

April 2019

Welcome to the April edition of the SIBELIUS newsletter. Please contact Nick if you have any thoughts or questions about the content in this edition. See the contact details and other useful links below.

NAMEM satellite ground station upgrade

Dominic and Filippo had a very productive week in Ulaanbaatar, working with the IRIMHE / NAMEM team on various installation tasks.

New satellite receivers have been installed to allow the reception and processing of NOAA & MetOp AVHRR data and an upgrade for the reception and processing of VIIRS products from the new NOAA 20 satellite.

New servers have been installed to process and store the new satellite data and the new derived Level-2 products for MODIS and VIIRS.

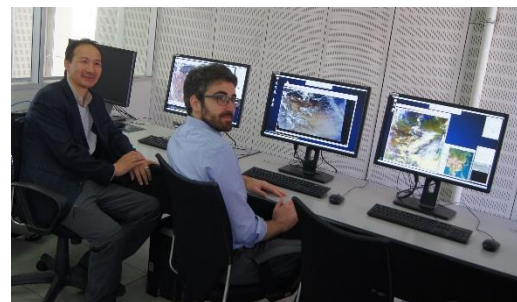


Elbeg showing the newly installed servers. Odbayar and Dominic are in the background.



Team photo.

For training purposes, Virtual Machines have been installed on the computers in the training room. This will facilitate in-place training at NAMEM using Jupyter Notebooks.



Elbeg and Filippo checking the new data. Further examples of the products, now being created automatically can be found [here](#).

Living Planet Symposium, Milan

Several members of the SIBELIUS team, from the UK and Mongolia, will be attending the Living Planet Symposium being held in Milan, Italy in May.



Three SIBELIUS papers will be presented: (1) discussing how satellite Earth Observation data can be used to meet the United Nations Sustainable Development Goals, within a

Mongolian context, (2) on monitoring of Mongolian Rangelands and (3) on monitoring Mongolian infrastructure such as gers, livestock shelters and tracks and roads.

The European Space Agency's Living Planet Symposium is one of the biggest Earth observation conferences in the world. The event attracts scientists from around the world and has a strong focus on Earth observation's role in building a sustainable future and a resilient society.

The SIBELIUS project will make extensive use of data from European Space Agency satellites, so this Symposium will provide an excellent forum for the team to discuss their results with other scientists and engineers, to ensure we are up to date, with the latest ideas algorithms and technology.

Sentinel-2 is the ESA satellite that will provide a large proportion of the SIBELIUS project's data. Sentinel-2 acquires optical imagery at high spatial resolution (10 m to 60 m) over land and coastal waters. The mission is a constellation with two twin satellites (Sentinel-2A and Sentinel-2B).

The colour cameras on the Sentinel-2 pair are designed to see features as small as 10m across, which for example, means that it is

possible to see features such as livestock shelters, gers and tracks and roads.

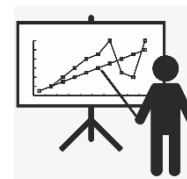
As well as being able to provide information about key parameters which are important for Mongolia, such as pasture levels, snow and drought, Sentinel-2 is also serving many other worldwide applications related to Earth's land and coastal water.



An artists impression of the Sentinel-2 satellite.

SIBELIUS Workshop 25-26 June

Another reminder! The SIBELIUS Workshop is scheduled for Tuesday 25 and Wednesday 26 June 2019 to be held in NAMEM.



We are hiring a simultaneous translator for this event, so hopefully all attendees will be able to actively participate.



Another picture from Batbuyan Batjav, young cows in Khisigundur, Bulgan province