Daily GFS Pars

GFS = Global Forecast System
Pars = (Climate) Parameters

Prerequisites

Same as the Daily GFS Prec:

Run dates:

a. Operational run process date comes from the system date and it will the same used for the web products.
   Example: scheduler task for Sep 25, 2019 = PPG output for Sep 25, 2019

b. Manual run download using the user-defined date input arguments. Web product date will be the user-defined date.
   Example: scheduler run for Sep 17, 2019 = PPG output for Sep 17, 2019

Important Note: No web products are created from this process.

Global Daily GFS (Clim)Pars

Main script process steps

1. Downloads source (raw) data from NOAA NCEP (**1 file/6 hourly day = 308 files**) and compress all files in a TAR GZ file

Python scripts used in the process

- `D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars_config.py` - Configuration file
- `D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars.py` - Main script
- `D:\FEWS\DataPortal_iraq\lib\daily_gfs_process.py` (uses other lib scripts)

Products

Download → `D:\FEWS\DataPortal_iraq\data\Global\Daily\GFSPars\raw\gfsp_YYYY` (TAR GZ files)

Command line

`USAGE: D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars.py` YYYY M D
where YYYY is the 4 digit year .. M is the 1-2 digit of the month (1-12).. and D is the 1-2 digit of the day (1-31). YYYY M D is an optional input, so the default input information is today's date.

Example

`> global_daily_gfs_pars.py` 2013 9 9

Windows Scheduler Task setup

For operational runs we will reuse the **Daily GFS ClimPars** to run using Global bin main script at **4:30 AM (CT)** every day of the month.

- `D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars.py`

Steps:
1. Open Scheduler Task
2. Go to folder "Iraq_Tasks". If the folder does not exists, create it under "Task Scheduler Library"
3. Right click on "Iraq_Tasks" folder and click on "Create Task"
4. Under General
   a. Set up Name: **Daily GFS ClimPars** (required) and Description (optional)
   b. Click on "Run whether user is logged on or not"
   c. Check option "Run with highest privileges" (*may need to unchecked if scheduled task does not run*).
5. Under Triggers
   a. Click on New and set it up based on the information above
6. Under Actions:
   a. Click on New and add the 2 python scripts paths described above in the exact order
7. Under Settings:
   a. In the checked "Stop the task if it runs longer than:", select 2 hours.

After creating the scheduler task, it can be exported as an XML to be used in another system.

Exercise

- After creating a Windows Scheduler Task, right click on Task and select Run
- Manual run for a Sep date (09/17/2019-09/25/2017)

  ```
  D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars.py 2019 9 17
  …
  D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars.py 2019 9 25
  ```

- Manual run to get an incomplete run.
  ```
  D:\FEWS\DataPortal_iraq\bin\global\daily\gfspars\global_daily_gfs_pars.py 2019 12 31
  ```

References

- Global Forecast System (GFS) Climate Parameters - Iraq PPG documentation