

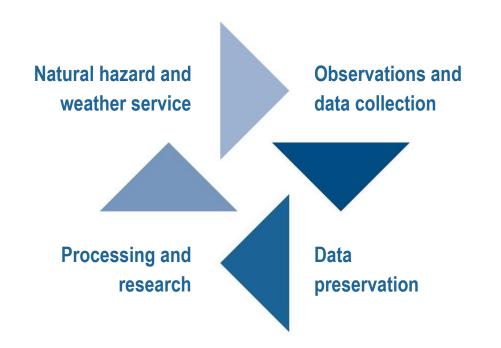
Conservative and progressive forecasting, all in one.

Elín Björk Jónasdóttir – elin@vedur.is Group leader of weather services

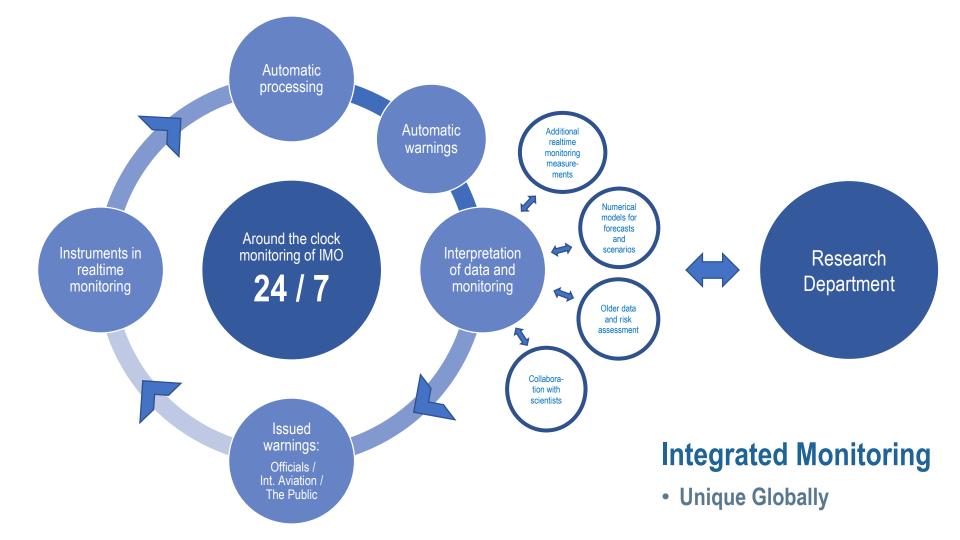
Using ECMWF Forecasts, June 2019





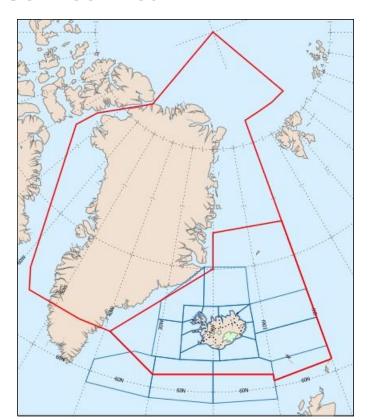






#### **An Extensive Service Area**

- ➤ IMO monitors and issues forecasts for land and sea, 200 NM economical zone, as well as aviation weather services for Reykjavík CTA and Reykjavík FIR
- ➤ IMO is a "State Volcano Observatory" nominated by the Icelandic Transport Authority and The International Civil Aviation Organization (ICAO)



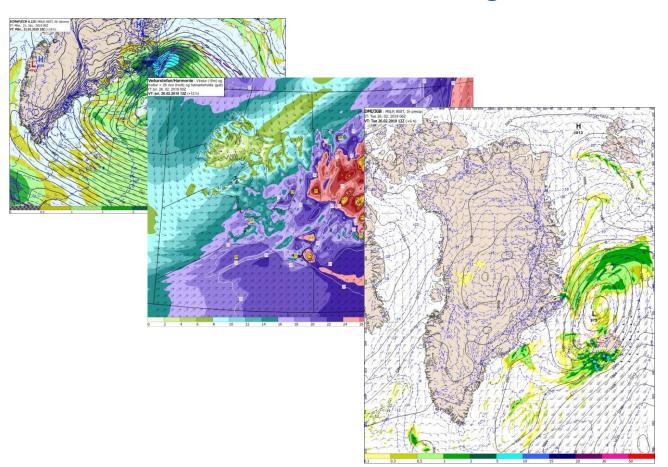


#### **Conservative forecasts**

- > Shortage of staff has been ongoing for decades
- Text forecasts still the main product, for 11 areas of Iceland for the next 48 hours, long term forecast (up to 7 days), overview, media content, marine forecasts for the sea and deep sea banks, remarks for specific weather
- > TAF and SIGMET production, Low level flight conditions, significant weather charts,
- Sea ice maps and monitoring (seasonal)
- ➤ TAFs 4 international airports and 9 domestic airports

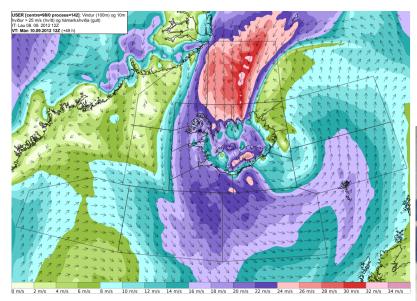


## **Conservative forecasting**





## **High impact weather**

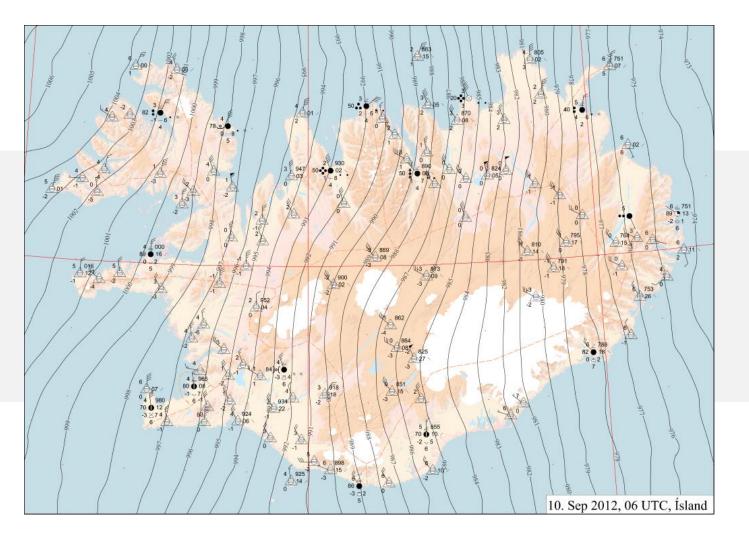






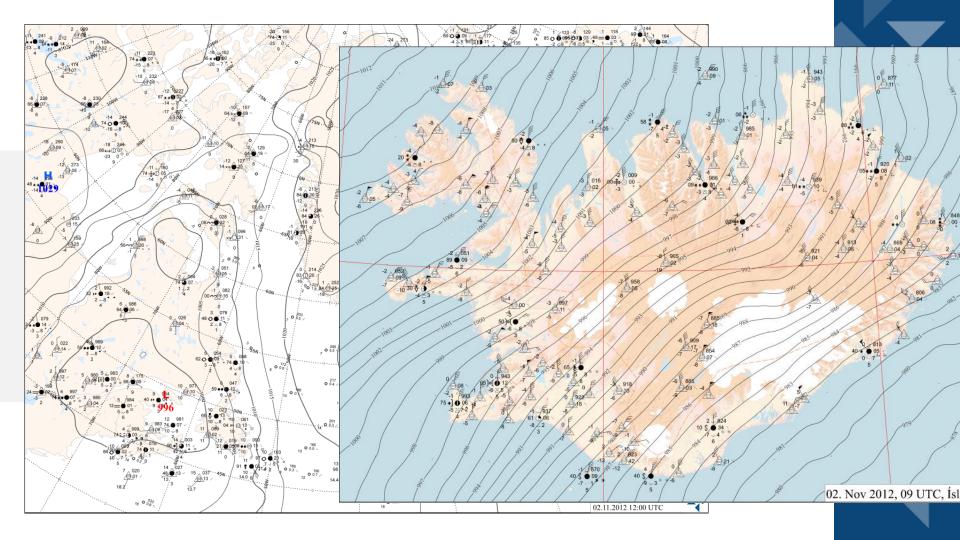










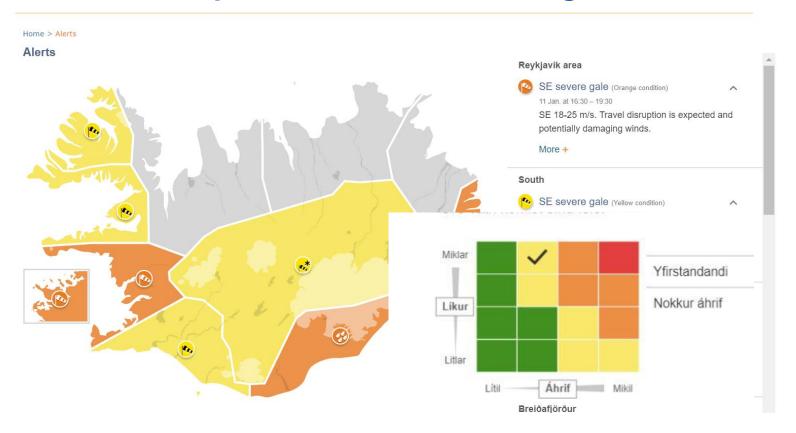


## **Progressive warnings**

- ➤ With the high impact weather events in 2012 the first drafts of a new colour coded warning system was established.
- ➤ By the time the system went into development WMO documents 1150 and 1129 regarding impact based warning systems had been released and the system was based on an impact matrix, with probability on one axis and impact on the other.
- ➤ A new system with 5 day warnings, probability and impact made for a fairly difficult introductory phase.



## Impact oriented forecasting



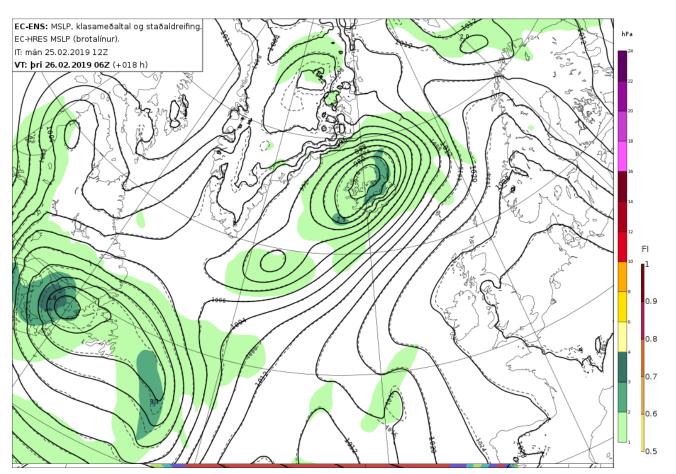


### **Ensamble foreacsts**

- Even though Icelandic forecasters go to training courses at the ECMWF often the knowledge stops with them when they come home and the traditional methods of forecasting continues.
- ➤ With the new warning system each forecaster has gradually started to use products from the ENS
- > Started with the EFI and SOT products
- ➤ Severe jumps in the deterministic forecast forced us to look at the spread

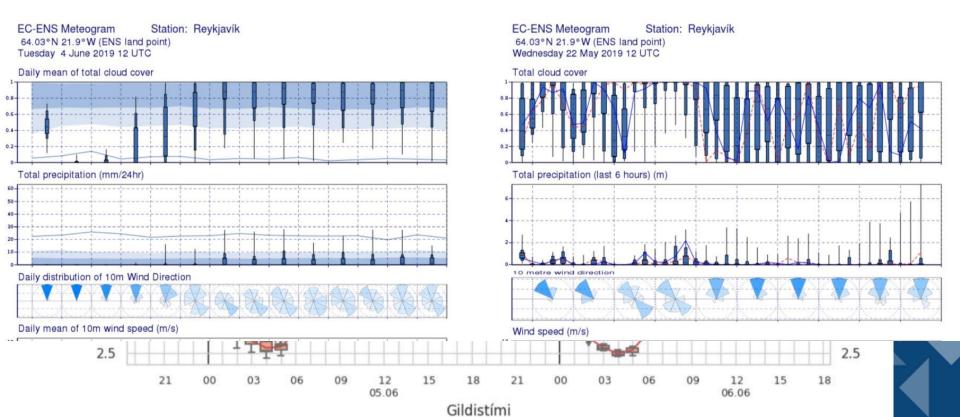


## **Ensamble forecasts**

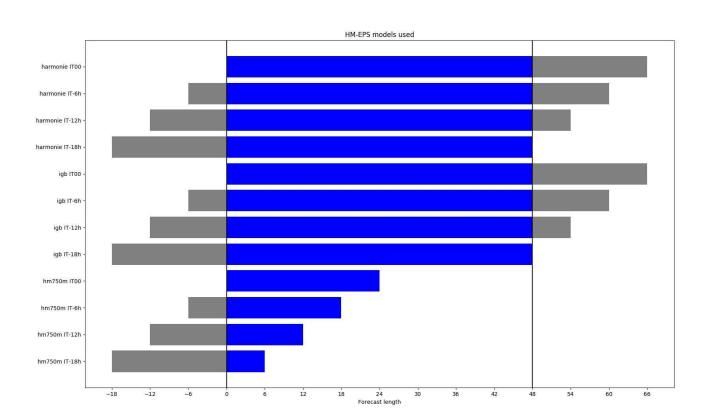




#### Spárit Spárit



## **Ensamble forecasts**

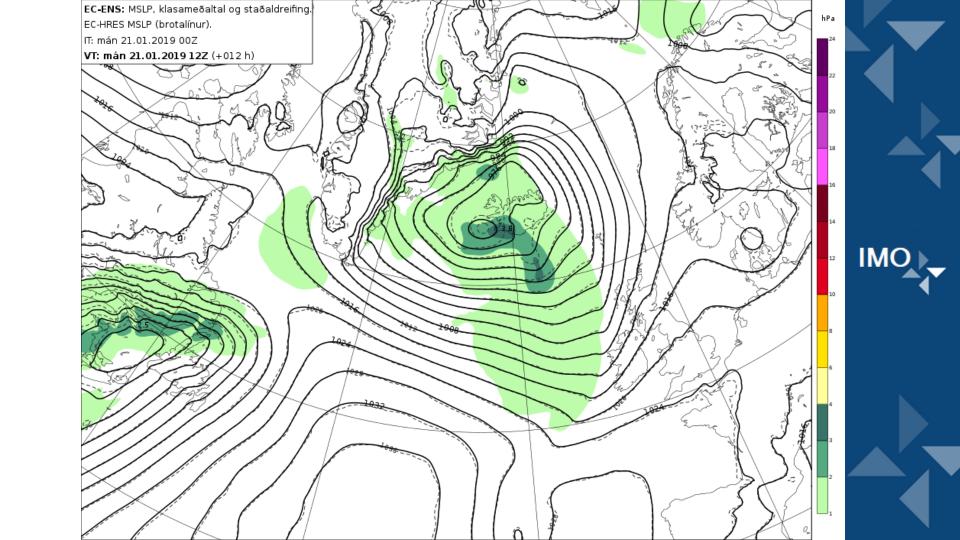




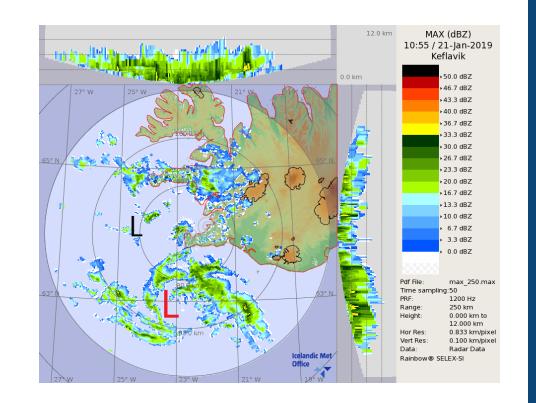
#### **Foreacst busts**

"The centre of the low pressure system is now visible 160 km SE of the forecasted position. The centre of the blizzard will therefore be to the south and east of Iceland."





# Thank you for your attention



**IMO**