era5_1983.nc (847.6K)

2022-10-28 18:34:45,065 INFO Download rate 547.5K/s

2022-10-28 18:34:45,534 INFO Welcome to the CDS

2022-10-28 18:34:45,536 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:45,886 INFO Downloading <https://download-0006-clone.copernicus-climate.eu/cache-compute-0006/cache/data1/adaptor.mars.internal-1666985125.4081395-29966-8-ca33d430-7bc0-4941-9175-64ce902f61ea.nc> to
 ../../data/test/era5_1984.nc (847.6K)

2022-10-28 18:34:48,565 INFO Download rate 317.4K/s

2022-10-28 18:34:49,080 INFO Welcome to the CDS

2022-10-28 18:34:49,082 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:49,378 INFO Downloading <https://download-0009-clone.copernicus-climate.eu/cache-compute-0009/cache/data2/adaptor.mars.internal-1666985138.6337223-12373-3-aab7bf3d-71c5-4609-b488-bf2a9a70c1d4.nc> to
 ../../data/test/era5_1985.nc (847.6K)

2022-10-28 18:34:52,005 INFO Download rate 322.9K/s

2022-10-28 18:34:52,476 INFO Welcome to the CDS

2022-10-28 18:34:52,481 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:52,752 INFO Downloading <https://download-0007-clone.copernicus-climate.eu/cache-compute-0007/cache/data6/adaptor.mars.internal-1666985153.1939733-3900-6-abe27ed4-2ea8-4110-99b1-fb2a7974c83a.nc> to
 ../../data/test/era5_1986.nc (847.6K)

2022-10-28 18:34:54,328 INFO Download rate 543.2K/s

2022-10-28 18:34:54,796 INFO Welcome to the CDS

2022-10-28 18:34:54,797 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:34:55,085 INFO Downloading <https://download-0002-clone.copernicus-climate.eu/cache-compute-0002/cache/data1/adaptor.mars.internal-1666985373.5171037-28458-1-23d1b2bd-2bad-4829-b7a6-413b2ab24cc2.nc> to

```

.././data/test/era5_1987.nc (847.6K)
2022-10-28 18:34:58,216 INFO Download rate 270.8K/s
2022-10-28 18:34:58,691 INFO Welcome to the CDS
2022-10-28 18:34:58,693 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:34:59,012 INFO Downloading https://download-0015-clone.copernicus-
climate.eu/cache-compute-0015/cache/data0/adaptor.mars.internal-1666985797.09703
78-32369-9-243cd620-ac8c-45bd-ab8b-6fa16f10f2f3.nc to
.././data/test/era5_1988.nc (847.6K)
2022-10-28 18:35:01,506 INFO Download rate 340.1K/s
2022-10-28 18:35:02,000 INFO Welcome to the CDS
2022-10-28 18:35:02,016 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:35:02,331 INFO Downloading https://download-0020.copernicus-
climate.eu/cache-compute-0020/cache/data7/adaptor.mars.internal-1666985810.50391
96-10846-17-04e37ea8-01a3-43a8-81dd-260e81f4b23c.nc to
.././data/test/era5_1989.nc (847.6K)
2022-10-28 18:35:03,850 INFO Download rate 560K/s
2022-10-28 18:35:04,326 INFO Welcome to the CDS
2022-10-28 18:35:04,327 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:35:04,610 INFO Downloading https://download-0016.copernicus-
climate.eu/cache-compute-0016/cache/data2/adaptor.mars.internal-1666985823.75678
52-21765-5-cbb7a008-e341-4826-b517-539bb044e8e1.nc to
.././data/test/era5_1990.nc (847.6K)
2022-10-28 18:35:07,204 INFO Download rate 326.8K/s
2022-10-28 18:35:07,677 INFO Welcome to the CDS
2022-10-28 18:35:07,679 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:35:07,947 INFO Downloading https://download-0005-clone.copernicus-
climate.eu/cache-compute-0005/cache/data5/adaptor.mars.internal-1666985838.57856
1-17148-14-d114d541-db1c-4a07-bbec-9b51c0a5587a.nc to
.././data/test/era5_1991.nc (847.6K)
2022-10-28 18:35:10,411 INFO Download rate 344K/s
2022-10-28 18:35:10,885 INFO Welcome to the CDS
2022-10-28 18:35:10,886 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:35:11,205 INFO Downloading https://download-0007-clone.copernicus-
climate.eu/cache-compute-0007/cache/data8/adaptor.mars.internal-1666986237.40279
87-3174-9-c5b48327-4c87-4d0d-9d89-cdafd0a22e59.nc to
.././data/test/era5_1992.nc (847.6K)
2022-10-28 18:35:12,765 INFO Download rate 543.5K/s
2022-10-28 18:35:13,466 INFO Welcome to the CDS

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2022-10-28 18:35:13,467 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:35:14,624 INFO Downloading <https://download-0000-clone.copernicus-climate.eu/cache-compute-0000/cache/data6/adaptor.mars.internal-1666986361.8484933-7371-10-a3f06035-b934-4954-b16c-4e889c6d5ece.nc> to
../data/test/era5_1993.nc (847.6K)
2022-10-28 18:35:17,392 INFO Download rate 306.3K/s
2022-10-28 18:35:17,923 INFO Welcome to the CDS
2022-10-28 18:35:17,925 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:35:18,216 INFO Downloading <https://download-0000-clone.copernicus-climate.eu/cache-compute-0000/cache/data1/adaptor.mars.internal-1666986374.8748965-1893-13-b5e8dd27-ec1f-436f-b216-faefd2fa39bf.nc> to
../data/test/era5_1994.nc (847.6K)
2022-10-28 18:35:20,628 INFO Download rate 351.4K/s
2022-10-28 18:35:21,360 INFO Welcome to the CDS
2022-10-28 18:35:21,367 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:35:21,756 INFO Downloading <https://download-0019.copernicus-climate.eu/cache-compute-0019/cache/data4/adaptor.mars.internal-1666986387.0527723-29211-16-72cb5887-9af5-4eda-ab22-a83994886056.nc> to
../data/test/era5_1995.nc (847.6K)
2022-10-28 18:35:27,552 INFO Download rate 146.3K/s
2022-10-28 18:35:28,190 INFO Welcome to the CDS
2022-10-28 18:35:28,192 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:35:28,572 INFO Downloading <https://download-0015-clone.copernicus-climate.eu/cache-compute-0015/cache/data2/adaptor.mars.internal-1666986400.9845583-1227-11-fb6481c0-ccdb-451b-bbde-60add91707e0.nc> to
../data/test/era5_1996.nc (847.6K)
2022-10-28 18:35:32,028 INFO Download rate 245.6K/s
2022-10-28 18:35:32,562 INFO Welcome to the CDS
2022-10-28 18:35:32,563 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:35:32,895 INFO Downloading <https://download-0005-clone.copernicus-climate.eu/cache-compute-0005/cache/data9/adaptor.mars.internal-1666986413.9698038-14756-4-c14fbf96-fb01-4501-891d-0507de3df7cb.nc> to
../data/test/era5_1997.nc (847.6K)
2022-10-28 18:35:37,188 INFO Download rate 197.6K/s
2022-10-28 18:35:37,975 INFO Welcome to the CDS
2022-10-28 18:35:37,986 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:35:38,291 INFO Downloading <https://download-0019.copernicus-climate.eu/cache-compute-0019/cache/data7/adaptor.mars.internal-1666714454.1589751-6414-13-b88731d2-0bde-41ad-9dc6-0d1cad8feeec.nc> to `../data/test/era5_1998.nc` (847.6K)

2022-10-28 18:35:41,861 INFO Download rate 237.5K/s

2022-10-28 18:35:42,470 INFO Welcome to the CDS

2022-10-28 18:35:42,471 INFO Sending request to <https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:35:42,821 INFO Downloading <https://download-0015-clone.copernicus-climate.eu/cache-compute-0015/cache/data3/adaptor.mars.internal-1666714470.045293-18762-17-d19110dd-f0e1-4424-a767-af35d835252e.nc> to `../data/test/era5_1999.nc` (847.6K)

2022-10-28 18:35:46,299 INFO Download rate 244K/s

2022-10-28 18:35:46,849 INFO Welcome to the CDS

2022-10-28 18:35:46,849 INFO Sending request to <https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:35:47,311 INFO Downloading <https://download-0001-clone.copernicus-climate.eu/cache-compute-0001/cache/data5/adaptor.mars.internal-1666986433.9709122-4324-6-7e459287-5d5c-43c6-b4b1-95710710356d.nc> to `../data/test/era5_2000.nc` (847.6K)

2022-10-28 18:35:52,356 INFO Download rate 168K/s

2022-10-28 18:35:53,059 INFO Welcome to the CDS

2022-10-28 18:35:53,060 INFO Sending request to <https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:35:53,367 INFO Downloading <https://download-0000-clone.copernicus-climate.eu/cache-compute-0000/cache/data3/adaptor.mars.internal-1666987397.9959946-2373-1-1da428bc-ea0d-42b2-878d-72d425f5f1d2.nc> to `../data/test/era5_2001.nc` (847.6K)

2022-10-28 18:35:57,162 INFO Download rate 223.4K/s

2022-10-28 18:35:57,799 INFO Welcome to the CDS

2022-10-28 18:35:57,800 INFO Sending request to <https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:35:58,166 INFO Downloading <https://download-0008-clone.copernicus-climate.eu/cache-compute-0008/cache/data6/adaptor.mars.internal-1666987441.665576-7090-4-25b5e0d1-8e8c-4ce2-9579-5ea19104442b.nc> to `../data/test/era5_2002.nc` (847.6K)

2022-10-28 18:36:01,317 INFO Download rate 269.1K/s

2022-10-28 18:36:01,906 INFO Welcome to the CDS

2022-10-28 18:36:01,909 INFO Sending request to <https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:02,351 INFO Downloading <https://download-0005-clone.copernicus-climate.eu/cache-compute-0005/cache/data2/adaptor.mars.internal-1666987453.0379398-3258-18-2e414334-1b9e-48c3-b4b2-919fbabcf08.nc> to `../data/test/era5_2002.nc` (847.6K)

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.././data/test/era5_2003.nc (847.6K)
2022-10-28 18:36:04,530 INFO Download rate 389.1K/s
2022-10-28 18:36:05,061 INFO Welcome to the CDS
2022-10-28 18:36:05,085 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:36:05,432 INFO Downloading https://download-0006-clone.copernicus-
climate.eu/cache-compute-0006/cache/data8/adaptor.mars.internal-1666987466.31941
82-7321-18-c41a46f0-00ab-43df-92a0-bdcd3f442586.nc to
.././data/test/era5_2004.nc (847.6K)
2022-10-28 18:36:08,376 INFO Download rate 287.9K/s
2022-10-28 18:36:08,879 INFO Welcome to the CDS
2022-10-28 18:36:08,880 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:36:09,213 INFO Downloading https://download-0015-clone.copernicus-
climate.eu/cache-compute-0015/cache/data5/adaptor.mars.internal-1666987478.58814
64-31570-18-074a2b6b-da47-4a31-8d8b-0dbaf3dea2b3.nc to
.././data/test/era5_2005.nc (847.6K)
2022-10-28 18:36:11,501 INFO Download rate 370.6K/s
2022-10-28 18:36:12,023 INFO Welcome to the CDS
2022-10-28 18:36:12,024 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:36:12,431 INFO Downloading https://download-0015-clone.copernicus-
climate.eu/cache-compute-0015/cache/data6/adaptor.mars.internal-1666987490.77159
98-1504-14-6263237f-e562-4cb3-88b0-2c662efcf8fc.nc to
.././data/test/era5_2006.nc (847.6K)
2022-10-28 18:36:14,102 INFO Download rate 507.3K/s
2022-10-28 18:36:14,695 INFO Welcome to the CDS
2022-10-28 18:36:14,696 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:36:15,078 INFO Downloading https://download-0013-clone.copernicus-
climate.eu/cache-compute-0013/cache/data8/adaptor.mars.internal-1666987503.92229
9-22029-14-06e3bbc8-5ed8-44ef-aabf-445e7ceb7886.nc to
.././data/test/era5_2007.nc (847.6K)
2022-10-28 18:36:18,382 INFO Download rate 256.6K/s
2022-10-28 18:36:18,943 INFO Welcome to the CDS
2022-10-28 18:36:18,944 INFO Sending request to
https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-
levels-monthly-means
2022-10-28 18:36:19,235 INFO Downloading https://download-0000-clone.copernicus-
climate.eu/cache-compute-0000/cache/data5/adaptor.mars.internal-1666987515.48617
98-26585-7-3b3cd922-9391-4f45-b7c4-e82b6fc875c7.nc to
.././data/test/era5_2008.nc (847.6K)
2022-10-28 18:36:21,038 INFO Download rate 470.4K/s
2022-10-28 18:36:21,548 INFO Welcome to the CDS

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2022-10-28 18:36:21,549 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:21,844 INFO Downloading <https://download-0002-clone.copernicus-climate.eu/cache-compute-0002/cache/data1/adaptor.mars.internal-1666987527.644163-1113-2-cd3ad239-da17-4e2d-ae59-5ebe4bbba08b.nc> to ../../data/test/era5_2009.nc (847.6K)

2022-10-28 18:36:24,521 INFO Download rate 316.9K/s

2022-10-28 18:36:25,281 INFO Welcome to the CDS

2022-10-28 18:36:25,283 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:26,185 INFO Downloading <https://download-0004-clone.copernicus-climate.eu/cache-compute-0004/cache/data9/adaptor.mars.internal-1666987540.6035075-18416-8-2446a6f6-52b2-43a0-9281-2b14eeb6b9a2.nc> to ../../data/test/era5_2010.nc (847.6K)

2022-10-28 18:36:29,447 INFO Download rate 260.2K/s

2022-10-28 18:36:30,077 INFO Welcome to the CDS

2022-10-28 18:36:30,082 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:30,446 INFO Downloading <https://download-0018.copernicus-climate.eu/cache-compute-0018/cache/data2/adaptor.mars.internal-1666987552.794667-25041-7-baf7e30d-eb62-4db2-ae84-130ffb531368.nc> to ../../data/test/era5_2011.nc (847.6K)

2022-10-28 18:36:33,940 INFO Download rate 242.8K/s

2022-10-28 18:36:34,580 INFO Welcome to the CDS

2022-10-28 18:36:34,582 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:34,888 INFO Downloading <https://download-0000-clone.copernicus-climate.eu/cache-compute-0000/cache/data7/adaptor.mars.internal-1666987565.569351-1893-18-b4f9a4f8-8ef2-4f8f-8baa-d5c320c635a6.nc> to ../../data/test/era5_2012.nc (847.6K)

2022-10-28 18:36:36,826 INFO Download rate 438K/s

2022-10-28 18:36:37,394 INFO Welcome to the CDS

2022-10-28 18:36:37,397 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:37,761 INFO Downloading <https://download-0003-clone.copernicus-climate.eu/cache-compute-0003/cache/data2/adaptor.mars.internal-1666987576.93008-10636-16-c042b161-5e9a-4d2a-9730-14a362355615.nc> to ../../data/test/era5_2013.nc (847.6K)

2022-10-28 18:36:40,883 INFO Download rate 272.9K/s

2022-10-28 18:36:41,470 INFO Welcome to the CDS

2022-10-28 18:36:41,475 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>

2022-10-28 18:36:41,851 INFO Downloading <https://download-0006-clone.copernicus-climate.eu/cache-compute-0006/cache/data4/adaptor.mars.internal-1666987589.8794413-11252-5-442fc7da-2ecc-4254-a172-bd09471f821c.nc> to
../data/test/era5_2014.nc (847.6K)
2022-10-28 18:36:43,667 INFO Download rate 467.2K/s
2022-10-28 18:36:44,254 INFO Welcome to the CDS
2022-10-28 18:36:44,257 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:36:44,616 INFO Downloading <https://download-0009-clone.copernicus-climate.eu/cache-compute-0009/cache/data0/adaptor.mars.internal-1666987602.707167-14272-11-c4b09bc1-d24d-4371-8dd5-cab936b26048.nc> to
../data/test/era5_2015.nc (847.6K)
2022-10-28 18:36:47,568 INFO Download rate 287.3K/s
2022-10-28 18:36:48,138 INFO Welcome to the CDS
2022-10-28 18:36:48,152 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:36:48,524 INFO Downloading <https://download-0019.copernicus-climate.eu/cache-compute-0019/cache/data5/adaptor.mars.internal-1666987616.65278-16006-9-70783ce8-d3bb-4867-b91d-4c3e8f25896d.nc> to ../data/test/era5_2016.nc (847.6K)
2022-10-28 18:36:51,739 INFO Download rate 263.9K/s
2022-10-28 18:36:52,338 INFO Welcome to the CDS
2022-10-28 18:36:52,343 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:36:52,708 INFO Downloading <https://download-0009-clone.copernicus-climate.eu/cache-compute-0009/cache/data4/adaptor.mars.internal-1666987629.8245945-17756-10-ab45fbb4-2cbf-4d8b-ac33-f8ee45da0e81.nc> to
../data/test/era5_2017.nc (847.6K)
2022-10-28 18:36:54,360 INFO Download rate 514.2K/s
2022-10-28 18:36:54,888 INFO Welcome to the CDS
2022-10-28 18:36:54,892 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:36:55,268 INFO Downloading <https://download-0018.copernicus-climate.eu/cache-compute-0018/cache/data5/adaptor.mars.internal-1666987641.5683537-23062-5-a0a68316-7343-475c-830e-1eb934152cdd.nc> to
../data/test/era5_2018.nc (847.6K)
2022-10-28 18:36:57,558 INFO Download rate 370.8K/s
2022-10-28 18:36:58,344 INFO Welcome to the CDS
2022-10-28 18:36:58,348 INFO Sending request to
<https://cds.climate.copernicus.eu/api/v2/resources/reanalysis-era5-single-levels-monthly-means>
2022-10-28 18:36:58,657 INFO Downloading <https://download-0009-clone.copernicus-climate.eu/cache-compute-0009/cache/data0/adaptor.mars.internal-1666987654.2372217-25267-11-0d50e99c-3708-4b35-92ee-bb881260077e.nc> to

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../../data/test/era5_2019.nc (847.6K)  
2022-10-28 18:37:00,582 INFO Download rate 441K/s
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