

Aling á opnum havi

Heðin Abrahamsen

Fiskaaling

Aliráðstevnan 2013

Uppruni til verkætlana

- ▶ Umbiðin av Vinnumálaráðnum eftir tilmæli frá vinnuni

Uppruni til verkætlana

- ▶ Umbiðin av Vinnumálaráðnum eftir tilmæli frá vinnuni
- ▶ Fíggjað av Fiskaaling, Granskingarráðnum, veitarum og vinnuni

Motivación

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- ▶ Flestu vard øki eru longu í nýtslu til laksaeling

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- ▶ Meira vatnskifti tálmar helst lúsum og sjúkum

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- ▶ Flestu vard øki eru longu í nýtslu til laksaeling
- ▶ Meira vatnskifti tálmar helst lúsum og sjúkum
- ▶ Møguliga summarbit
 1. so vanligu økini kunnu koma fyrir seg
 2. meira vatnskifti, meðan lúsatrupulleikin er størstur

Endamál

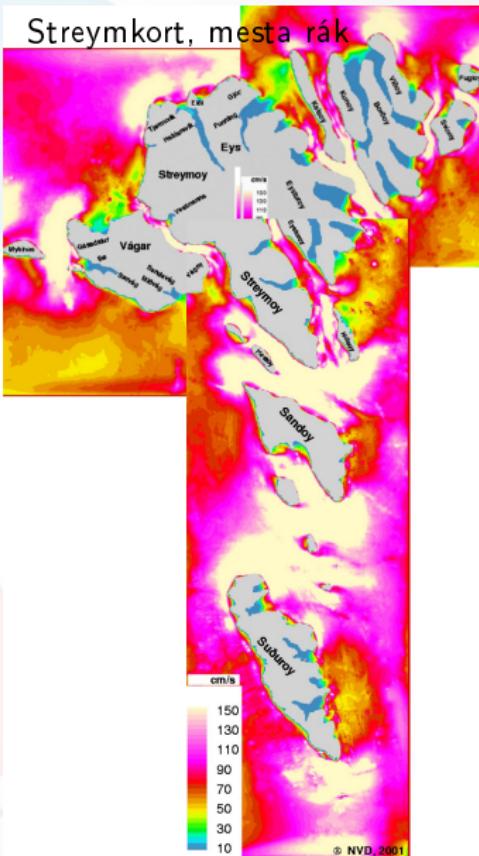
- ▶ Skapa möguleikar at ala á meira harðbalnum økjum
 - 1. á opnum havi
 - 2. longri úti á firðunum

Endamál

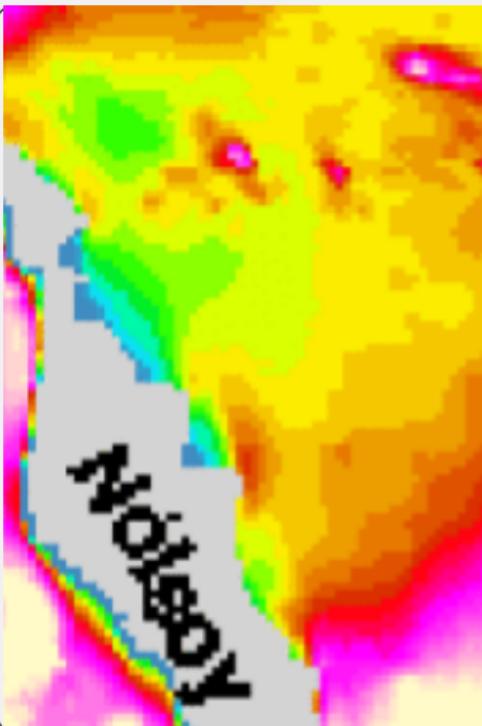
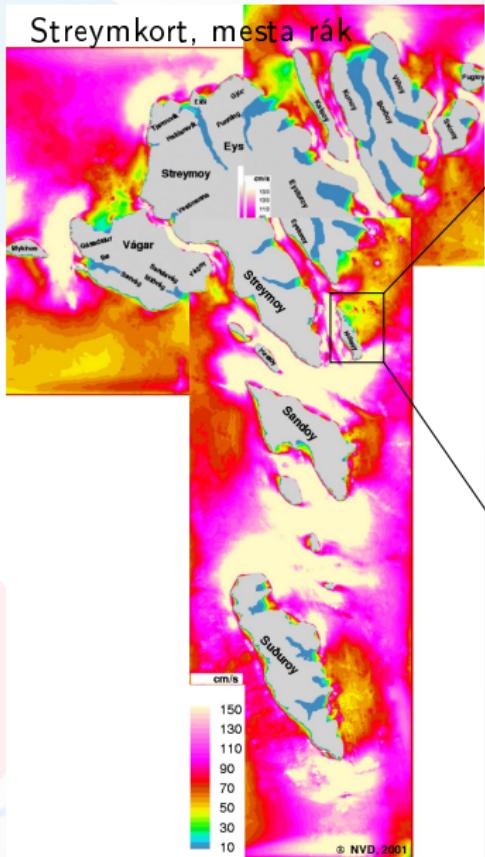
- ▶ Skapa möguleikar at ala á meira harðbalnum økjum
 1. á opnum havi
 2. longri úti á firðunum
- ▶ Menna amboð so sum teldumyndlar

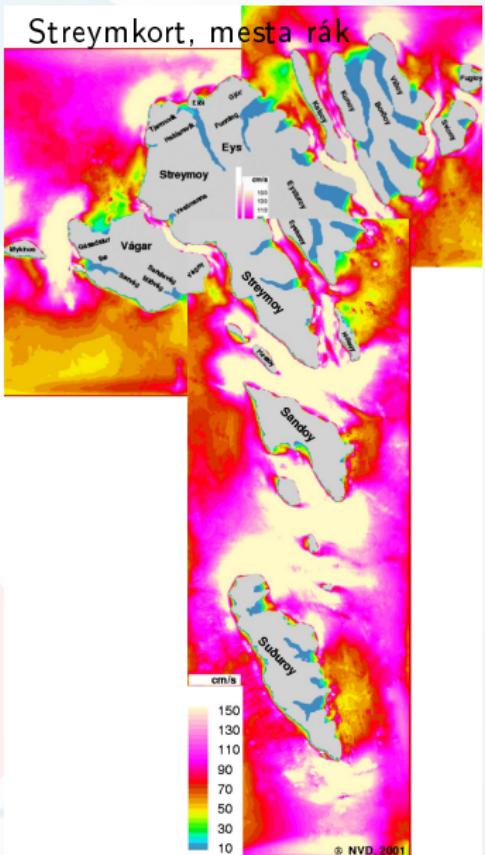
Endamál

- ▶ Skapa möguleikar at ala á meira harðbalnum økjum
 1. á opnum havi
 2. longri úti á firðunum
- ▶ Menna amboð so sum teldumyndlar
- ▶ Menna útgerð, sum er betri egnað til harðbal øki

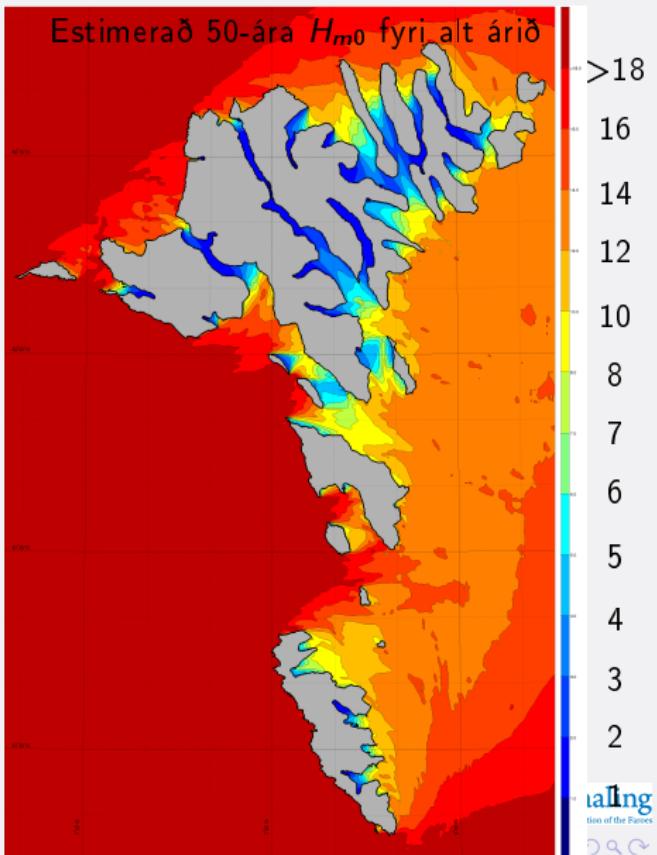


Streymkort, mesta rák





Heðin Abrahamsen

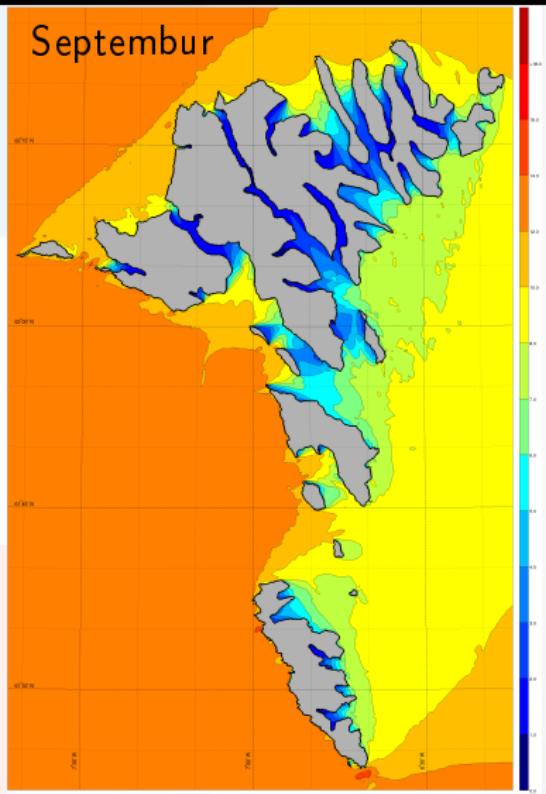


Aling á opnum havi

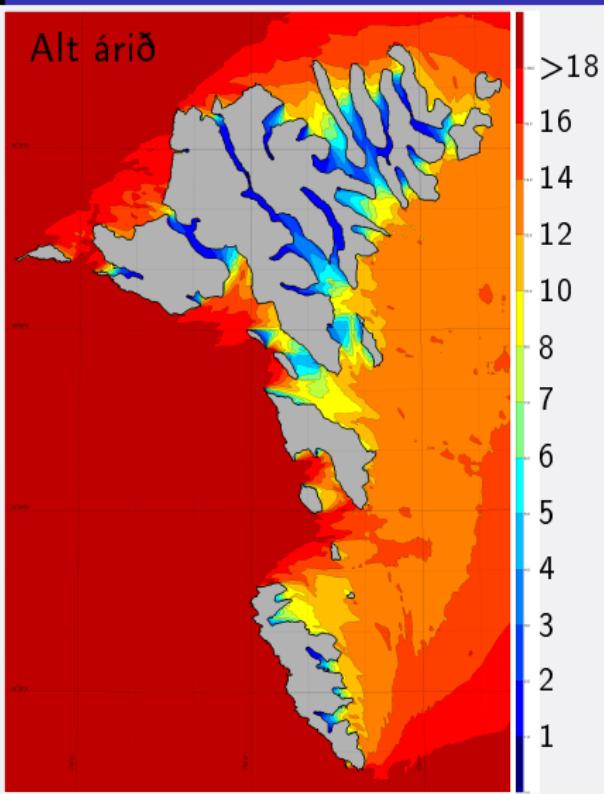
Inngangur
Streymur og alda
Amboðini
Framyvir

Streym- og aldukort
Samanbering við Sørvág
Aldumátingar
Streymmátingar

Septembur

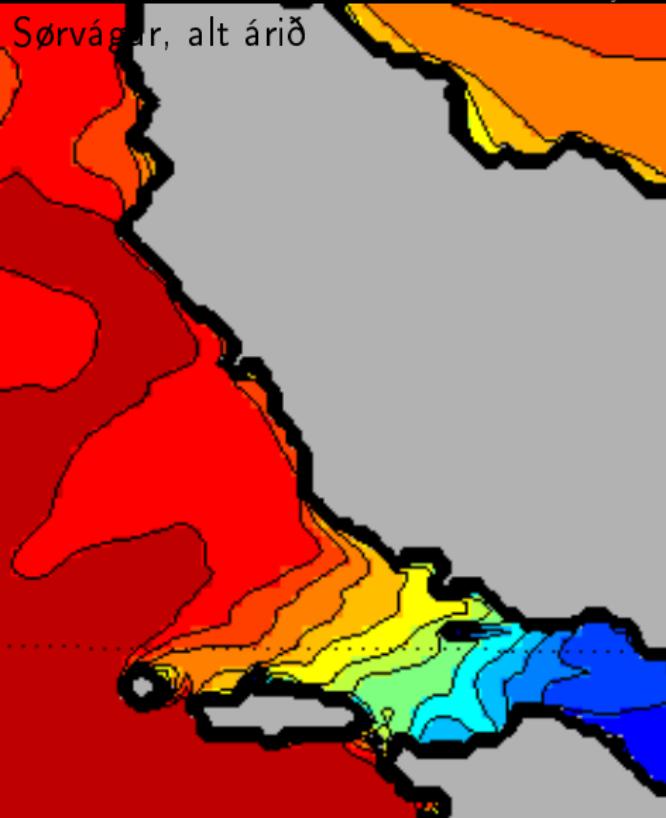


Alt árið



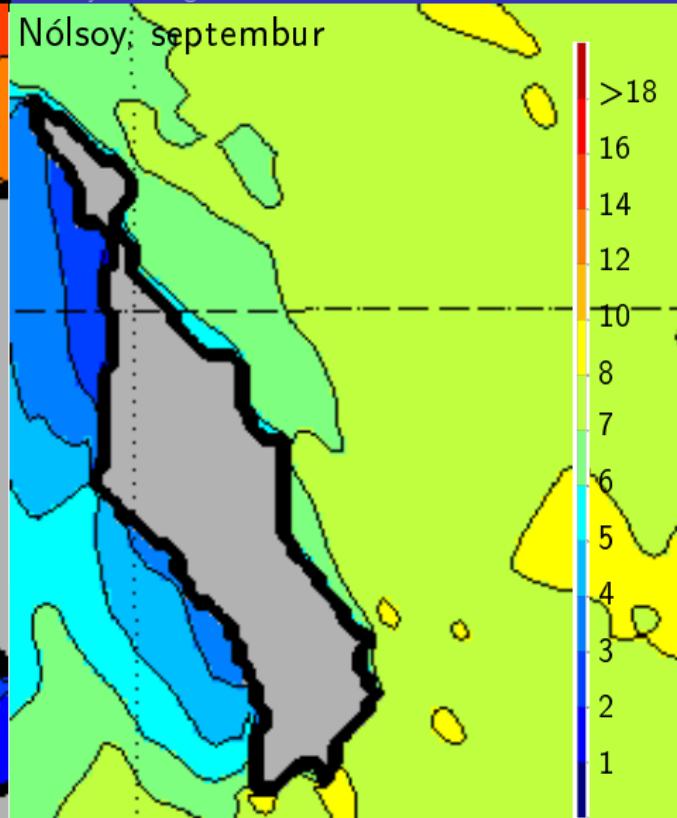
Inngangur
Streymur og alda
Amboðini
Framyvir

Sørvágur, alt árið



Streym- og aldukort
Samanbering við Sørvág
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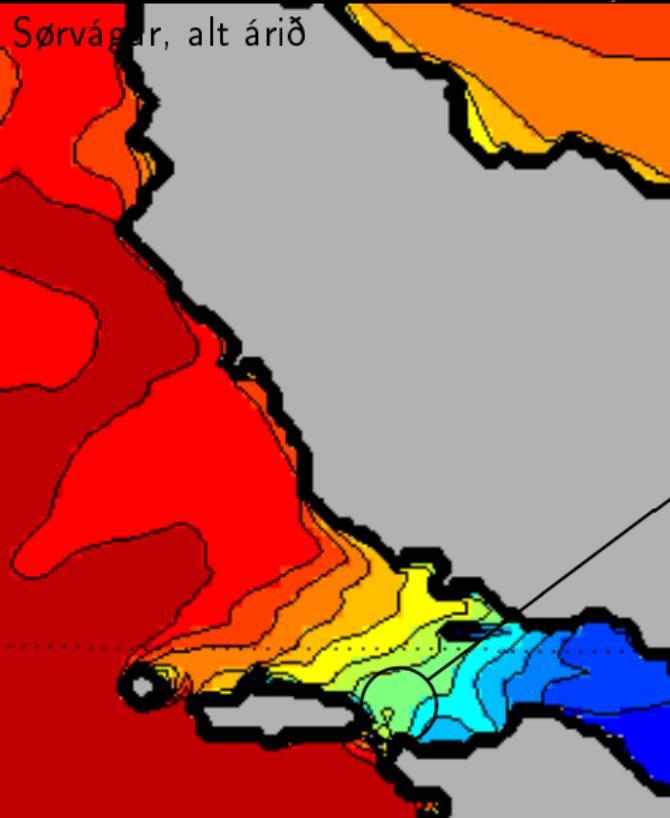
Nólsoy; septembur



TISKANING
Aquaaculture Research Station of the Faroes

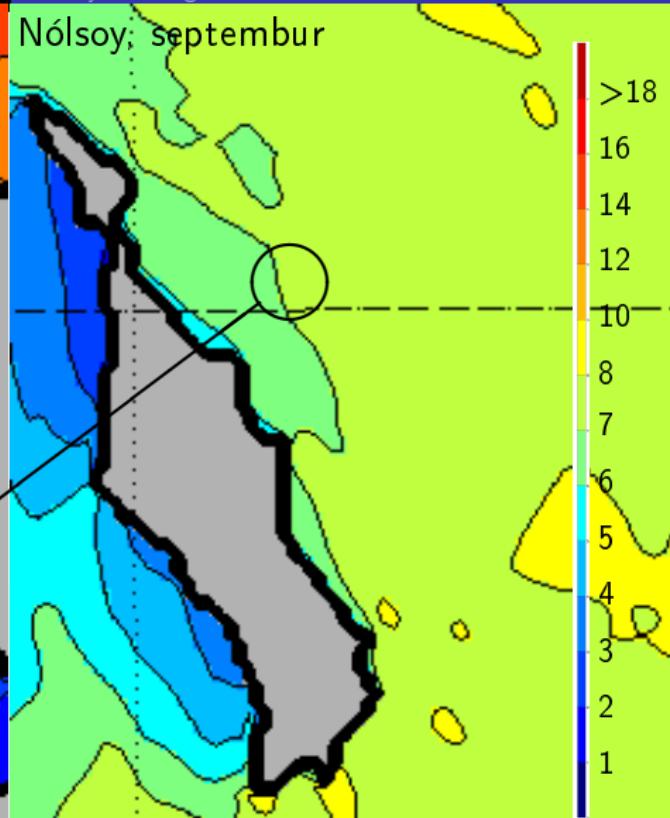
Inngangur
Streymur og alda
Amboðini
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Sørvágur, alt árið



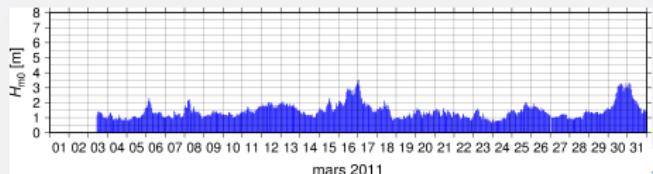
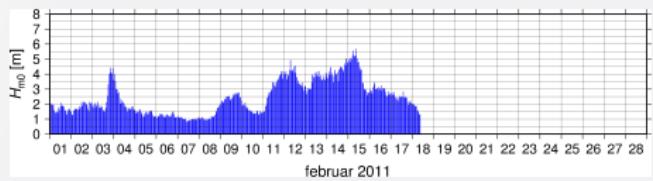
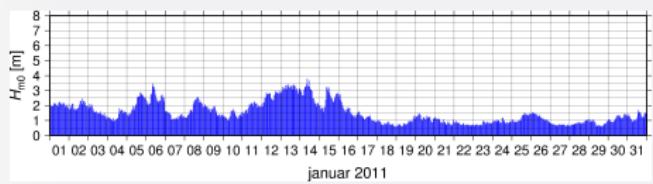
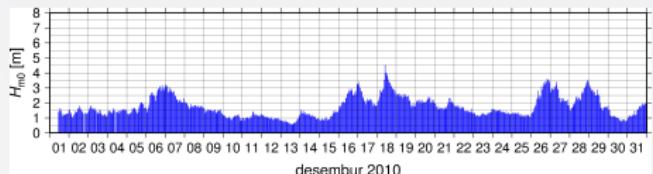
Streym- og aldukort
Samanbering við Sørvág
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Nólsoy, septembur

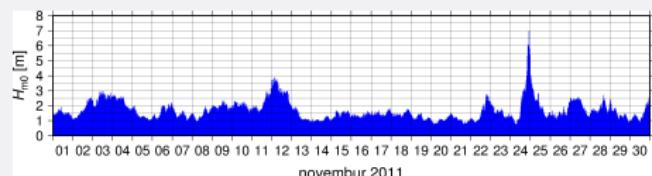
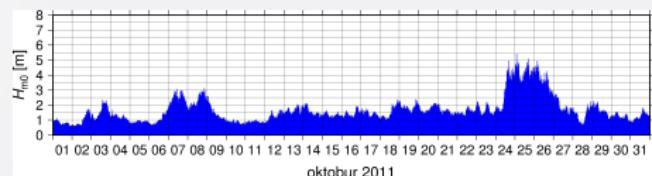
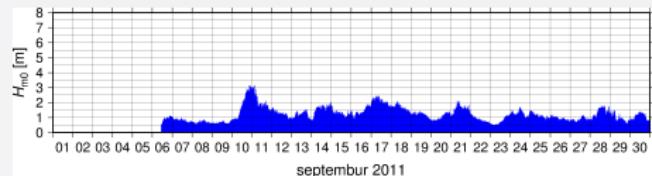
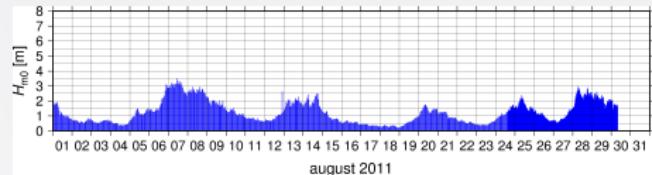
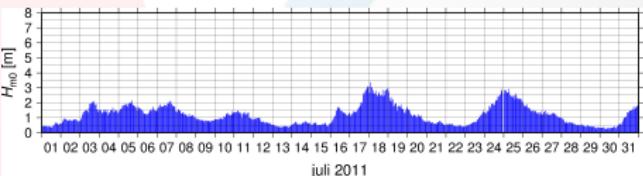
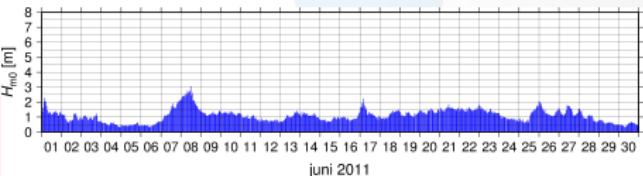
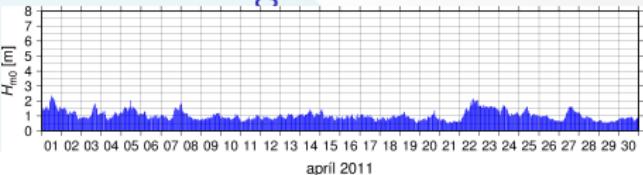


TISKANING
AquaCulture Research Station of the Faroes

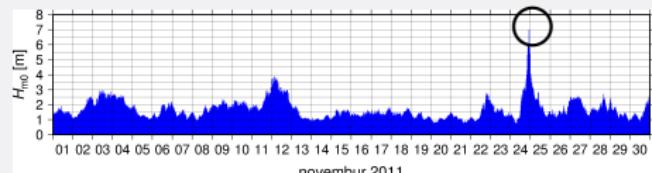
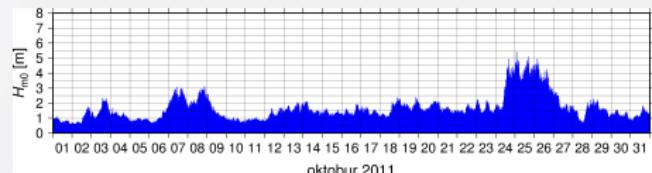
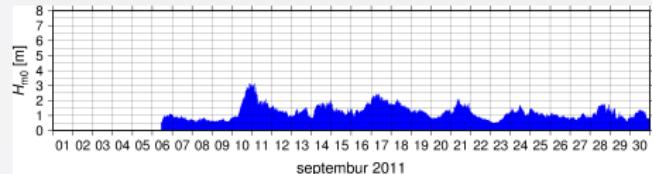
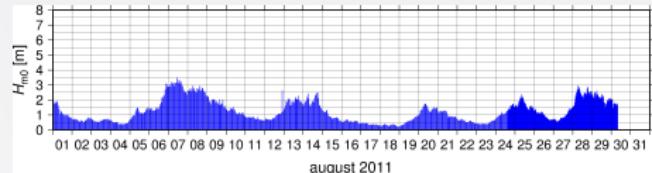
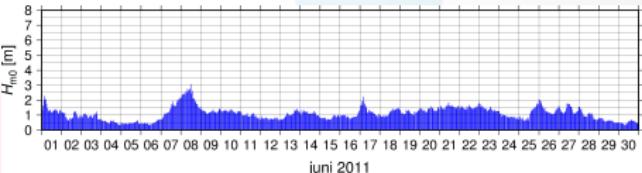
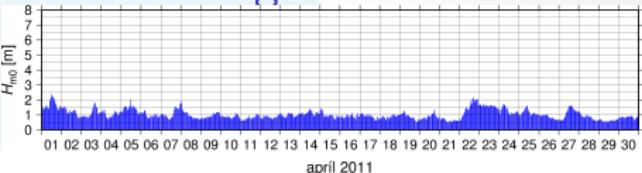
Aldumátingar



Aldumátingar

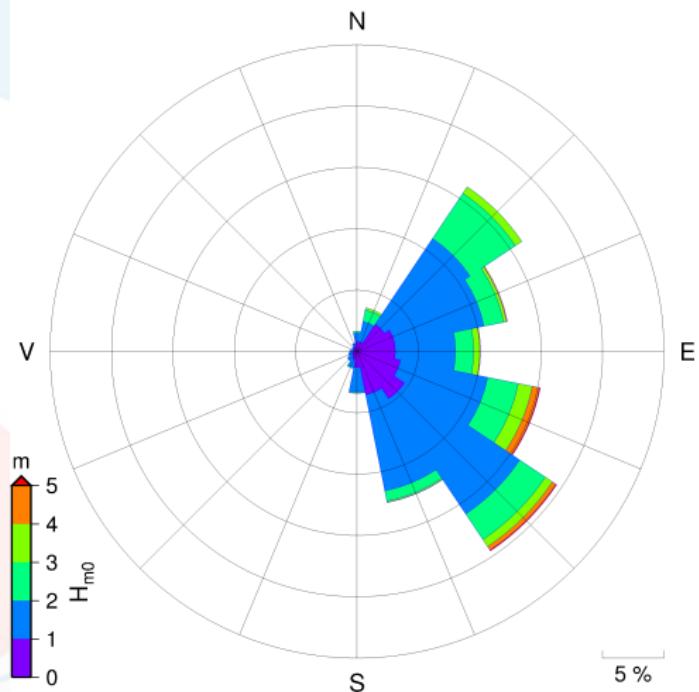


Aldumátingar

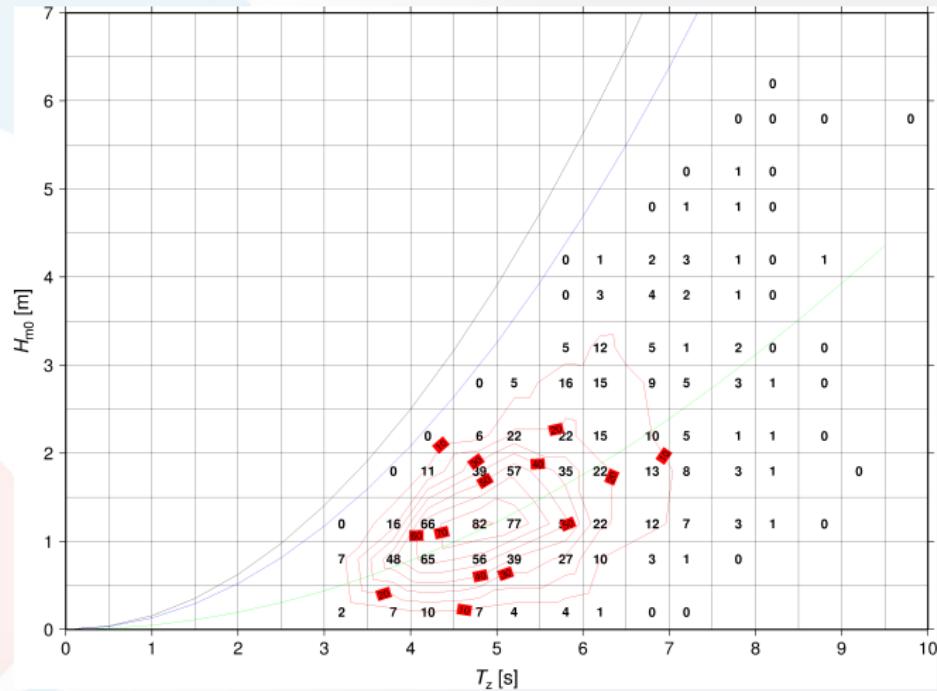


Aldurósá

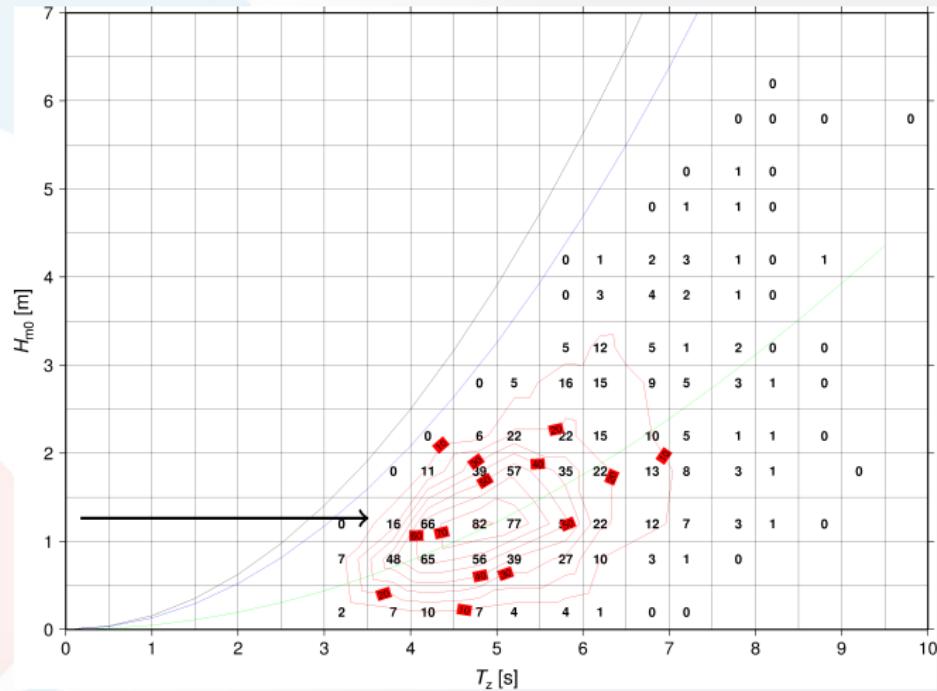
Aldurósá við Nólsoy 1. des 2010 – 13. des 2011



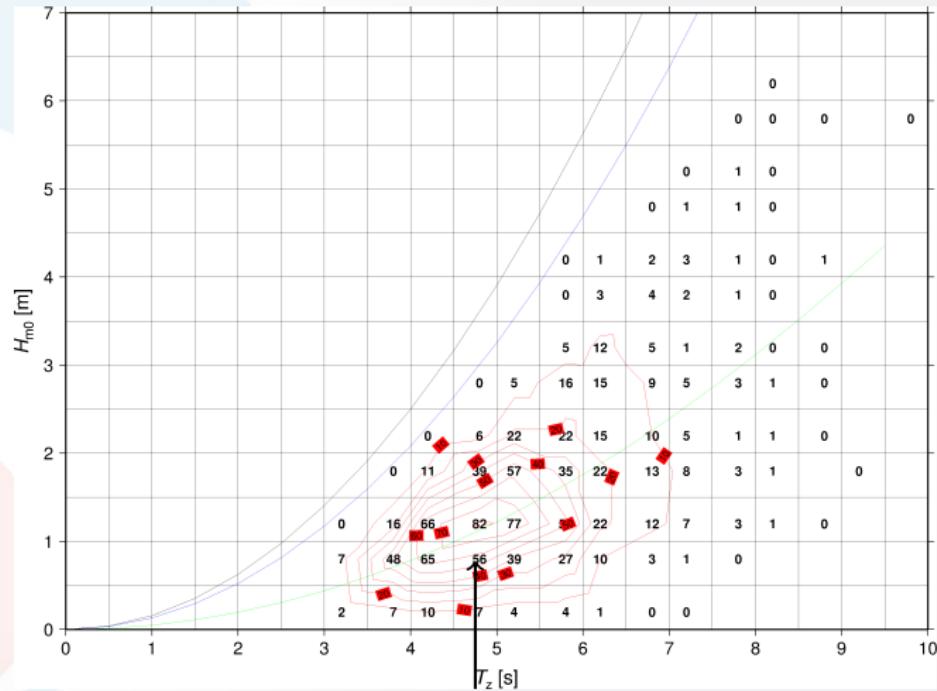
Samansett sannlíkindi



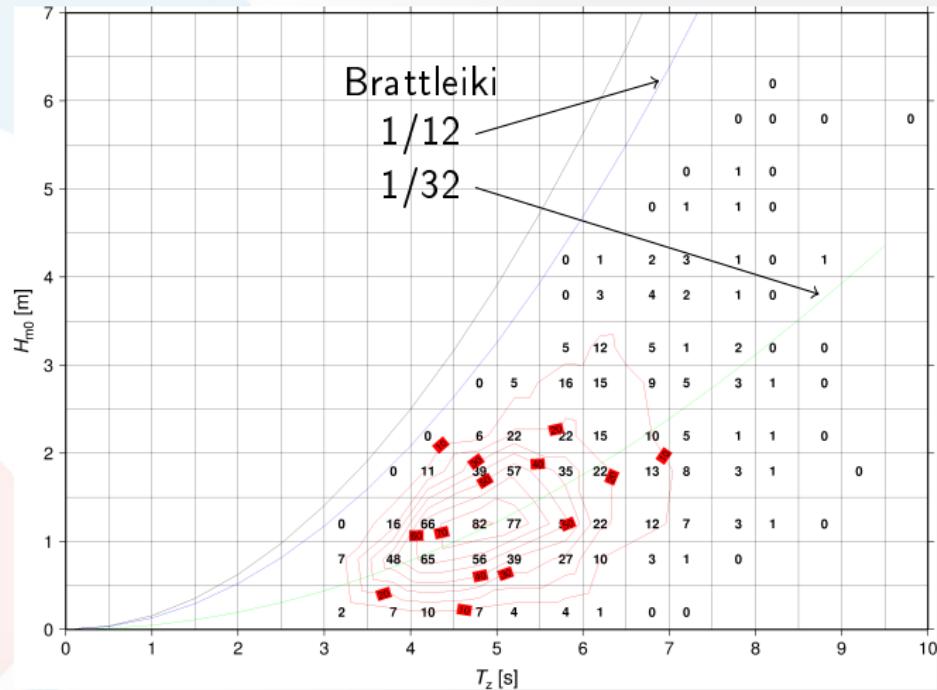
Samansett sannlíkindi



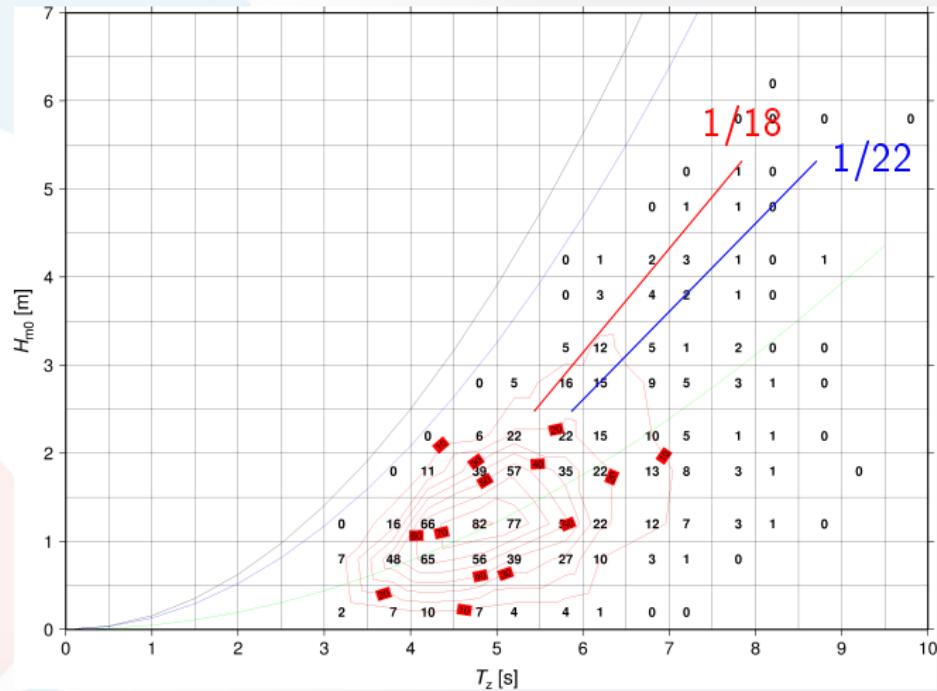
Samansett sannlíkindi



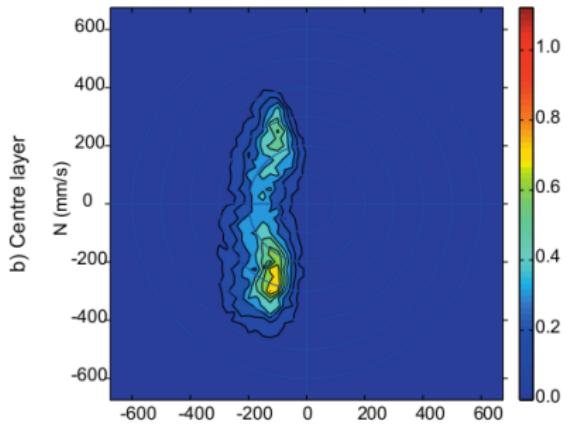
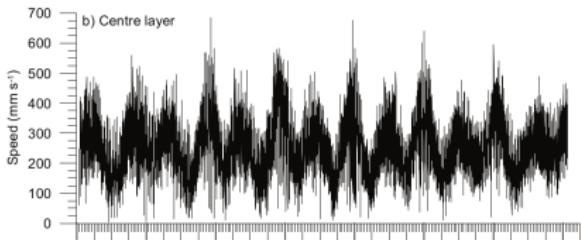
Samansett sannlíkindi



Samansett sannlíkindi



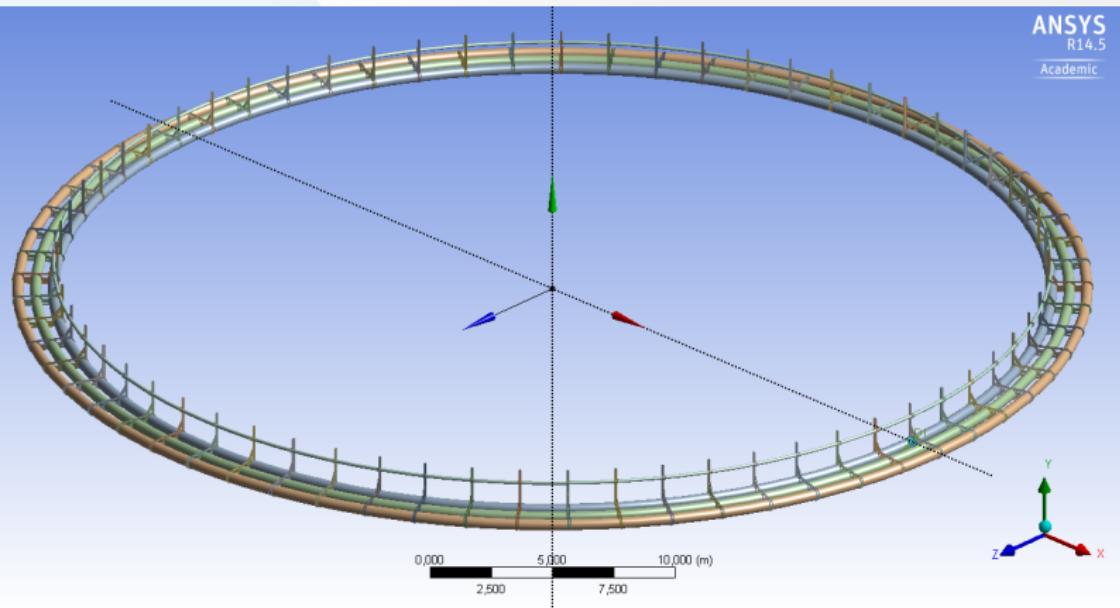
Streymmátingar



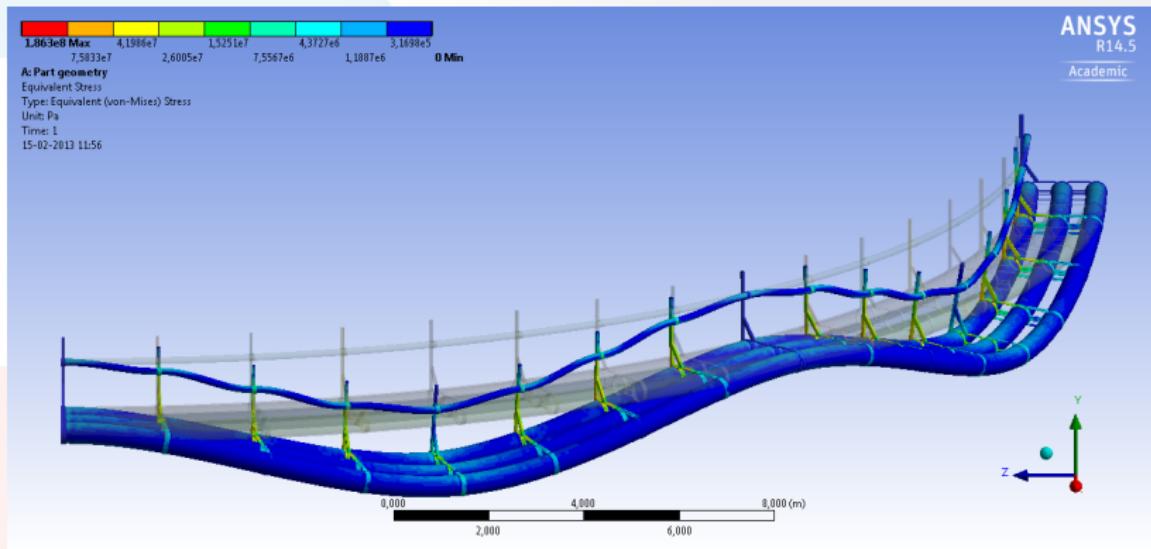
Tvey høvðusamboð

- ▶ Ansys til mekaniska styrkirokning
- ▶ AquaFE til at rokna árin, alda og streymur hava á skipanina

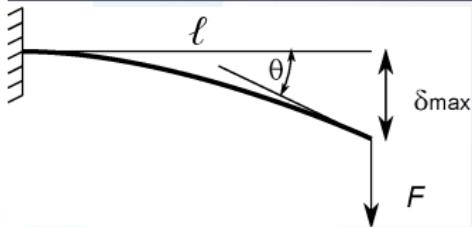
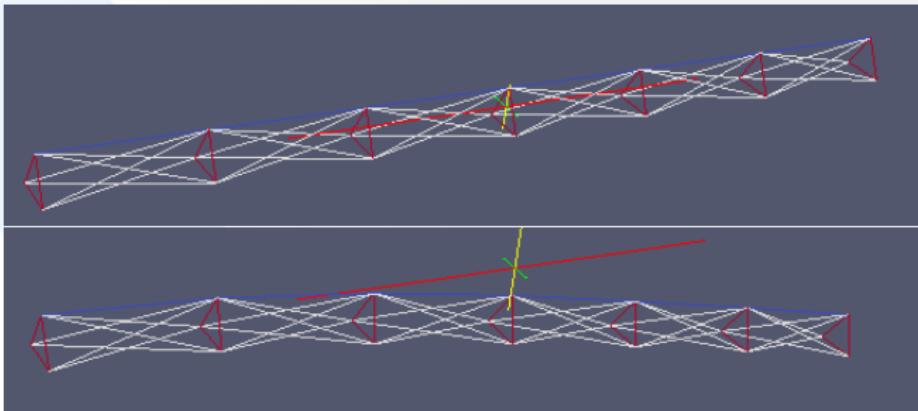
Ansys



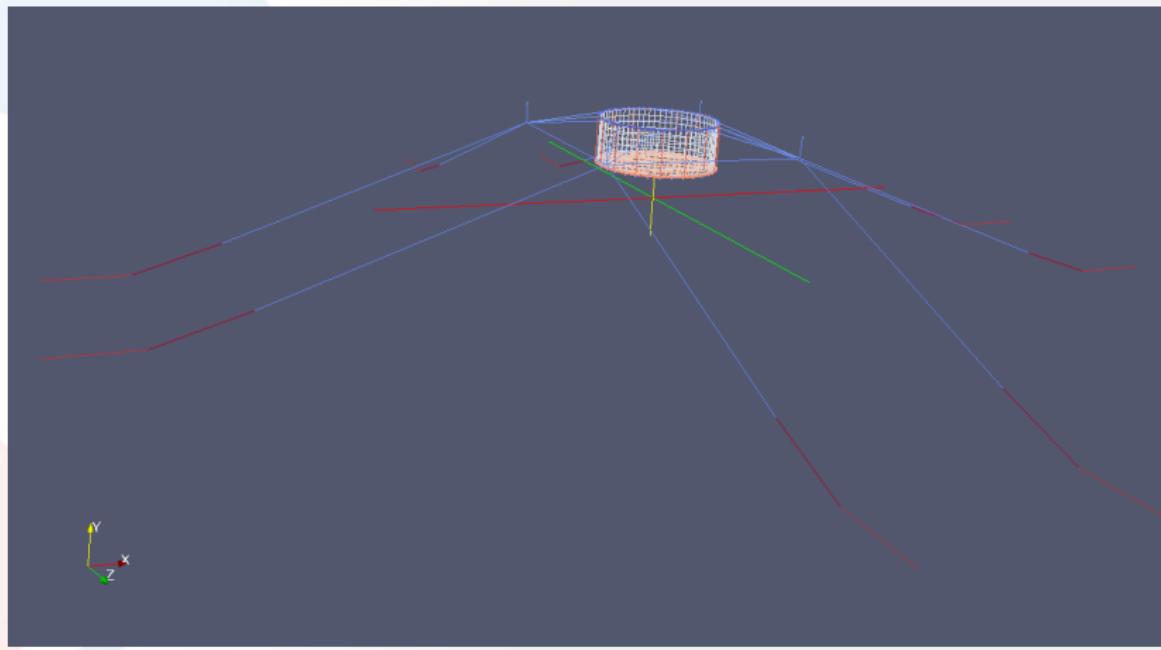
Ansys



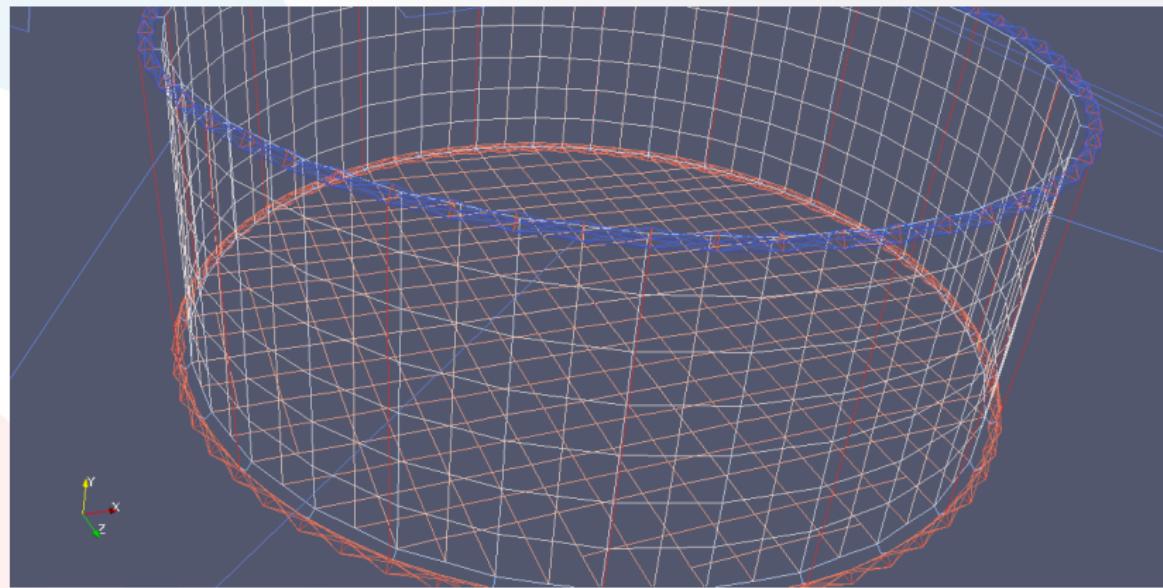
Kragaelement



Teymar

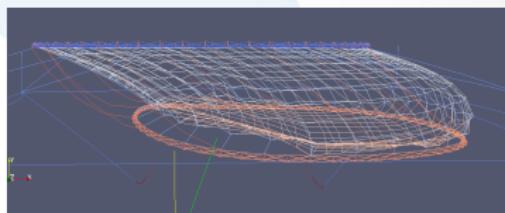


Nót

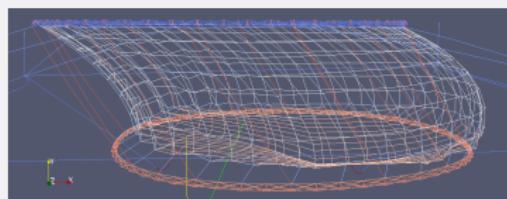


Dómi um simulerigar, ymsar vektrir

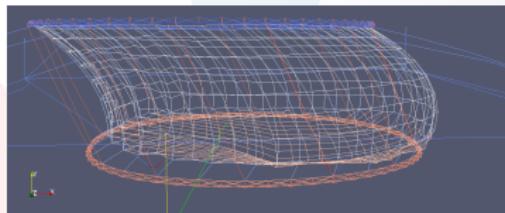
Eingin alda, streymferð 50 cm/s, rein nót



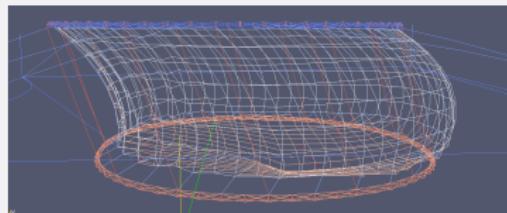
Eingin vekt í sokkringi



30 kg/m eru í sokkringi



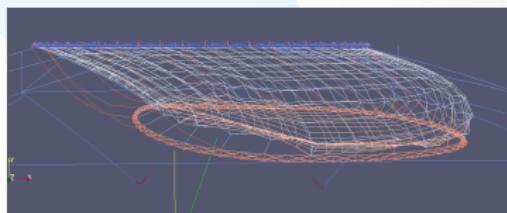
50 kg/m eru í sokkringi



80 kg/m eru í sokkringi

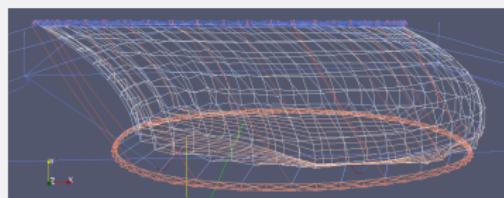
Dómi um simuleringu, ymsar vektrir

Eingin alda, streymferð 50 cm/s, rein nót



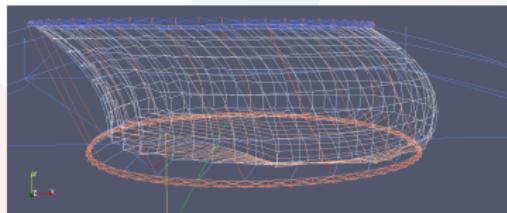
63%

Eingin vekt í sokkringi



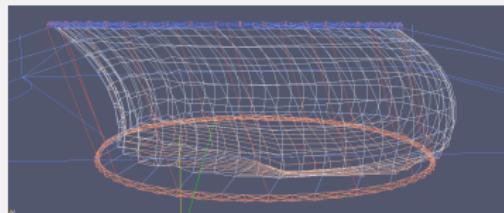
86%

30 kg/m eru í sokkringi



91%

50 kg/m eru í sokkringi

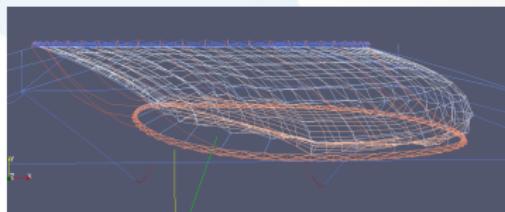


95%

80 kg/m eru í sokkringi

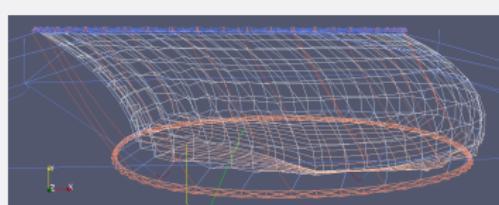
Dómi um simulerigar, ymsar vektrir

Eingin alda, streymferð 50 cm/s, rein nót



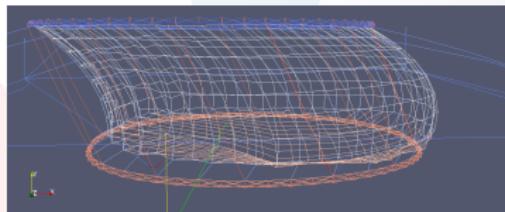
23kN

Eingin vekt í sokkringi



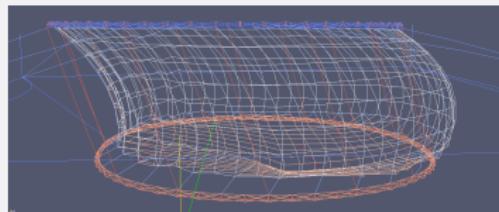
27kN

30 kg/m eru í sokkringi



29kN

50 kg/m eru í sokkringi

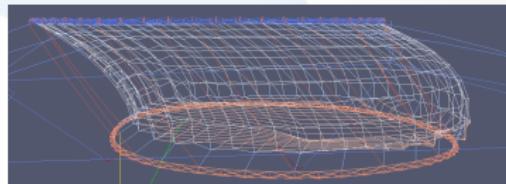


31kN

80 kg/m eru í sokkringi

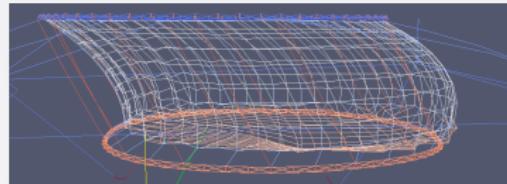
Dómi um simuleringu, tá gróður kemur á nótina

Eingin alda, streymferð 50 cm/s, 80 kg/m í sokkringi



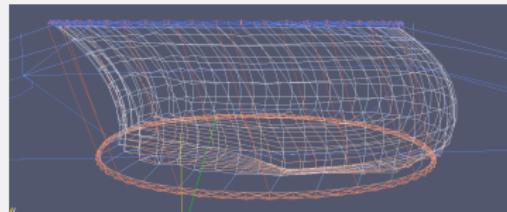
82%

skitin nót (250%)



87%

dálkað nót (175%)

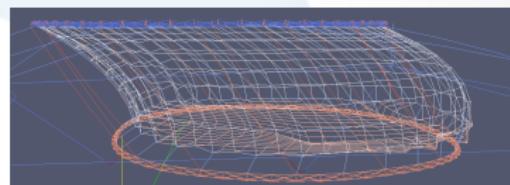


95%

rein nót

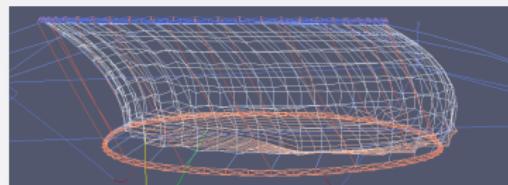
Dómi um simuleringu, tá gróður kemur á nótina

Eingin alda, streymferð 50 cm/s, 80 kg/m í sokkringi



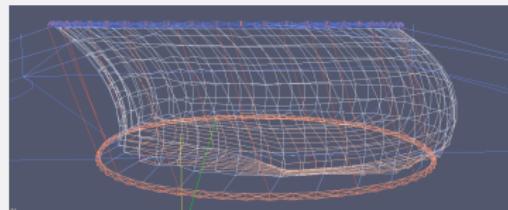
55kN
82%

skitin nót (250%)



44kN
87%

dálkað nót (175%)



31kN
95%

rein nót

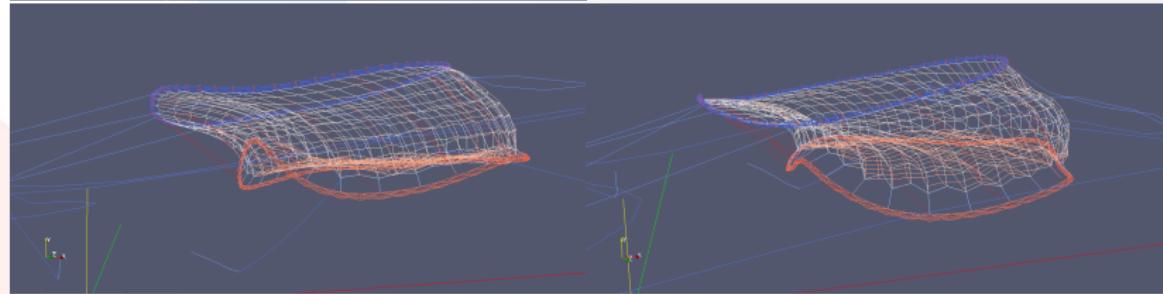
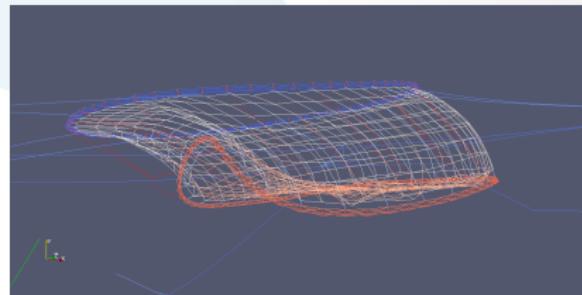
8m, 1/12, 50 cm/s, 80 kg/m, rein nót

Animering

12 m, 1/12, 50 cm/s, 80 kg/m, rein nót

Animering

Dømi um simuleringu, meira slakk í innbinding



Akkersketan

- ▶ Tað eיגur at verða hálað vatnrætt í akkerið

Akkersketan

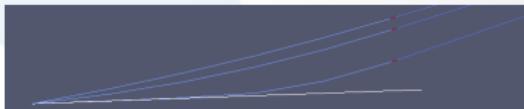
- ▶ Tað eיגur at verða hálað vatnrætt í akkerið
- ▶ Akkersketan ger, at tað fjaðrar í

Akkersketan

- ▶ Tað eיגur at verða hálað vatnrætt í akkerið
- ▶ Akkersketan ger, at tað fjaðrar í
- ▶ Æll akkersketan skal tí ikki verða lyft frá botni

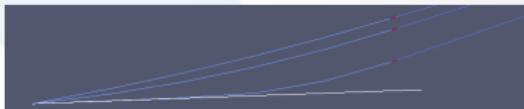
Akkersketa, eingin alda, rein nót, 80 kg/m í sokkringi

- ▶ 1 shot av 51 mm akkersketu, 30-, 50- og 70cm/s av streymi:

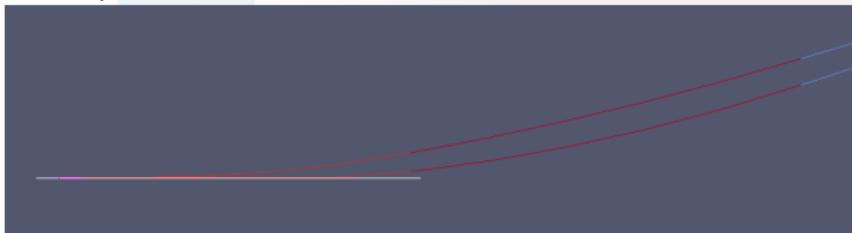


Akkersketa, eingin alda, rein nót, 80 kg/m í sokkringi

- ▶ 1 shot av 51 mm akkersketu, 30-, 50- og 70cm/s av streymi:



- ▶ 1 shot av 36 mm ketu millum teym og akkersketu, 50- og 70cm/s av streymi:



Akkersketa í 8 m aldu, 50 cm/s av streymi

2 shot av 51mm akkersketu

Animering

Akkersketa í aldu

	0m	8m	12m
0 cm/s		30%	50%
30 cm/s		50%	80%
50 cm/s		70%	100%
70 cm/s	60%	100%	100%

2 shot av 51mm ketu

Akkersketa í aldu

	0m	8m	12m
0 cm/s		30%	50%
30 cm/s		50%	80%
50 cm/s		70%	100%
70 cm/s	60%	100%	100%

2 shot av 51mm ketu

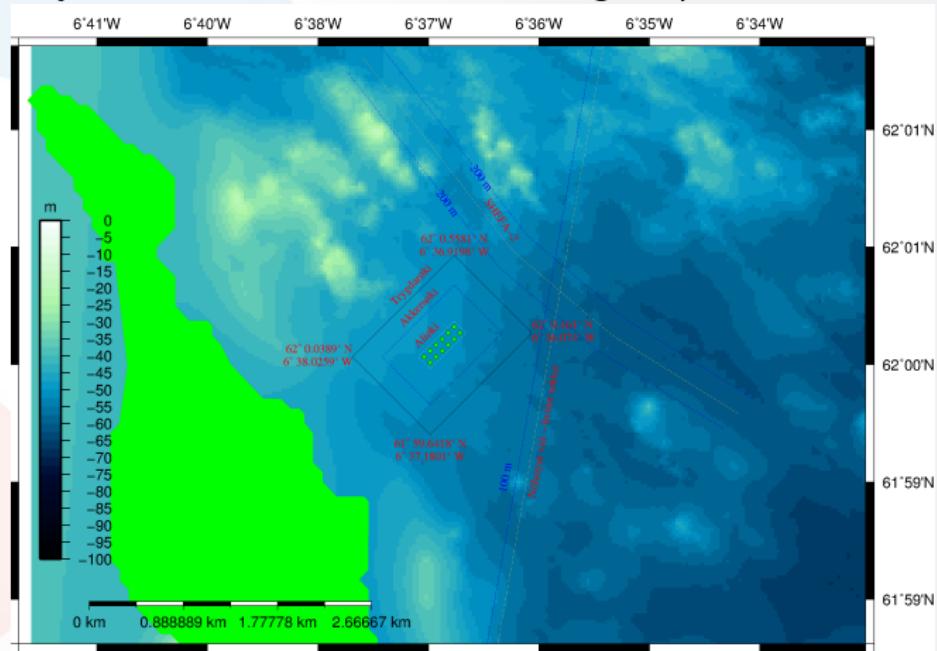
- ▶ Meira vekt skal í ketuna, enn vanliga hevur verið brúkt

Framyvir

- ▶ Skipanin verður lögð út í summar
- ▶ Mátingar og samanbering við simulerigar verða gjørdar komandi vetur

Umbiðna økið

Royndarøkið til verkætlana "Aling á opnum havi"



Takk fyri

Takk fyri