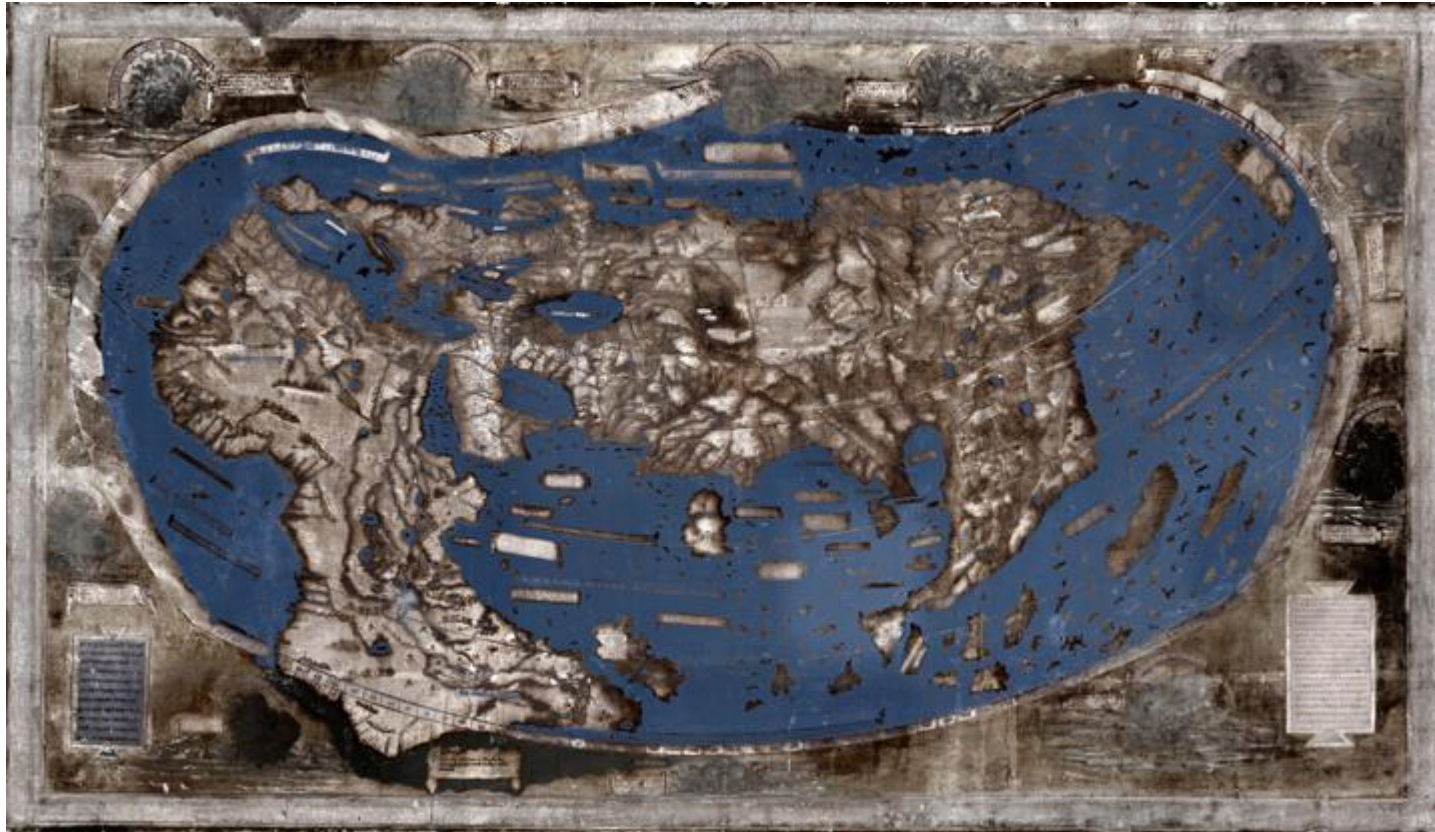
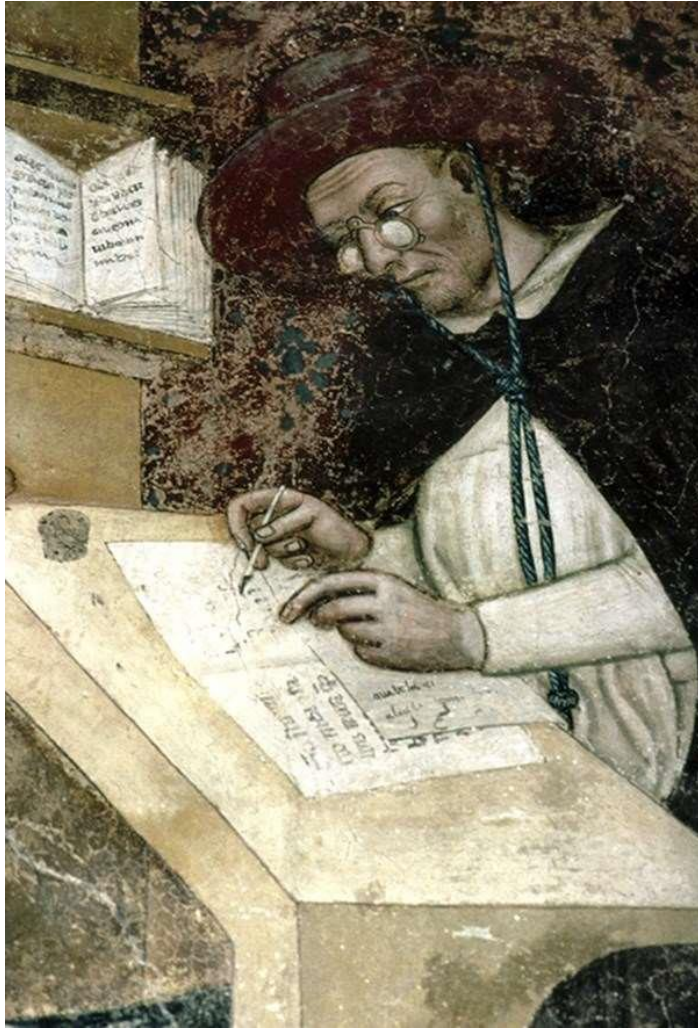


Veðurfar á Grænlandshafi og landnám Grænlands á söguöld

- Haraldur Ólafsson, Phlipp Weitzel, Benoit Soula, Léo Jacobin, Iman Rousta

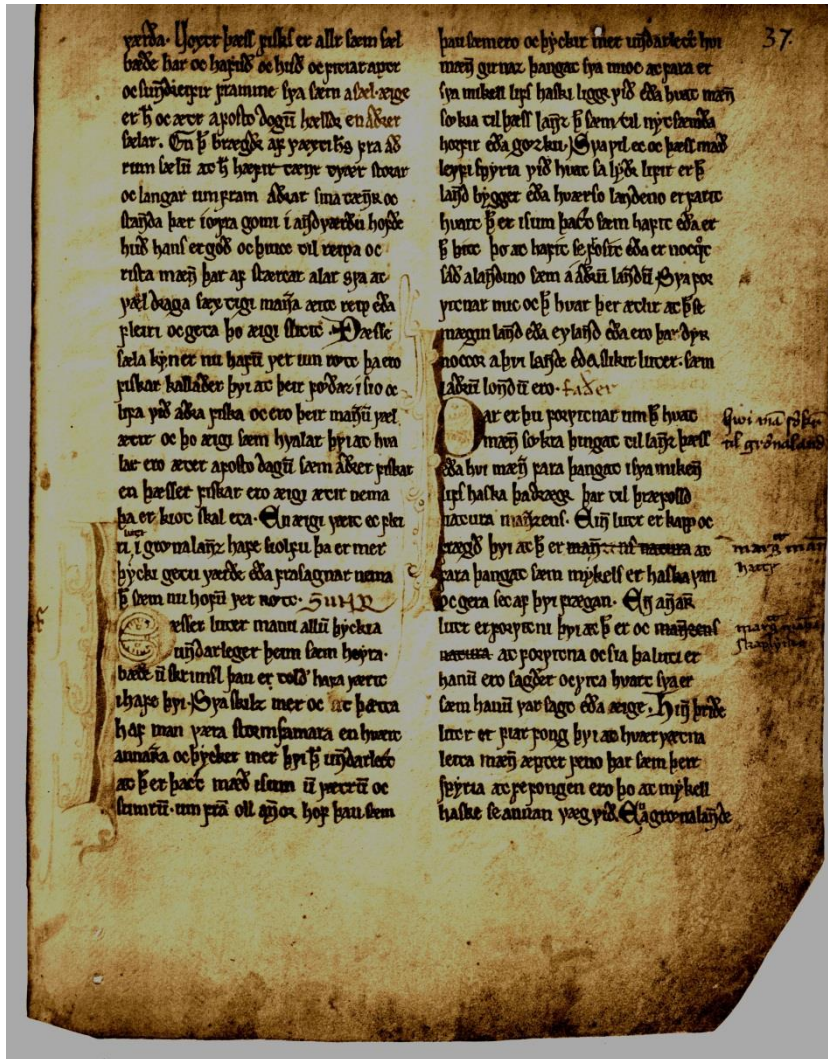


Hvað afrekaði mannkyn á miðöldum?





Konungsskuggsjá



Rituð um 1240

Veðurkafli:

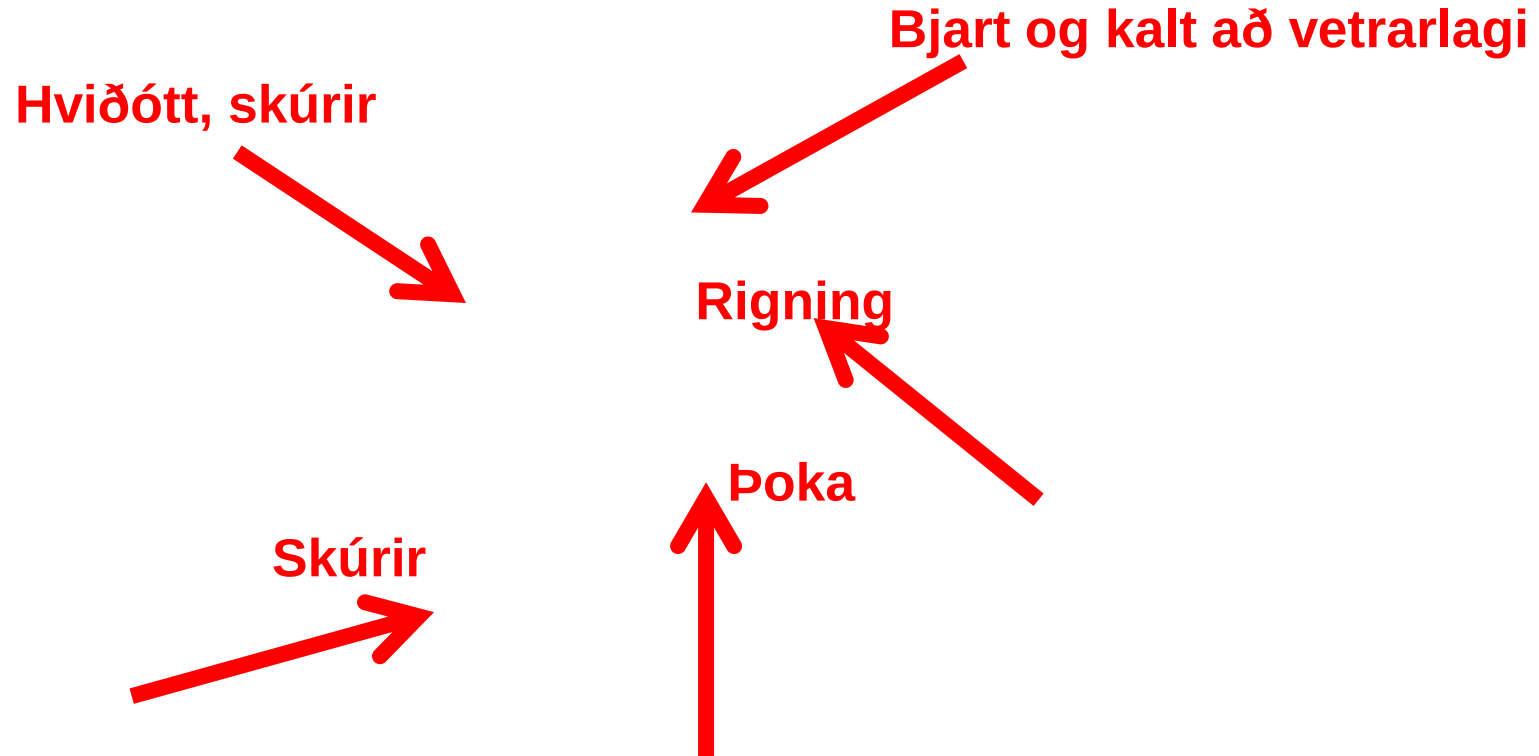
Rigning í suðaustanátt

Þoka í sunnanátt

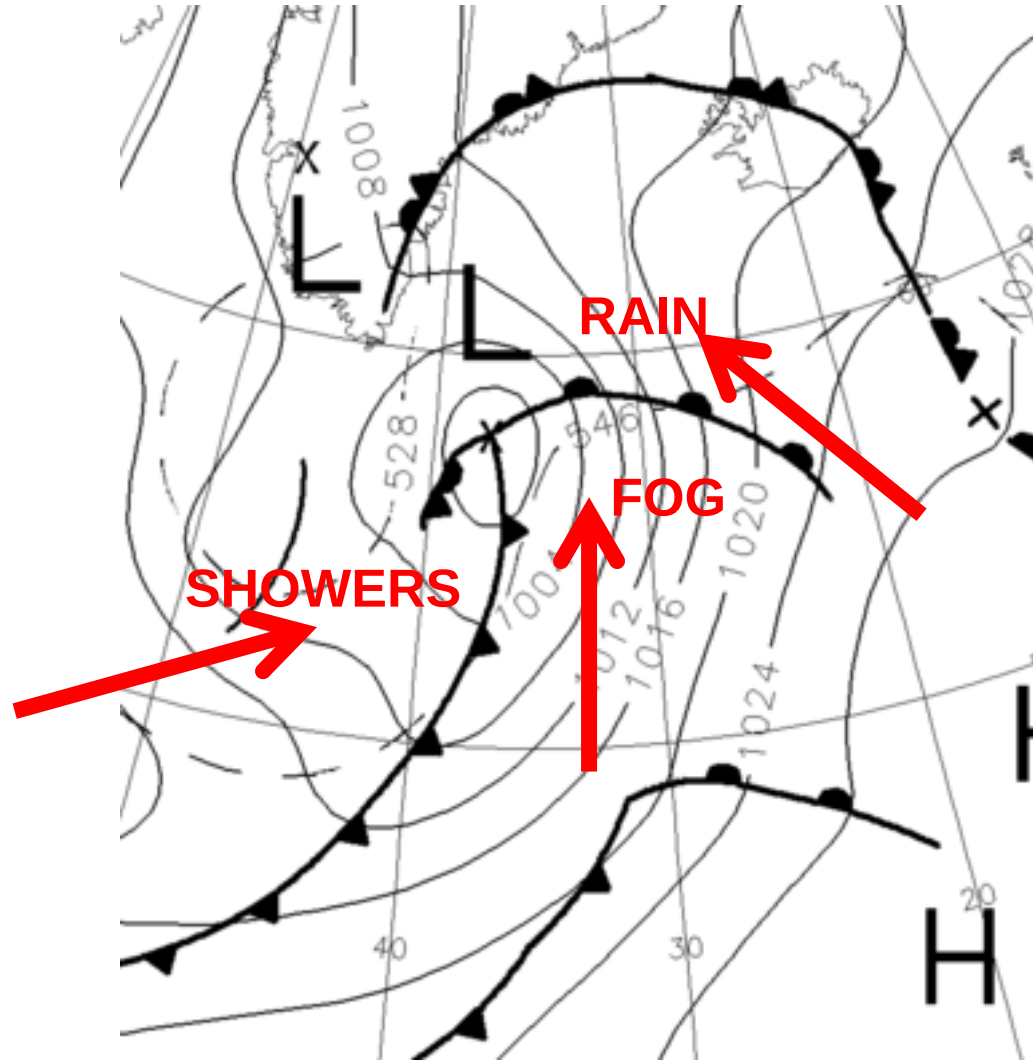
Skúrir í suðvestanátt

Sjá m.a. Páll Bergþórsson; Vínlandsgátan, 1997

Ágrip veðurkafla Konungsskuggsjár



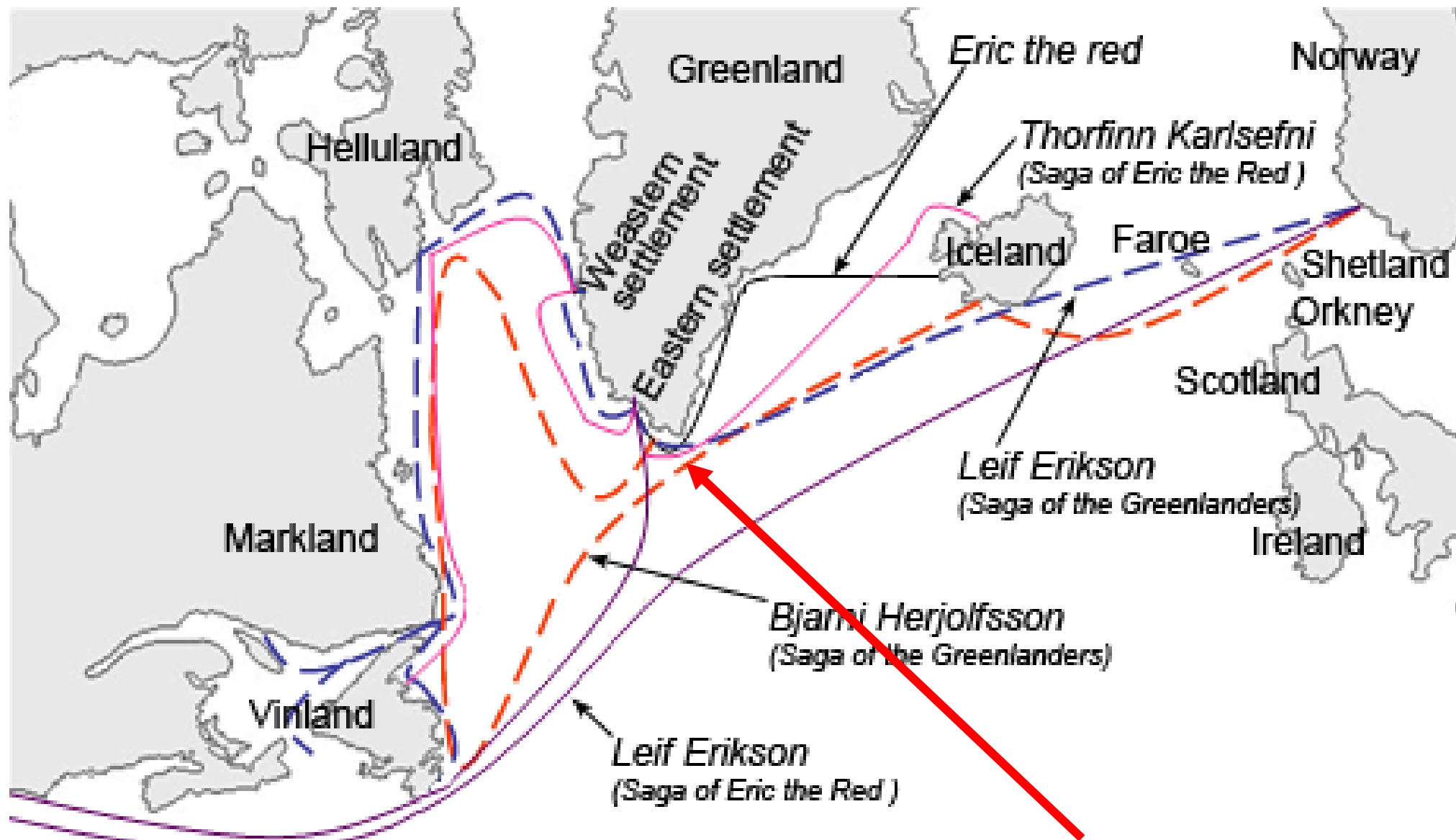
Björgvinjarskólafræðin voru umritun á Konungsskuggsjá



Bjarni Herjólfsson (Sumarið 986)



Flateyjarbók



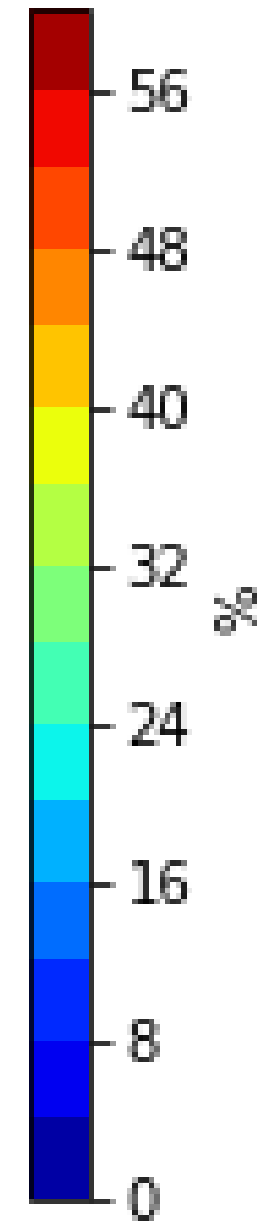
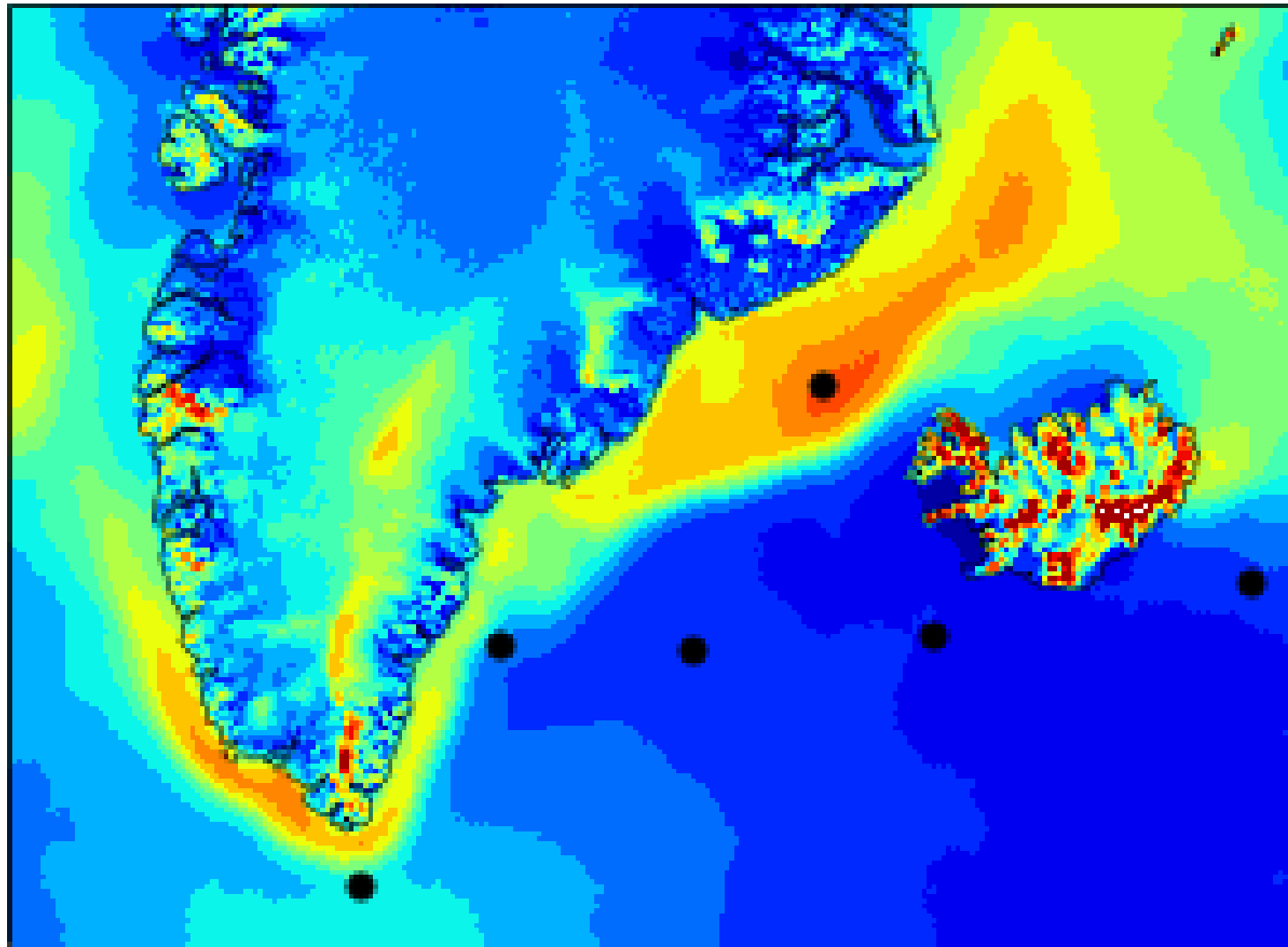
Bjarni Herjólfsson sigldi til Nýfundnlands, norður með ströndum Kanödu og svo austur til norrænu byggðanna í Grænlandi

Ný gögn

- CARRA-súpan. Niðurkvörðun á ERA 5, DX=2.5 km, 1991-2021 til að byrja með.

NE-Atlantic Arctic: Költzow et al. (2022)

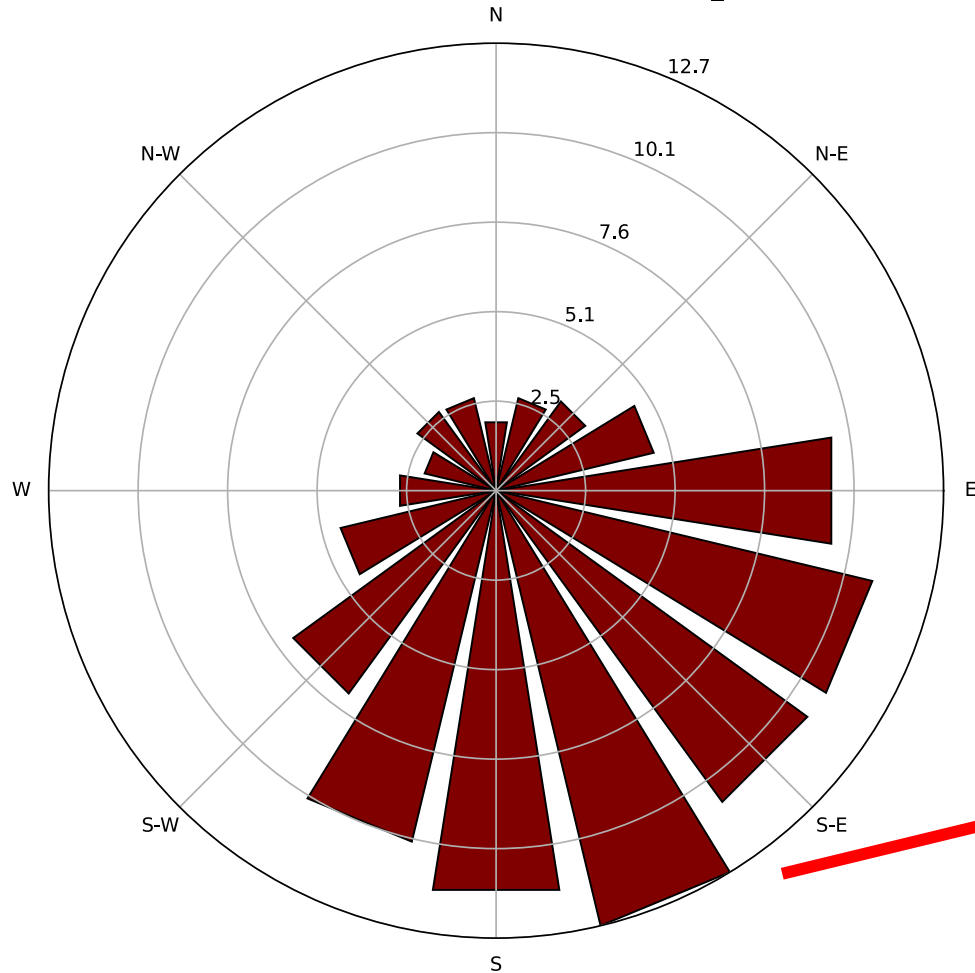
Frequency of events when humidity $> 97\%$
Summer 1991 - 2021



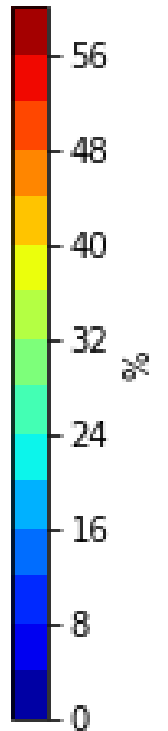
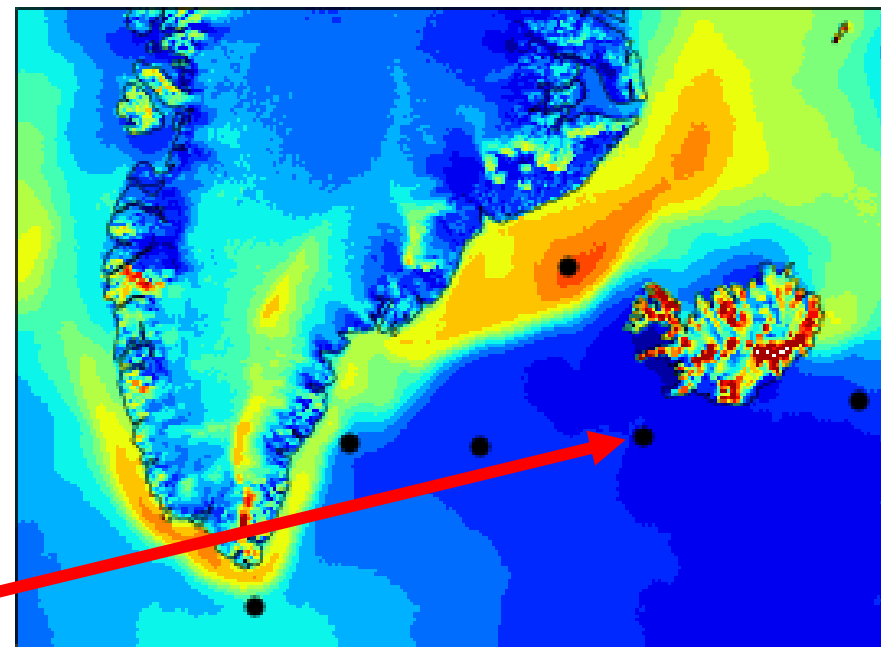
poka

Tíðni vindáttu SV af Íslandi

Wind direction frequency while there is fog at Iceland_West (RH > 97)

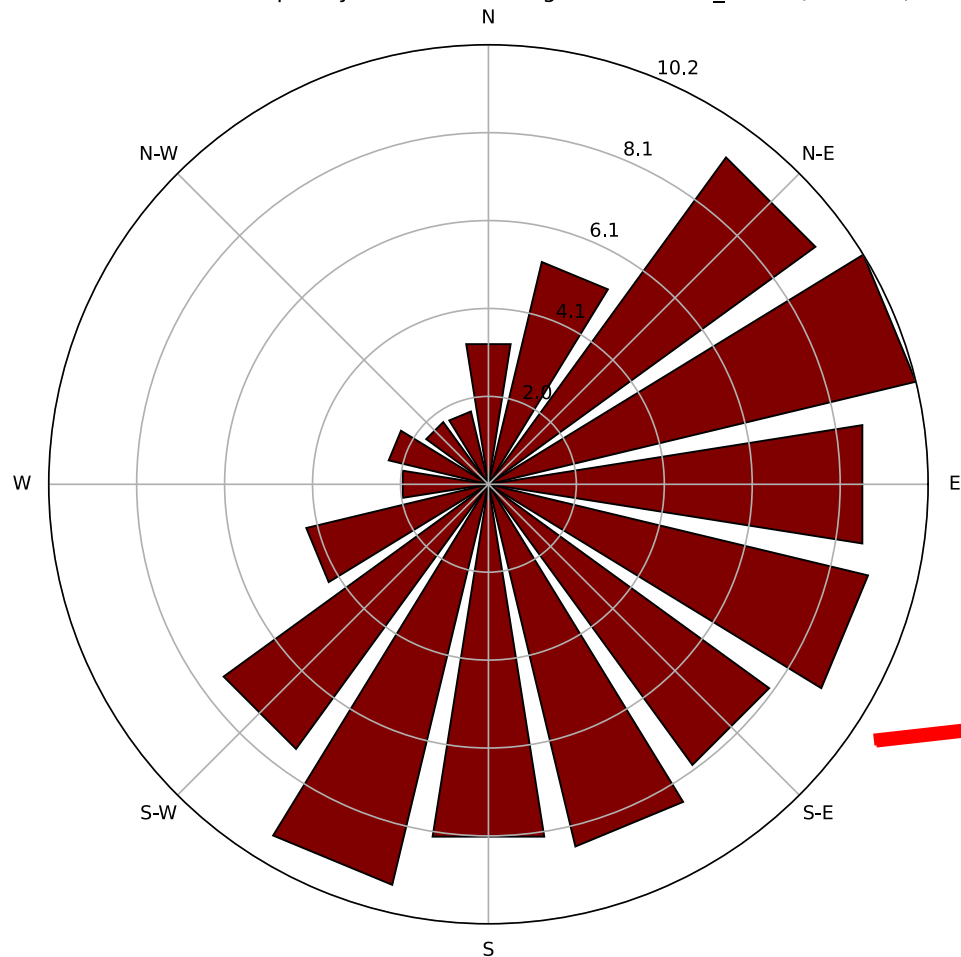


Frequency of events when humidity > 97
Summer 1991 - 2021

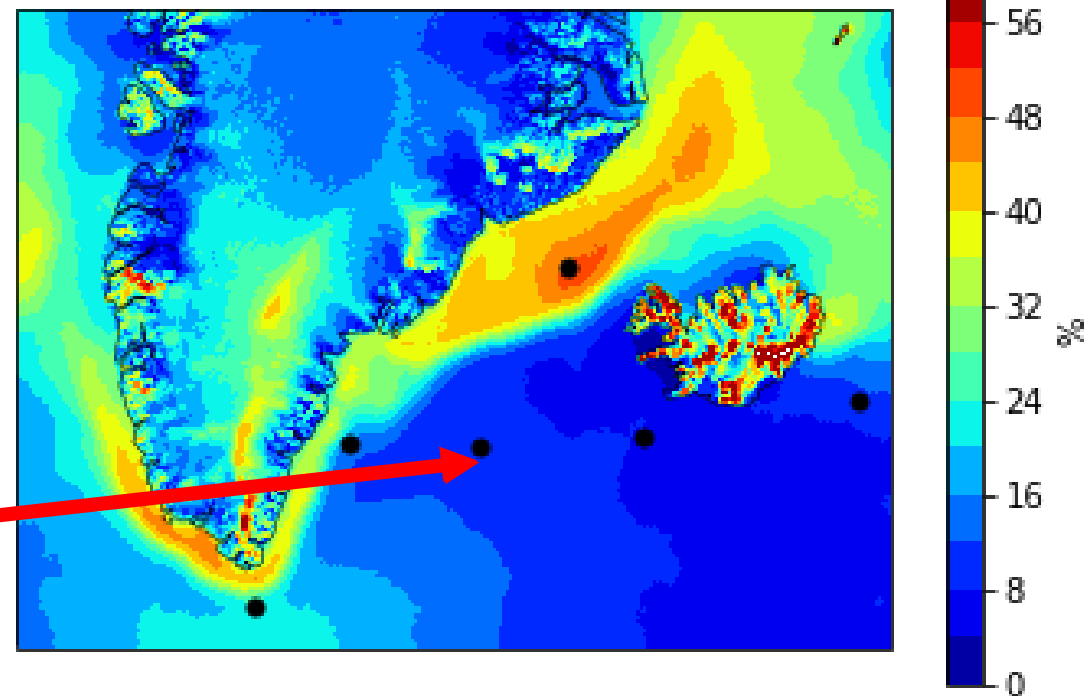


Tíðni vindáttanna í þoku þegar á vestanverðu Grænlandshafi

Wind direction frequency while there is fog at Greenland_South (RH > 97)

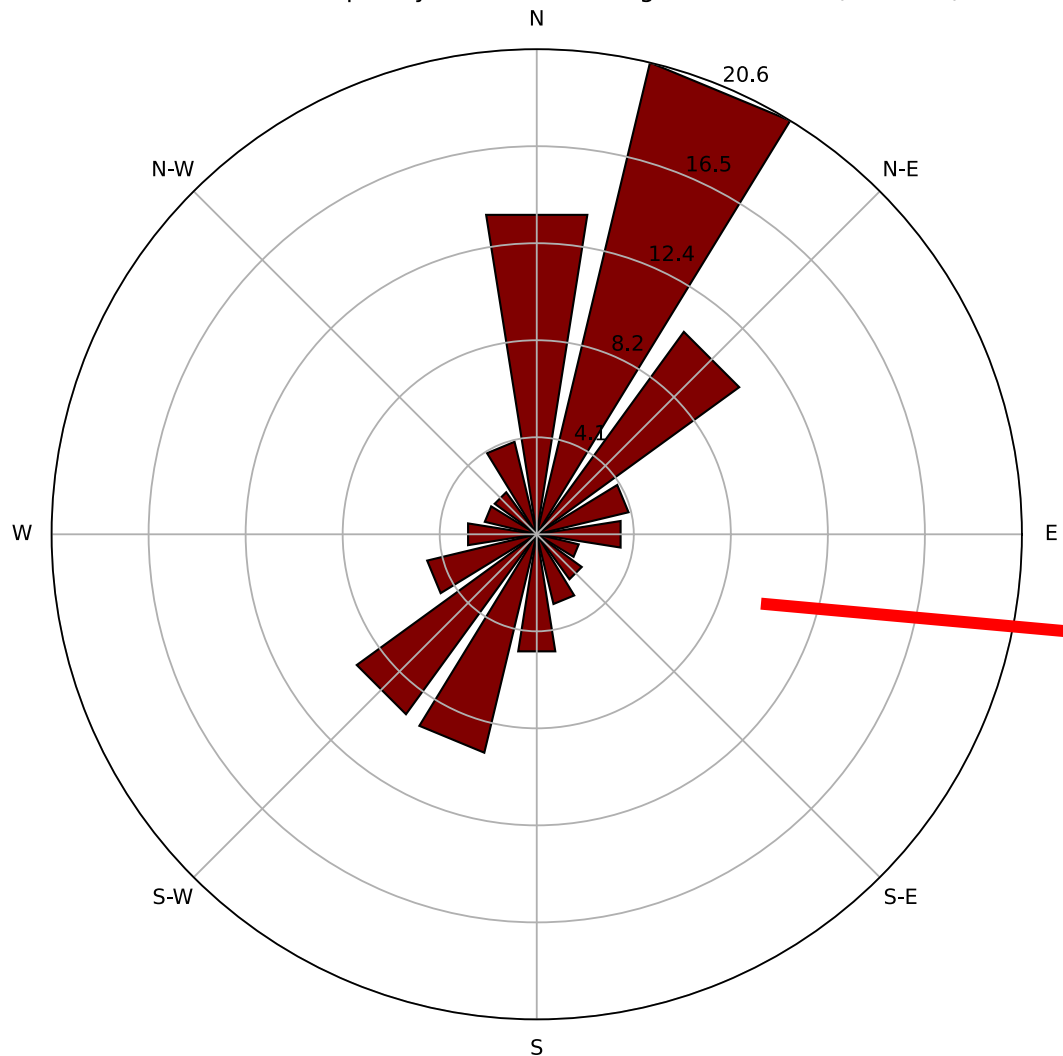


Frequency of events when humidity > 97
Summer 1991 - 2021

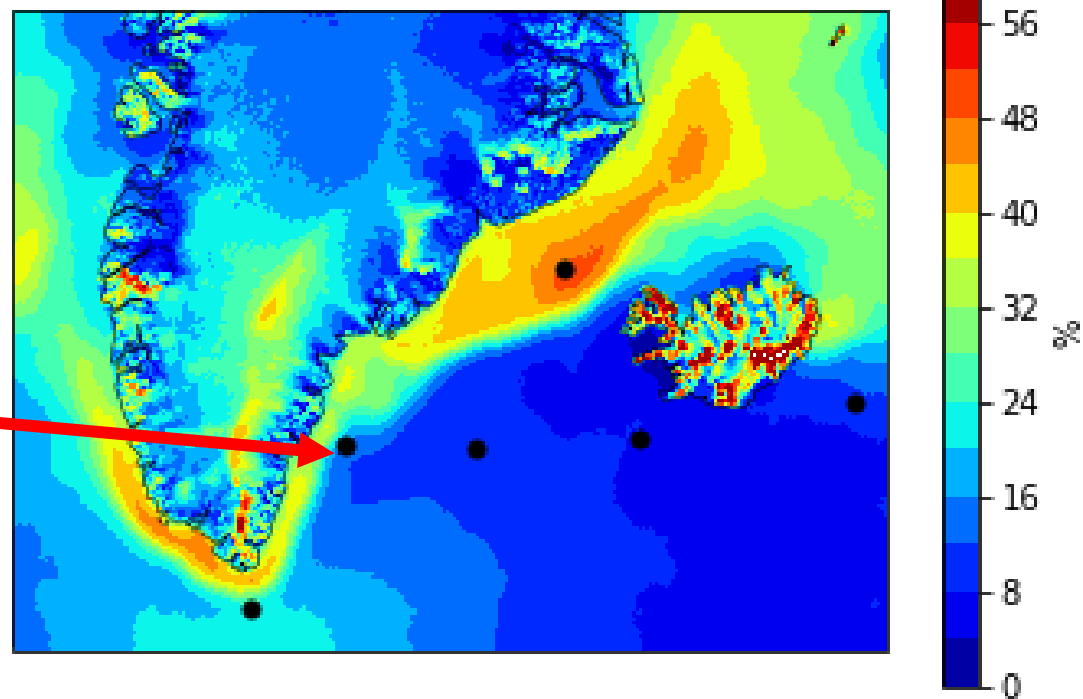


Tíðni vindátta í þoku vestast á Grænlandshafi

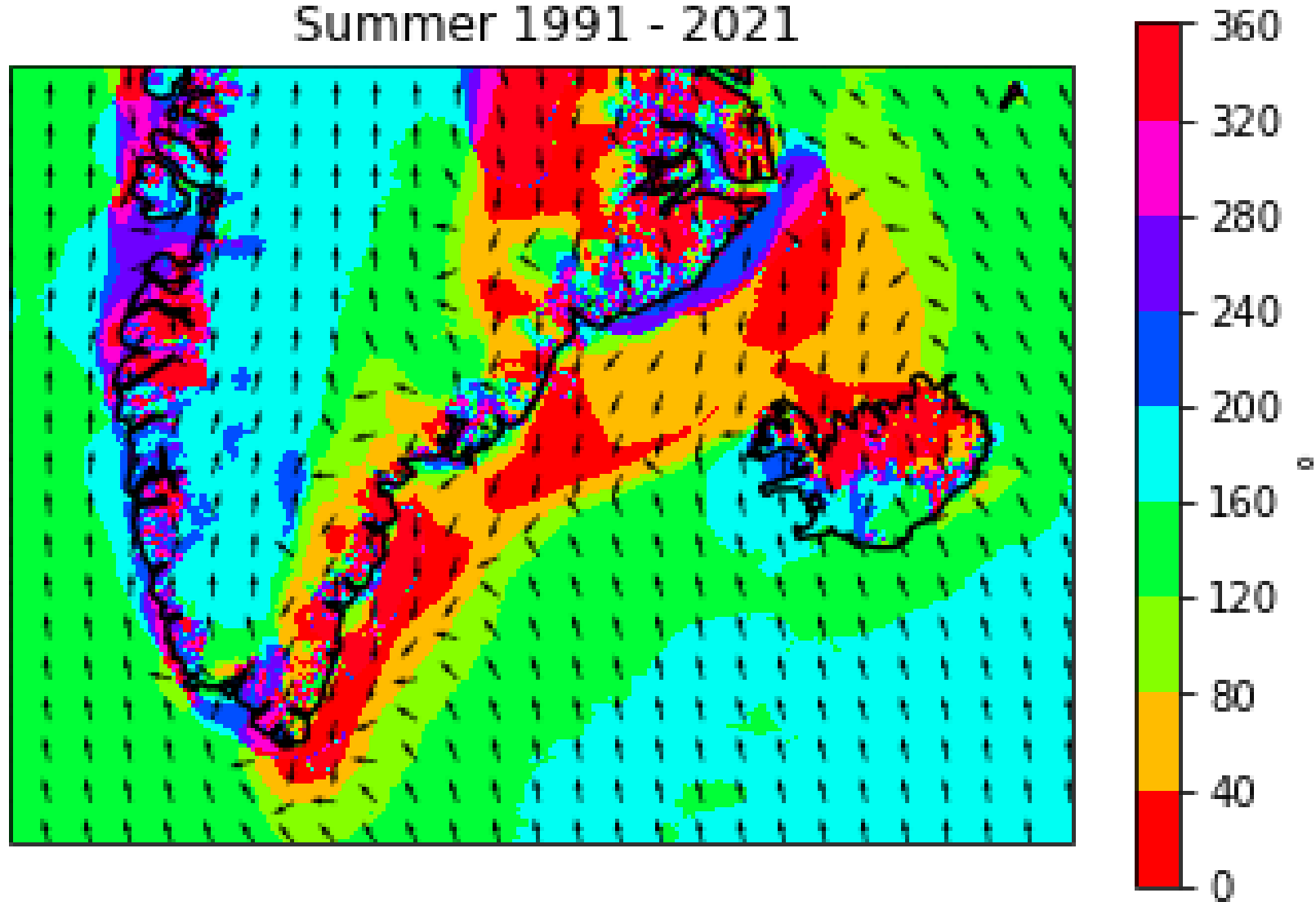
Wind direction frequency while there is fog at Greenland (RH > 97)



Frequency of events when humidity > 97
Summer 1991 - 2021



Most frequent wind direction when humidity $> 97\%$
Summer 1991 - 2021



Bjarni Herjólfsson

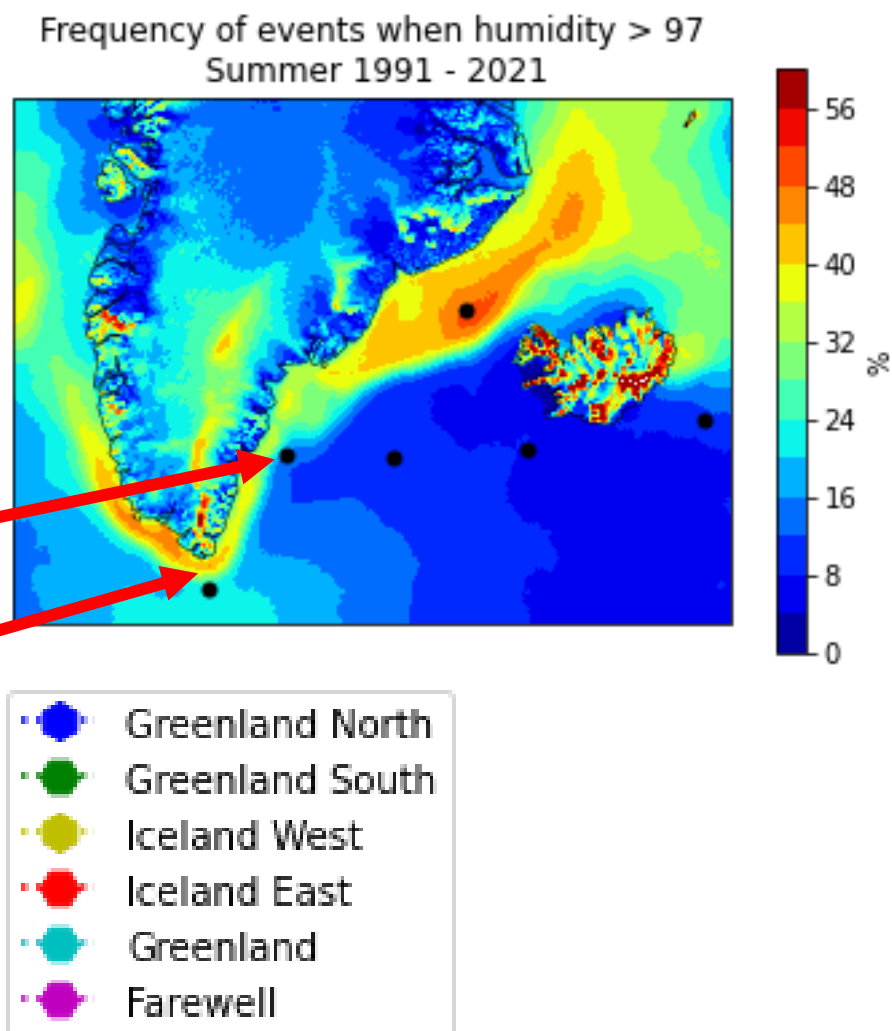
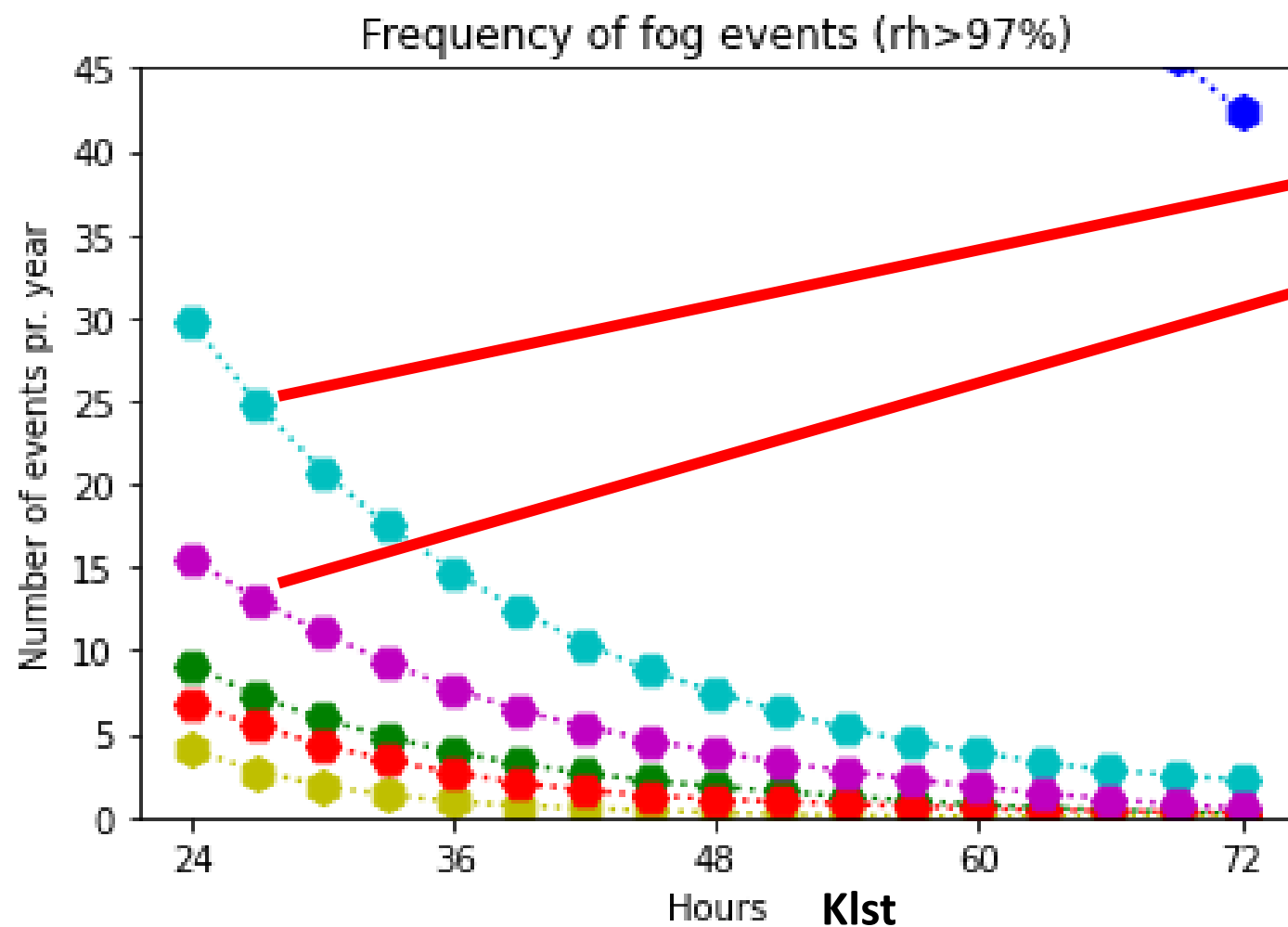
Lenti í þoku í norðaustanátt, tók stefnu til suðurs eða suðvesturs og sigldi framhjá Grænlandi



Flateyjarbók (late 14th Century)



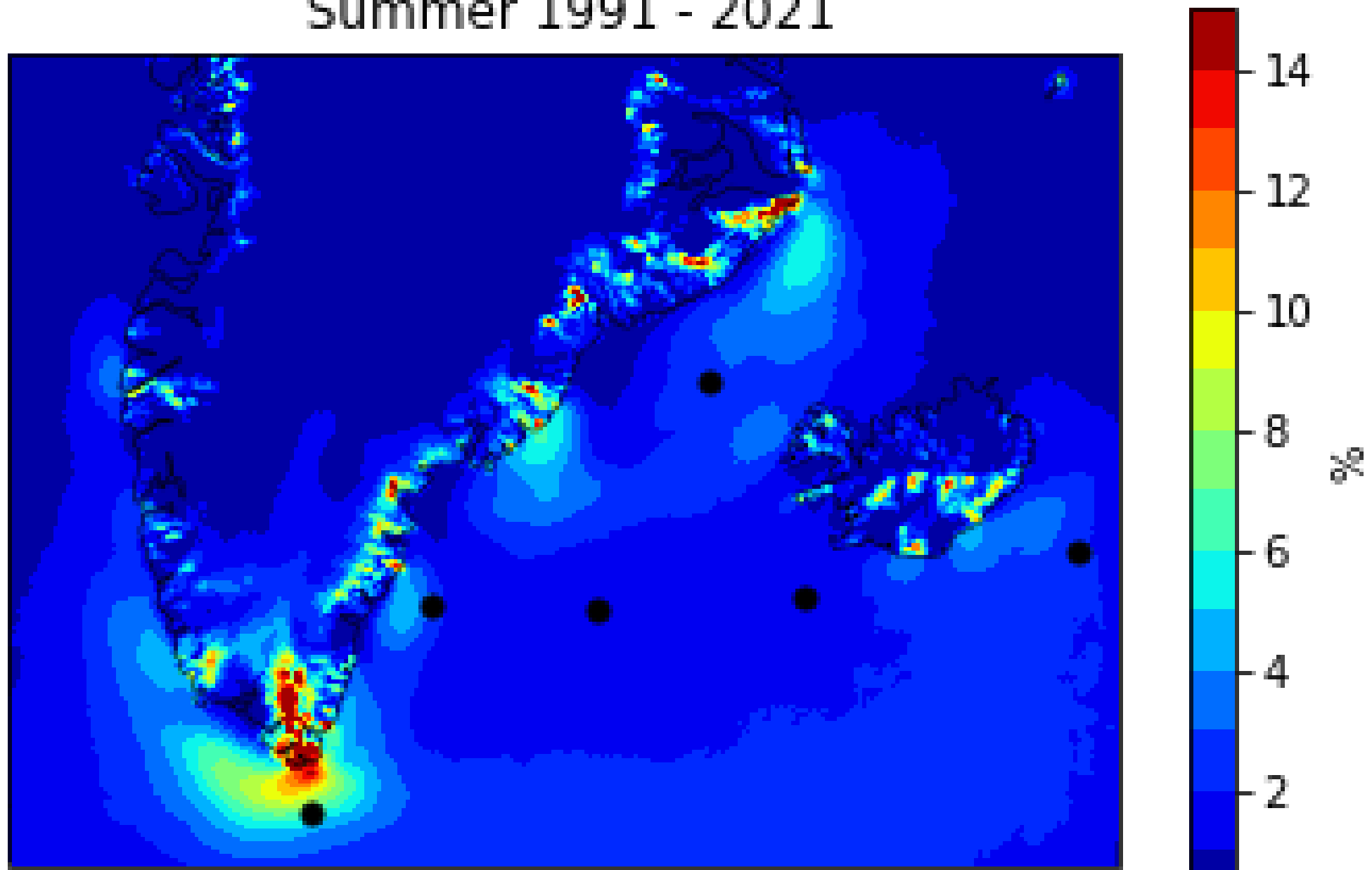
Hversu lengi varar þokan?



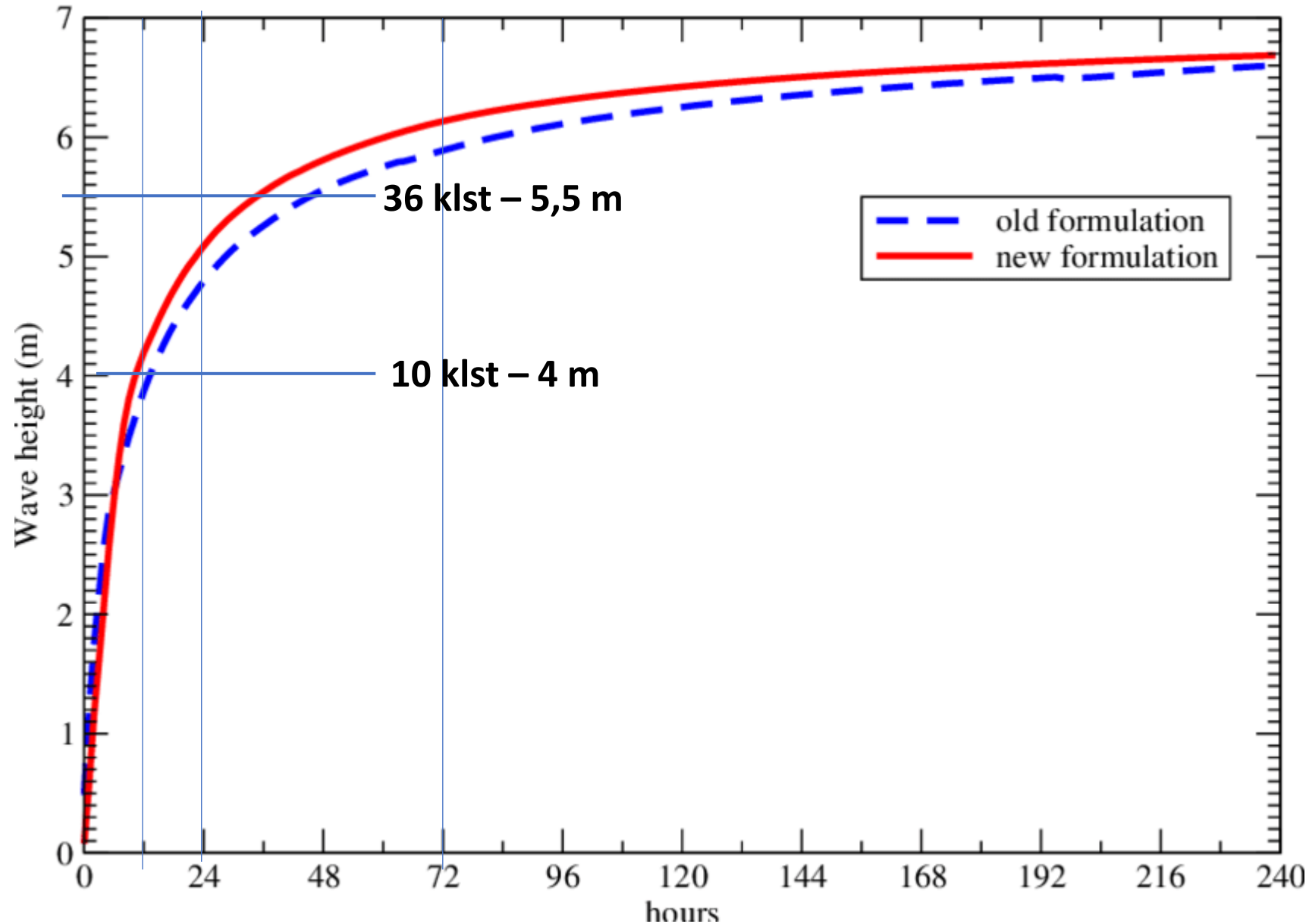
25 skip sigldu af stað til Grænlands sumarið 985. 14 komust
alla leið (Grænlandingasaga)



Frequency of events when wind > 15 m/s Summer 1991 - 2021

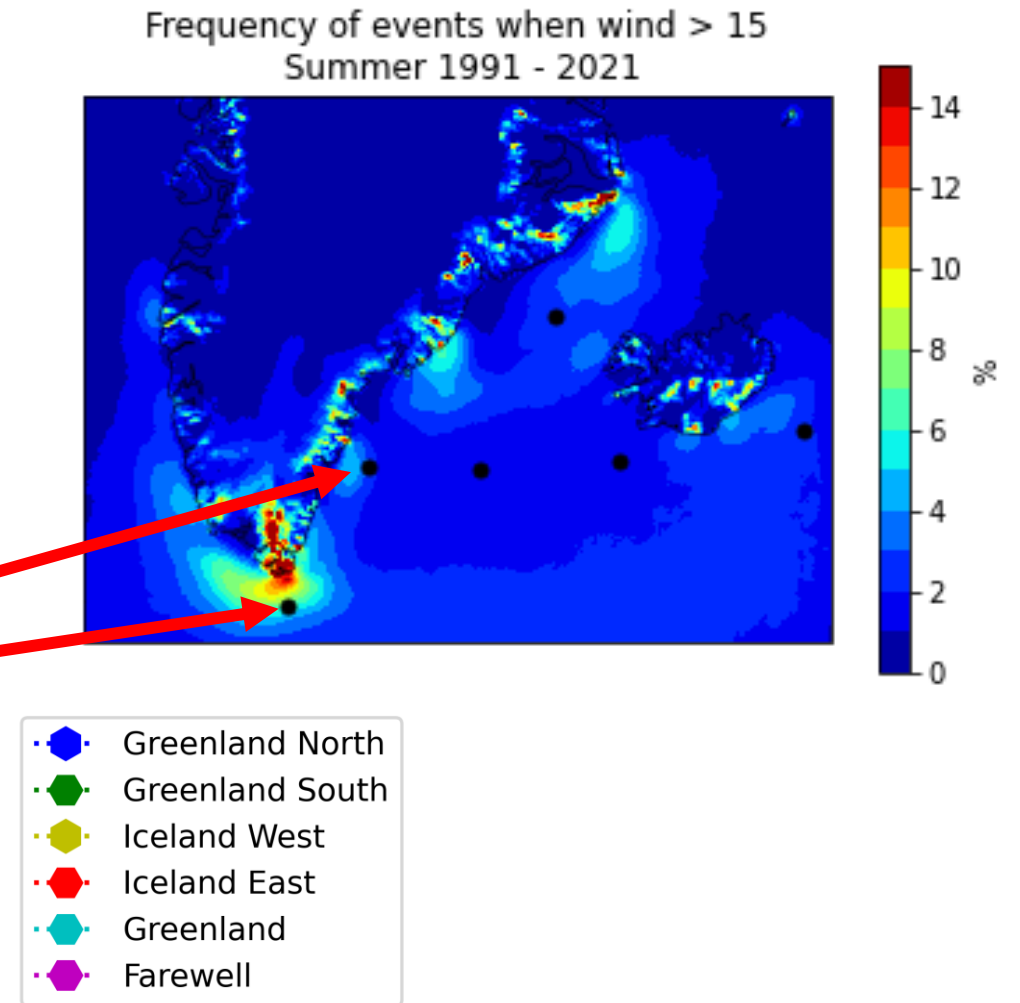
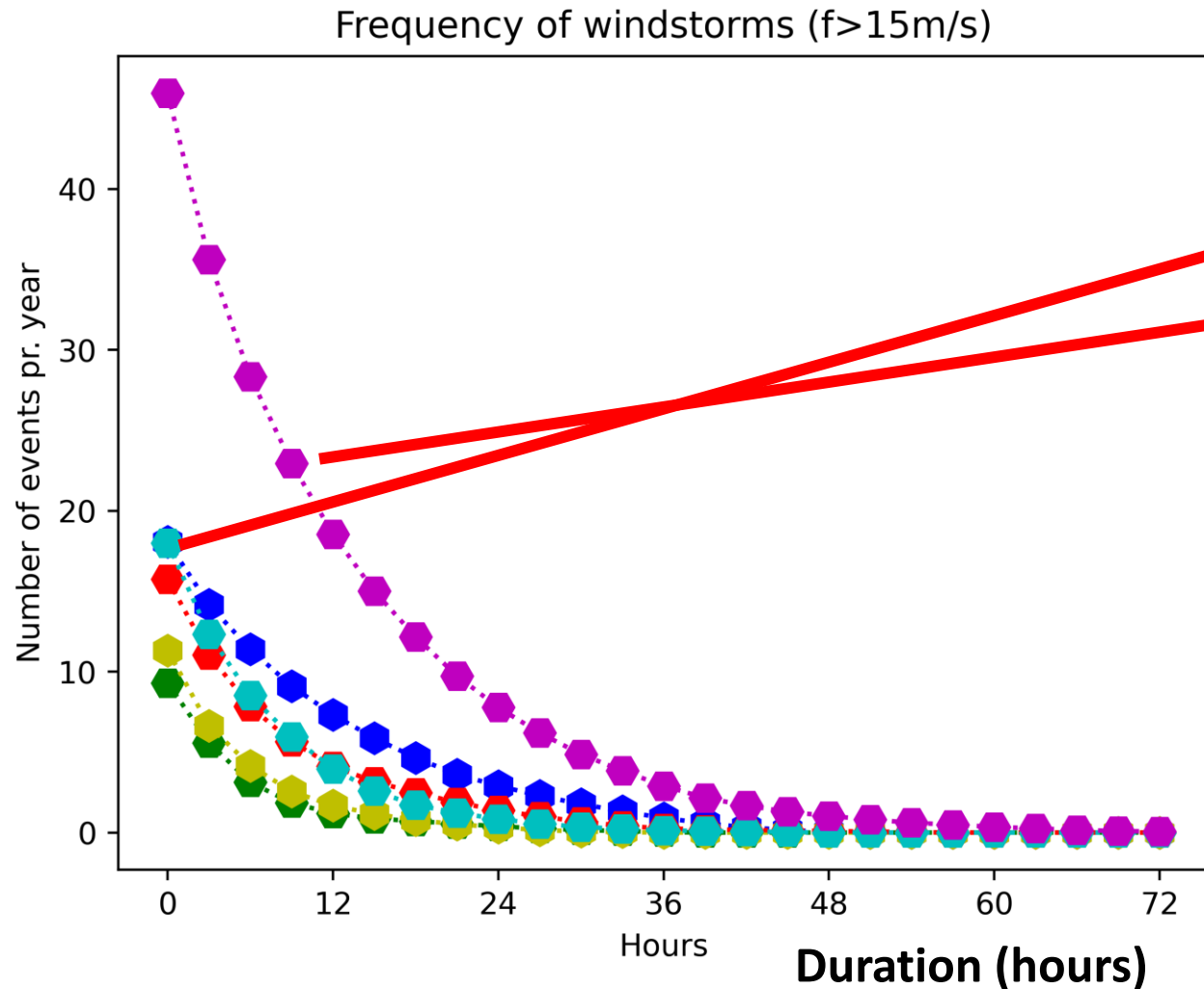


Ölduhæð sem fall af tíma



Bidlot et al. 2005

Hvasst að sumri ($f > 15 \text{ m/s}$)



Samanburður á siglingaleiðinni milli Íslands og Noregs og milli Íslands og Grænlands

- Þoka og langvarandi þoka miklu algengari á Grænlandshafi en í Noregshafi
- Óreiða í vindáttum í þoku á Grænlandshafi veldur aukinni hættu á hafvillum
- Miklu tíðari hvassviðri á Grænlandshafi en á Noregshafi
- Ís á Grænlandshafi, en ekki á leið til Noregs
- Mjög löng sigling til byggðanna á Grænlandi

Hvert er mesta afrek mannskyns á miðöldum?

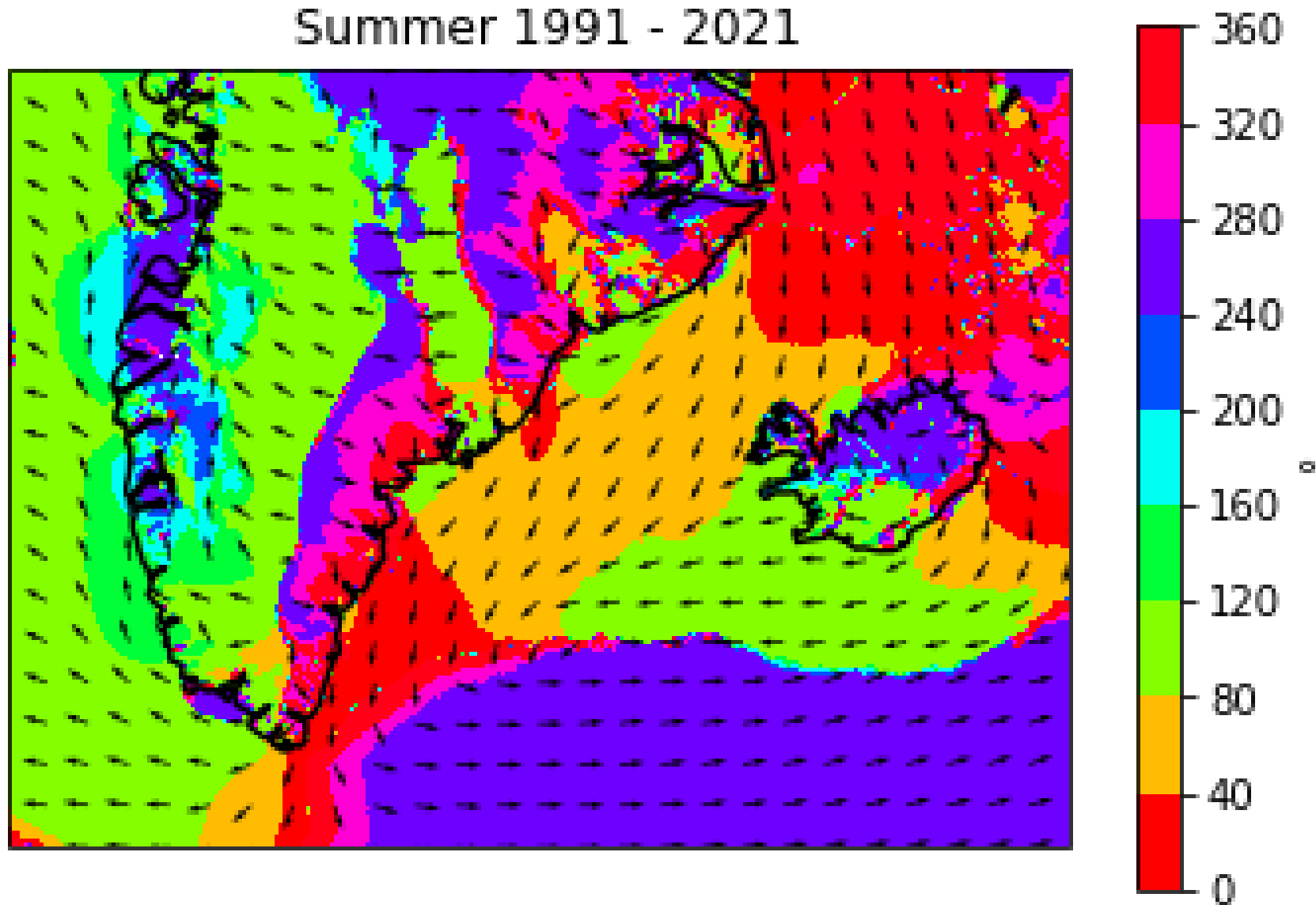
- Þjóðflutningarnir sem leiddu til uppbyggingar þróaðs samfélags á Íslandi með sterk og reglubundin tengsl yfir hafið til meginlands Evrópu

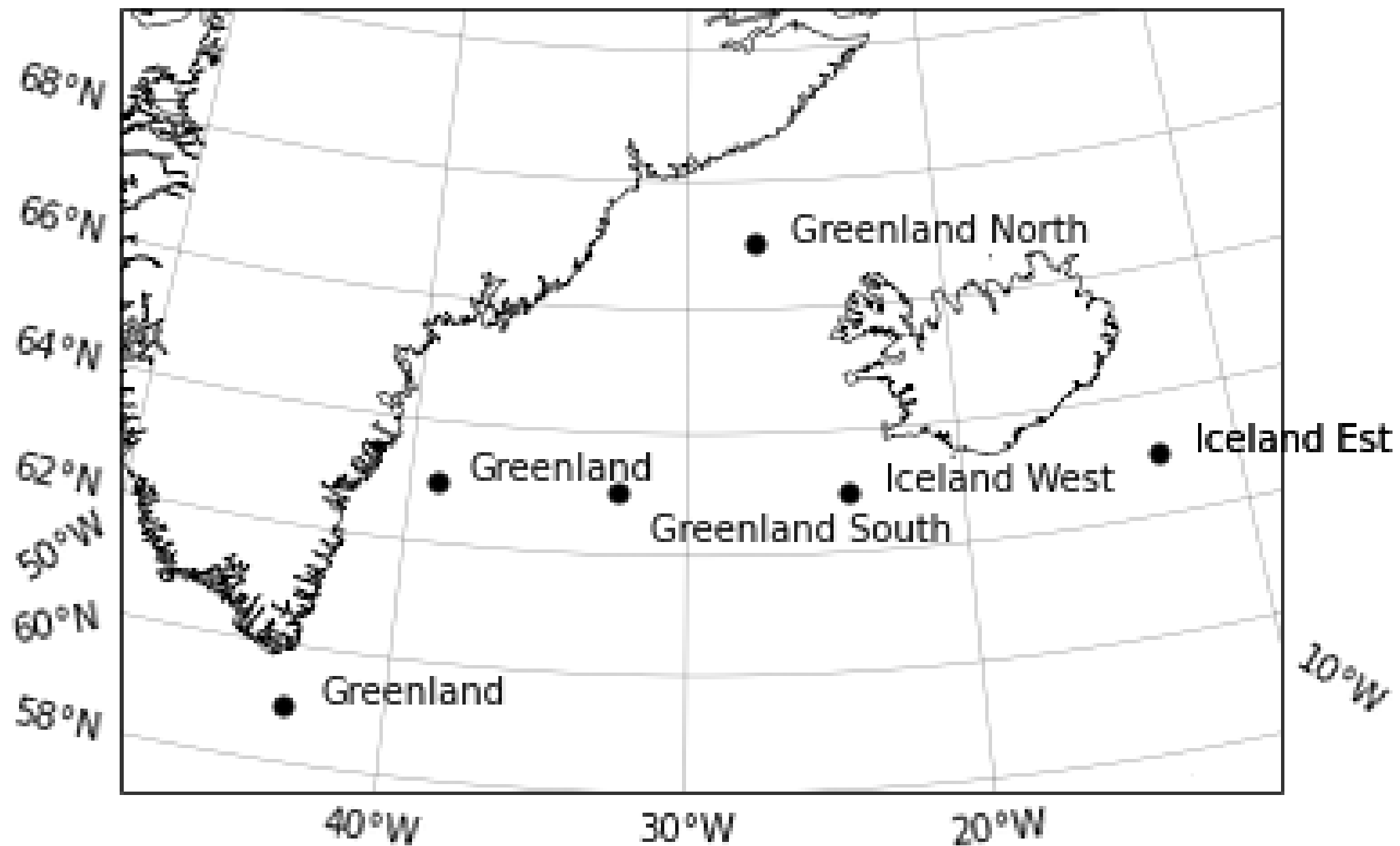
Siglingar á N-Atlantshafi voru ekki fyrir aukvisa

- Landnám Grænlands og tilraunir til landnáms á meginlandi N-Ameríku
 - Reglubundnar siglingar milli Grænlands og Evrópu var **mun meira afrek** en siglingar milli Íslands og meginlands Evrópu

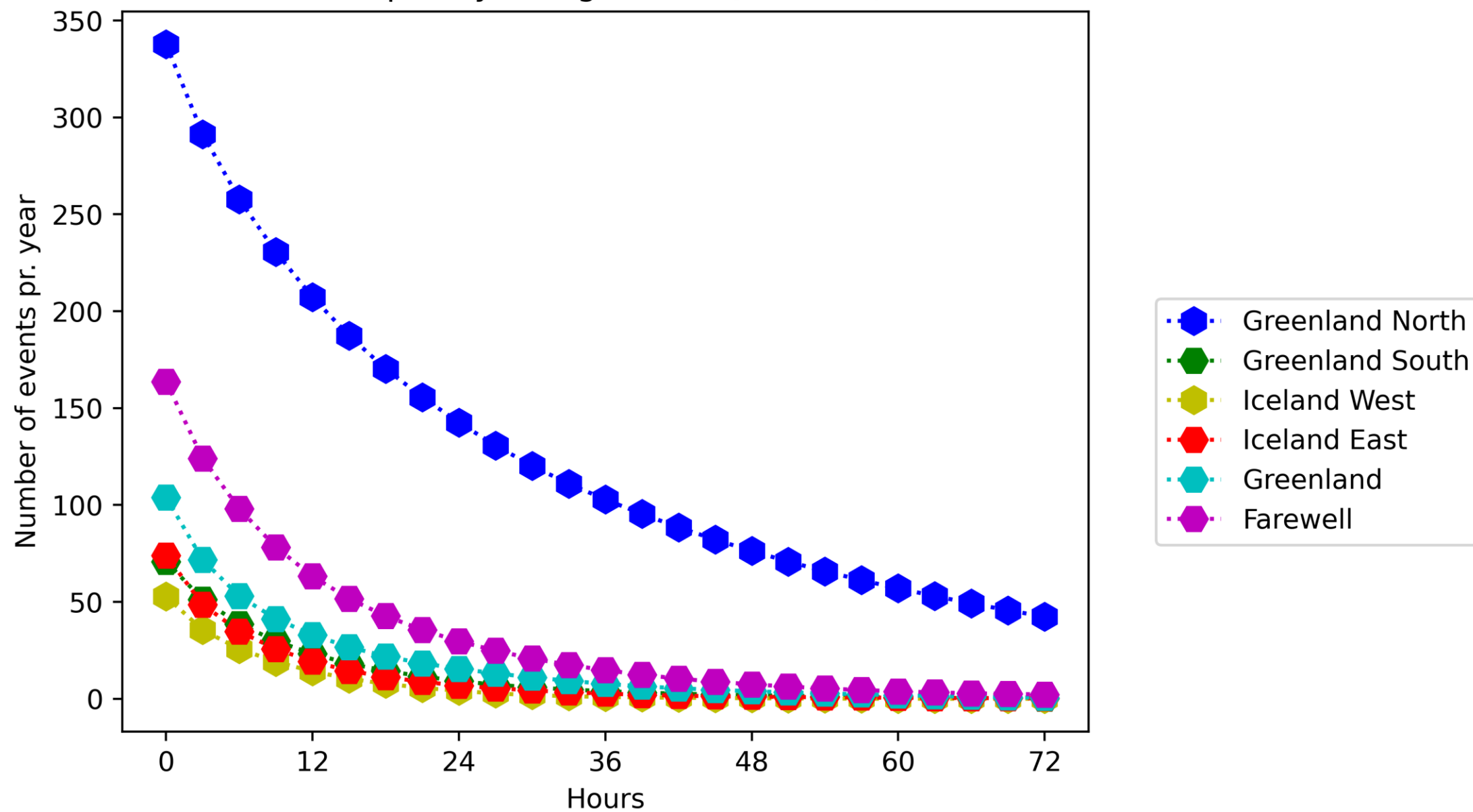
Fundur Vesturheims og landnám Grænlands
var líklega mesta afrek mannkyns á miðöldum
– veðurgögn benda eindregið í þá átt

Most frequent wind direction when wind > 15
Summer 1991 - 2021





Frequency of fog events (rh>97%)



One thousand
years of Meteorology:
What works and what
is forgotten?

Haraldur Ólafsson

Bergen School of Meteorology &
University of Iceland



mostri. ja
æmæra
þiordung
ti. Stika
r segu þu

Y er ein
logtig þar
teðra ein
eunni þu
ar i þu