Intra-ACP Climate Service and related applications (ClimSA)

Climate Station

Data Provider credential creation

Version 1.3.0

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Abstract / Résumé
This document lists all the products available on Climate Station (or C-Station)

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Version history	Details	Date
1.2.1	Initial Release	February 2024
1.3.0		June 2024

Contents

ACRONYMS and DEFINITIONS

ADS	Atmospheric Data Store
CDS	Climate Data Store
CLMS	Copernicus Land Monitoring Service
CS	Climate Station/ ClimSA Station
USGS	United States Geological Survey
LANCE	Land, Atmosphere Near-real-time Capability for EOS
HTTPS	Hypertext Transfer Protocol Secure
API	Application Programming Interface
MODIS	Moderate Resolution Imaging Spectroradiometer
MODAPS	MODIS Adaptive Processing System
FIRMS	Fire Information for Resource Management System
JRC	Joint Research Centre
GIS	Geographical Information System

INTRODUCTION

This document explains the procedure to create the credentials in the data provider website and approve the terms & condition then use those credentials either username/password or API key in the ClimSA station.

1. DATA PROVIDER

This section describes the list of data provider

1.1 DATA PROVIDERS WITH CREDENTIALS

Product/ Version	Data Source ID	DataProvider / URL	Username:Password
modis-chla/v2013.1	GSFC:CGI:MODIS:CHLA:1D	**Earthdata USGS** Earthdata Login User Registration (nasa.gov) https://oceandata.sci.gsfc.nasa.gov/	Need Credentials
modis-kd490/v2012.0	GSFC:CGI:MODIS:KD490:1D		
modis-par/v2012.0	GSFC:CGI:MODIS:PAR:1D		
modis-sst/v2013.1	GSFC:CGI:MODIS:SST:1D:NEW		
olci-wrr/V02.0	GSFC:CGI:OLCI:L3:S3B:CHLA:1D	**Copernicus S3 from Earth Data** https://oceandata.sci.gsfc.nasa.gov/	Need Credentials
olci-wrr/V02.0	GSFC:CGI:OLCI:L3:S3B:CHLA:1D		
modis-firms/v6.1	MODAPS:EOSDIS:FIRMS:C61:NASA:HTTP	**LANCE Near Real Time(NRT)** https://nrt3.modaps.eosdis.nasa.gov/	Need Credentials
vgt-dmp/olci-v1.0	PDF:GLS:OLCI-V1.0:DMP	**Copernicus Global Land** https://land.copernicus.vgt.vito.be/PDF/datapool/	Need credentials
vgt-lai/olci-v1.0	PDF:GLS:OLCI-V1.0:LAI		
vgt-ndvi/olci-v2.0	PDF:GLS:OLCI-V2.0:NDVI		
vgt-fapar/olci-v1.0	PDF:GLS:OLCI-V1.0:FAPAR		
vgt-fcover/olci-v1.0	PDF:GLS:OLCI-V1.0:FCOVER		
ascat-swi/V3.1	PDF:GLS:METOP:ASCAT-V3.1:SWI		
theia-wl/1.0	THEIA:HYDRO:LEGOS:WATERLEVEL	**Hydro Web** http://hydroweb.theia-land.fr/hydroweb/	Need credentials
CDS API		**Climate Data Store** https://cds.climate.copernicus.eu/	Need credentials
ADS API		**Atmospheric Data Store** https://ads.climate.copernicus.eu/	Need credentials

1.2 DATA PROVIDERS WITHOUT CREDENTIALS

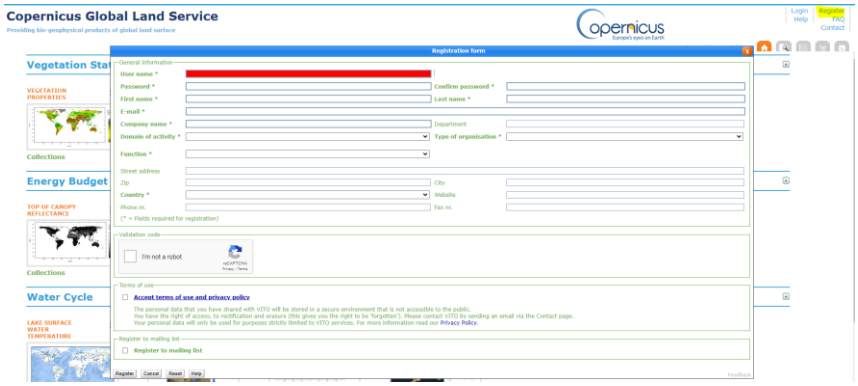
Product/ Version	Data Source ID	URL	Username:Password
arc2-rain/2.0	CPC:NOAA:RAIN: ARC2	https://ftp.cpc.ncep.noaa.gov/fews/fewsdata/africa/arc2 /geotiff/	Not needed
gdo-rdri gdo-sm gdo-tws		https://estation.jrc.ec.europa.eu/eStation2/datamanage ment/getproductarchive?	Not needed
chirps-rfe/2.0	UCSB:CHIRPS:DE KAD:2.0:HTTP	https://data.chc.ucsb.edu/products/CHIRPS-2.0/global_dekad/tifs/	Not needed
chirps-rfe/2.0	UCSB:CHIRPS:PR EL:DEKAD:HTTP		
cpc-sm/1.0	CPC:NCEP:NOAA :SM	ftp://ftp.cpc.ncep.noaa.gov/wd51yf/global_monthly/gri dded_binary/current_month/	Not needed
cdas-month-prcp	IRI:NOAA:PRCP: MONTH	http://iridl.ldeo.columbia.edu/	Not needed
fewsnet-rfe/2.0	USGS:EARLWRN: FEWSNET	https://edcintl.cr.usgs.gov/downloads/sciweb1/shared/f ews/web/africa/dekadal/rfe/dekadrainfall/downloads/de kadal/	Not needed
rain-spi/V1.0	JRC:MARS:SPI:3 MON	https://agricultural-production-hotspots.ec.europa.eu/data/	Not needed
rain-spi/V1.0	JRC:MARS:SPI:1 MON	https://agricultural-production-hotspots.ec.europa.eu/data/	Not needed
tamsat-rfe/3.0	READINGS:TAMS AT:3.0:10D:NC	https://www.tamsat.org.uk/public_data/	Not needed
tamsat-rfe/3.1	READINGS:TAMS AT:3.1:10D:NC	https://www.tamsat.org.uk/public_data/	Not needed
wsi-hp/V1.0	JRC:MARS:WSI:C ROP	https://agricultural-production-hotspots.ec.europa.eu/data/indicators_wsi/wsi_hp/	Not needed
wsi-hp/V1.0	JRC:MARS:WSI:P ASTURE	https://agricultural-production-hotspots.ec.europa.eu/data/indicators_wsi/wsi_hp/	Not needed
Online eStation2		https://estation.jrc.ec.europa.eu/eStation2/datamanage ment/getproductarchive	Not needed

2. PROCEDURE TO CREATE CREDENTIALS

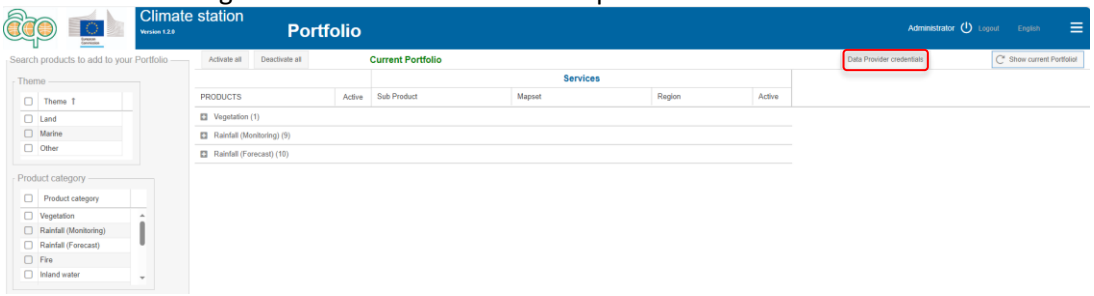
2.1 COPERNICUS GLOBAL LAND SERVICE

2.1.1 Credentials using Username, password (current mechanism)

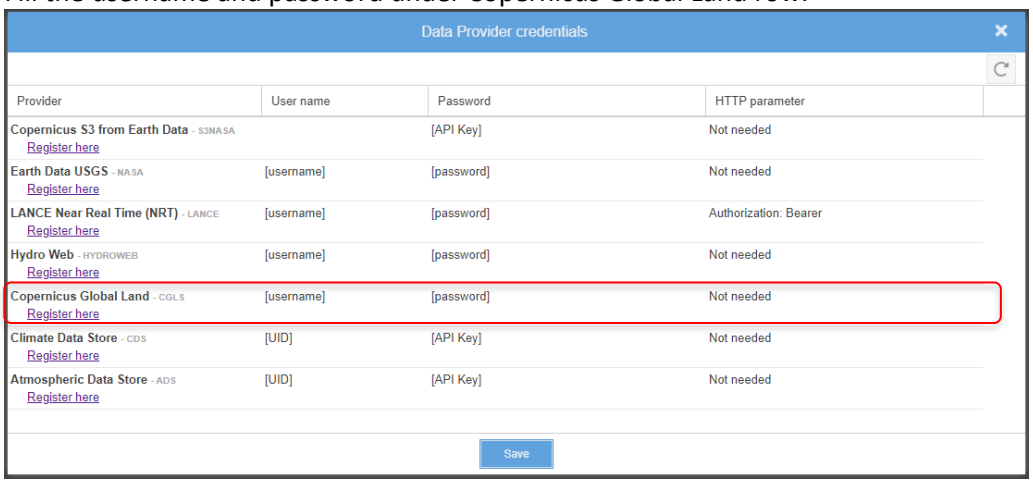
- Go to the Copernicus Global Land Service website and create credentials by clicking on register option https://land.copernicus.vgt.vito.be/PDF/portal/Application.html#Home



- Fill all the information. Check also "Register to mailing list" so that any information regarding the changes are notified.
- Once you receive the mail regarding the registration confirm it.
- Now use the credentials in the ClimSA station by opening the interface and login using administrator login then in Portfolio click "Data provider Credentials"



- Fill the username and password under Copernicus Global Land row.

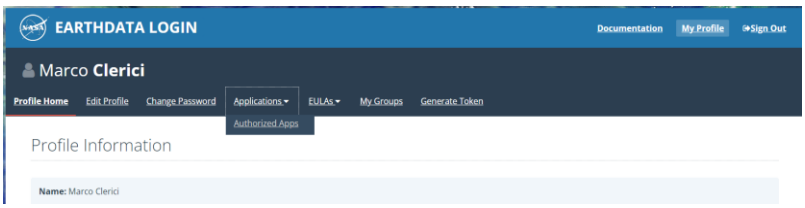


2.1.2 **Credentials using CLMS new API (New method)**

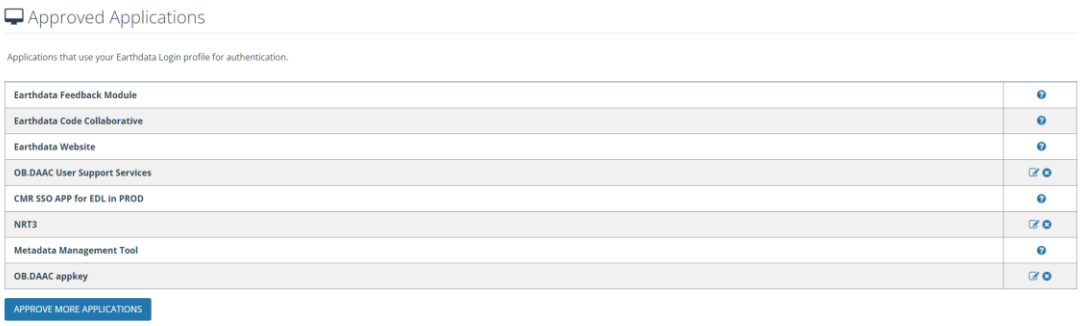
The procedure to retrieve data from CLMS is provided in the link below. Though we don't use this approach currently, we might have to change them in the upcoming release. https://land.copernicus.eu/en/how-to-guides/how-to-download-spatial-data/how-to-download-m2m

2.2 NASA EARTH DATA

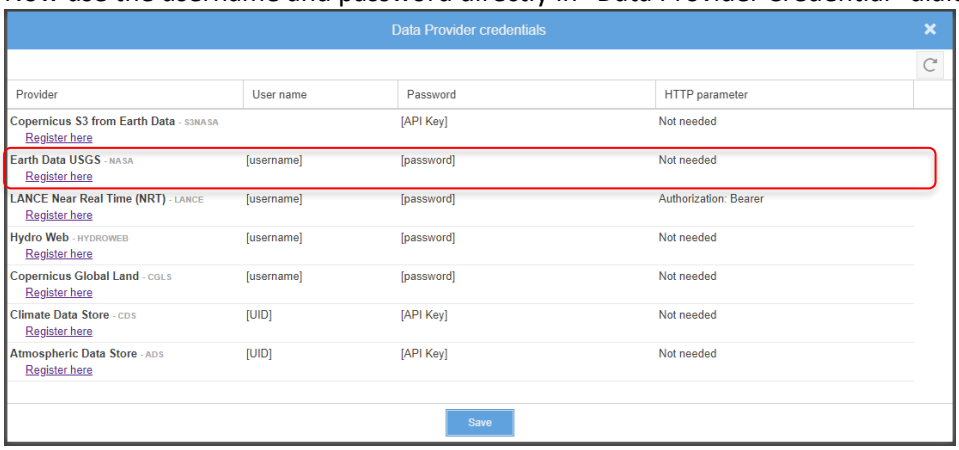
- Go to the NASA Earth Data website https://urs.earthdata.nasa.gov/users/new and fill the registration form (More details). Please also check "Yes, I'm interested in Meris and ESA Sentinel-3 Data."
- After registering and login, go to your profile https://urs.earthdata.nasa.gov/profile and select "Applications" → Authorized Apps



- Check if you credentials are authorized with the following Apps



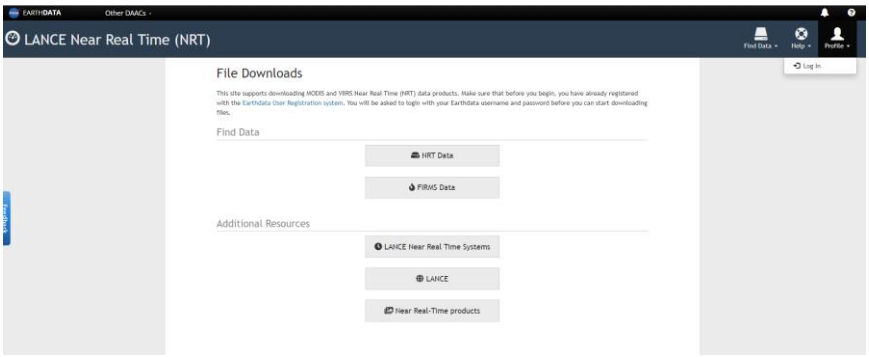
- If something is not present in your credentials then click on "Approve More Application" and approve the same.
- Now use the username and password directly in "Data Provider Credential" dialog box



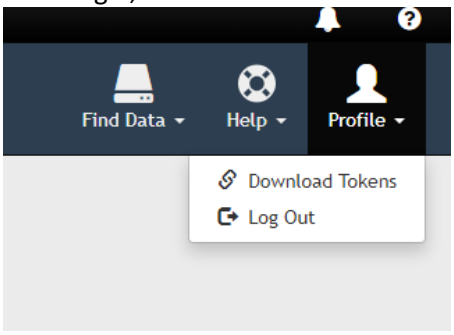
- But we are slightly different way to use Earth Data credentials for LANCE Near Real Time (NRT) & Copernicus Sentinel3 Earth Data. Find the procedures below.

2.2.1 LANCE Near Real Time(NRT) Credentials using Username, password & Token

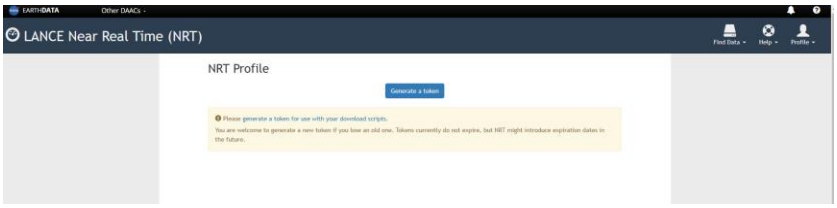
- Go to https://nrt3.modaps.eosdis.nasa.gov/ and Login. It uses the same credentials as Earth Data which we created in section 2.2



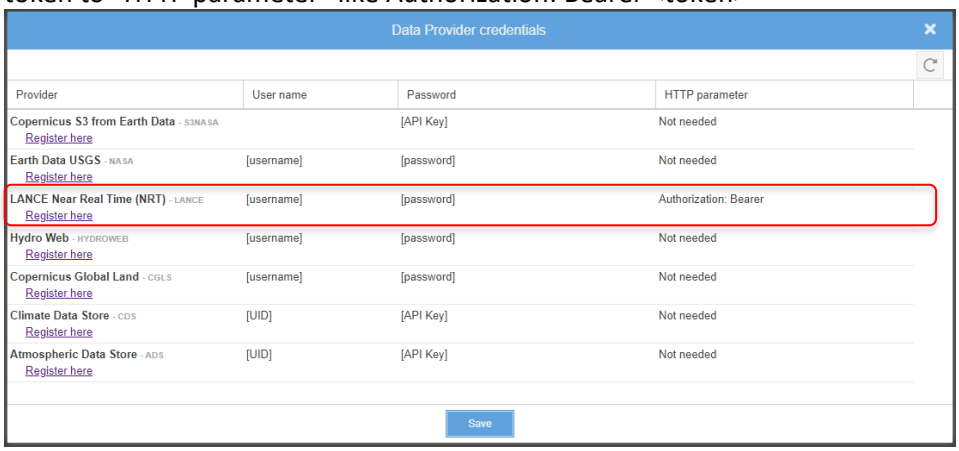
- Once login, click on the "Profile" and select "Download Tokens"



- Then Generate a token

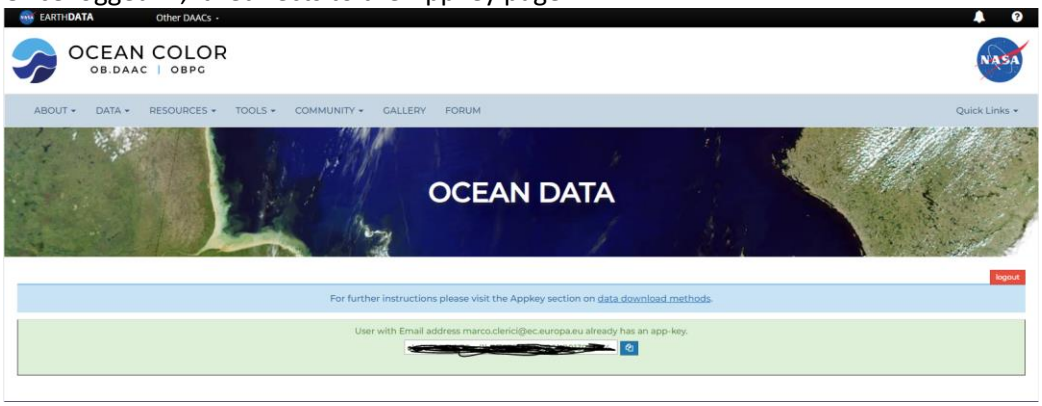


- Once generated then copy the credentials to "Data Provider Credential" dialog box under portfolio of ClimSA station.
- Enter username and password created from section 2.2. Also make sure to copy the token to "HTTP parameter" like Authorization: Bearer <token>

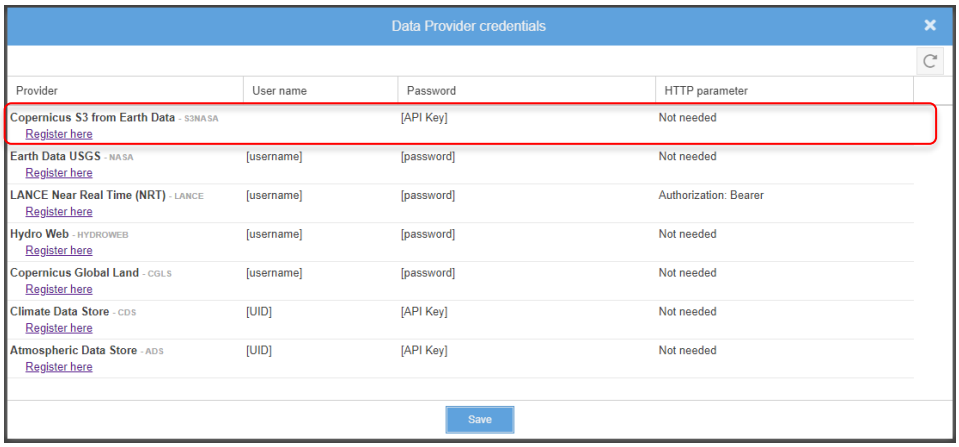


2.2.2 Copernicus Sentinel 3 data from NASA Earth data Credentials using Appkey

- Go to https://oceandata.sci.gsfc.nasa.gov/appkey/ and login using the same Earth Data credentials.
- Once logged in, it redirects to the Appkey page.



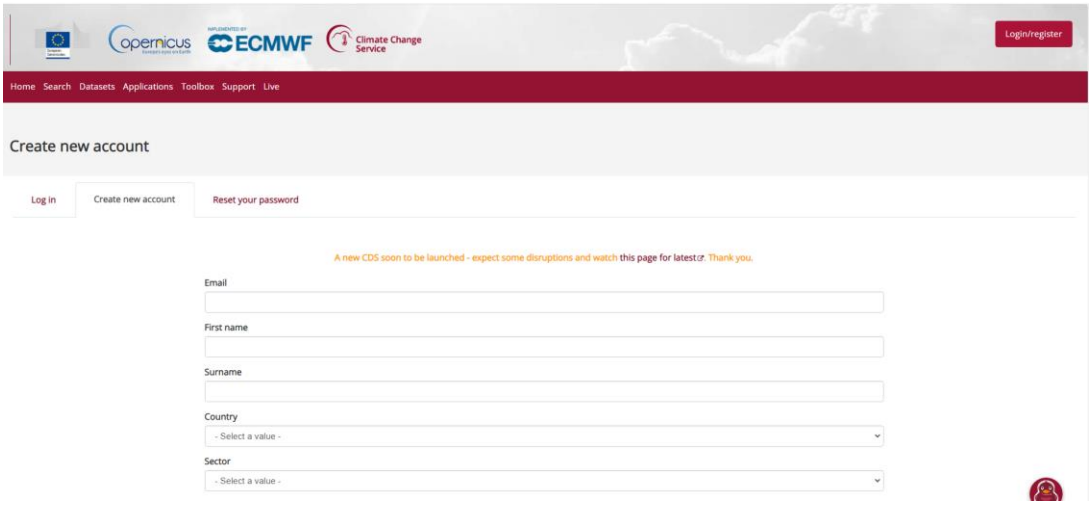
- Use this Appkey in the password column of the “Data Provider Credential” table.



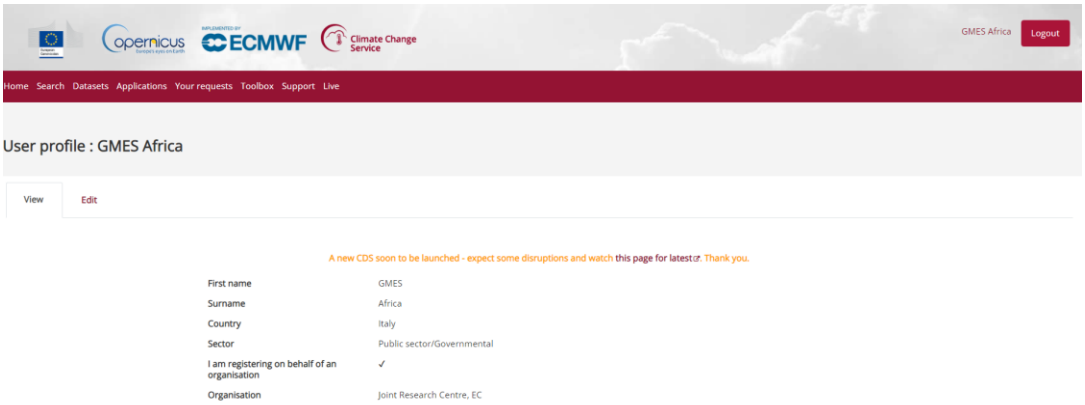
- For more details https://oceancolor.gsfc.nasa.gov/data/download_methods/

2.3 COPERNICUS CLIMATE CHANGE SERVICE - CLIMATE DATA STORE

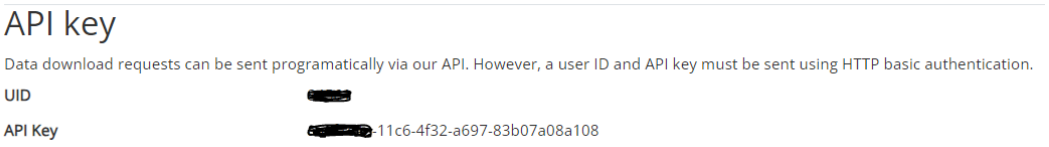
- Open the CDS website https://cds.climate.copernicus.eu/
- Click on the "Login/Register" & Create new account



- Once account if created, login with the credentials & click on your username

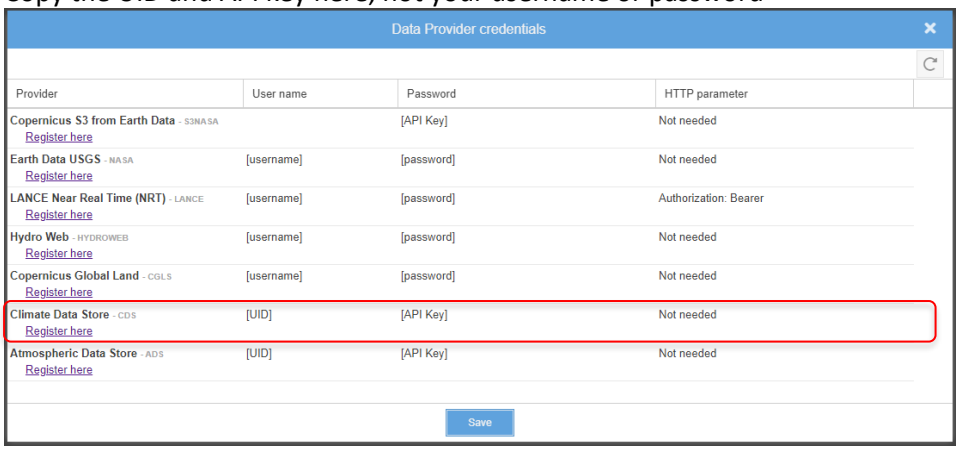


- In the User Profile page scroll down to the API key section



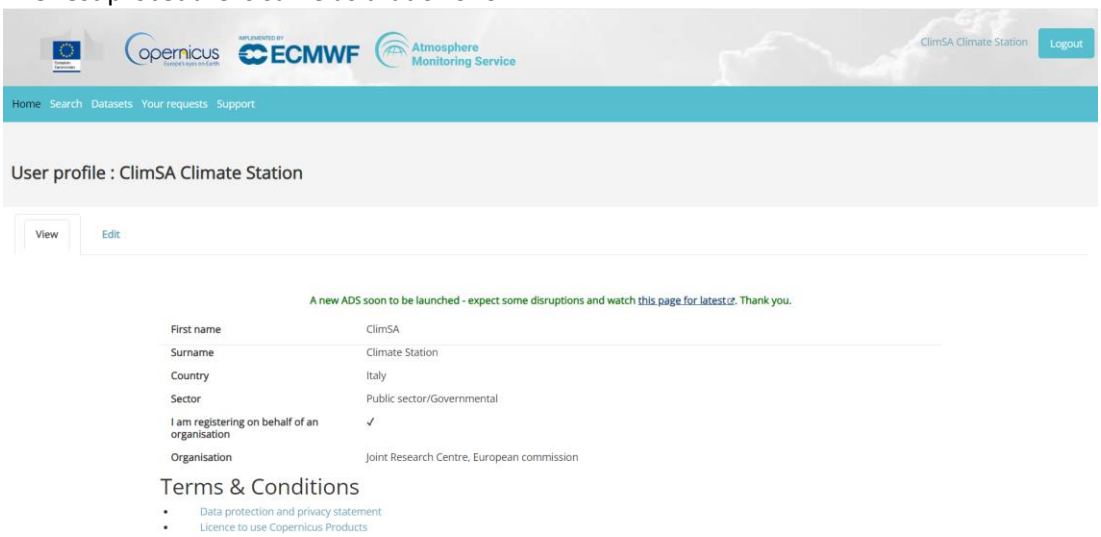
- UID is the username and API key is the password which you have to input in the ClimSA station datasource
- Now go to the dataset website https://cds.climate.copernicus.eu/cdsapp#!/dataset/seasonal-monthly-single-levels?tab=form and choose Download tab and scroll to the end
- You will notice "Terms of use" where you can accept the license to use Copernicus Products & Additional license to use non-European contributions.

- After accepting the license, copy the credentials to “Data Provider Credential” dialog box under portfolio of ClimSA station.
- Copy the UID and API key here, not your username or password

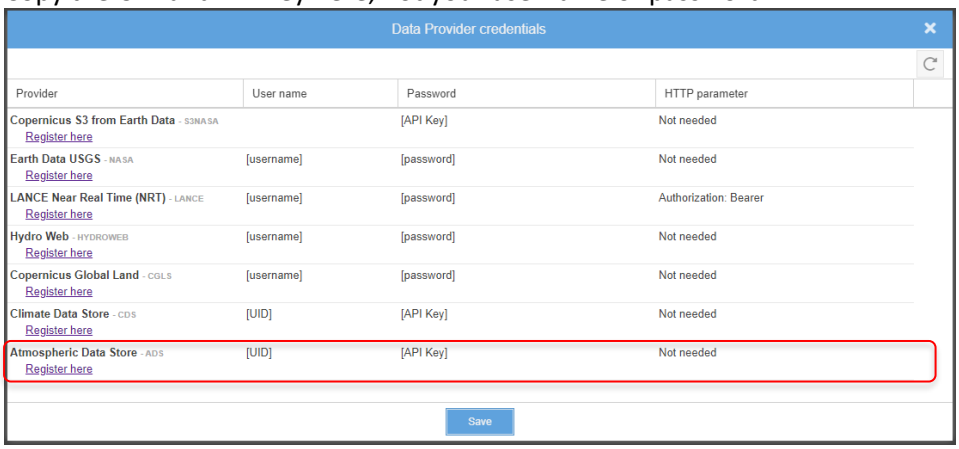


2.4 COPERNICUS ATMOSPHERE MONITORING SERVICE – ATMOSPHERE DATA STORE

- Open the ADS website https://ads.atmosphere.copernicus.eu/
- Click on the "Login/Register" & Create new account
- The rest procedure is same as that of CDS.



- Go to one dataset website https://ads.atmosphere.copernicus.eu/cdsapp#!/dataset/cams-global-reanalysis-eac4?tab=form and accept the license in bottom of the page.
- After accepting the license, copy the credentials to "Data Provider Credential" dialog box under portfolio of ClimSA station.
- Copy the UID and API key here, not your username or password



3. CREDENTIALS IN CLIMSA STATION

Please fill the credentials below and take a print out of it. Provide this print out to the administrator or in charge of the ClimSA station. In case of reinstallation, credentials saved in the DB will be lost, so that they can copy, paste the credentials back to "Data Provider Credential" dialog box under portfolio of ClimSA station.

Data Provider	Username	Password	HTTP Parameter
Earthdata USGS	**<username>**	**<password>**	**Not needed**
Copernicus S3 from Earth Data		**<APPkey>**	**Not needed**
LANCE Near Real Time (NRT)	**<username>**	**<password>**	**Authorization: Bearer <Token>**
Copernicus Global Land	**<username>**	**<password>**	**Not needed**
Hydro Web	**<username>**	**<password>**	**Not needed**
Climate Data Store	**<UID>**	**<API Key>**	**Not needed**
Atmospheric Data Store	**<UID>**	**<API Key>**	**Not needed**