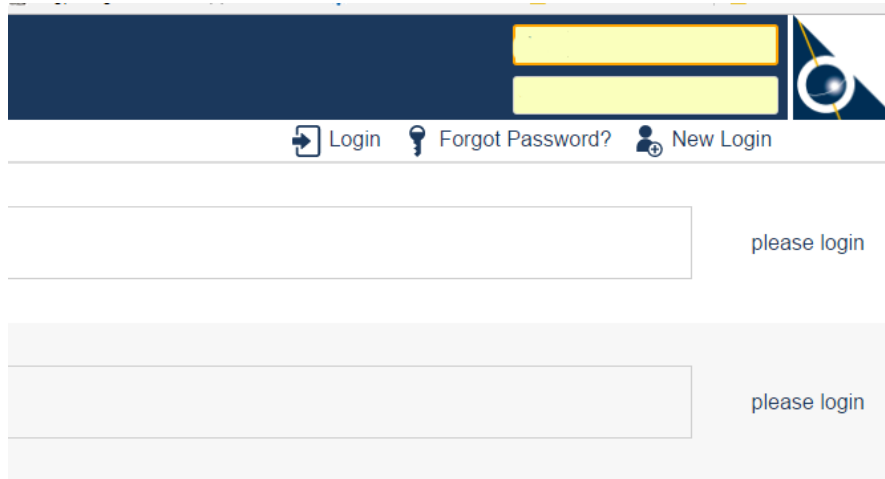


User Guide of GNUserportal

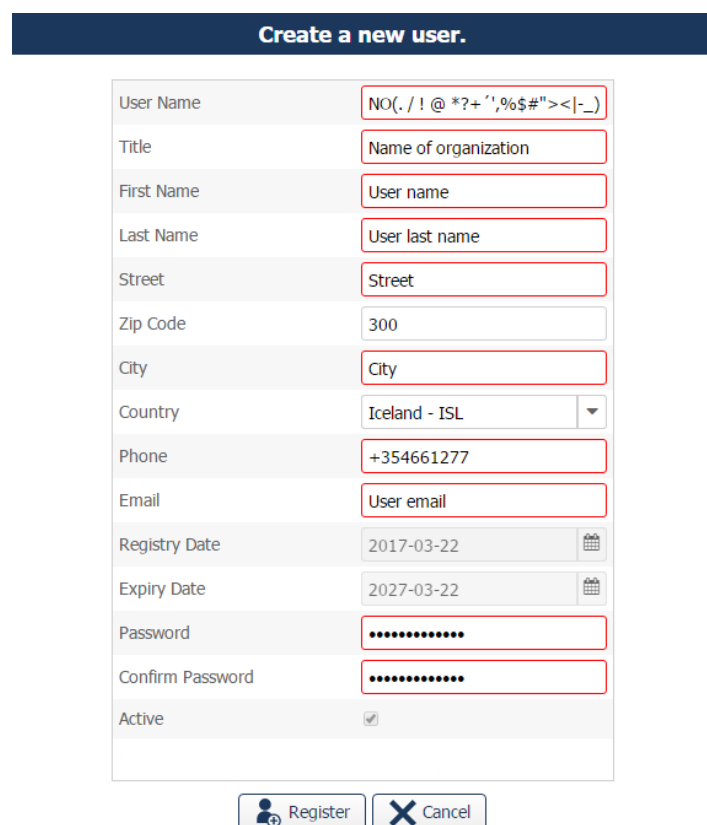
I. New Login

If you have user name and password, just enter it and click “Login”.



The image shows the login interface of the GNUserportal. At the top, there is a dark blue header with a logo on the right. Below the header, there are two yellow input fields for username and password. To the right of these fields is a 'Login' button. Below the input fields, there are two links: 'Login' and 'Forgot Password?'. To the right of these links is a 'New Login' button. Below the 'Login' button, there is a text input field and a 'please login' button. Below the 'Forgot Password?' button, there is a text input field and a 'please login' button.

If you are new user click “New Login” and fill the form below:



The image shows the 'Create a new user' form. The form has a dark blue header with the text 'Create a new user.' Below the header, there is a table with the following fields:

User Name	NO(. / ! @ * ? + ' , % \$ # " > < - _)
Title	Name of organization
First Name	User name
Last Name	User last name
Street	Street
Zip Code	300
City	City
Country	Iceland - ISL
Phone	+354661277
Email	User email
Registry Date	2017-03-22
Expiry Date	2027-03-22
Password	
Confirm Password	
Active	☒

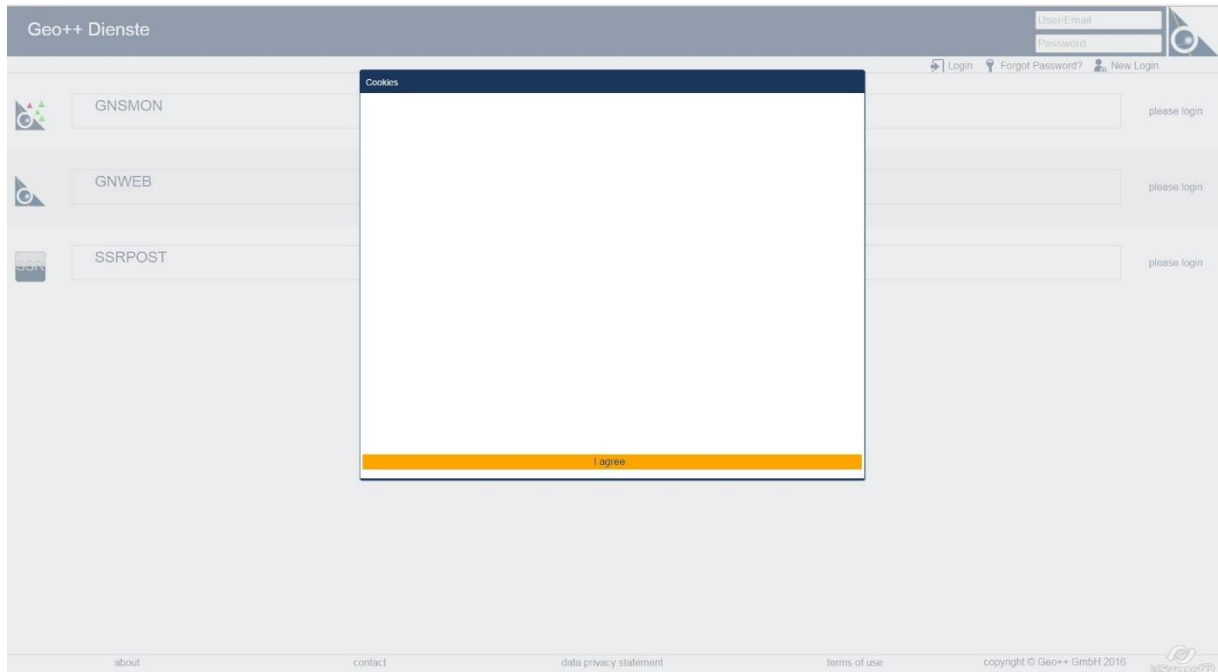
At the bottom of the form, there are two buttons: 'Register' and 'Cancel'.

If you forgot your password, click “Forgot Password?” and retrieve the password.

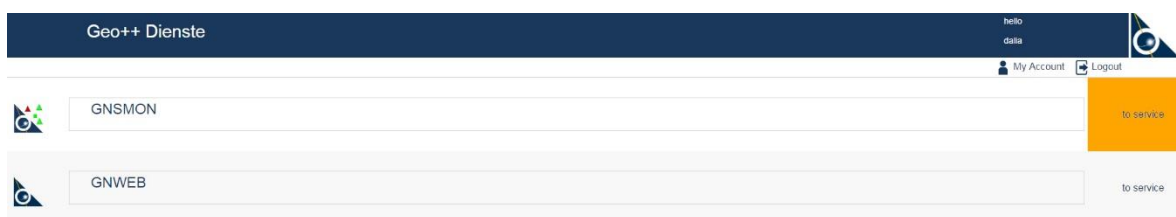
II. GNSMON service

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

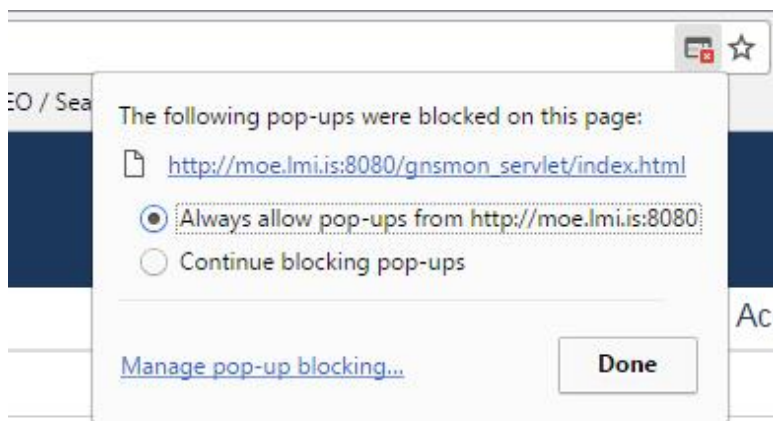
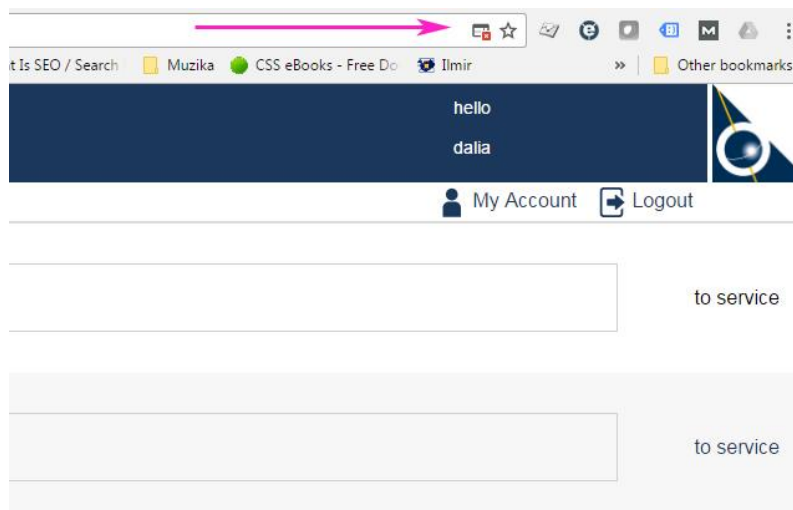
1. The first step would be to agree to use “Cookies”. Push “I agree” button.



2. In the upper right corner enter your user name and password.
3. Select GNSMON or GNWEB Services.



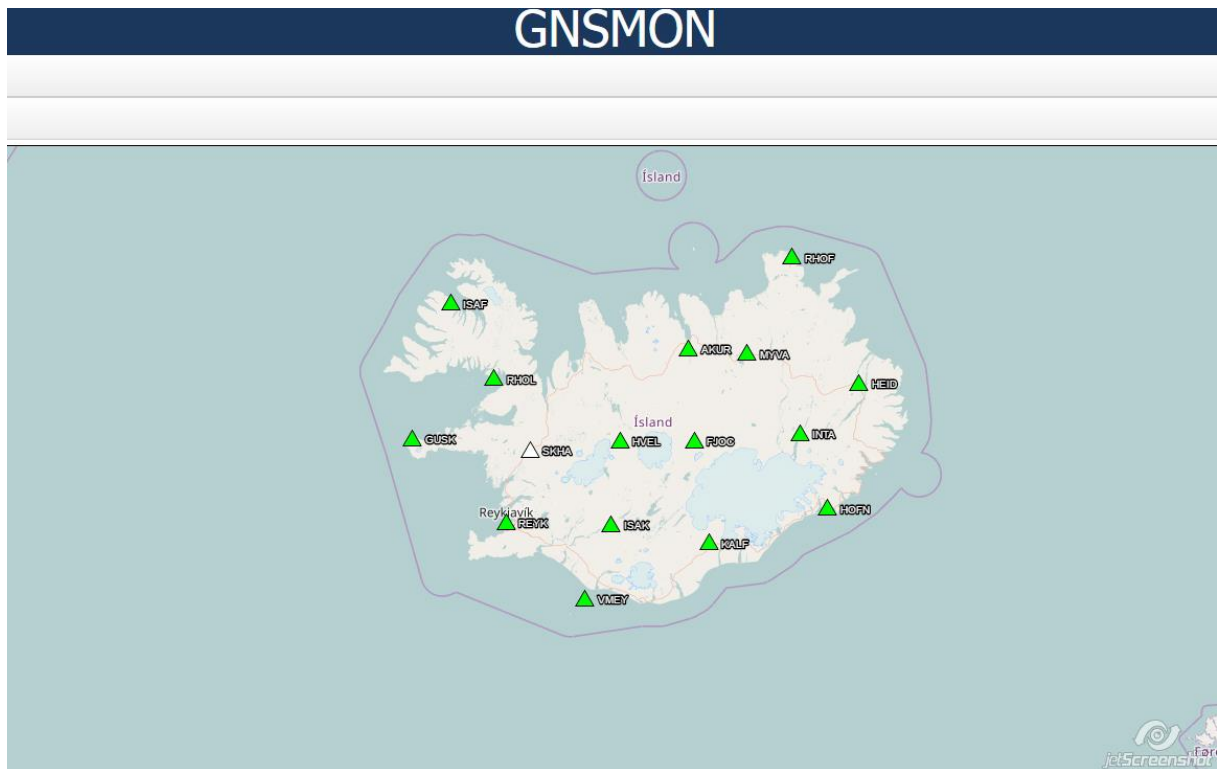
4. By select one of the Services you will get small notice in the upper right corner like in the picture below. Enable pop-ups!



5. If you select the GNSMON Service you will get GNSMON window like this:

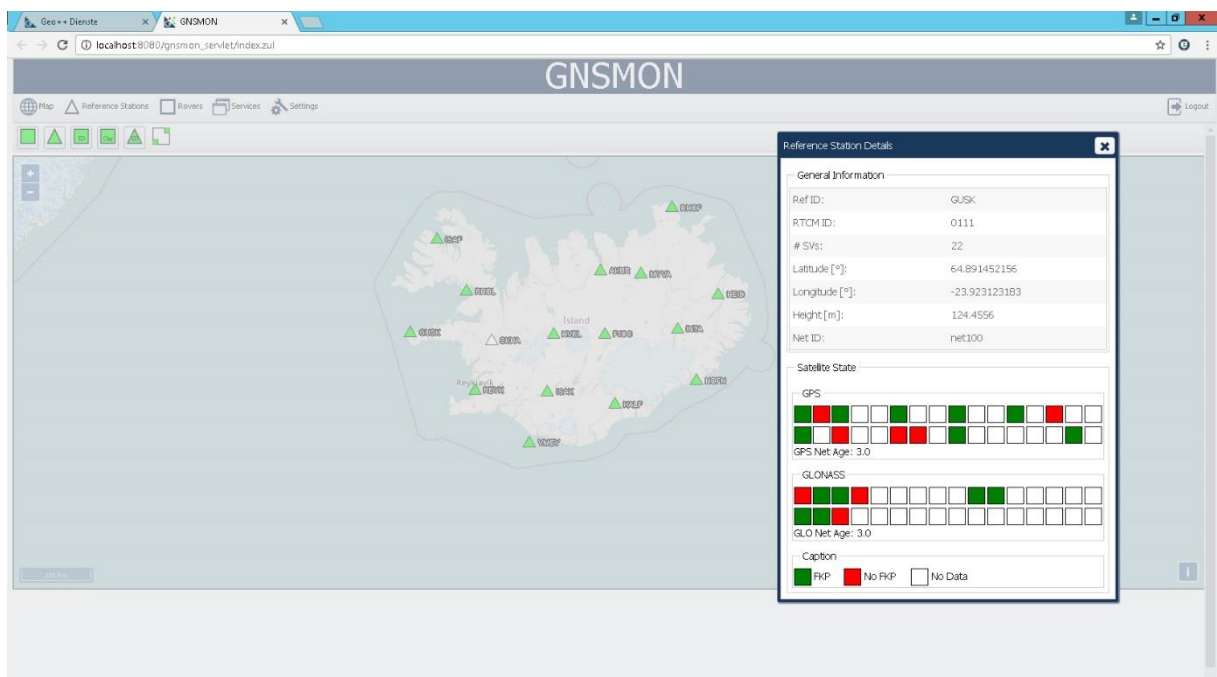


6. Zoom in or zoom out using your mouse wheel. When you will zoom in you will get the view like in the picture:

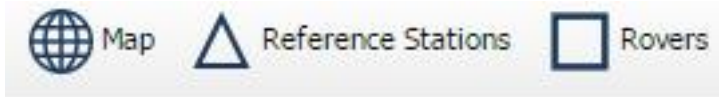


*The green triangle represents active stations and white triangle represents not active stations.

7. Click on one of the triangles to see more info about the station.



8. The Menu of GNSMON:



You have three options. One is to see only “Reference stations”, another to see only “Rovers” and the third to see both of them using Map icon.

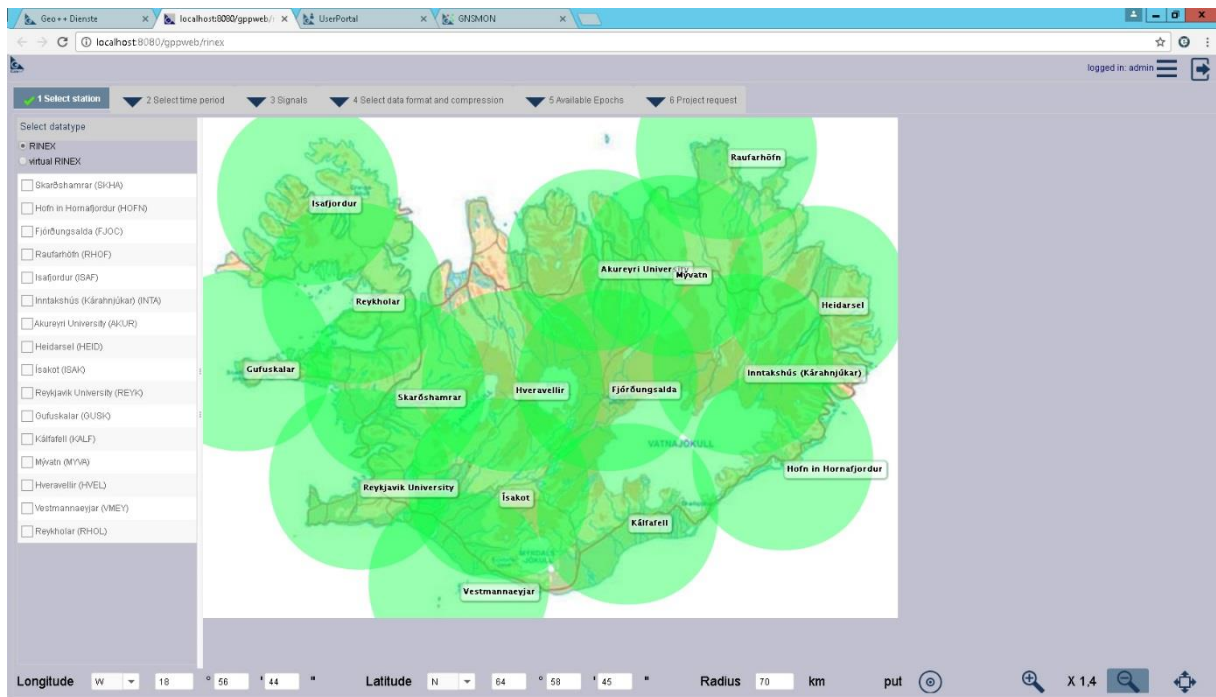
9. The GNSMON map symbols:

Symbol Colors in Map	
Reference Stations	
Fixed	
Unfixed	
No Data	
Without permission 'Map_Ref_Fix'	
Rovers	
Fixed	
Unfixed	

III. GNWEB service

Regular RINEX:

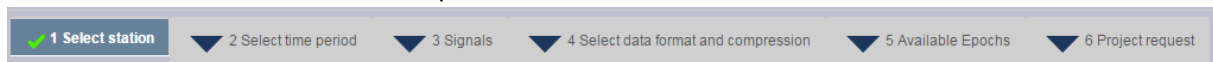
1. If you will select GNWEB service, you will get this view.



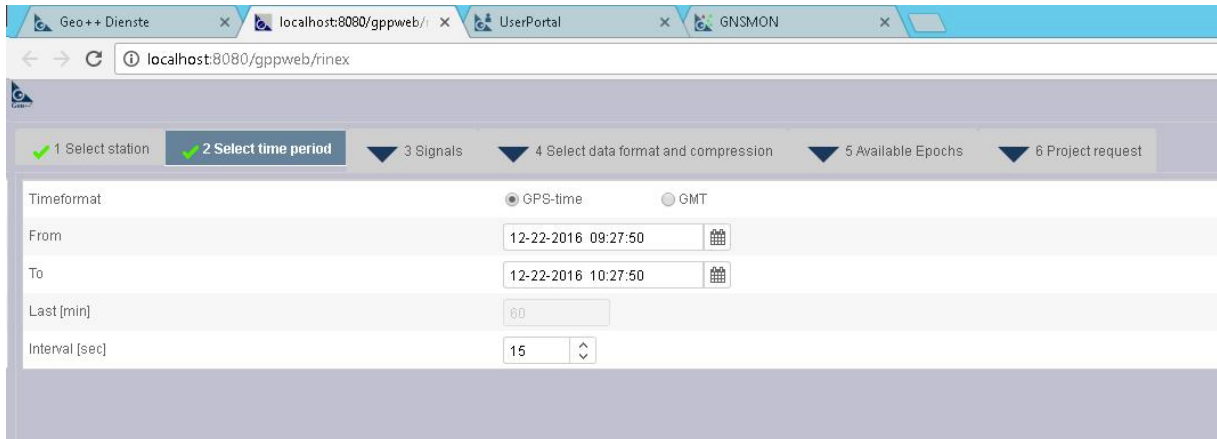
2. Before selecting a station choose "RINEX" or "Virtual RINEX". If you choose "RINEX", select the station. You can select not only one station but also few or even all. Selected stations will change the color.



3. There are 6 panels in GNWEB window:



4. After you have selected needed stations, please, select panel “2 Select time period” and choose time period for the selected station.



The user can change interval of observations. The smallest interval can be 1sec.

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.

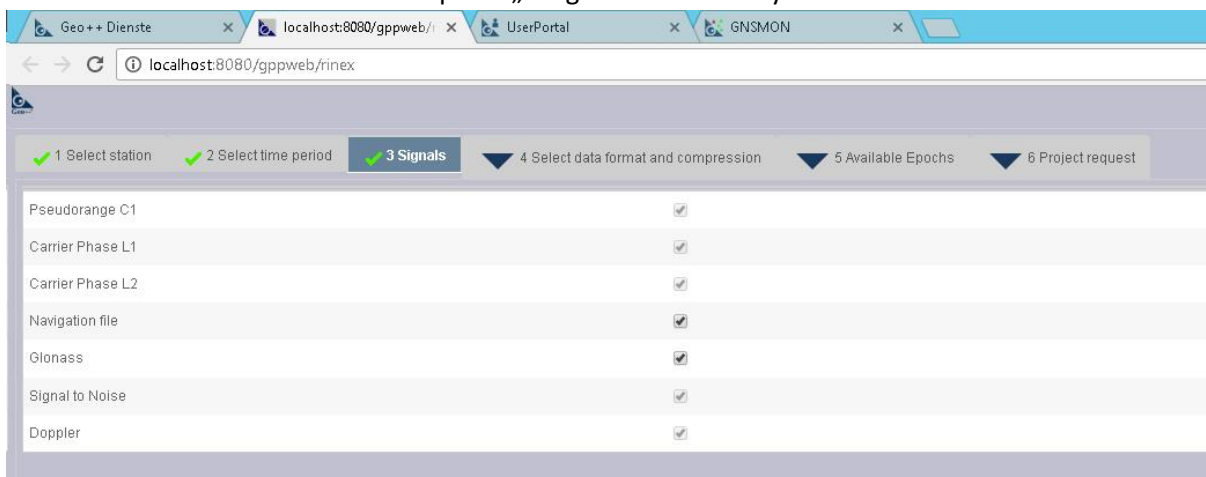
If you will select GPS +3:00 of period 14:00 to 18:00 you will get data that starts 11:00 to 15:00.

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 „calendar“ button.

5. Later select panel „3 Signals“ and make your choices.



User can choose to have or not to have navigation files. In the observation file user can expect pseudorange C1, carrier phase L1, carrier phase L2, GLONASS, signal to noise, Doppler if available.

6. Select panel „4 Select data format and compression“

The screenshot shows a web browser window with the URL `localhost:8080/gppweb/rinex`. The application has a navigation bar with six steps: 1 Select station, 2 Select time period, 3 Signals, 4 Select data format and compression (active), 5 Available Epochs, and 6 Project request. The main content area is divided into three sections:

- RINEX output format:** Two checkboxes are visible: ☐ compressed RINEX and ☐ Compact RINEX (Hatanaka).
- Data splitting:** Three radio buttons are visible: ☐ Session files, ☒ Day files, and ☐ Hour files.
- RINEX file suffix:** Two radio buttons are visible: ☐ *.rxo, *.rxn and ☒ *.16o, *.16n, ...

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.

7. Select panel „5 Available Epochs“ and push „Cart“ below the page.

The screenshot shows the '5 Available Epochs' panel in the Geo++ Dienste application. The panel includes a table of data formats and a 'Costs' table. A pink arrow points to a shopping cart icon at the bottom of the page.

ordered	Data format	from (GPS-time)	to (GPS-time)	rate
	RINEX			
	Pseudorange C1			
	Pseudorange C2			
	Carrier Phase L1			
	Carrier Phase L2	2016-12-22-09:27:50	2016-12-22-10:27:50	15.0
	Navigation file			
	Glonass null			

ID	name	from (GPS-time)	to (GPS-time)	availability	rate
FJOC	Fjódungsálda	2016-12-22-09:00:00	2016-12-22-10:00:00	99,9 %	1
FJOC	Fjódungsálda	2016-12-22-10:00:00	2016-12-22-11:00:00	0 %	0

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.

8. After you will push the „Cart“, you will get the window, where you will enter your project name. At the end push button „Buy“

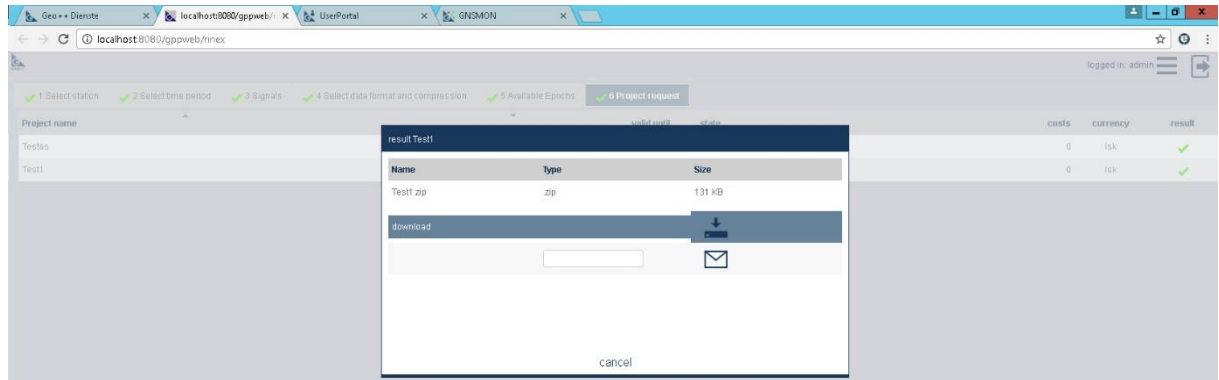
The screenshot shows the 'Buy data for project' dialog box in the Geo++ Dienste application. The dialog box has a 'projectname' field with 'Test1' entered and a 'buy' button.

9. Click green tick „results are ready“.

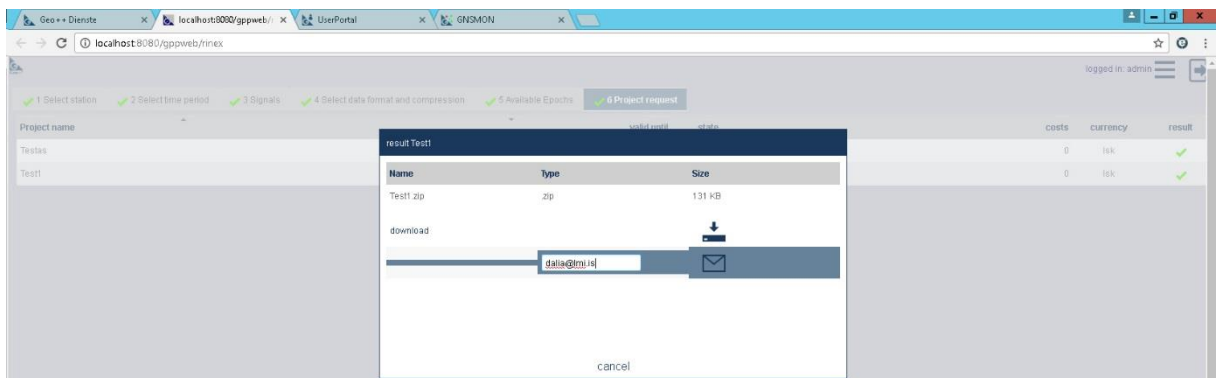
The screenshot shows the '6 Project request' panel in the Geo++ Dienste application. The panel displays a table of project requests with a green tick icon indicating that the results are ready.

Project name	valid until	state	costs	currency	result
Testas	2017-01-21-10:05:32	✓	0	Isk	✓
Test1	2017-01-21-10:28:20	✓	0	Isk	✓

10. Click „Download“ icon to directly download the project.



11. Click „Envelope“ icon to get the project data by email.



12. Log out using this „Door“ icon:



Virtual RINEX:

If you selected Virtual RINEX, this creates a custom Rinex file for a location specified by the user by combining observables from surrounding 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 click on the map or enter the coordinates at the bottom of the window and push „red triangle“ button. Coordinate system is WGS84.

