

Brief guide to obtaining OS Net data after the 45 day limit.

Data is available on the OS Net web service for up to 45 days. After this OS Net data files can be searched for and listed at the EPOS Data Gateway (<https://gnssdata-epos.oca.eu>).

All files are 24 hour duration at 30 second epoch rate and are in the compacted RINEX 3 format (.crx file extension) and compressed to .gz format. For a guide to RINEX file naming conventions see the document on the OS Net web site - <https://www.ordnancesurvey.co.uk/documents/resources/rinex-file-naming.pdf>.

The initial decompression from .crx.gz file to .crx file can be done with most compression/decompression utilities. Many GNSS processing software will read .crx files directly otherwise the Hatanaka un-compaction utility will be required (from <https://terras.gsi.go.jp/ja/crx2rnix.html>) to expand the .crx files to full RINEX .rnix files.

To select OS Net data start at the EPOS Data Gateway (<https://gnssdata-epos.oca.eu>).

Proceed as follows:

- Select *Show advanced search* at the top right of the page.

Show advanced search

- Click on the green *File Info* bar to open the file selection options.

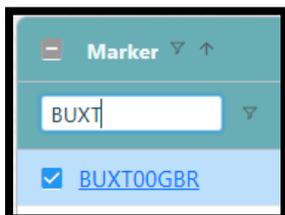
- Click on the calendar symbol in the *Date from* and *Date to* date range boxes to bring up a calendar and select the required dates. If only require one day of data set the same date in both fields.

Either select stations in the table in the lower half of the screen:

- Filter the table by entering "United Kingdom" in the *Country* field.



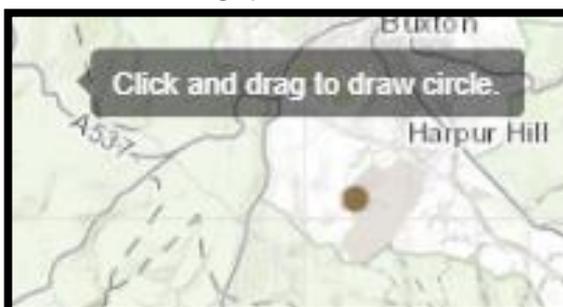
- Individual stations can also be filtered to by entering the station ID the *Marker* field, e.g.:



- Tick the required OS Net stations in the table (tick box is far left column of table).

Or select stations on the map:

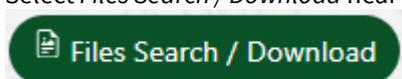
- Zoom/pan the map and select the required stations by drawing selection polygons, boxes or circles using the tools on the left side of the map. A single left click on a station will bring up a window of station information. E.g.:



- Tick the required OS Net stations from the selection in the table (tick box is far left column of table).

Then:

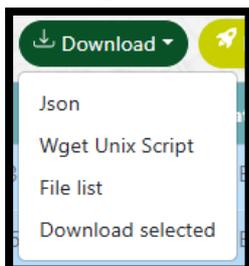
- Select *Files Search / Download* near top right of the page.



- A new web page tab will open and (after a short "loading" pause) will display a table showing the selected files/dates.

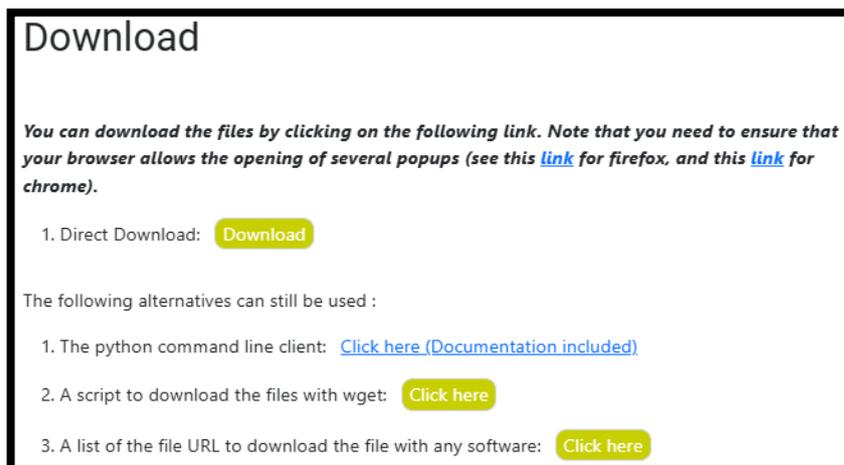
File Name	File Type	Reference Date	Published Date	Revision Date	Sampli...	Sampli...	M D5 Check Sum	File Size	Data Center ...	Status
<input type="checkbox"/> BUXT00GBR_S_20242480000_01D_30S_MO.crx.gz	RINEX3	2024-09-04 00:0...	2024-09-05 07:1...	2024-09-05 02:5...	24h	30s	ff8818620f88270adfa4e371bd347d63	3193778	EPOSGNSS	1
<input type="checkbox"/> CAMO00GBR_S_20242480000_01D_30S_MO.crx.gz	RINEX3	2024-09-04 00:0...	2024-09-05 07:1...	2024-09-05 02:5...	24h	30s	19f97ef3adb982b890fa7e7151d4d525	4036989	EPOSGNSS	1
<input type="checkbox"/> HERO00GBR_S_20242480000_01D_30S_MO.crx.gz	RINEX3	2024-09-04 00:0...	2024-09-05 08:2...	2024-09-05 03:0...	24h	30s	7289b229662eac6a06aeeb2dbda1b3...	3314136	EPOSGNSS	1

- Tick the required files. All files can be selected with a single tick in top left corner of the table.
- Click the green “Download” button at the top right of the table to expand a pull down list of options.



- “Download selected” – **the easiest option since files will be downloaded using the browser’s “download” function.**

Click “Download selected” and a selection window will appear:



Click the option 1 *Direct Download* “Download” button. The download of each selected file will start **in parallel**. This means that if the file selection list is large the same number of browser tabs will open all at once. The tabs will close as each file is download is completed.

- “File list” – A small text file “*eposfilelist.txt*” will be downloaded. This file is a list of the download URLs of the files. E.g.:

```
https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/BLAP00GBR_S_20240060000_01D_30S_MO.crx.gz
https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/GIGG00GBR_S_20240060000_01D_30S_MO.crx.gz
https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/LEED00GBR_S_20240060000_01D_30S_MO.crx.gz
https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/MANR00GBR_S_20240060000_01D_30S_MO.crx.gz
https://epncb.oma.be/ftp/obs/2024/006/DARE00GBR_S_20240060000_01D_30S_MO.crx.gz
```

Note that some files are not hosted at EPOS. The files not at EPOS will generally be from stations that are part of the EPN network (<http://www.epncb.oma.be/index.php>).

Each URL can be copied and pasted into a browser address bar to download the file.

Windows users comfortable with Powershell can also employ a simple loop to download the files. First copy the *eposfilelist.txt* file to a suitable folder (the example uses `c:\temp\`). Type the following commands into a Powershell command window:

```

foreach ($URL in Get-Content "c:\temp\eposfilelist.txt")
{
    $filename = "c:\temp\" + (Split-Path $URL -leaf)
    Invoke-WebRequest $URL -OutFile $filename
}

```

The `foreach` command parses each URL in the list in turn. The name of the file (`$filename`) to be saved is constructed from an output directory path (the example uses `c:\temp\`) and the filename given in the URL (the `-leaf` parameter of the URL path). The `Invoke-WebRequest` command then calls the URL and saves the output to `$filename`.

- **“Wget UNIX Script”** – despite the name this script can be used on any system that has the `wget` utility. Very similar to the “File list” option a small text file `eposwget.sh` will be downloaded that contains a list of `wget` commands with the download URL of each file. E.g.:

```

wget https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/BLAP00GBR_S_20240060000_01D_30S_MO.crx.gz
wget https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/GIGG00GBR_S_20240060000_01D_30S_MO.crx.gz
wget https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/LEED00GBR_S_20240060000_01D_30S_MO.crx.gz
wget https://datacenter.gnss-epos.eu/RINEX3/30s/2024/006/MANR00GBR_S_20240060000_01D_30S_MO.crx.gz
wget https://epncb.oma.be/ftp/obs/2024/006/DARE00GBR\_S\_20240060000\_01D\_30S\_MO.crx.gz

```

- **“Json”** – only for users familiar with implementing JSON data to extract the file download URLs and use them in a suitable script to capture the files. A file `files-metadata.json` of JSON format data for each RINEX file will be downloaded.