

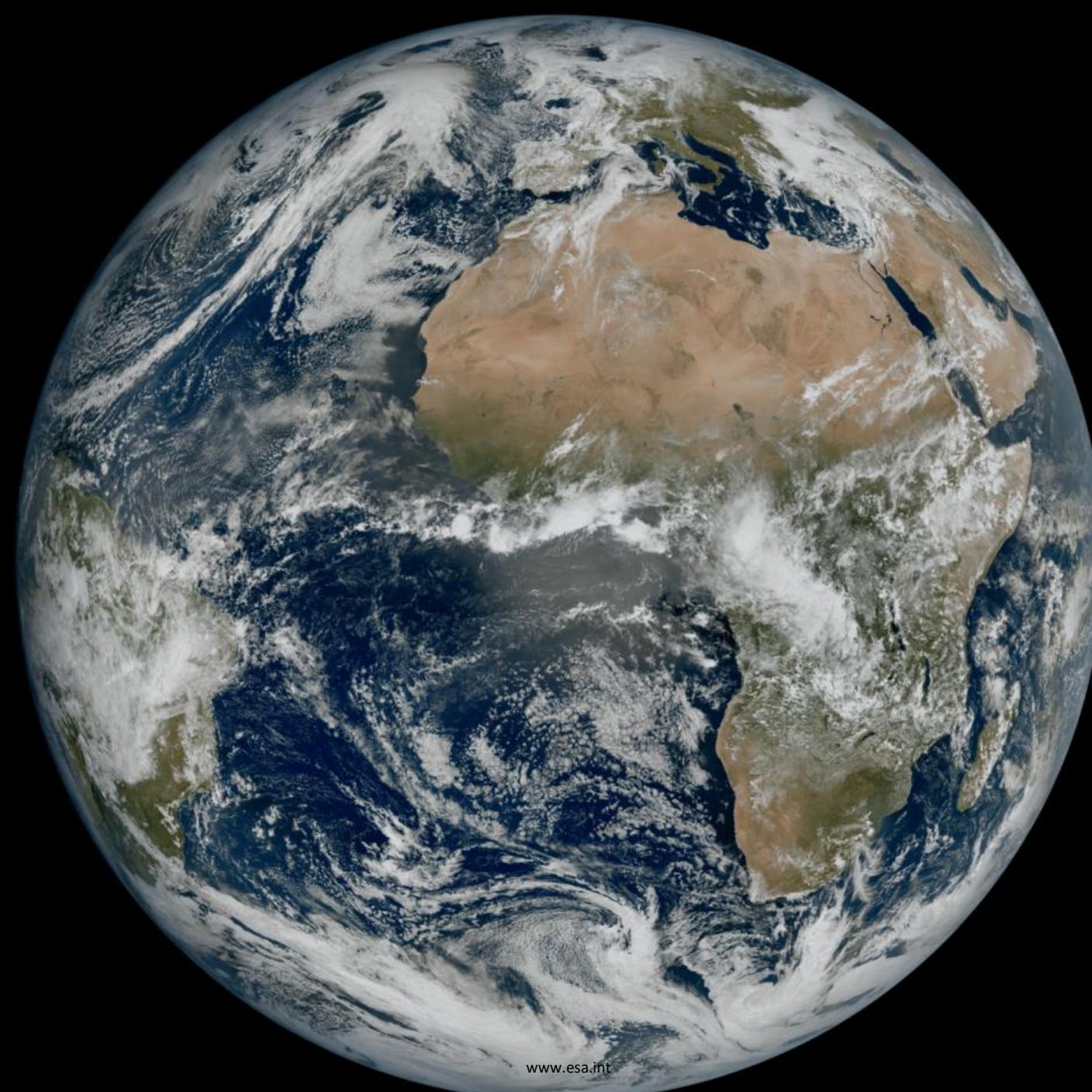
# Veðurforsagnir í væntu

Bárður A. Niclasen, deildarleiðari

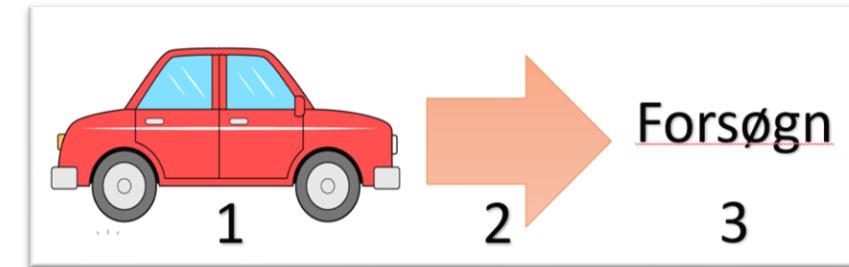
Veðurstova Føroya

# Innihald

- Grundleggjandi um veðurforsagnir
- Veðurstova Føroya í dag
- Hvat vit miðja móti næstu tíðina ... og uppá sikt



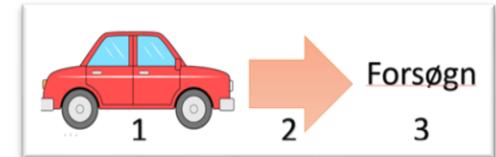
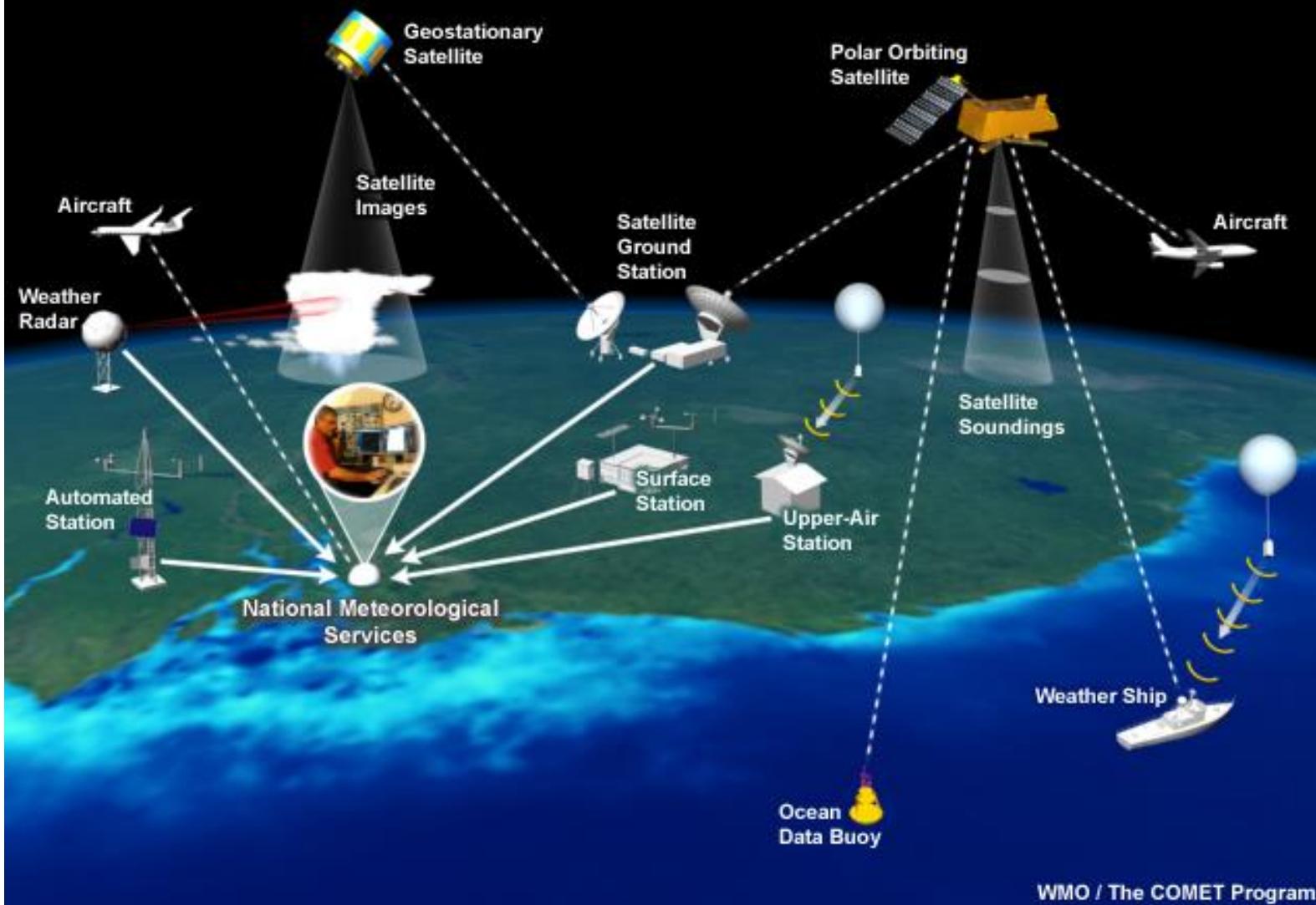
# At spáa um veðrið:



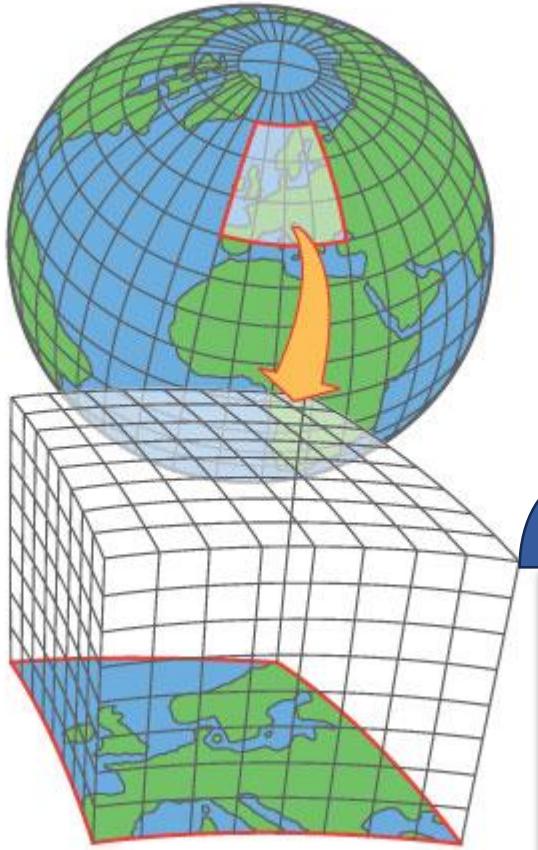
- 1: Byrjanarstóðan?
- 2: Líkningar/model
- 3: Framtíðin?

# 1.stig: byrjanarstøðan

WMO Global Observing System

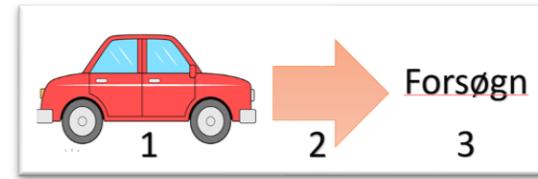


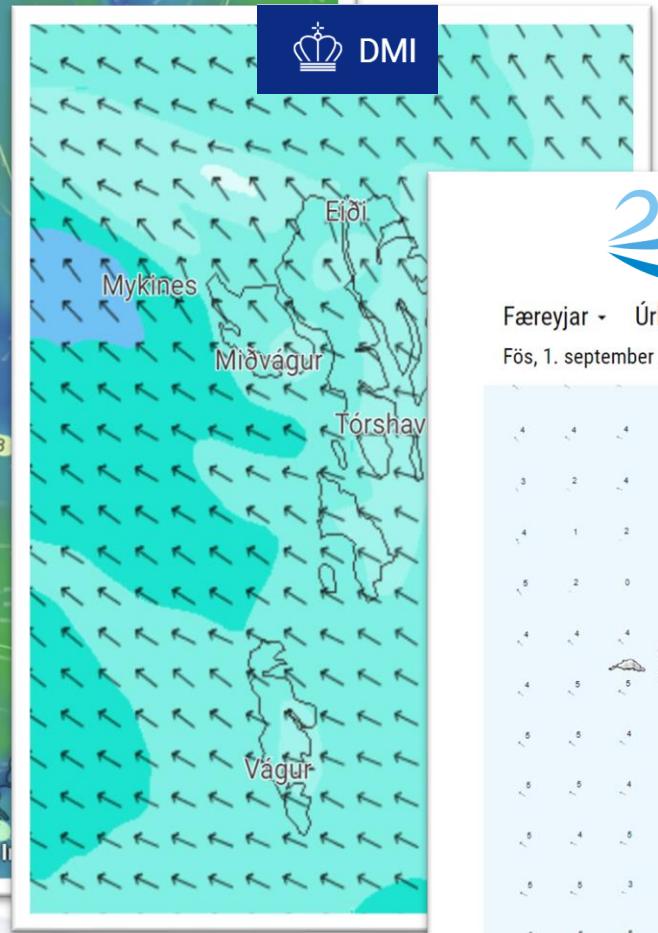
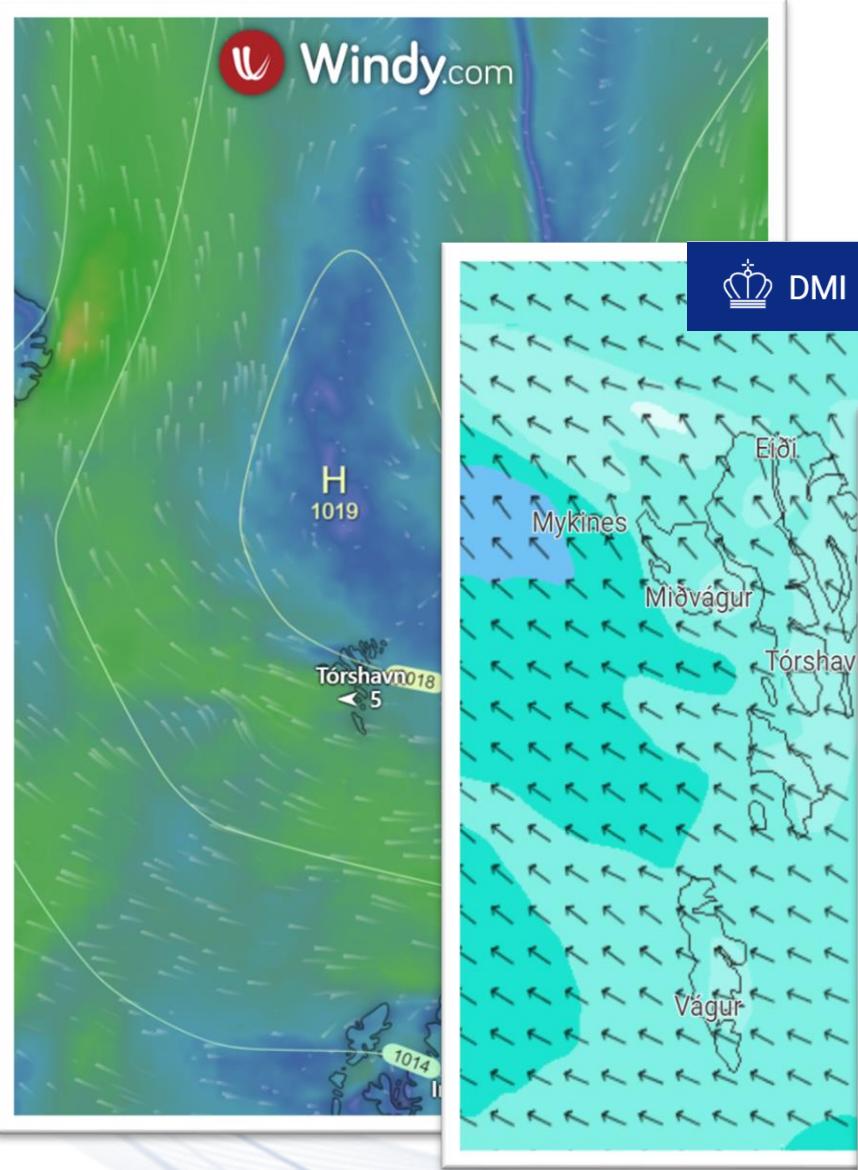
# 2. stig: rokna



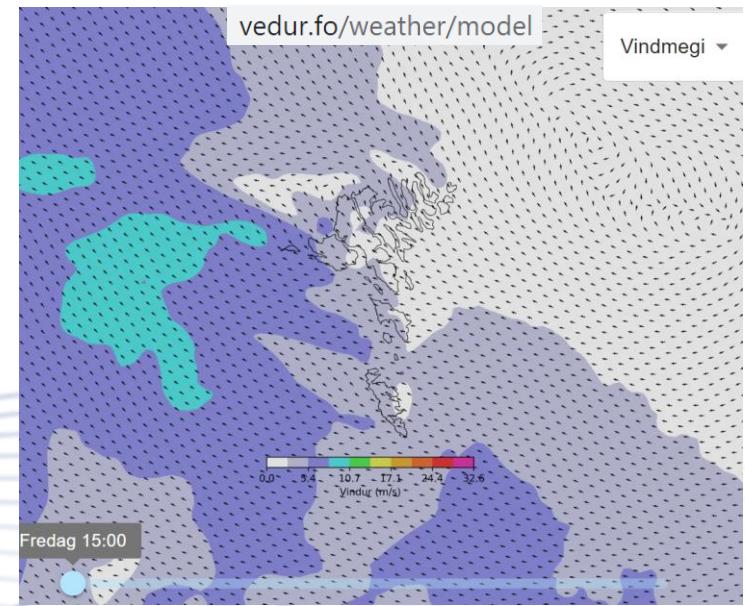
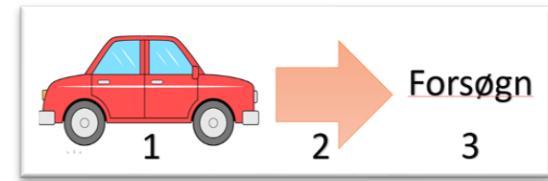
## Navier Stokes Equation with Gravity and Coriolis

$$\begin{aligned} \text{Acceleration} & \quad \downarrow & \text{Coriolis} & \quad \downarrow & \text{Buoyancy} & \quad \downarrow \\ \frac{\partial \vec{u}}{\partial t} + \vec{u} \cdot \nabla \vec{u} & + \vec{f} \times \vec{u} = - \frac{1}{\rho_0} \nabla p - \bar{b} + \nu \nabla^2 \vec{u} \\ \frac{\partial u_i}{\partial t} + u_j \frac{\partial u_i}{\partial x_j} & + \varepsilon_{ijk} f_j u_k = - \frac{1}{\rho_0} \frac{\partial p}{\partial x_i} - b_i + \nu \frac{\partial^2}{\partial x_i^2} u_i \\ f_i = 2\Omega \sin(\theta) \delta_{i3} & \quad 2\Omega = 1.5 \times 10^{-4} \text{ sec}^{-1}; \theta \text{ Latitude} \\ b_i = \frac{\Delta \rho}{\rho_0} g \delta_{i3} & \\ \nabla = \frac{\partial}{\partial x_i} & \quad \nabla^2 = \frac{\partial^2}{\partial x_i^2} \end{aligned}$$





# 3. stig: forsøgnin



VØRN

**Bárður A. Niclasen**

Deildarleiðari, PhD

+298 231320

bardurn@vorn.fo

**Andrias Klein  
Gregoriussen**

Veðurfrøðingur, MSc

+298 231321

andriaskg@vorn.fo

**Turið Laksá**

Veðurfrøðingur, MSc - í barsilsfarloyvi

+298 231322

turidl@vorn.fo

**Hanus Kjølbro**Veðurfrøðingur,  
Skipsførari

+298 231323

hanusk@vorn.fo

**Rúnar Alix  
Rasmussen**

Veðurfrøðingur, MSc

+298 231324

runar.alix.rasmussen@vorn.

**Djóni Strømsten**

KT-mennari, BSc

+298 231326

dfs@vorn.fo

**Turið Poulsen**

Veðurfrøðingur, PhD

+298 231328

turidp@vorn.fo

# Hvør eru vit?





# Hvar eru vit

VÍÐ VORN  
VÍÐ FISKVARDEGI FØRÐING  
VÍÐ KARCI  
VÍÐ EINARI  
VÍÐ TALDRIÐI  
**VÍÐ VERKSTADAN**

<b>Bárður A. Nicllsen</b> Deldarleðari, PhD +298 231320 bardurn@vorn.fo	<b>Andrias Klein Gregoriusen</b> Veðurfræðingur, MSc +298 231321 andriask@vorn.fo	<b>Turíð Laksá</b> Veðurfræðingur, MSc - I barsilisfarøyi +298 231322 turidi@vorn.fo	<b>Hanus Kjelbro</b> Veðurfræðingur, Skipsfari +298 231323 hanusk@vorn.fo
<b>Rúnar Alix Rasmussen</b> Veðurfræðingur, MSc +298 231324 runar.alix.rasmussen@vorn.	<b>Djóni Stromsten</b> Kf-mennari, BSc +298 231326 dfs@vorn.fo	<b>Turíð Poulsen</b> Veðurfræðingur +298 231328 turidp@vorn.fo	





# Hvat gera vit

vedur.fo

Heim Tiðindi

15<sup>ee</sup> 10° ▾ 2% 16<sup>ee</sup> 11° ▾ 3% 17<sup>ee</sup> 11° ▾ 3% 18<sup>ee</sup> 11° ▾ 3% 19<sup>ee</sup> 10° ▾ 3% 20<sup>ee</sup> 10° ▾ 2% 21<sup>ee</sup> 9° ▾ 2%

01. sep.

Sólarris: 06:15 | Sólsetur: 20:37

Forsagnir í somstanvi (vð DMI)

24 tima forsøgn 5 daga forsøgn Havforsøgn

Fríggjadagur, 1. september 2023

Forsøgn galdandi til á middegri leygardagin, skrivað klokkan 07.05 UTC.

Vindávaring er fyri Ytrabanka og Íslandsryggin

Eitt hátrýst, um 1015 hPa, mennist yvir Norskahavi. Eitt veikt luftrák er í dag eystanetfir, seinni av landsynningi og so sunnan.

Ytrabanki:

Eystan 6 til 11 m/s. í kvøld landsynningar 6 til 11 m/s. í nátt og fyrapartin í morgin sunnan 11 til 16 m/s. Hampulig ella gott sýni.

Munkagrunnur:

Eystan 3 til 8 m/s. í kvøld og í nátt landsynningar og sunnan 3 til 8 m/s. Fyrapartin í morgin í vestara parti sunnan 7 til 12 m/s; í eystara parti sunnan 5 til 10 m/s. Gott sýni.

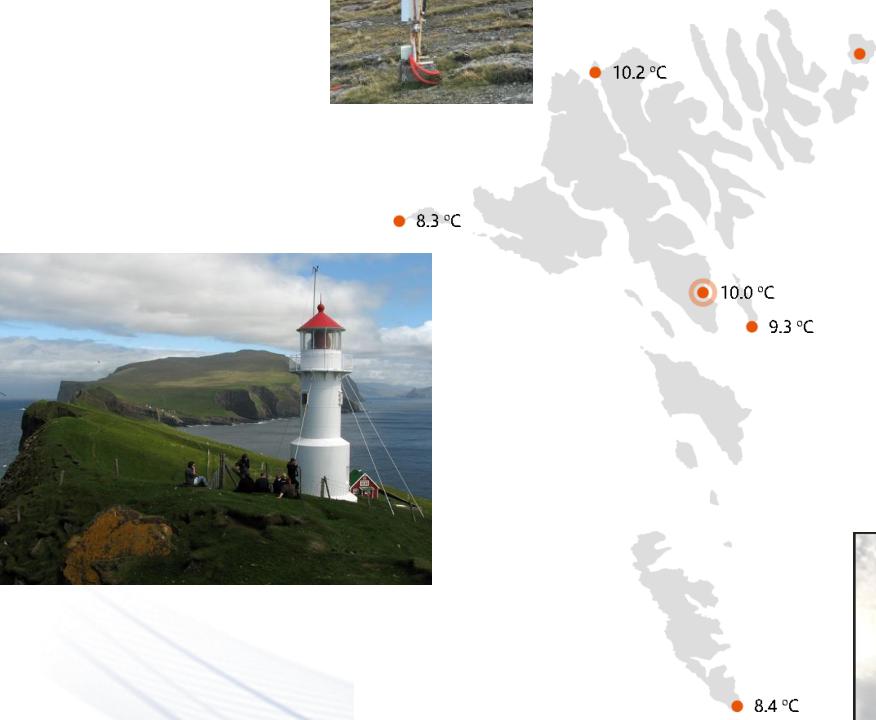
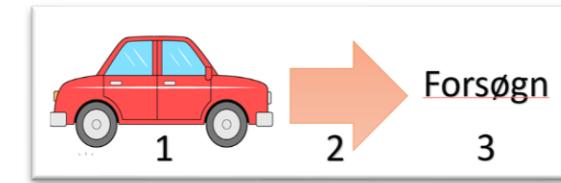
Fugloyarbanki:

Ymsar ættir minni enn 6 m/s. í kvøld og í nátt í vestara parti sunnan 4 til 9 m/s; í eystara parti sunnan minni enn 6 m/s. Fyrapartin í morgin sunnan 8 til 13 m/s. Gott sýni.

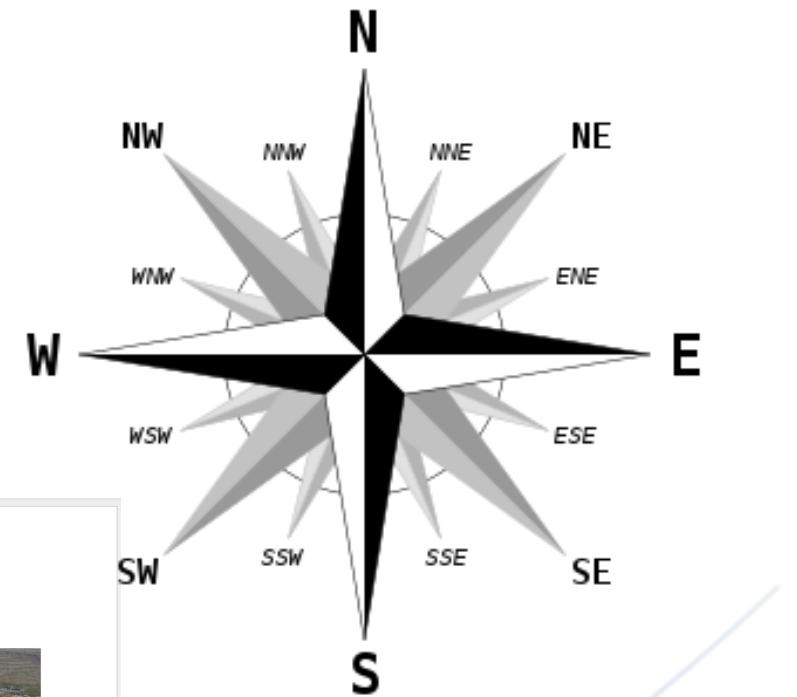
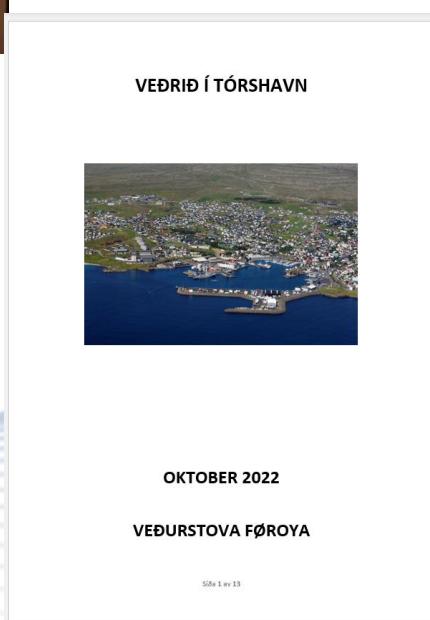
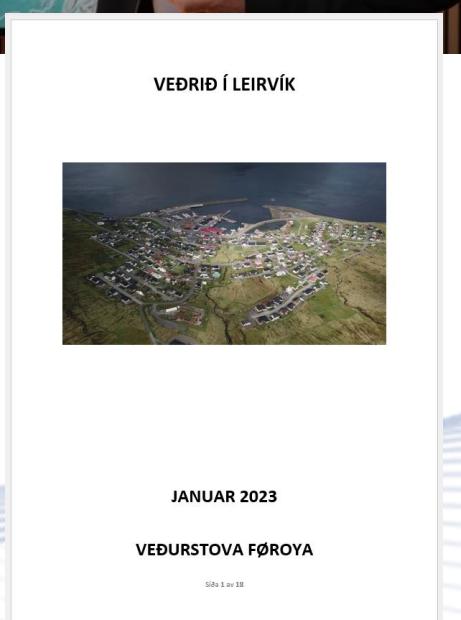
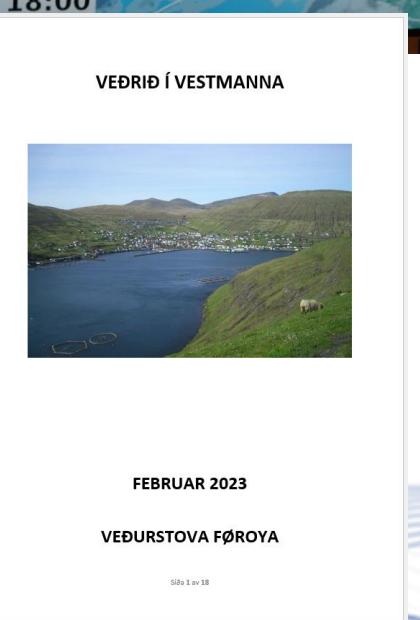
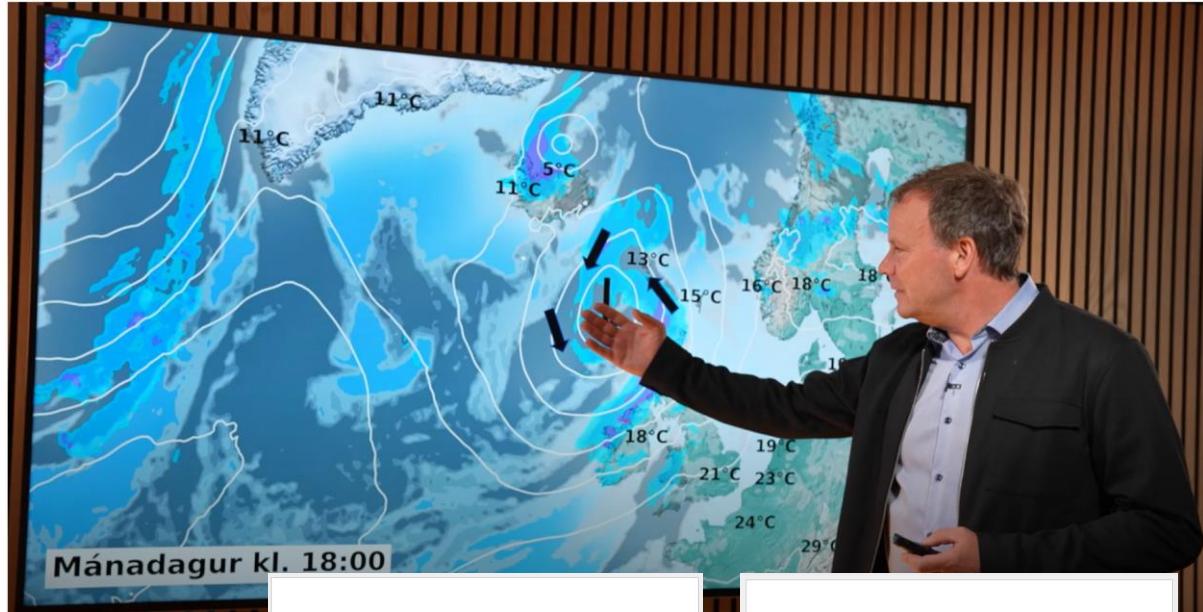
Íslandsryggi:

Millum eystan og sunnan 3 til 8 m/s. í kvøld og frameftir sunnan 13 til 18 m/s. Hampulig ella vánaligt sýni.

# Hvat máta vit



# Verkætlan: Staðarveður



# Verkætlæn: Hagtøl/klima



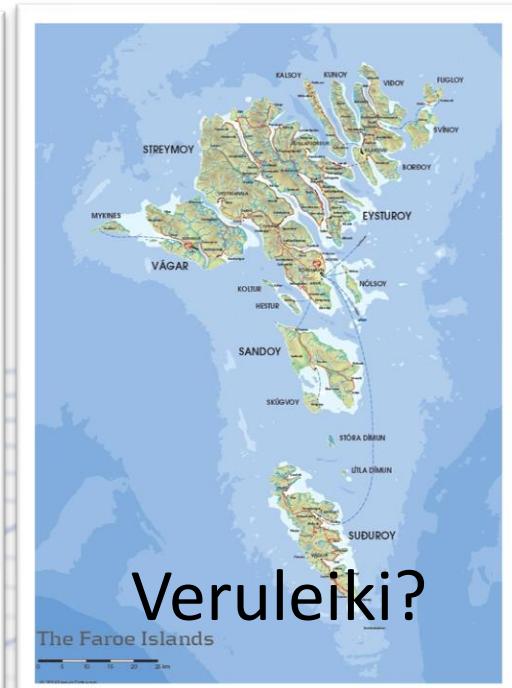
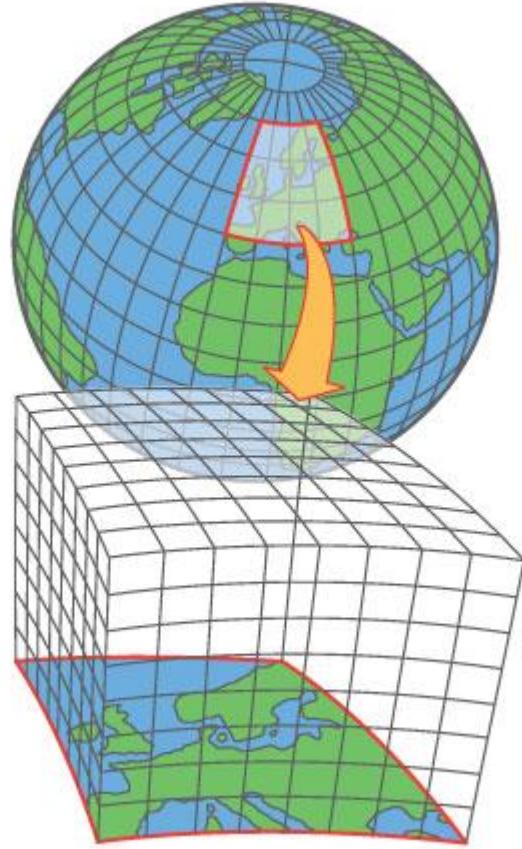
**THORSHAVN.** (oprettet som hovedstation 73 12.9.72)

F. S. [28.11.51]

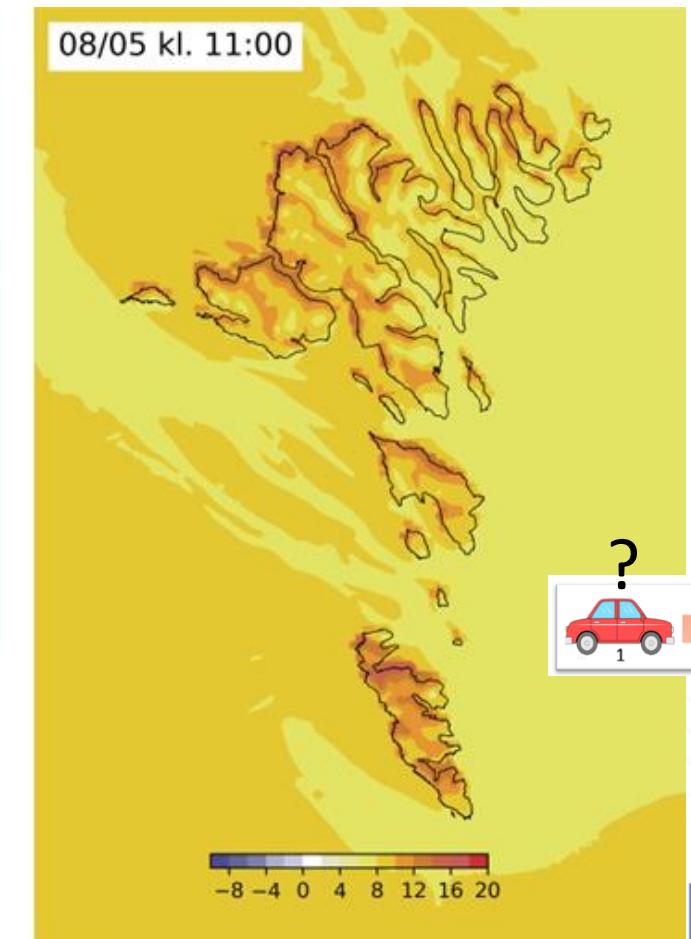
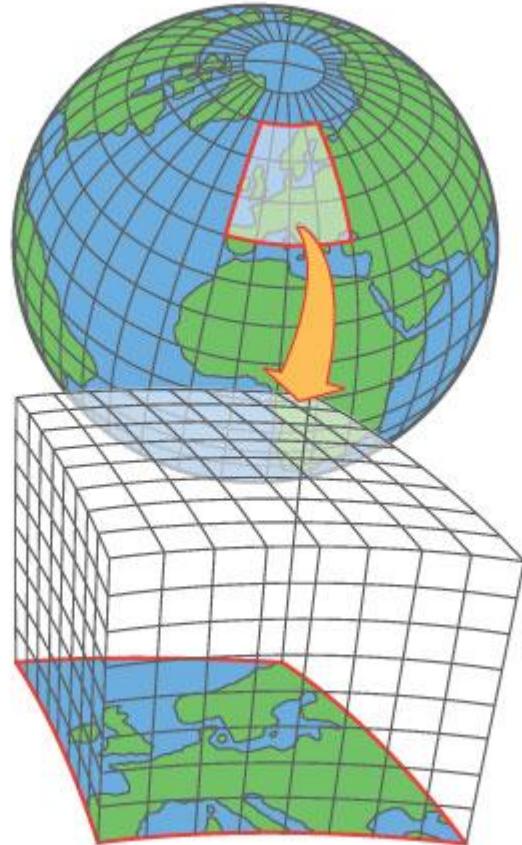
1872. Oktobre.	Barometer, red. t. 0° C. Millimeter.			Thermometer. Celsius.						Damptyrk. Tension de la vapeur. Millimeter.			Fugtighedsgrad. Humidité de l'air. pCt.			Nedbor. Hent. d. pl. Millim.			Vindens Retning og Styrke. Direction et force du vent. Skala: 0—6.			Skydækket. Quant. de nuages. Skala: 0—4.			Vejrliget*. Etat du temps. Skala: 0—4.			Havets Varme. Temperatur de la mer. Celsius.		
	8.	2.	9.	8.	2.	9.	Minimi- num.	Maxi- num.	8.	2.	9.	obs.	2.	9.	8.	2.	9.	8.	2.	9.	8.	2.	9.	8.	2.	9.	8.	2.	9.	
	a. m.	p. m.	p. m.	a. m.	p. m.	p. m.	a. m.	p. m.	a. m.	p. m.	p. m.	p. m.	a. m.	p. m.	a. m.	p. m.	a. m.	p. m.	a. m.	p. m.	a. m.	p. m.	a. m.	p. m.	a. m.	p. m.	a. m.	p. m.		
1	748.3	744.1	738.4	5.2	7.6	7.0			5.6	6.0	6.3	84	77	84	2.6	NNO	2	NO	2	N	2-3	3	3	4	R	R	9.7			
2	36.1	36.5	36.4	5.9	5.8	5.4			5.7	5.6	5.1	83	82	87	21.3	NO	2-3	NO	4-5	4	4	4	R	R	9.2					
3	35.0	36.6	47.8	3.2	2.0	1.6			5.2	4.5	4.6	90	85	89	26.8	N	4-5	N	4-5	4	4	4	R	Sl	Sl	8.6				
4	55.8	62.0	66.3	1.4	3.7	2.4			4.0	3.0	3.5	78	51	65	9.2	N	3-4	N	2-3	NV	1	3	3	Slb	Nl	8.6				
5	62.4	58.7	53.8	5.6	6.9	8.7			5.0	5.2	7.5	74	70	89	3.4	S	2-3	SV	2-3	R	R	R	R	R	8.1					
6	55.3	53.8	45.8	10.2	10.9	11.0			8.3	7.2	9.2	90	74	94	2.5	SV	1	S	1	SO	2-3	3	3	4	R	R	9.7			
7	47.0	47.6	46.3	9.4	9.3	8.8			6.5	6.3	6.2	74	72	73	8.1	S	3	SSV	3	3	3	3	Rb	Rb	Nl	9.2				
8	44.2	43.3	40.6	7.6	7.8	5.6			6.1	5.9	5.8	79	75	85	3.0	SV	2	SSV	1-2	SV	1	3	3	R, Hb	Rb	9.4				
9	39.8	37.6	39.4	6.6	8.8	6.8			6.0	7.3	6.1	83	87	82	2.1	S	1	S	1	VNV	1	2	3	Rb	Rb	9.4				
10	42.9	44.0	46.3	4.6	7.0	4.6			5.3	5.3	5.3	84	71	84	1.8	NO	1	N	1	N	1	4	2	3	R	R	9.2			
11	49.2	50.6	52.5	3.5	6.5	4.5			5.0	6.3	4.9	85	87	78	1.1	N	1	N	1	NNO	1-2	1	3	1	R	Rb	8.6			
12	55.1	55.9	55.4	4.9	5.5	4.2			5.4	5.4	4.5	82	80	73	0.7	N	1-2	N	1	NV	1	3	3	1	Rb	Rb	8.2			
13	58.6	58.8	57.3	5.0	6.8	2.8			4.7	4.5	4.8	72	61	86	1.1	S	1	SV	1	2	1	2	T	R	8.6					
14	53.8	51.3	49.1	8.0	9.0	9.2			7.1	8.1	8.2	89	95	95	4.1	S	1-2	S	1-2	SSV	1-2	4	4	4	R	R	8.6			
15	49.4	49.8	49.6	6.6	7.6	3.2			6.0	5.7	5.2	83	73	90	12.1	V	1	VSV	1	O	3	3	1	Rb	Rb	8.9				
16	49.7	52.5	58.4	6.6	7.4	4.9			6.5	6.4	5.2	85	83	79	6.8	N	1	NNO	1	N	1	3	3	3	R	R	8.6			
17	62.8	62.5	60.9	3.5	4.2	0.2			4.4	4.4	4.2	75	71	90	0.5	NNO	1	NNO	1	NNO	1	1	2	2	Rb	Rb	8.2			
18	57.6	56.7	55.0	6.0	7.7	7.6			5.7	6.6	6.1	85	83	79	0.1	SV	1	SV	1	SSV	1	3	3	4	Rb	Rb	8.9			
19	53.7	49.7	47.5	8.4	9.5	8.5			8.0	8.6	7.9	97	98	96	2.7	O	1	SO	1	SSO	1	4	4	3	T	R	9.2			
20	41.7	45.8	46.9	8.4	7.6	8.0			7.1	5.7	6.3	87	73	79	3.2	SSV	3	SV	3	SV	3	2	3	3	Rb	Rb	8.6			
21	49.7	50.7	51.5	7.3	8.1	3.5			5.8	6.3	5.4	76	78	92	3.7	SSV	2	SV	1	O	2	1	1	1	Rb	Rb	9.4			
22	51.1	50.2	48.2	6.4	6.0	5.3			5.7	5.9	5.5	79	85	83	0.9	NNO	1	NNO	1	NNO	2	4	4	4	R	R	8.6			
23	45.5	43.8	41.6	5.2	6.6	4.3			5.5	5.7	5.5	83	78	89	12.4	N	1	NV	1	NV	1	3	4	2	Rb	Rb	8.6			
24	41.7	43.4	45.3	8.3	9.0	8.8			6.9	7.5	7.6	86	88	91	1.5	OSO	2	OSO	2	OSO	2	4	4	4	Rb	Rb	8.6			
25	49.0	49.9	50.9	9.2	9.6	9.2			8.3	8.2	8.0	96	92	70	0.0	OSO	2	OSO	2	OSO	2	4	4	4	Rb	Rb	8.1			
26	51.7	50.5	49.9	8.9	9.0	8.6			8.2	8.2	7.9	96	96	95	20.8	O	2	OSO	2	OSO	1	4	4	4	R	R	8.9			
27	50.2	51.4	50.7	9.0	9.4	8.8			8.1	8.3	6.8	95	95	81	9.6	S	1	SSO	1	SO	1	4	4	4	R	R	9.2			
28	51.6	50.7	48.2	8.2	9.6	8.8			7.7	8.0	8.0	94	89	95	0.3	S	1	SSO	1	SO	1	3	3	4	Rb	Rb	9.7			
29	43.5	36.8	26.9	7.8	8.0	6.6			6.9	6.4	5.7	88	81	78	0.1	S	2	S	3	SSV	3-4	3	4	4	R	R	9.2			
30	14.8	12.1	14.4	8.2	8.0	7.4			6.5	6.9	6.6	81	86	86	10.3	SSV	3-4	SV	3-4	VSV	3-3	3	3	3	Rb	Rb	8.6			
31	25.9	29.8	36.2	4.8	7.0	5.2			5.9	6.4	5.4	92	85	81	7.7	NV	2-3	NV	2	N	1	3	3	3	Rb	Rb	9.4			
M.																														

\*) R, r = Regn; S, s = Sne; -b = Bygger; Sl = Slud; T, t = Taage; H, h = Hagel; Td = Torden; L = Lyn; Nl = Nordlys.

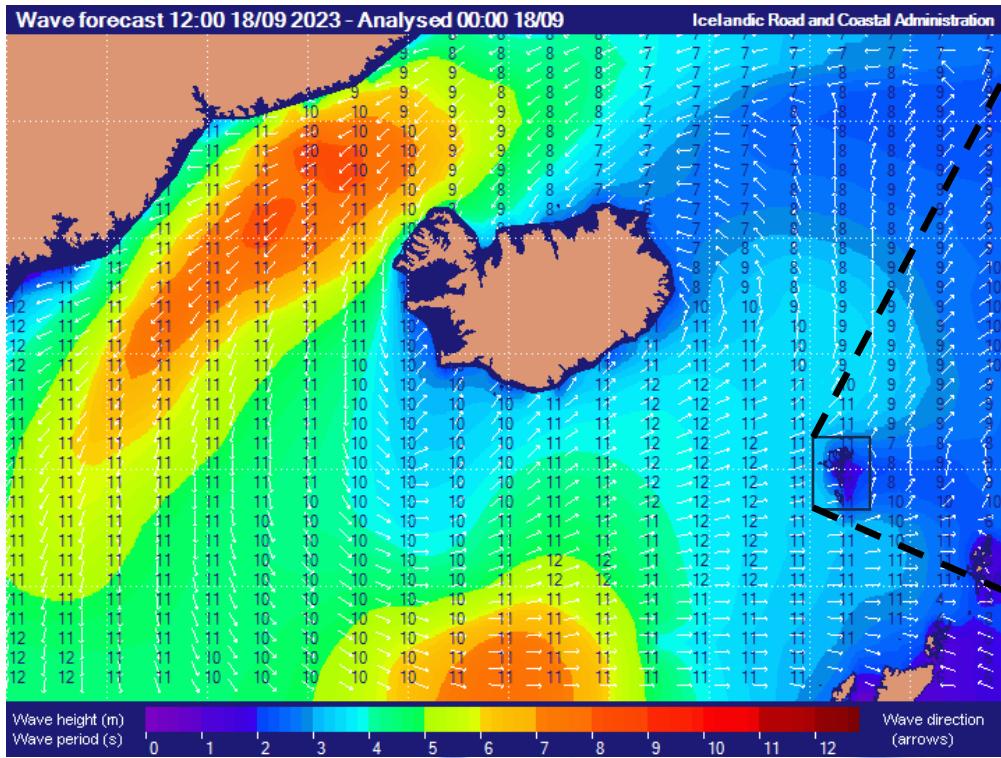
# Verkætlan: Lokalt veðurmodel



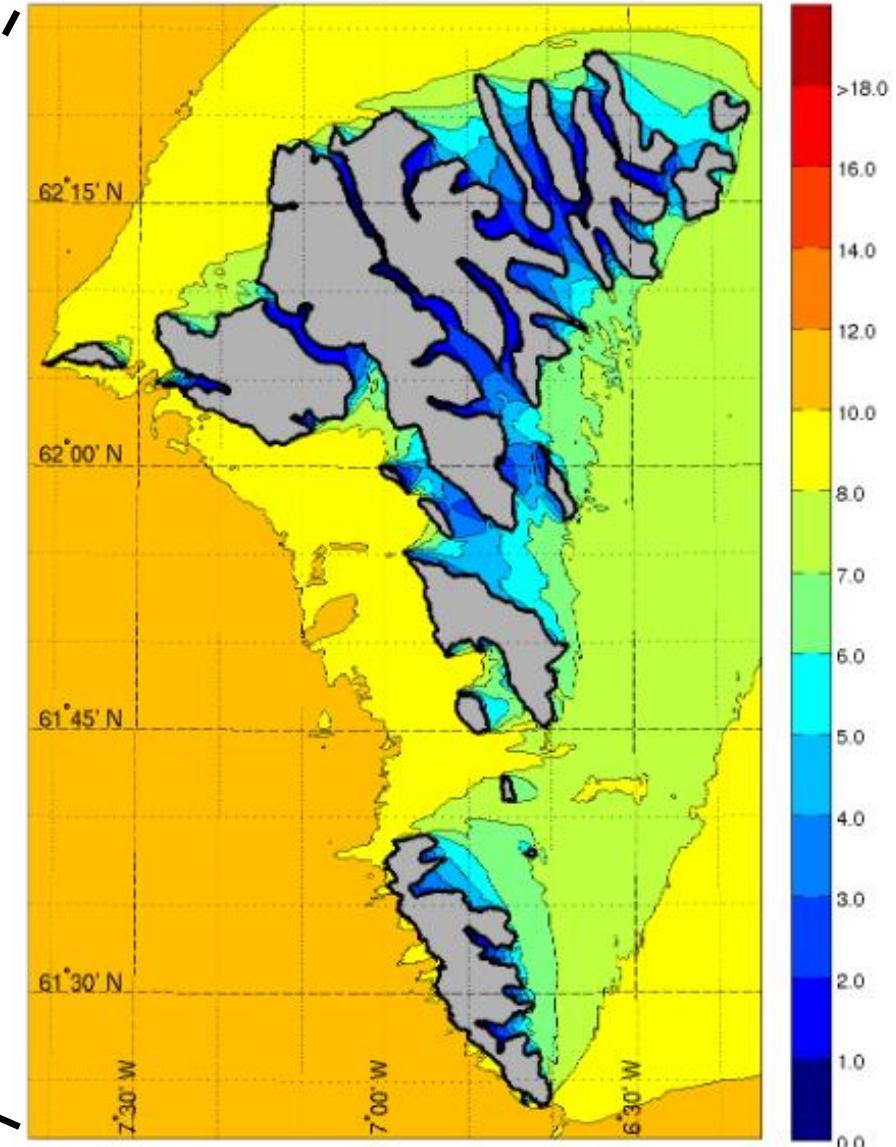
# Verkætlan: Lokalt veðurmodel



# Ætlan: Lokalt aldumodel

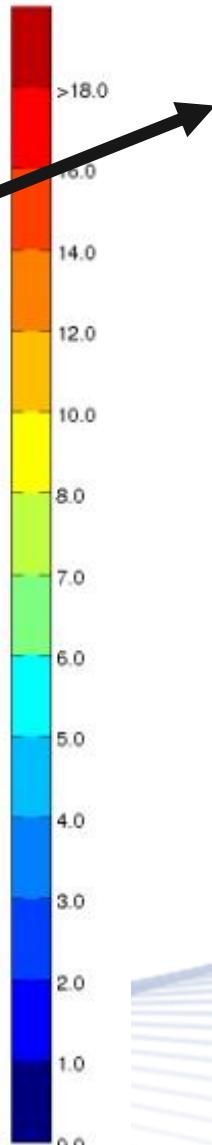
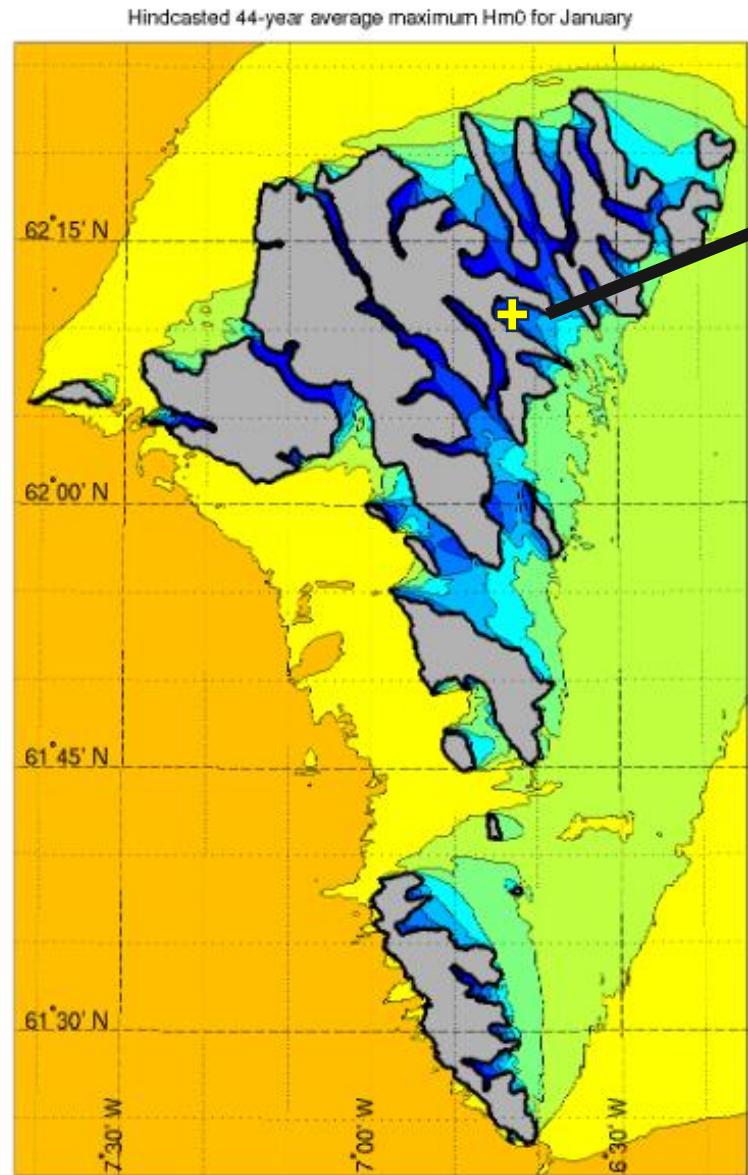


Hindcasted 44-year average maximum Hm0 for January



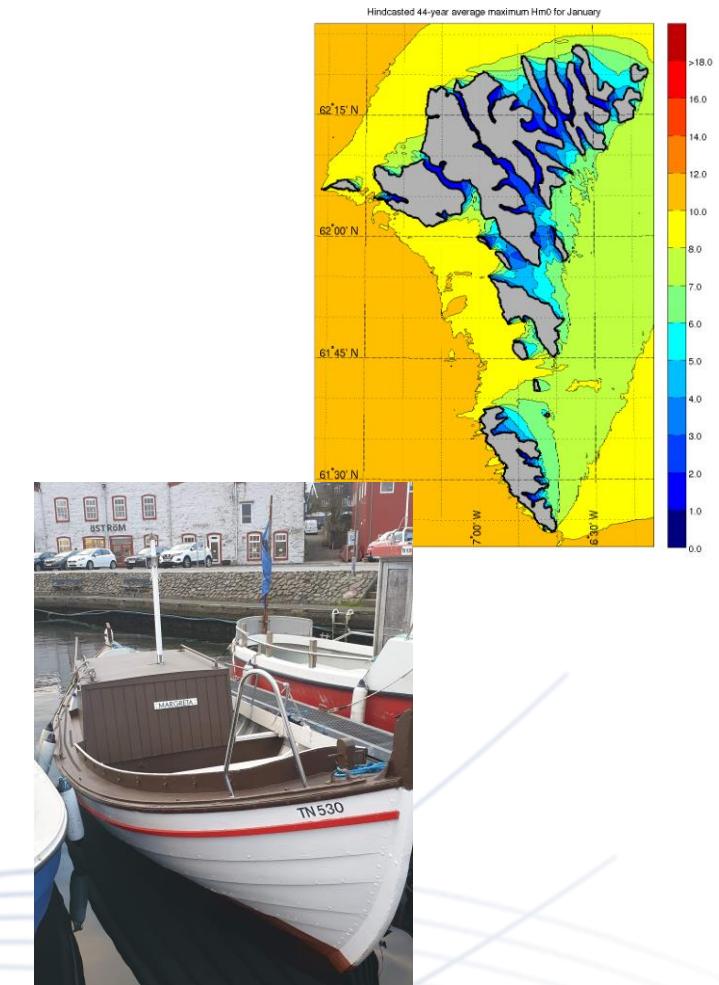
VØRN

# Ynski: Lokalt aldumodel við hagtølum



1. Hvat sigur forsøgnin á ávísum staði?
2. Er hetta nógv/lítið í mun til hvat er vanligt á staðnum?
3. Nær er nakað líknandi hent hent fyrr? (Yvirlit yvir stormhendingar)

# Ynski: Lokalt aldumodel við ráki



# Ætlan: Veðrið á havinum



1: metta vindferð frá  
Landsverk alduboym



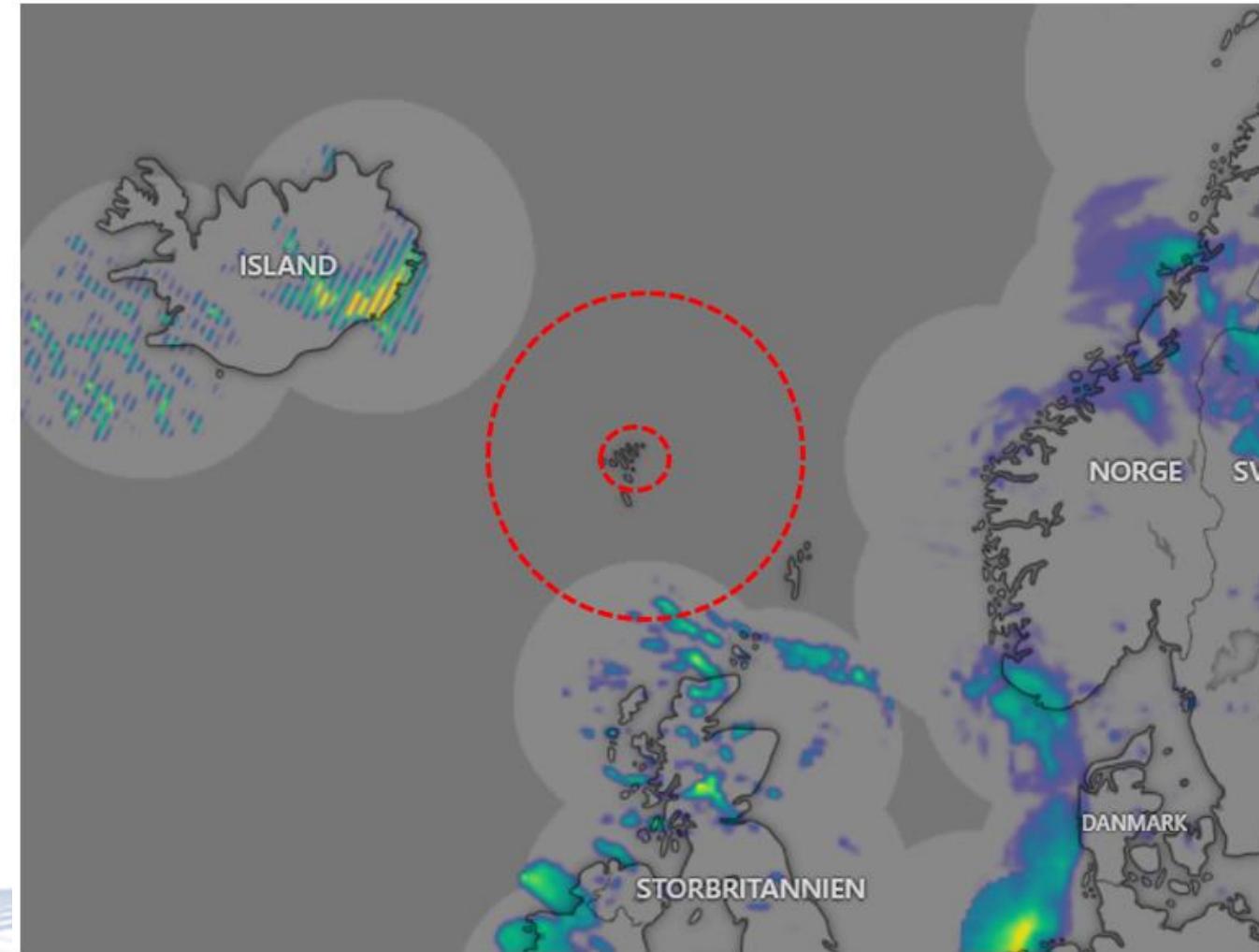
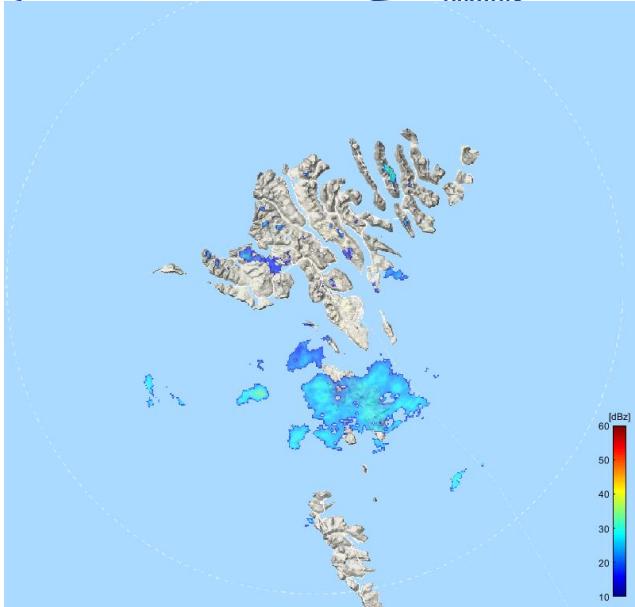
2: arbeiða saman um  
veður/aldu og hav  
boyu?



 LANDSVERK

BORGARI      BYGGING      SÓLA

STAD	DATO	TÍÐ	HÆDD	LONGD	TP	ÆTT	HITI	KNATTSTÖDA
Norðanfjri	18/09	13:30	<b>2.8 m</b>	246 m	13 s	194 °	11 °C	62.5061 -6.7727
Eystanfjri	18/09	13:16	<b>2.1 m</b>	276 m	13 s	163 °	11 °C	61.7716 -6.2173
Sunnanfjri	18/09	13:30	<b>3.0 m</b>	246 m	13 s	194 °	11 °C	61.2976 -6.2745



# Ynski: Veðurradari

# Veðurstovan og framtíðin ...

