Dekadal RFE

Rainfall Estimate

Prerequisite

The Iraq Dekadal RFE process uses the Afghanistan Daily RFE source (raw) data as the input to create a GeoBIL zip.

Run dates:

a. Operational run process dates come from the system date. It runs 3 times during the month on the 2nd, 12th, and 22nd of each month. Output products correspond to the previous dekad period from run date (e.g. 12th run corresponds to dekad period from 1st to 10th day of the run month).
   i. Op run date = Sep 12 2019 → Sep 1-10, 2019
b. Manual run download using the user-defined date input arguments using 4-digit year and 2-digit dekad of the year (1-36).
   i. See Dekadal Example PDF to find the 36 dekad periods of a year.

Iraq Dekadal RFE

Main script process steps

1. Creates dekadal RFE geoBIL zip
2. Calculates anomaly differences using IWMI data and save them as ArcGrids, and creates map graphic

Python scripts used in the process

- `D:\FEWS\DataPortal_iraq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe_config.py` → Configuration file
- `D:\FEWS\DataPortal_iraq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe.py` → Main script.
- `D:\FEWS\DataPortal_iraq\lib\dekadal_rfe_process.py` (uses another python lib scripts)
- `D:\FEWS\DataPortal_iraq\lib\periodicity_calculator.py`
- `D:\FEWS\DataPortal_iraq\lib\dekadal_functions.py`

Products

BIL product → `D:\FEWS\DataPortal_iraq\data\MiddleEast\Iraq\Dekadal\RFE\geobil\YYYY\` (TAR.GZ file)
Grids → `D:\FEWS\DataPortal_iraq\data\MiddleEast\Iraq\Dekadal\RFE\grids\` (ArcGrids for anomalies output)
Anomalies Graphics → `D:\FEWS\DataPortal_iraq\data\MiddleEast\Iraq\Dekadal\RFE\graphics\anomdek\` (PNG files)

Command line

```
USAGE: D:\FEWS\DataPortal_iraq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe.py YYYYDD
where YYYY is the 4 digit year and.. DD is the 2 digit dekad of the year (01-36).. YYYYDD is an optional input,
so the default input information is today's date.
```

Example

```
iraq_dekadal_rfe.py 201924
```

Windows Scheduler Task setup

For operational runs set it up for **Dekadal RFE** to run using Afghanistan and Iraq bin main scripts at **3:10 AM (CT)** on the **2nd, 12th, and 22nd** of each month.

- `D:\FEWS\DataPortal_raq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe.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: **Dekadal 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 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 python script paths described above
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

- Make sure Afghanistan Daily RFE source data for Sep 1-20 is available.
- Manual run for Sep dekad 1 and 2, 2019 (25 and 26 of the year)
  - `D:\FEWS\DataPortal_iraq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe.py 201925`
  - `D:\FEWS\DataPortal_iraq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe.py 201926`
- Manual run to get an incomplete run.
  - `D:\FEWS\DataPortal_iraq\bin\asia\middleeast\iraq\dekadal\rfe\iraq_dekadal_rfe.py 201936`

References

- Rainfall Estimate - Iraq PPG documentation
- Iraq dekad RFE web product page: http://earlywarning.usgs.gov/fews/product/75