



Með gosmökk á radarnum

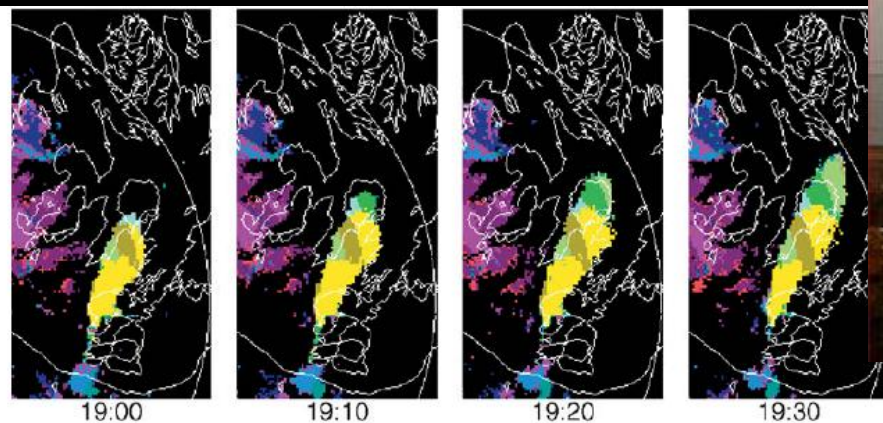
Guðrún Nína Petersen

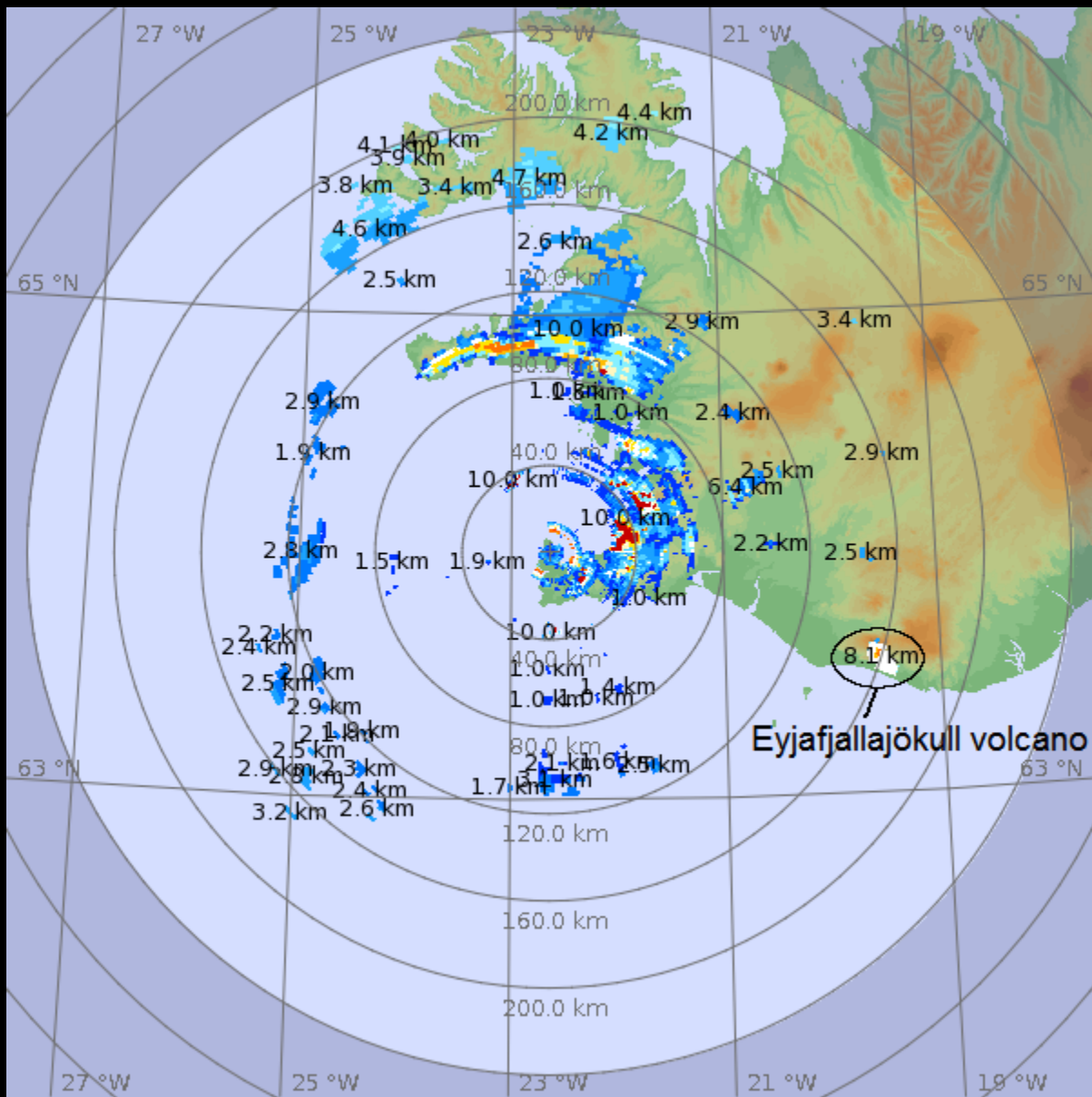
og

Þórður Arason

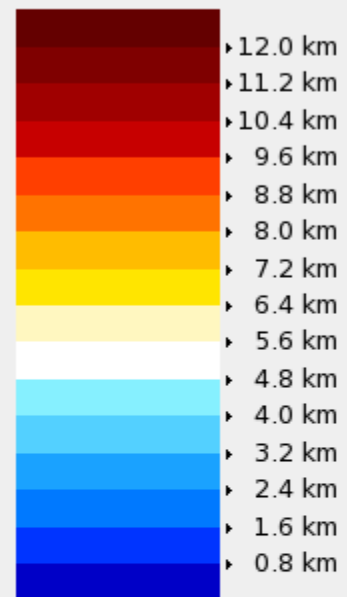
# Miðnesheiði/Keflavíkur veðursjáin

- 3 km frá KEF
- Drægni 480 km
- Tekin í notkun 1991
- Doppler síðan 29. apríl
- Vöktun eldgosa
  - Hekla 1991, 2000
  - Gjálp 1996
  - Grímsvötn 1998, 2004





**EHT (Height)**  
**09:50 / 16-May-2010**  
**Keflavik**



Pdf File: eht\_240km\_text.eht  
 Clutter Filter: None  
 Time sampling: 50  
 PRF: 1200 Hz  
 Range: 250 km  
 Resolution: 0.833 km/pixel  
 Min Z: -20.0 dBZ  
 Text Heights: Echo Top  
 Data: Echo Top  
 Rainbow® SELEX-SI

# Veðursjá athuganir v/eldgos

- Endurvarpsmælingar 240 km radíus á 5 mín fresti = 12 myndir á klst (í stað 4)
- Eftir 29 Apríl: Doppler mælingar 2 á klst => 10 endurvarpsmælingar

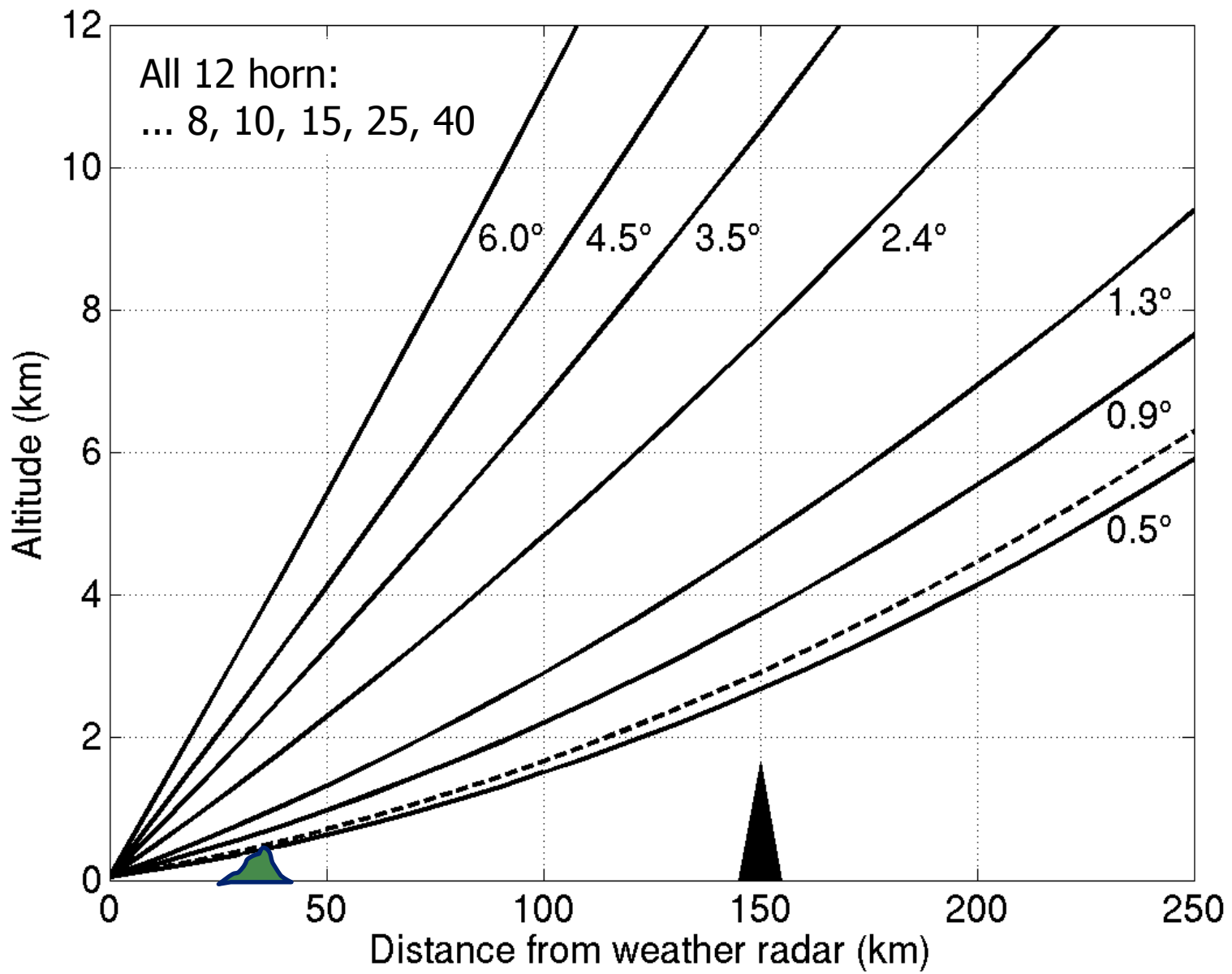
Samtals radarmyndir 14 Apríl – 23 May: 9500 stk

Það vantar 2019 myndir (Doppler og tækni)

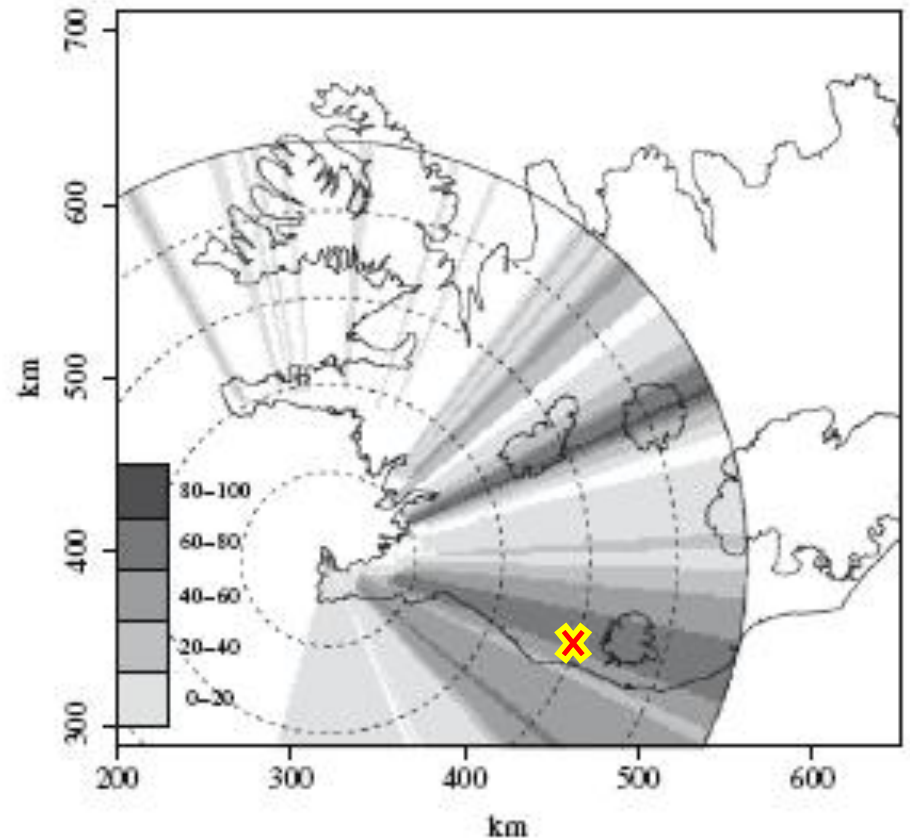
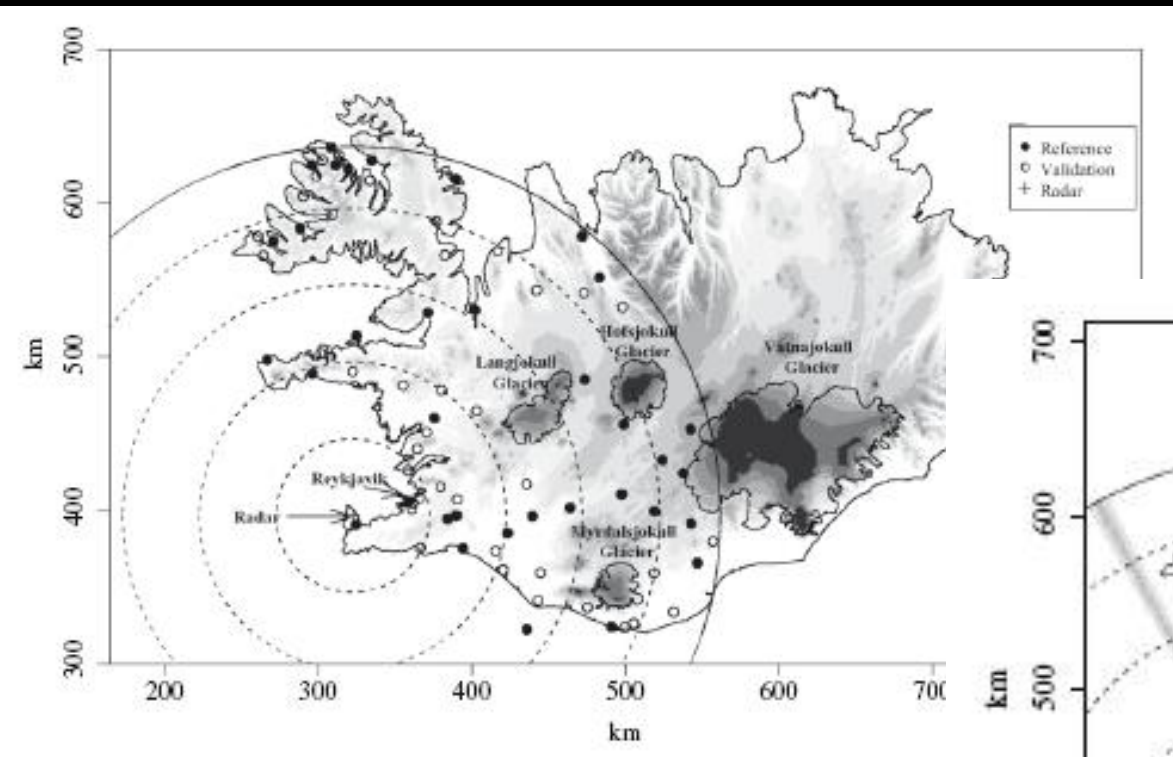
Allar myndir skoðaðar og

- Makkarhæð skráð
- Mökkur undir radar
- Úrkomuský fyrir



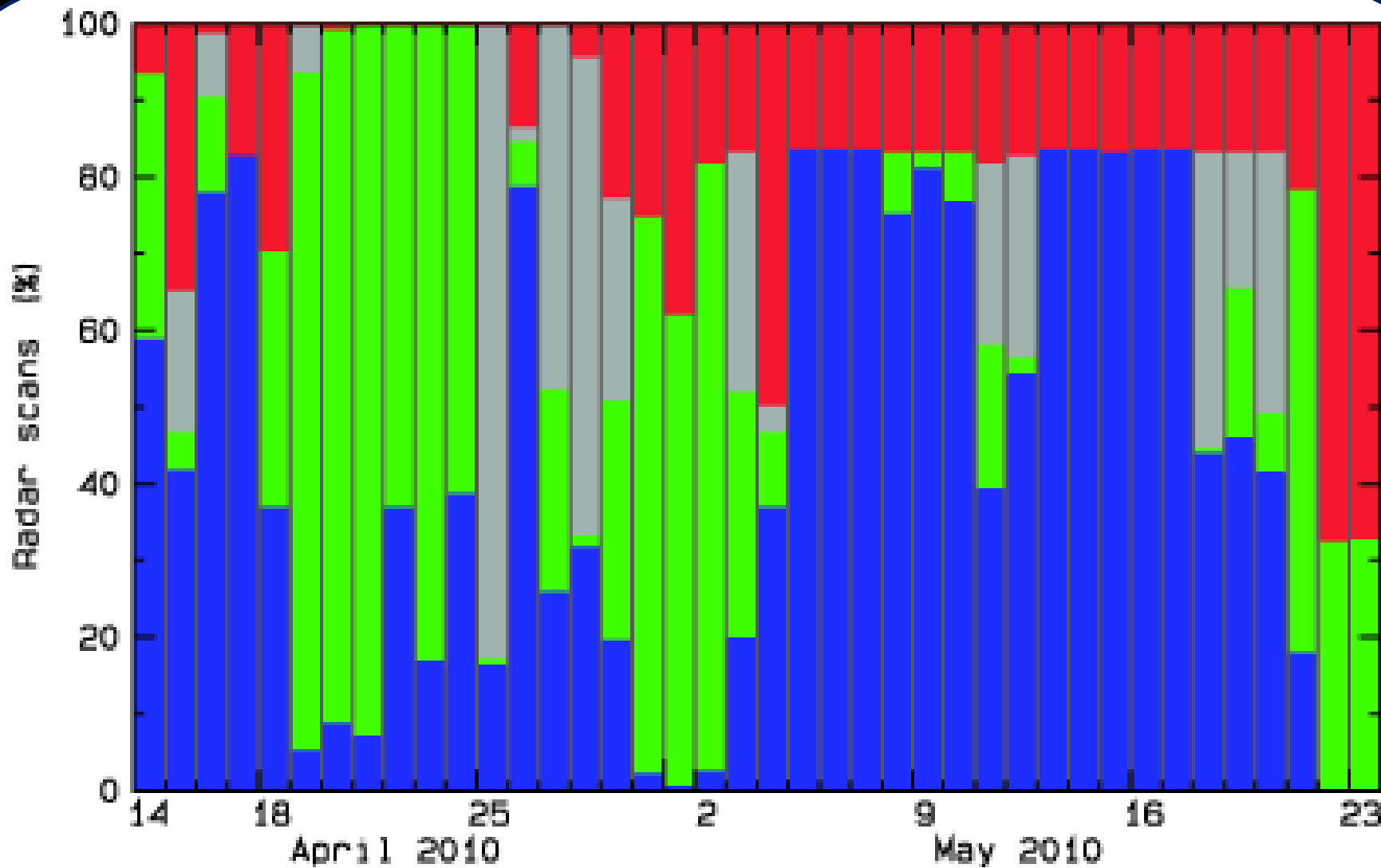


# Fjallaskuggi – 60% við E15

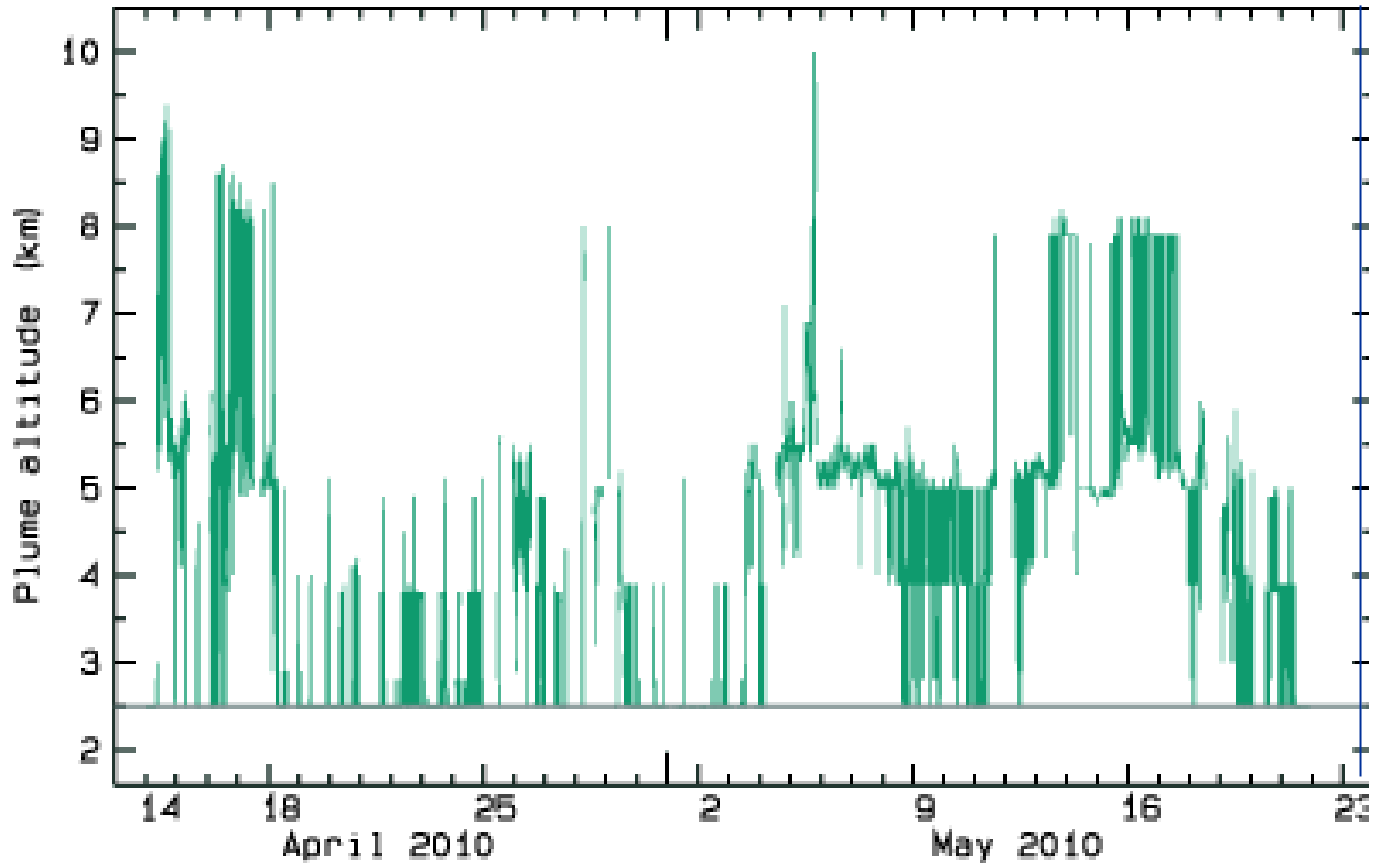


Crochet (2009)

Mökkur mældur  
Mökkur undir radar  
Mökkur ekki sýnilegur  
Myndir vantar

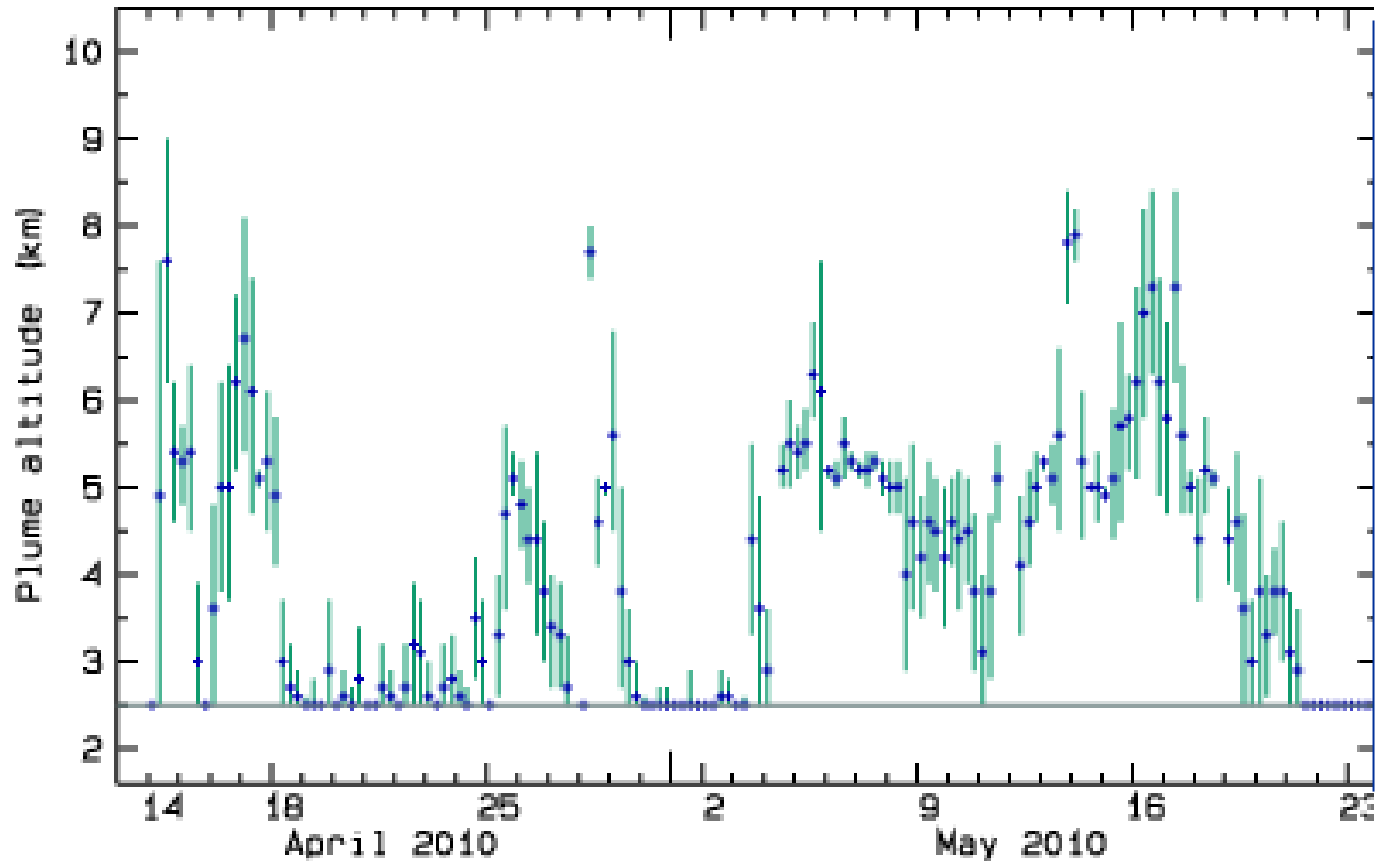


# Makkarhæð á 5 mínútna fresti





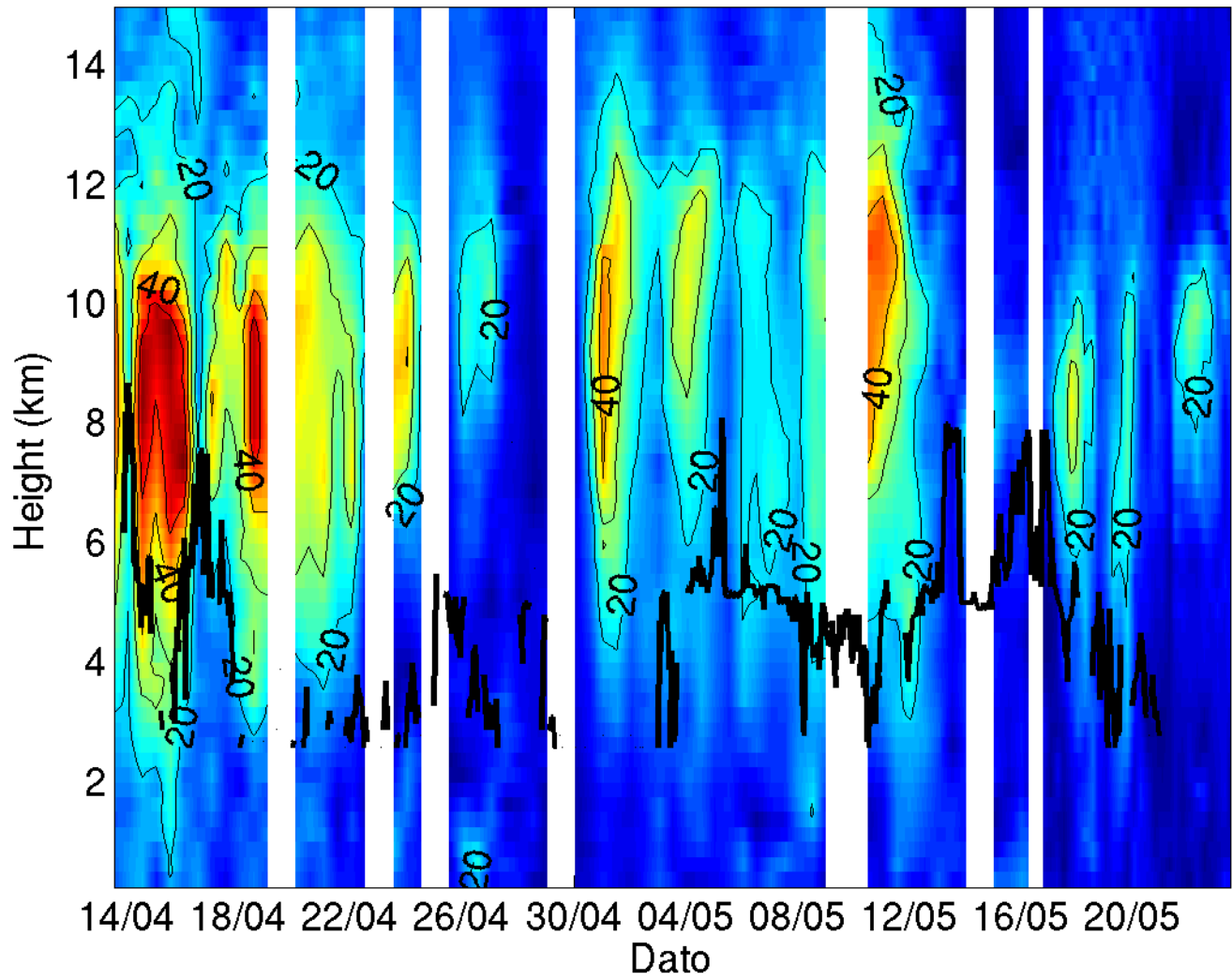
# Makkarhæð 6 tíma meðaltal

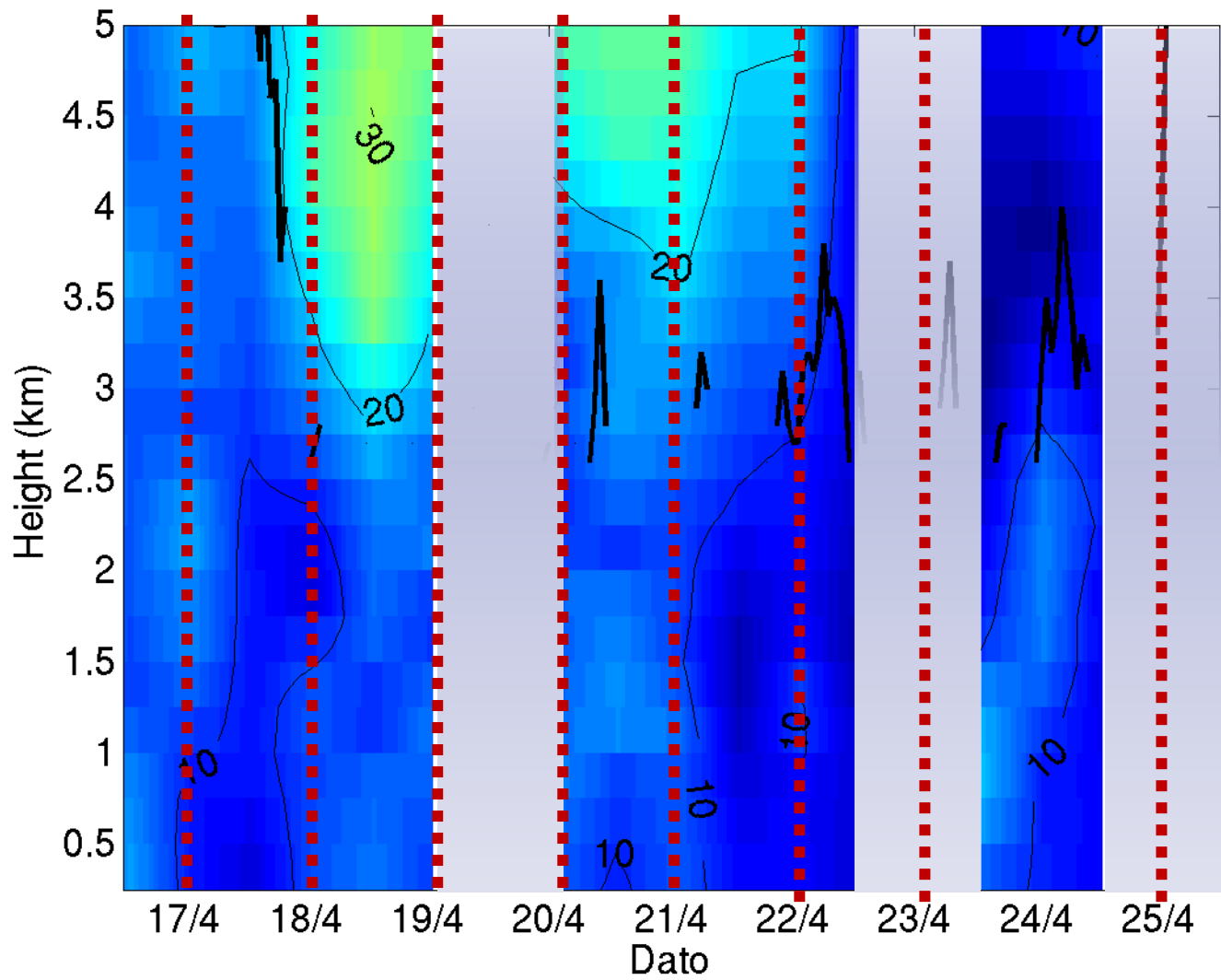


# Not af gögnunum

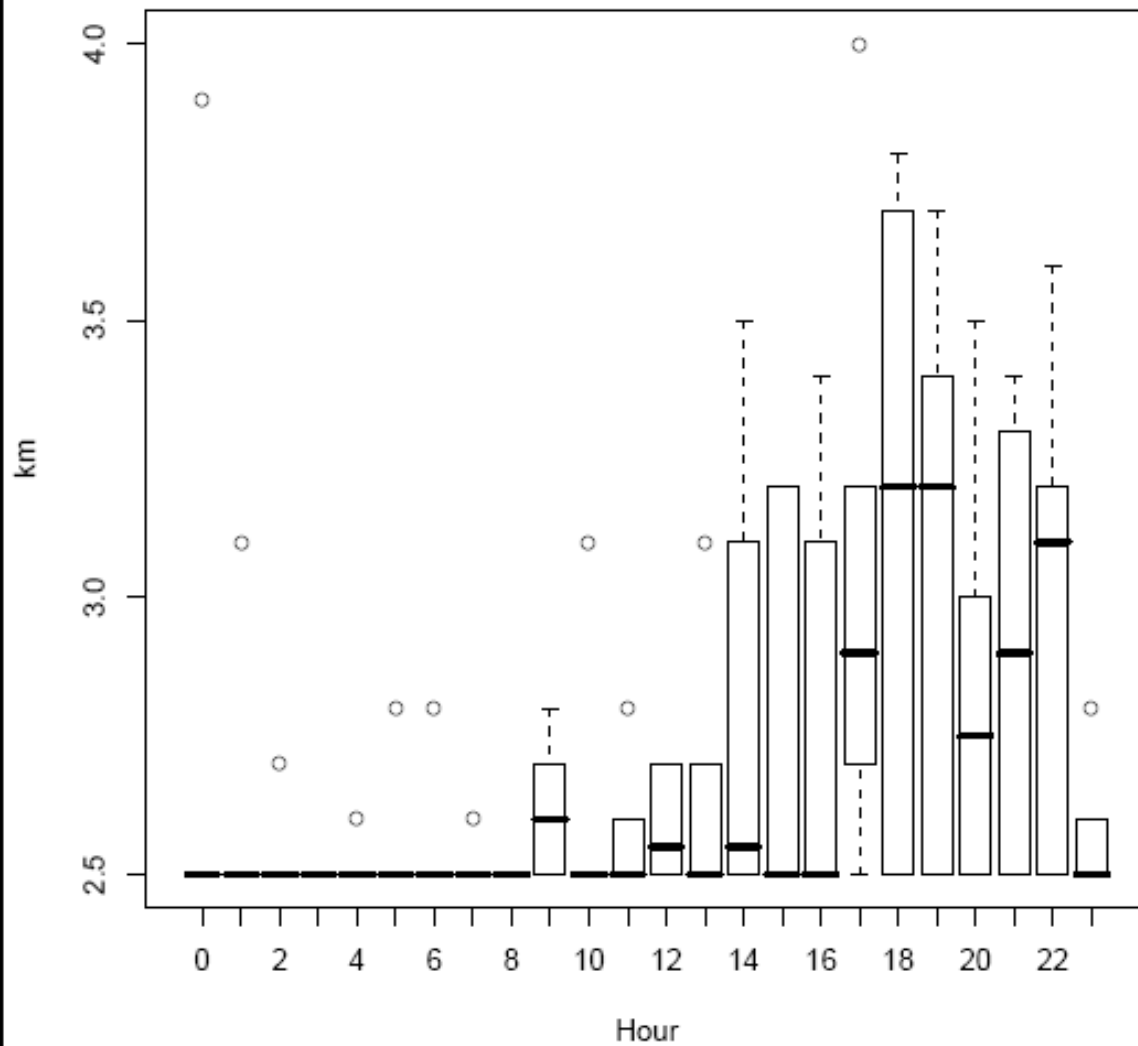
- Rannsóknir á
  - makkarhæð+öskumagni
  - dreifingu niðurstraums
  - áhrifum andrúmsloftsins á mökkinn
  - áhrifum makkarins á andrúmsloftið
- Sjaldséður hrafn
  - Tímaupplausn
  - Lengd raðar (lengd goss)







Boxplot of 1hr plume heights from Apr 19th – Apr 24 by hour



Gagnaraðir eru á vefnum!

5 mínútna röð (hrágögn)

1, 3, 6, 12, 24 tíma meðaltöl – með tölfræði

[www.vedur.is/~arason/radar](http://www.vedur.is/~arason/radar)