era5cli : The command line tool to download ERA5 data
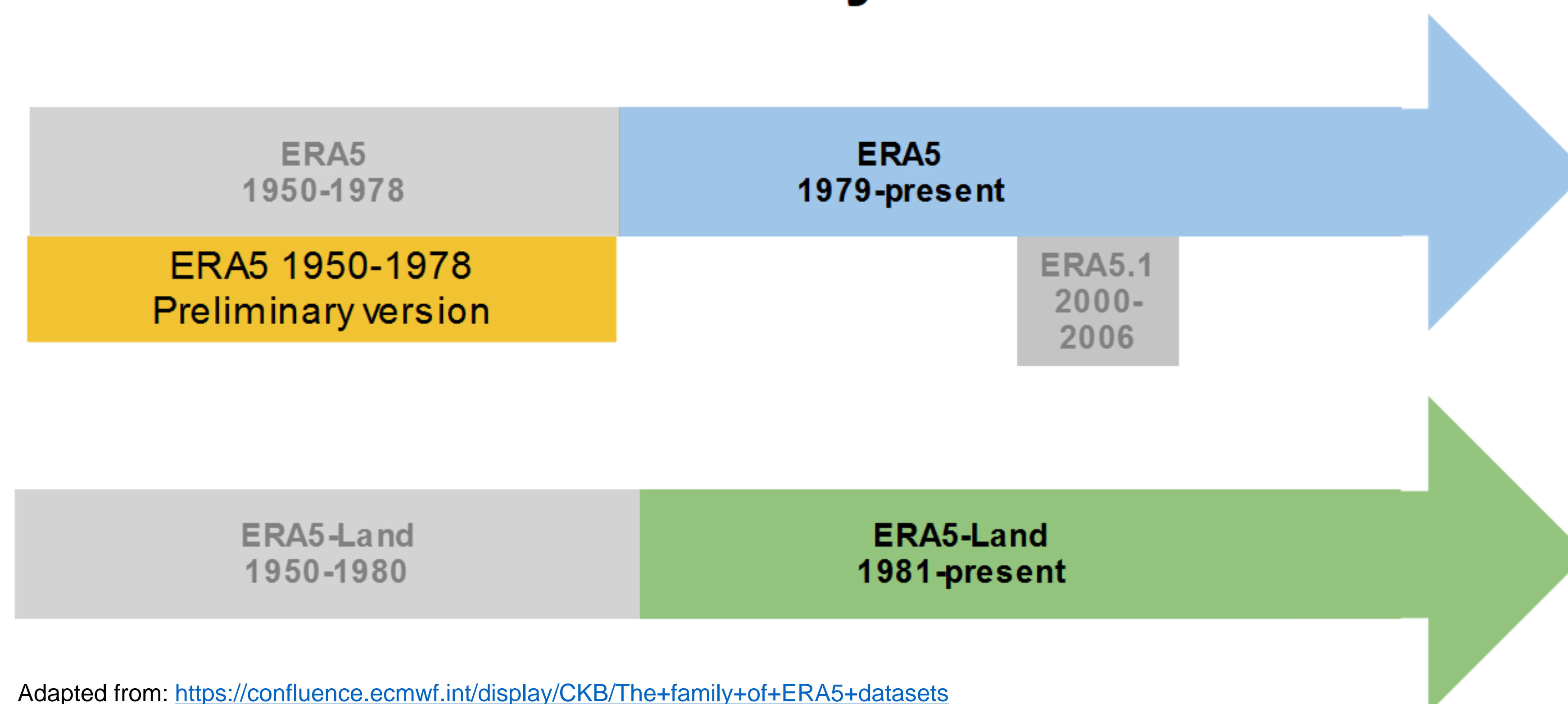
eWaterCycle

Features

- Download meteorological data in GRIB/NetCDF

- Select multiple variables for several months and years

- Split outputs to a separate file for every year

- Download multiple files at once

- Automatically add history to the netcdf file

- List and retrieve information on available variables and pressure levels

- New: Support for ERA5-Land (`--land`)

- New: Support for ERA5 Preliminary back extension (`--prelimbe`)

- New: Area selection (`--area 90 -180 -90 180`)

ERA5 Family Timeline

ERA5 1950-1978	ERA5 1979-present
ERA5 1950-1978 Preliminary version	ERA5.1 2000-2006
ERA5-Land 1950-1980	ERA5-Land 1981-present

Adapted from: https://confluence.ecmwf.int/display/CKB/The+family+of+ERA5+datasets

Usage

1. Register at CDS and get your api key

2. Install era5cli:

```
pip install era5cli
```

3. Download some data:

```
era5cli monthly --variables temperature --startyear 2010
```

```
$ era5cli monthly --variables temperature --startyear 2010

Download request is being queued at Copernicus.
It can take some time before downloading starts, please do not kill this process
in the meantime.

2021-04-21 11:35:55,360 INFO Welcome to the CDS
2021-04-21 11:35:55,360 INFO Sending request to https://cds.climate.copernicus.eu
/api/v2/resources/reanalysis-era5-pressure-levels-monthly-means
2021-04-21 11:35:55,476 INFO Request is queued

2021-04-21 11:46:14,503 INFO Request is running
2021-04-21 11:48:14,807 INFO Request is completed

2021-04-21 11:48:14,808 INFO Downloading
https://download-0009.copernicus-climate.eu/cache-compute-
0009/cache/data4/adaptor.mars.internal-1618998334.629226-24684-8-97ab9fa0-ff56-
4075-9039-be7903ff6d68.nc to era5_temperature_2010_monthly.nc (879.3M)

2021-04-21 11:50:36,470 INFO Download rate 6.2M/s

$ ls *.nc
era5_temperature_2010_monthly.nc
```