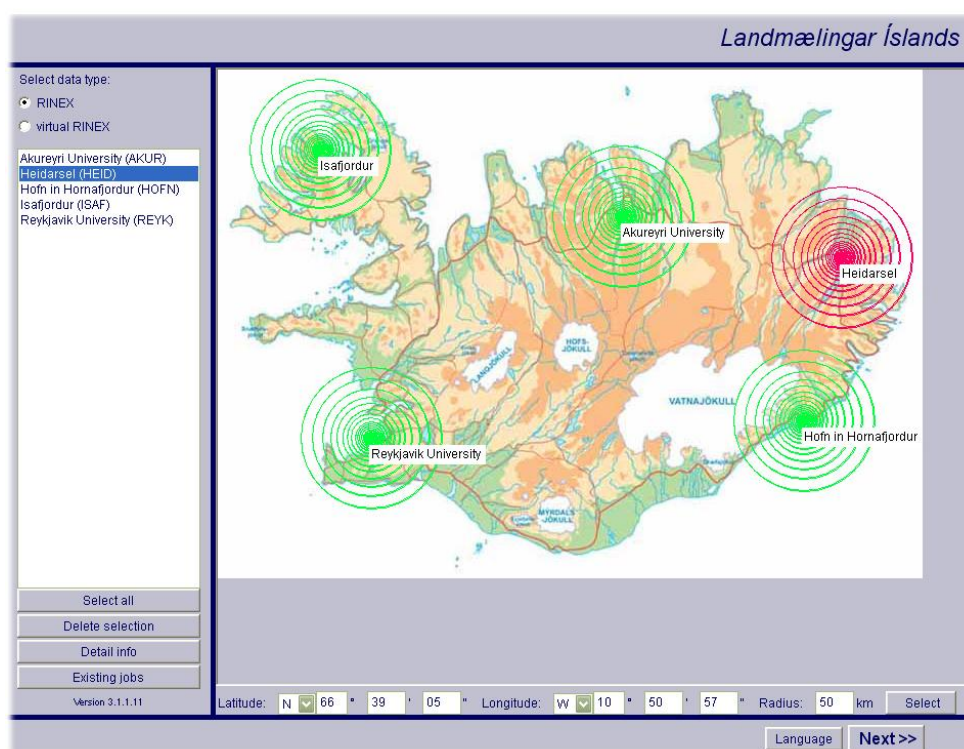


GNWEB Application user guide

I. The main window

To access GNWEB window you need to have user name and password issued by Landmælingar Íslands.



The main window is divided into left and right parts. From the left menu choose RINEX or Virtual RINEX. RINEX is available for year from 2009 to current year. Virtual RINEX is available from 2010 to current year. More about these options read in further sections of the document.

1.1 RINEX

There are four buttons on the left. Here are short descriptions about them:

Select all

You can select not only one station but also few or even all (names of selected stations have blue background color). In the map selected stations are in red. So, this button will help you to select all stations at once.

Delete selection

To unselect the station click with mouse on selected station name on the left menu or click on the station in the map. The button will unselect all selected stations.

Detail info

This button will open extra window. In that window there is information about selected station.

Existing jobs

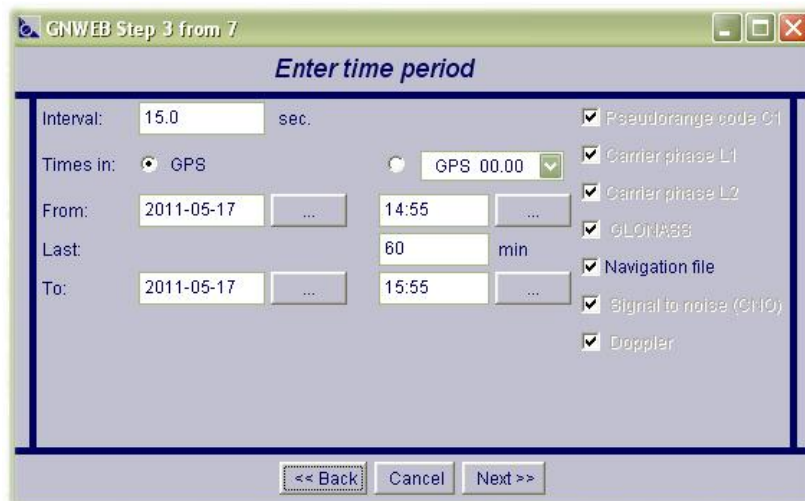
With this button the user will enter into own archive of his created project jobs. The user can download again existing jobs if he wants. The user's jobs are available for one month, later they are deleted.

Next >>

This button at the bottom of the window helps the user to get the files of the selected stations.



In the window there is overall information what stations have been selected by user.



The user can change interval of observations. The smallest interval can be 1sec. User can choose to have or not to have navigation file with observation file. In the observation file user can expect pseudorange C1, carrier phase L1, carrier phase L2, GLONASS, signal to noise, Doppler if available.

There are two time selections GPS or GPS+few hours/GPS- few hours.

Explanation:

If you will select GPS time you will get data of the period 14:00 to 15:00.

If you will select GPS +3:00 of period 14:00 to 18:00 you will get data that starts 11:00 to 15:00.

If you will select GPS-3:00 of period 14:00 to 18:00 you will get data that starts 17:00 to 21:00. The hour 14:00 is like reference time in this example.

Time and date you can change by the click of the button.



Available epochs:

Ordered: Rate: 15.0 sec.
 Data format: RINEX, C1, L1, L2, RXN
 Time period: from: 2011-05-17 14:55 to: 2011-05-17 15:55
 Found in 2 data files:

ID Name	From (GPS-Time)	To (GPS-Time)	Availability	Supported observation rate
HOFN Hofn in Hornafjordur (HOFN)	2011-05-17 14:00:00	2011-05-17 15:00:00	100 %	1.0 sec.
	2011-05-17 15:00:00	2011-05-17 16:00:00	0 %	

Costs: 0,00 Isk

<< Back Cancel Next >>

In this window there are information about availability of the data. Number of percentage will give sense of data availability of each hour. If the bar is empty it can mean that data is not available or the data for that hour is not completely downloaded.

Data formats and compression

☐ Compressed RINEX
☐ Compact RINEX (Hatanaka)
☐ Session files
☐ Day files
☒ Hour files

Archive:
☒ *.zip
☐ *.tar.gz

RINEX file suffix:
☐ *.rxo=*.rxn=...
☒ *.01o, *.01n, ...

<< Back Cancel Next >>

Compressed RINEX – compressed binary *.y for RINEX observation, *.v for RINEX navigation GLONASS and *.x for RINEX navigation GPS.

Compact RINEX (Hatanaka) – compact Hatanaka *.d for observation, *.n navigation GPS and *.g navigation for GLONASS.

Session files – put all data into one file.

Day files – data are separated into different files depending on the date.

Hour files – data are separated into different hour files.

***.zip** – zip archive

***.tar.gz** – tar archive

- *.rxo – for compressed RINEX it will be *.rxy, for compact RINEX *.rxd.
- *.rxn – for compressed RINEX it will be *.rxx, for compact RINEX *.rxn.
- *.01o – for compressed RINEX it will be *.11y, for compact RINEX *.11d.
- *.01n – for compressed RINEX it will be *.11x, for compact RINEX *.11n.



GNWEB Step 6 from 7

Authentification

HOFN
2011-05-17-14:55 - 2011-05-17-15:55
Costs: 0,00 Isk

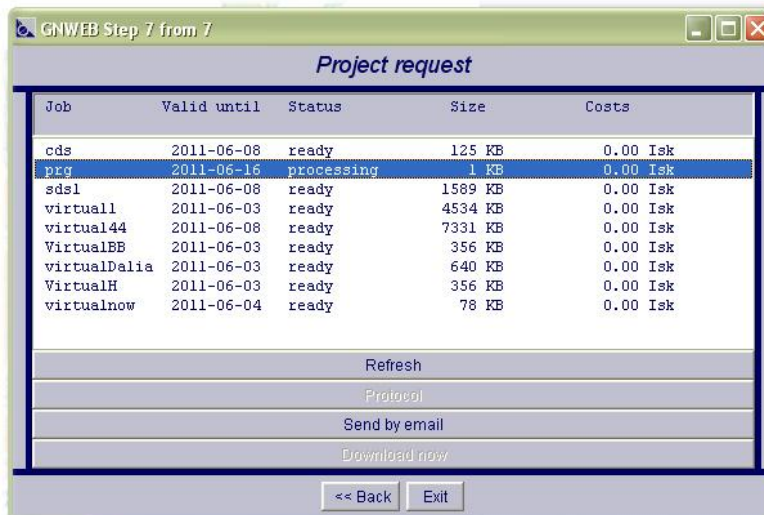
Projectname
Max. 12 signs (A-Z,a-z,0-9,-,_)

Name:

Password:

<< Back Cancel Next >>

Here write any desired project name and your user name and password.



GNWEB Step 7 from 7

Project request

Job	Valid until	Status	Size	Costs
cds	2011-06-08	ready	125 KB	0.00 Isk
prg	2011-06-16	processing	1 KB	0.00 Isk
sds1	2011-06-08	ready	1589 KB	0.00 Isk
virtual1	2011-06-03	ready	4534 KB	0.00 Isk
virtual44	2011-06-08	ready	7331 KB	0.00 Isk
VirtualBB	2011-06-03	ready	356 KB	0.00 Isk
virtualDalia	2011-06-03	ready	640 KB	0.00 Isk
VirtualH	2011-06-03	ready	356 KB	0.00 Isk
virtualnow	2011-06-04	ready	78 KB	0.00 Isk

Refresh

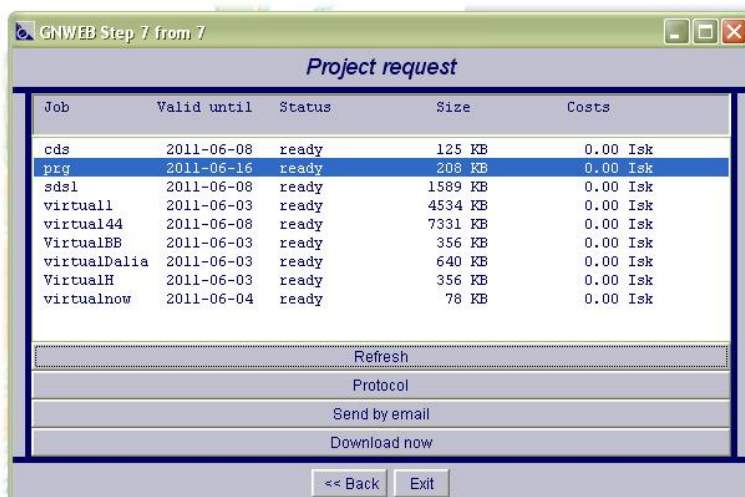
Protocol

Send by email

Download now

<< Back Exit

Select your project. Your project can have processing status. Wait and refresh the window with „Refresh“ button time to time untill your project will have status –ready.



GNWEB Step 7 from 7

Project request

Job	Valid until	Status	Size	Costs
cds	2011-06-08	ready	125 KB	0.00 Isk
prg	2011-06-16	ready	208 KB	0.00 Isk
sds1	2011-06-08	ready	1589 KB	0.00 Isk
virtual1	2011-06-03	ready	4534 KB	0.00 Isk
virtual44	2011-06-08	ready	7331 KB	0.00 Isk
VirtualBB	2011-06-03	ready	356 KB	0.00 Isk
virtualDalia	2011-06-03	ready	640 KB	0.00 Isk
VirtualH	2011-06-03	ready	356 KB	0.00 Isk
virtualnow	2011-06-04	ready	78 KB	0.00 Isk

Refresh

Protocol

Send by email

Download now

<< Back Exit

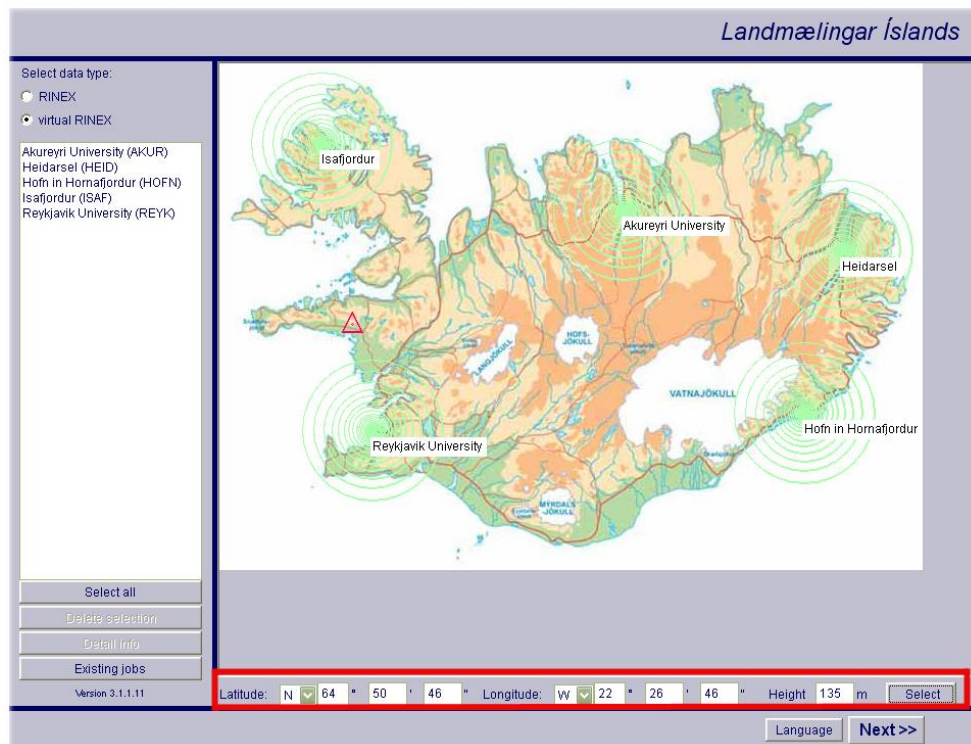
Choose to send data by e-mail or download the data. If you want short information about your data push „Protocol“ button.

1.2 Virtual Rinex

This creates a custom Rinex file for a location specified by the user by combining observables from surrounding of reference stations of the network and adding VRS corrections. This provides an option for post-processing data while leveraging the VRS technology. This can be a good solution for rapid data collection needs, perhaps in areas without good cellular coverage. This is available for account holders. Virtual Rinex you can generate for either static rovers, for trajectories (moving rover) or for reference stations.

Virtual Rinex is generated by using state space representation files(SSR) they came from continuous reference network . Advantage of SSR or derived quantities compared to original RINEX of a reference station is the station dependent error. Due to the processing of several reference stations and the state space representation, the SSR is free or greatly reduced of any station dependent errors. The noise of the observation from SSR is lower and hence often better than original RINEX.

That to select the location double click on the map or enter the coordinates at the bottom of the window and push „Select“ button. Coordinate system is WGS84.



The rest of the steps are the same as for simple RINEX option.