## Opnunarávarp Jóns Atla Benediktssonar rektors Háskóla Íslands á fundi um Copernicus fjarkönnunargögn

"Copernicus training and information session"

## Grand hótel, 19. september 2018

Good morning everyone.

This meeting the "Copernicus training and information session" is about introducing to users and researchers various Copernicus services based on remote sensing using European satellite images.

Let me use this opportunity to discuss the value of remote sensing for Iceland. Remote sensing is indeed a very important research area for Iceland. In many ways Iceland is even ideal as a laboratory for remote sensing research and activities. It is a large country of continuously changing nature with very few inhabitants. The population density is only 3,5 inhabitants per square kilometer and vast areas, i.e., all the highlands, are completely uninhabited. It is obvious that there is no other way to map and monitor all the possible processes happening in this desolated area other than using satellite technology. Therefore, the high resolution satellite imagery acquired on a regular basis and made accessible at low cost or completely free of charge by the Copernicus programme is of great importance for us.

Iceland is a geologically young and very active country with many rapidly changing environmental factors. We have an active continental drift originating at a Neovolcanic zone across the country with regular earthquakes and volcanic eruptions frequently changing the appearance of the country that can be monitored by remote sensing.

Disaster management and destruction minimization in Iceland is also to a large extent based on remote sensing. But we have other issues too, including melting glaciers, continuously changing glacier rivers and geothermal areas on which our non-polluting and renewable energy exploitation is based. These sources of energy have to be monitored and mapped at regular intervals. Again this is not possible without remote sensing techniques.

Global warming is changing the vegetation cover of Iceland. The country is gradually getting greener which also means changes in agriculture. Here remote sensing can and will provide valuable information.

Iceland onshore is one thing, another thing is the ocean around us. There we have a much larger economic zone that we are obliged to monitor, i.e., detect pollution, monitor temperature changes on the ocean's surface and in the air, keep an eye on strong winds and hurricanes, track sea ice and so on.

This leads us to the global context and globally changing features. Iceland might be a tiny spot on the Earth but nevertheless an important part as many environmental changes that happen here are indicative of what will happen elsewhere in the world. Surveillance of these changes will be and can only be based on regular and frequent satellite data acquisition with an easy access.

To conlude, I wish you a fruitful and informative meeting and I am sure that it will contribute to further use of remote sensing data and be of benefit for remote sensing research here in Iceland.