

# Daily RFE

Rainfall Estimate

# Prerequisite

The Iraq Daily RFE process uses the GeoBIL zip generated by Afghanistan daily RFE as the input

## Run dates:

- a. Operational run process date for previous previous date based on system date.
  - i. Scheduler Task = System date = Sep 23, 2019
  - ii. PPG product = Sep 22, 2019
- b. Manual run download using the user-defined date input arguments.
  - i. Manual run date = PPG product = Sep 3, 2019

# Afghanistan Daily RFE

## Main script process steps

1. Downloads the daily RFE from NOAA NCEP, <ftp://ftp.cpc.ncep.noaa.gov/fews/afghan> (spatial window of the raw data covers the Southwest Asia region)
2. Converts source data to geoBIL zip.

## Python scripts used in the process

- D:\FEWS\DataPortal\bin\centralasia\afghanistan\daily\rfe\afghanistan\_daily\_rfe\_config.py → Configuration file
- D:\FEWS\DataPortal\bin\centralasia\afghanistan\daily\rfe\afghanistan\_daily\_rfe.py → Main script
- D:\FEWS\DataPortal\lib\daily\_rfe\_process.py

## Products:

Download → D:\FEWS\DataPortal\data\CentralAsia\Afghanistan\Daily\RFE\raw\YYYY(GZ files)

BIL product → D:\FEWS\DataPortal\data\CentralAsia\Afghanistan\Daily\RFE\geobil\YYYY(TAR.GZ files)

## Command line

USAGE: D:\FEWS\DataPortal\bin\centralasia\afghanistan\daily\rfe\afghanistan\_daily\_rfe.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

```
afghanistan_daily_rfe.py 2013 6 10
```

# Iraq Daily RFE

## Main script process steps

1. Creates a geoBIL zip file this region using the Afghanistan daily RFE geoBIL zip as input. The geoBIL zip is uploaded the FTP server (optional)
2. creates 6-days RFE graphic and upload it to web server (e.g. earlywarning.usgs.gov)

## Python scripts used in the process

- D:\FEWS\DataPortal\bin\middleeast\iraq\daily\rfe\iraq\_daily\_rfe\_config.py → Configuration file
- D:\FEWS\DataPortal\bin\middleeast\iraq\daily\rfe\iraq\_daily\_rfe.py → Main script.
- D:\FEWS\DataPortal\lib\daily\_rfe\_process.py

## Products

**BIL product** → D:\FEWS\DataPortal\data\MiddleEaste\Iraq\Daily\RFE\geobil\YYY(TAR.GZ files)

**Graphics** → D:\FEWS\DataPortal\data\MiddleEaste\Iraq\Daily\RFE\graphic(PNG files)

## Command line

USAGE: D:\FEWS\DataPortal\bin\asia\middleeast\iraq\daily\rfe\iraq\_daily\_rfe.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

iraq\_daily\_rfe.py 2013 6 10

# Windows Scheduler Task setup

For operational runs set it up for **Daily RFE** to run using Afghanistan and Iraq bin main scripts at **9:15 PM (CT)** every day of the month.

- `D:\FEWS\DataPortal\bin\asia\centralasia\afghanistan\daily\rfe\afghanistan_daily_rfe.py`
- `D:\FEWS\DataPortal\bin\asia\middleeast\iraq\daily\rfe\iraq_daily_rfe.py`

## Steps

1. Open Scheduler Task
2. Go to folder "Iraq\_Tasks". If the folder does not exist, 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 RFE** (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 be unchecked if scheduled task does not run).
5. Under Triggers
  - a. Click on New and set it up to run every day.
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.

# Python batch script for manual runs

A batch python script can be used to run the regions processes from one command line.

```
D:\FEWS\DataPortal_iraq\bin\allregions_daily_rfe.py YYYY M D
```

# Exercise

- Run Afghanistan and Iraq Daily RFE to get source data and PPG products from Sep 3 to 21, 2019.
  - `D:\FEWS\DataPortal_iraq\bin\allregions_daily_rfe.py YYYY M D`
- Manual run to get an incomplete run.
  - `D:\FEWS\DataPortal_iraq\bin\allregions_daily_rfe.py 2019 12 31`

# References

- Rainfall Estimate (RFE) PPG document.
- Iraq daily GFS Prec web product page:  
<https://earlywarning.usgs.gov/fews/product/74>