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I am aware that the database is not perfect. One example is that the structure of the data in each zip files is not homogeneous (names of directory vary). There are also some problems with some preview images that are cut off, although it will be fixed in the near future. Meanwhile, we ask for your indulgence and we hope that you will find the data useful for your researches.

A few hints for searching data in the SPIRIT database

url: <https://theia.cnes.fr/rocket/#/search?collection=Spirit&view=default>

Everybody can browse the database. If you want to download the data you need to register. See screen shot below for switching the language to English during registration (left panel)



The screenshot shows the 'GESTION DES UTILISATEURS THEIA' interface. On the left, under 'Connexion', there are links for 'Login', 'Récupération mot de passe', and 'Créer un compte'. A language dropdown menu is open, showing 'Français' and 'English' with a mouse cursor pointing to 'English'. On the right, under 'Création d'un compte', there are input fields for 'Email' (containing 'etienne.berthier@lego'), 'Mot de passe', 'Confirmation du mot de passe', 'Prénom', 'Nom', and 'Organisme'.

You can then download the data products individually or add them to your basket and then download them all.

Area of interest

It is possible to search by selecting a target area (e.g., rectangle or a polygon).

Another search option is by country (or geographic name). The system automatically identifies the language of your browser for the country names or geographic names. For example, on my machine I cannot search using "Greenland" but I need to search using "Groenland".

Period of interest

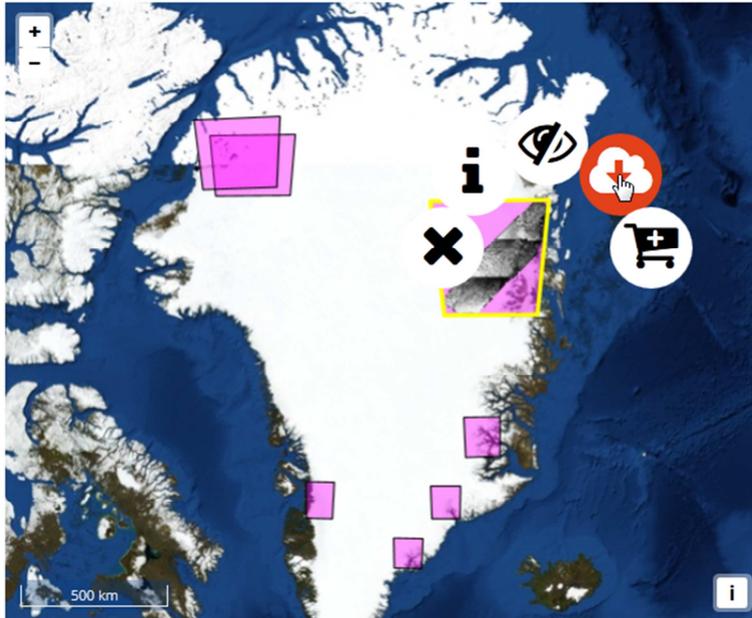
During the query A time frame can be defined such as

"entre Janvier 2007 et Décembre 2007". I cannot test in English on my "Frenchie" computer but it should be something like "Between January 2007 and December 2007"

For example if your are only interested in the post IPY products, you can search for "Since 2010"

One can merge the temporal and spatial queries. For example:
"Greenland between January and December 2014"

Example. The image below shows the result of the above query



Content of each data product

Each zip file includes

1. One 5-m SPOT5-HRS ortho-image (directory SPOTVIEW)
2. Two 40-m Digital Terrain Models computed using two sets of correlation parameters to fit with gentle (V1) or steeper (V2) slopes (directory SPOTDEM). Over the last 3-4 years, a new set of correlation parameters has been used for Antarctica (as described in Flament et al., TC, 2013: <http://www.the-cryosphere.net/8/673/2014/tc-8-673-2014.html>)
3. Two 40-m reliability masks that indicate the level of correlation and the location of data gaps in the DTM where elevation have been filled by interpolation (directory MASQUES_CC)

All files are in geotiff format and share the same projection.

Acknowledgments and Reference when using the data

"SPOT-5 DEMs and imagery were provided at no cost by the French Space Agency (CNES) through the SPIRIT International Polar Year project (Korona and others, 2009)".

Korona J., Berthier E., Bernard M., Rémy F. & Thouvenot E. SPIRIT. SPOT 5 stereoscopic survey of Polar Ice: Reference Images and Topographies during the fourth International Polar Year (2007-2009). ISPRS Journal of Photogrammetry & Remote Sensing, 64, 204-212, doi:

10.1016/j.isprsjprs.2008.10.005, 2009. (available at:

http://etienne.berthier.free.fr/download/Korona_et_al_ISPRS_2009.pdf)

Enjoy and keep us inform!