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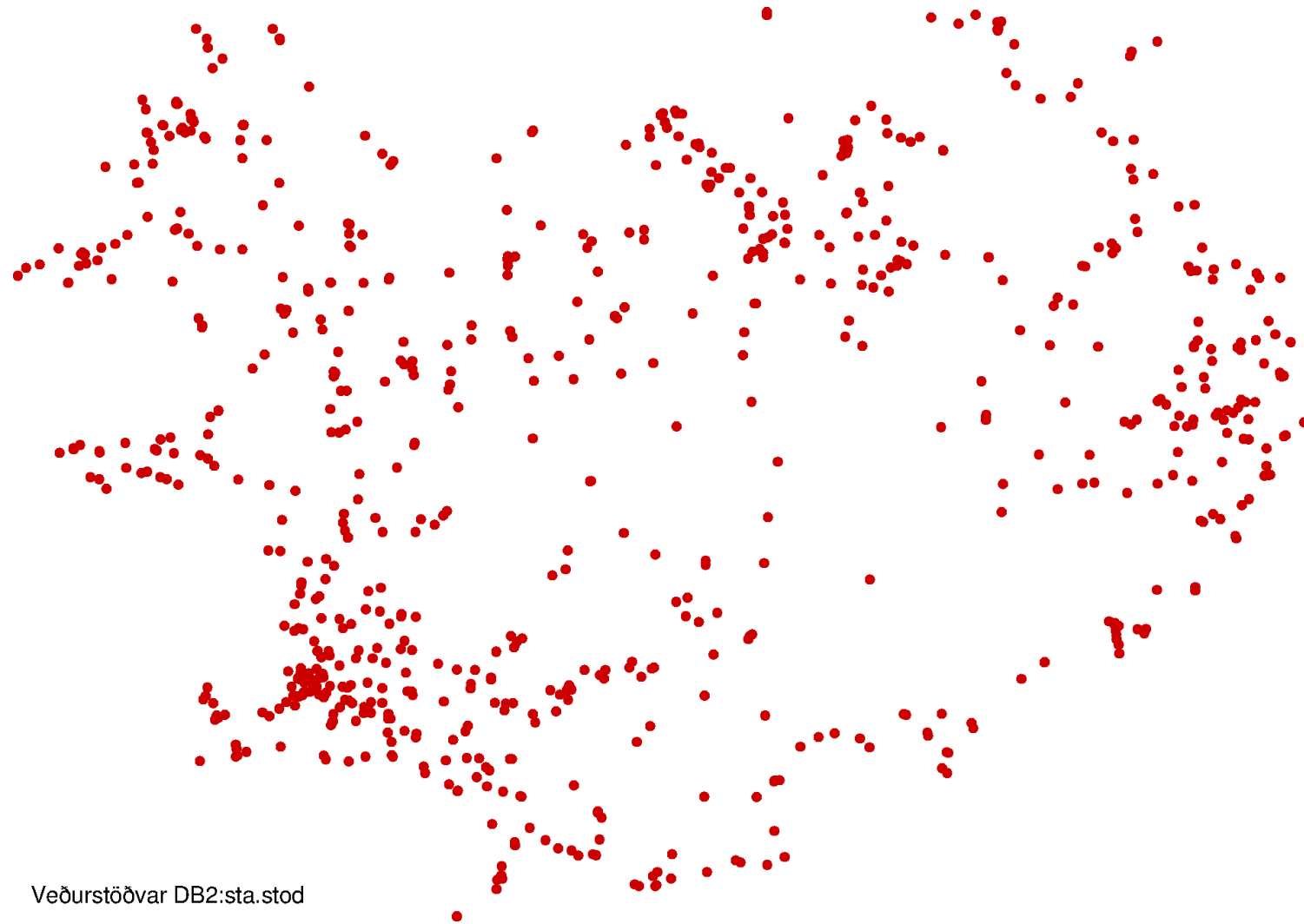
# Veðurstöðvar á Íslandi

## þróun kerfis

Þórður Arason, Kristín Björg Ólafsdóttir, Sibylle von Löwis & Trausti Jónsson  
Veðurstofu Íslands

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# Allar stöðvar í gagnagrunni

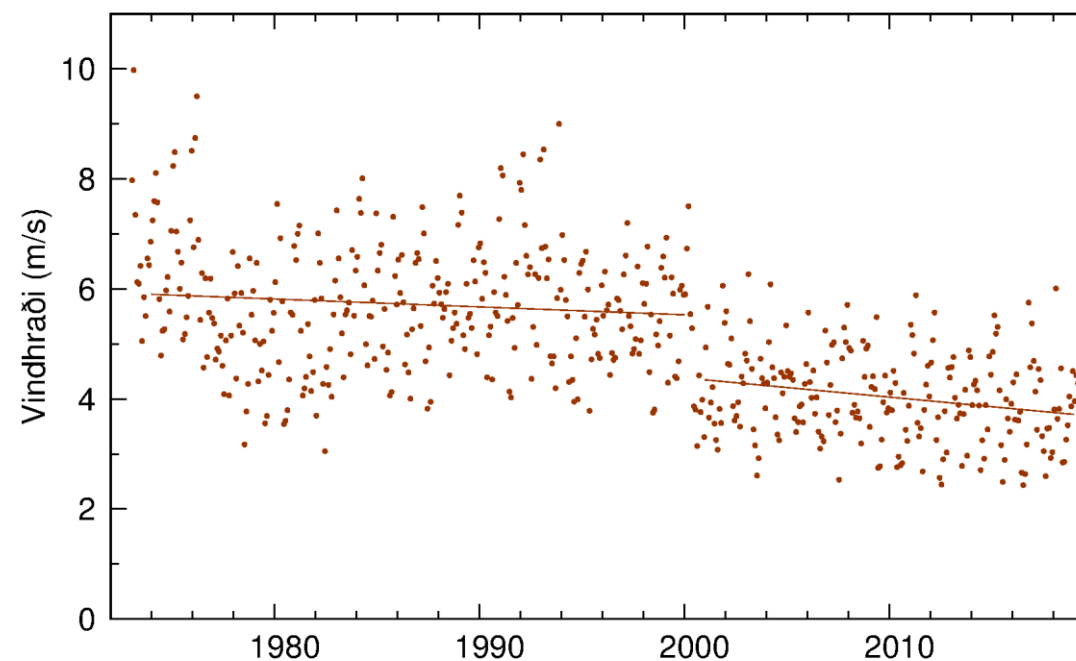


Veðurstöðvar DB2:sta.stod

## Smávægilegar breytingar á mæliaðferðum geta truflað sýn okkar á raunverulegar langtímabreytingar

- Vindhraði á veðurskeytastöðinni í Reykjavík var áður lesinn af sírita sem var tengdur við skálamæli í 10 m hæð í mælireit
- Í maí 2000 varð breyting og er vindhraði nú lesinn af sjálfvirku stöðinni sem er með rellumæli í 10 m hæð í reitnum

Mánaðameðaltöl vindhraða  
í Reykjavík 1973-2019



## Mannaðar stöðvar

- hiti
- raki
- vindur
- úrkoma, úrkomutegund
- loftþrýstingur
- veður - veðurlýsing
- skýjahula
- skýjahæð, skýjategundir
- snjódýpt
- snjóhula, í fjöllum
- jarðlag, sjólag
- (sólskinsstundir)
- (sjávarhiti)
- sérstök náttúruþyrirbæri

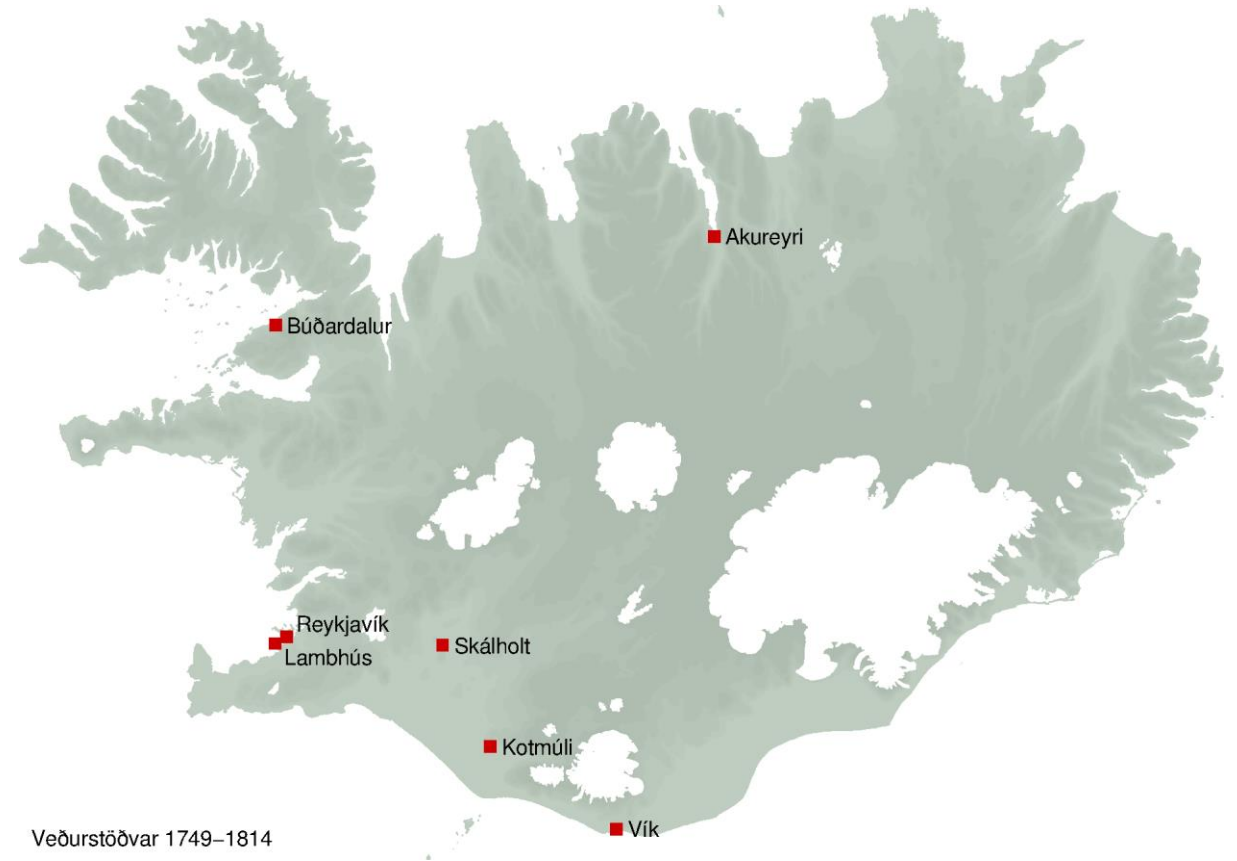
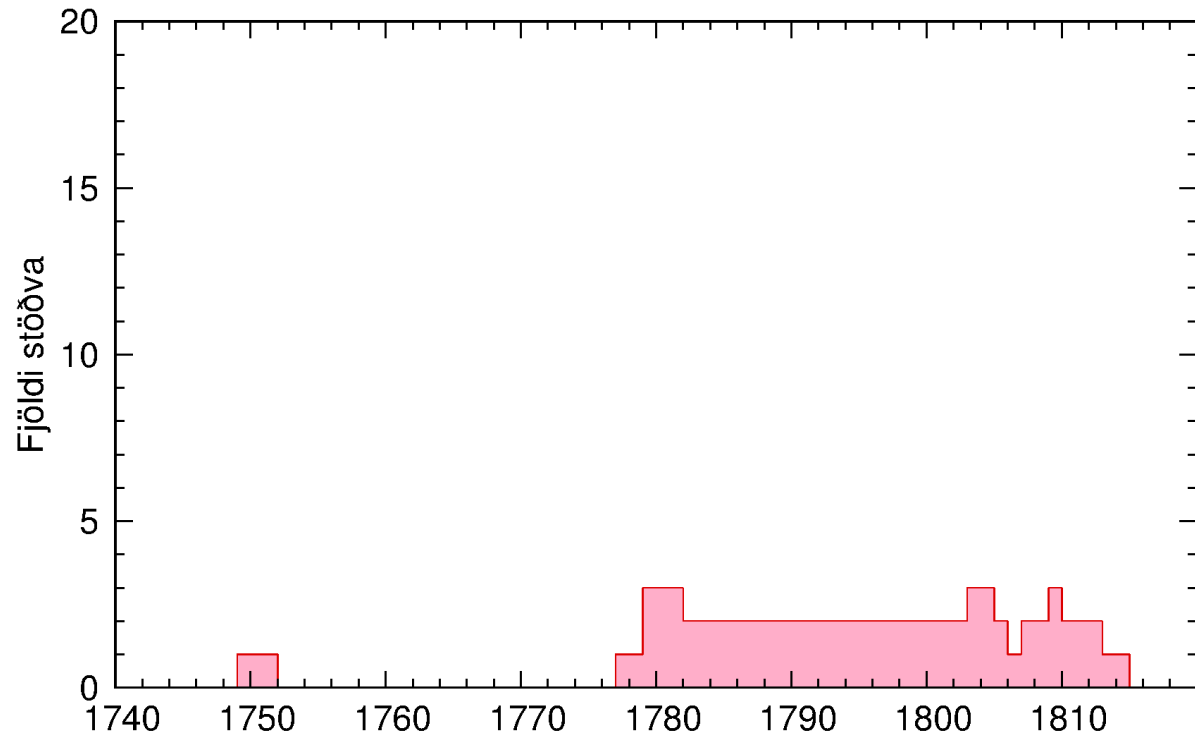
## Úrkomustöðvar

- úrkoma, úrkomutegund
- snjódýpt, snjóhula, í fjöllum
- sérstök náttúruþyrirbæri

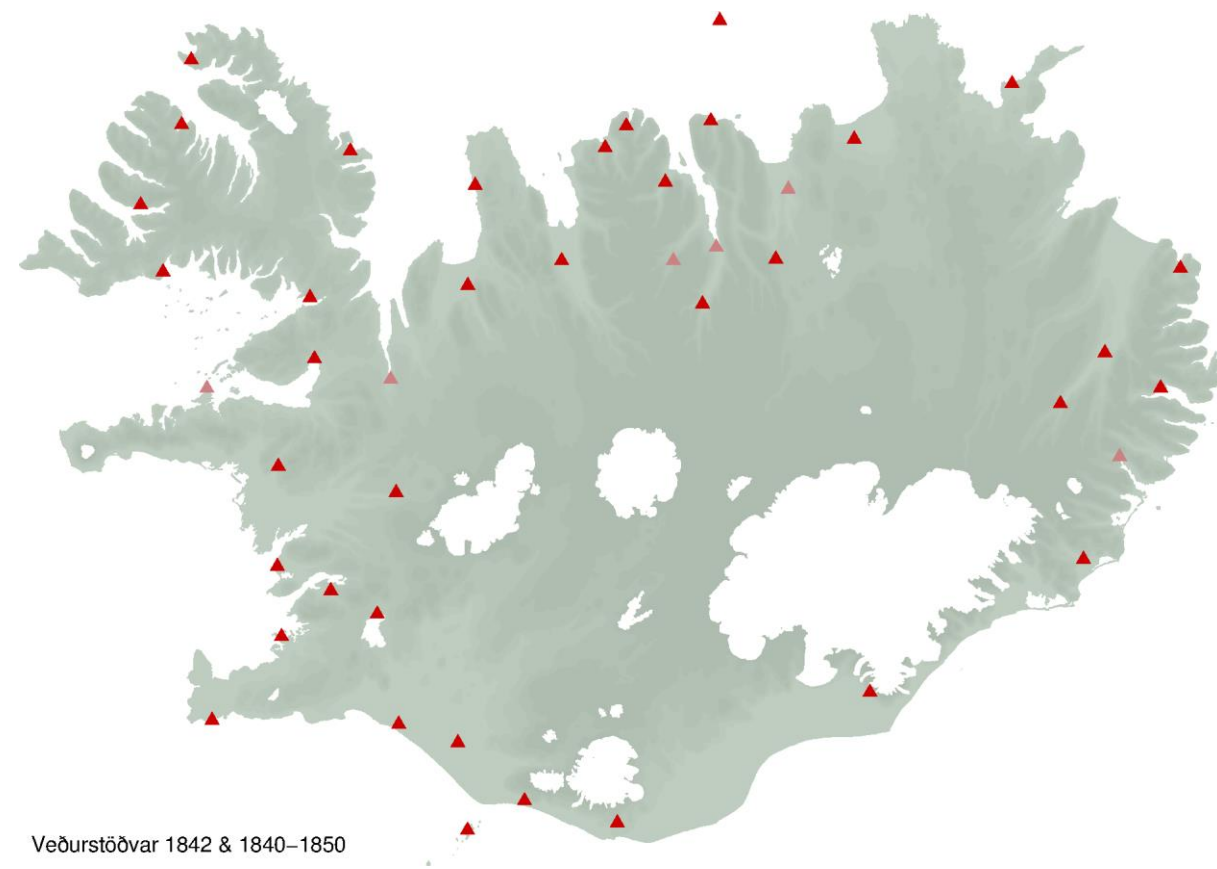
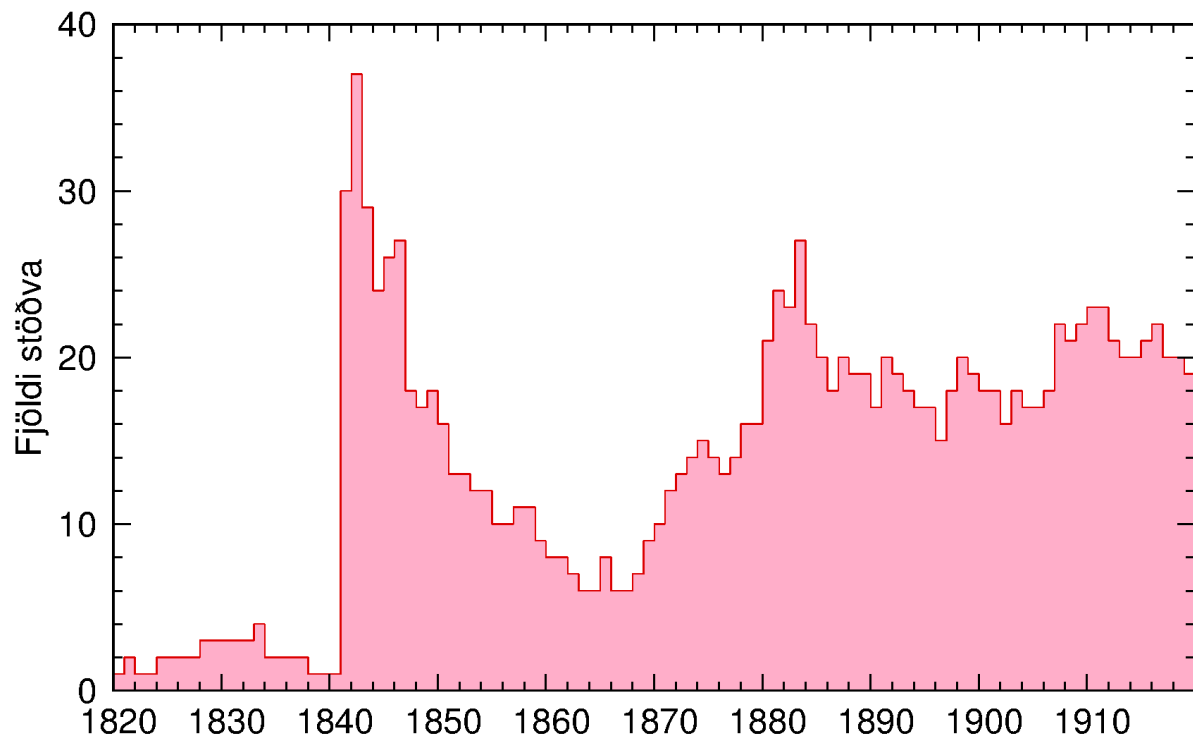
## Sjálfvirkar stöðvar

|                        | VÍ        | aðrir |
|------------------------|-----------|-------|
| Stöðvar í rekstri      | 148       | 123   |
| • hiti                 | 145 (98%) | 123   |
| • raki                 | 111 (75)  | 120   |
| • vindur               | 133 (90)  | 123   |
| • úrkoma               | 60 (41)   | 12    |
| • loftþrýstingur       | 44 (30)   | 12    |
| • geislun              | 10 (7)    | 3     |
| • snjódýpt             | 7 (5)     | 4     |
| • skýjahæð             | 8 (5)     | 2     |
| • skyggni/úrkomutegund | 8 (5)     | 2     |
| • jarðvegshiti         | 6 (4)     | 0     |
| • geislavirkni         | 4 (3)     | 0     |

# Fyrstu athuganir á 18. öld

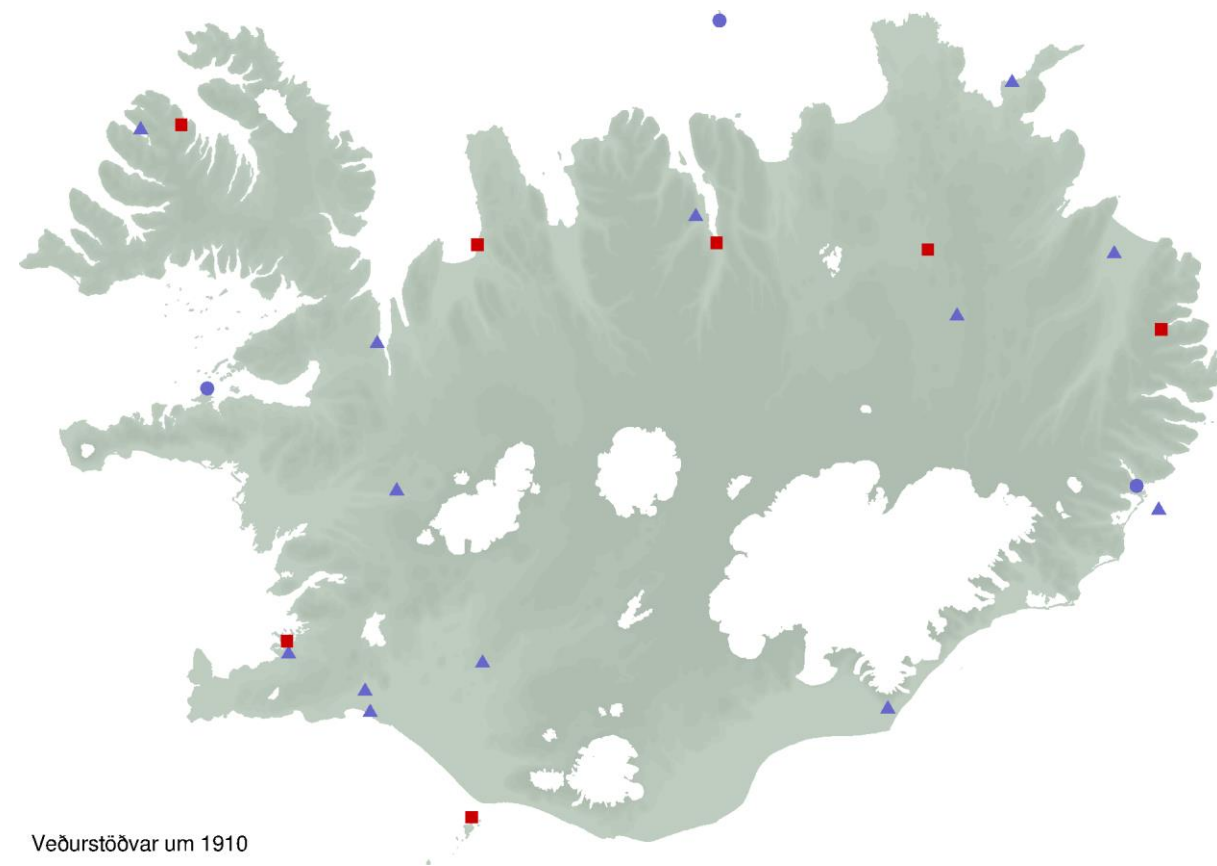
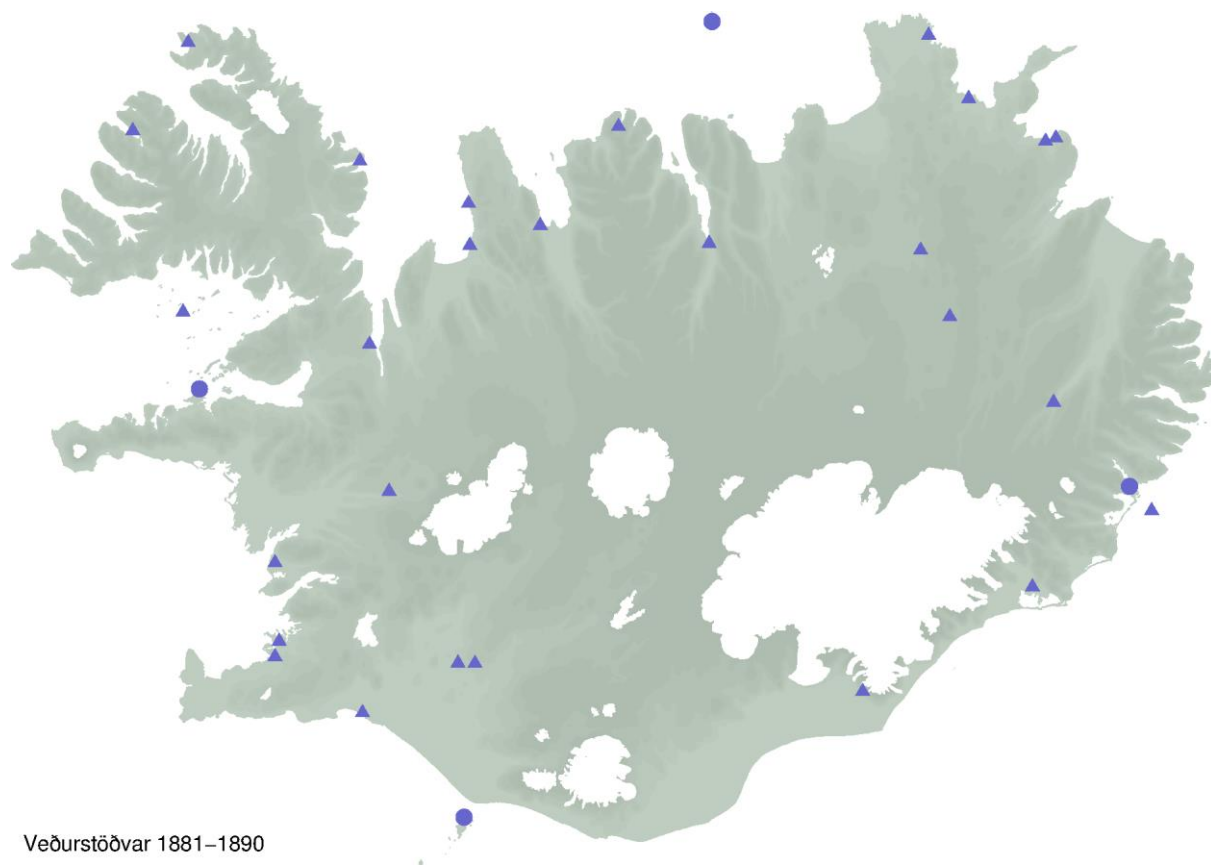


# Stórátak Bókmenntafélagsins nær hátindi 1842 en fjarar fljótt út



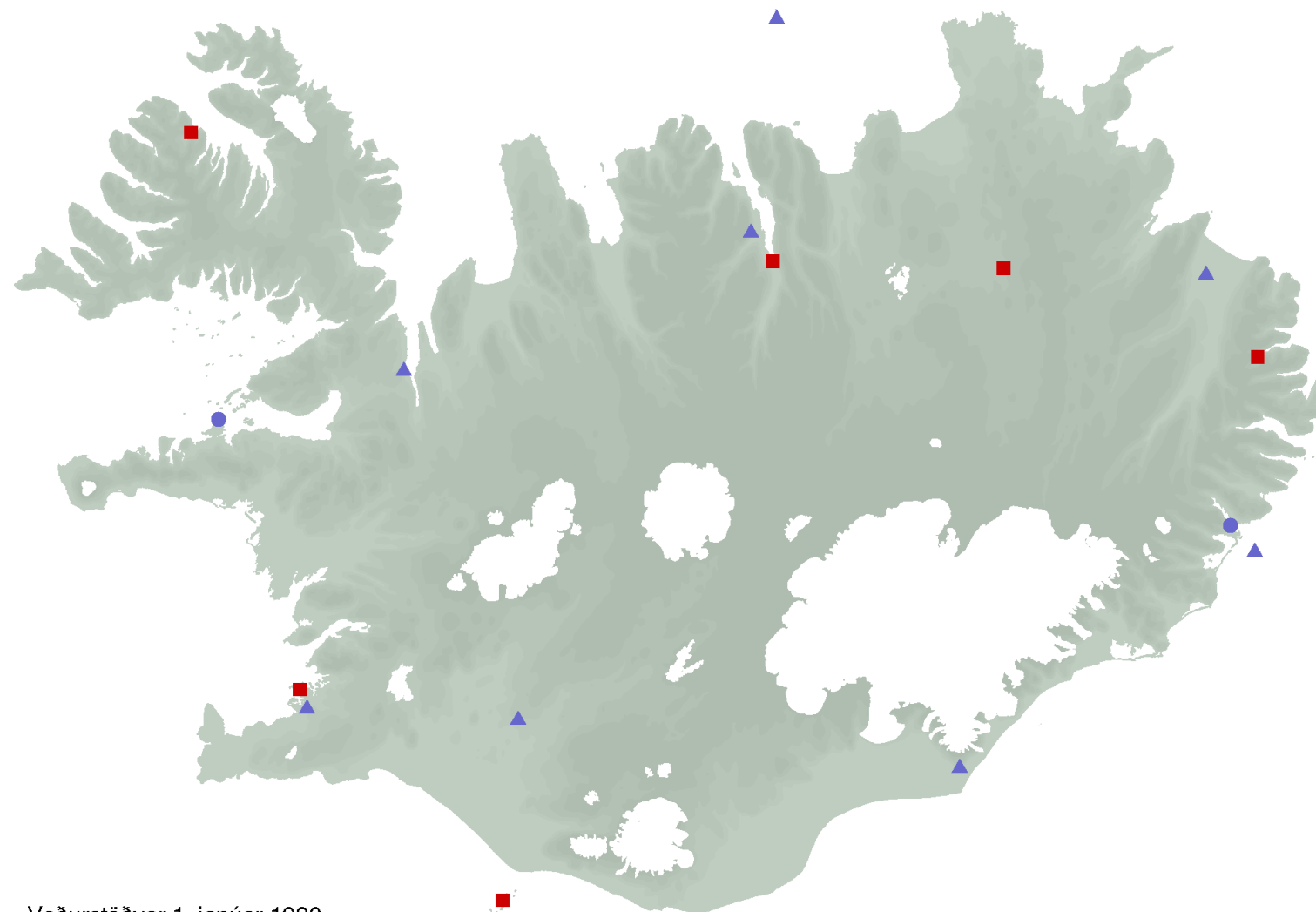
Sjá: Trausti Jónsson & Hilmar G. Garðarsson (2009), *Jónas Hallgrímsson og veðurathuganir á Íslandi um og upp úr 1840*, Skýrsla VÍ 2009-019, 24 bls.

# 1883 & 1910



# Veðurstofa Íslands

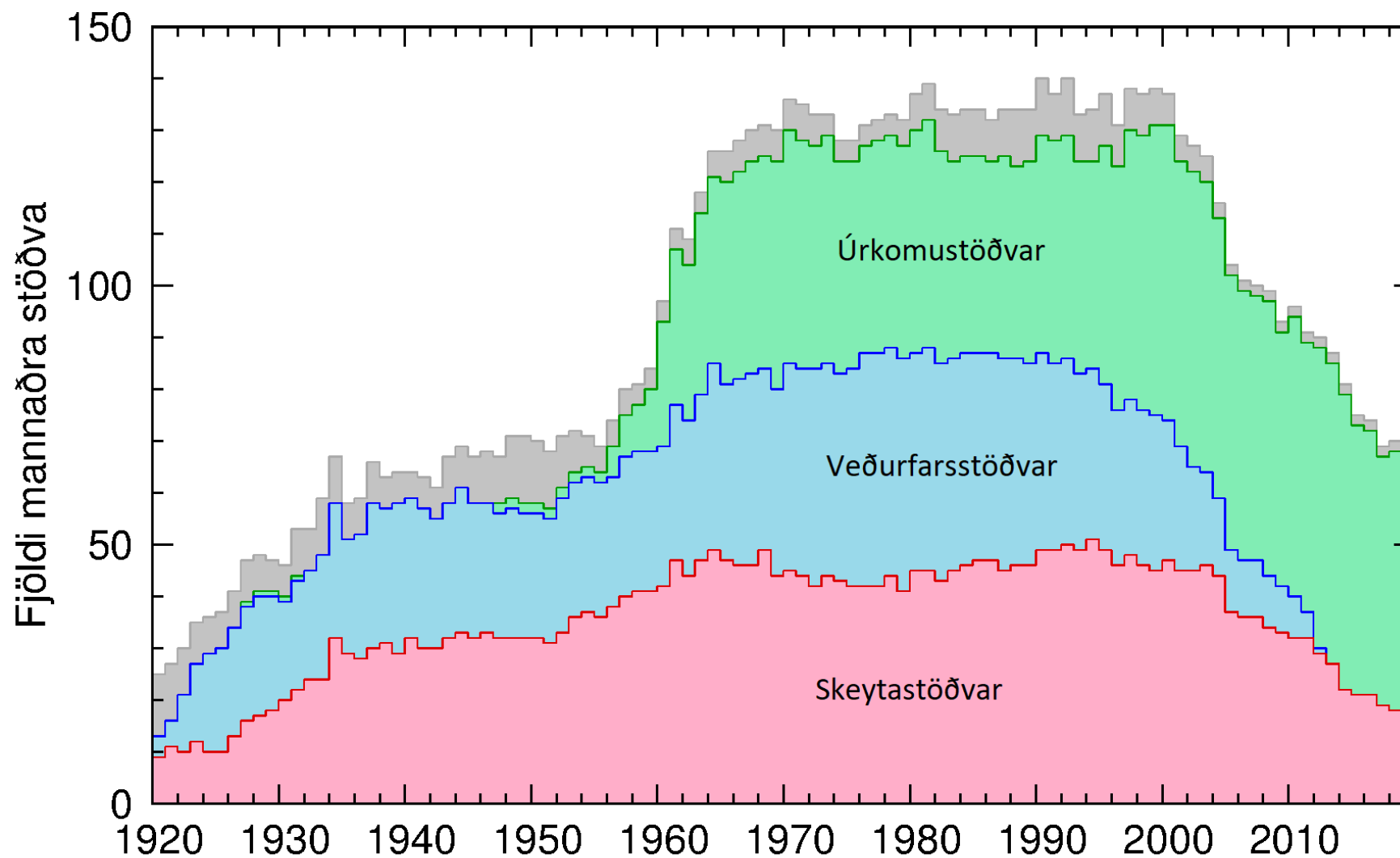
## stofnuð 1. janúar 1920



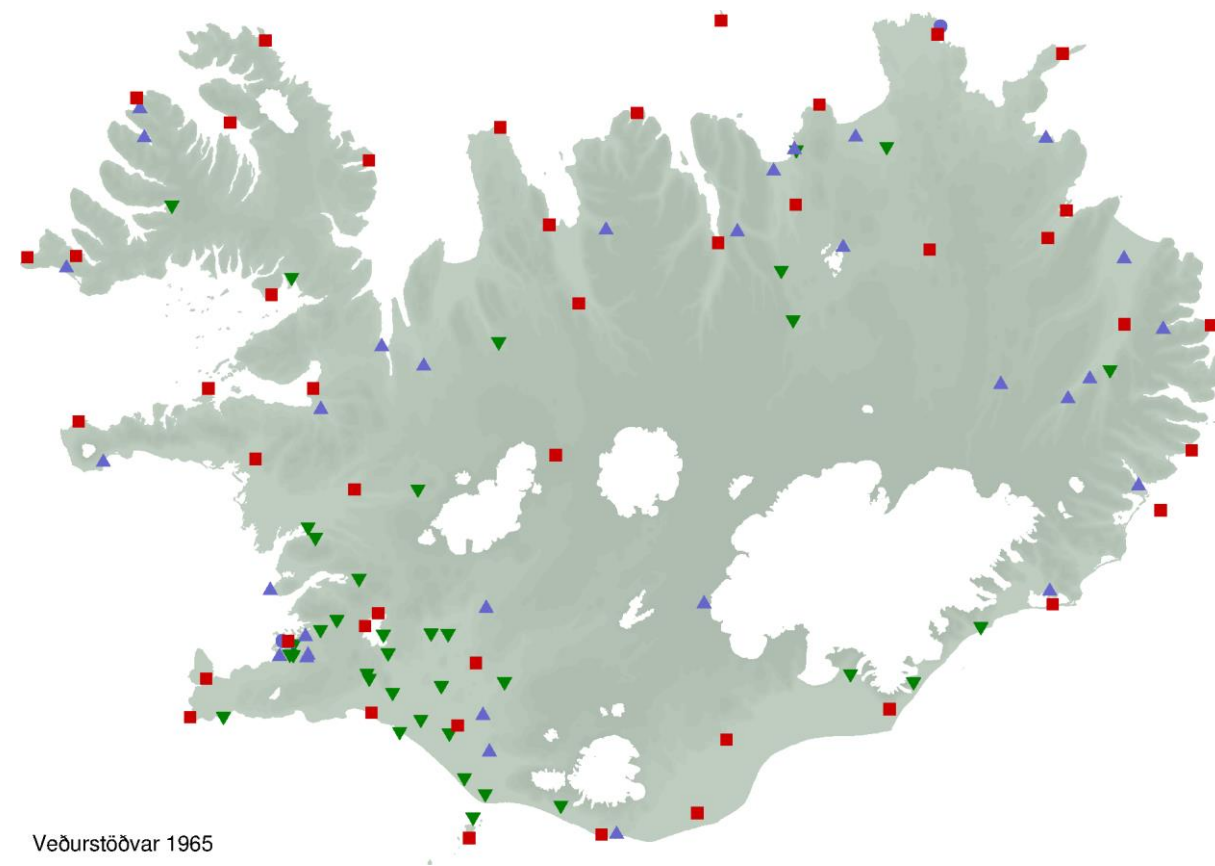
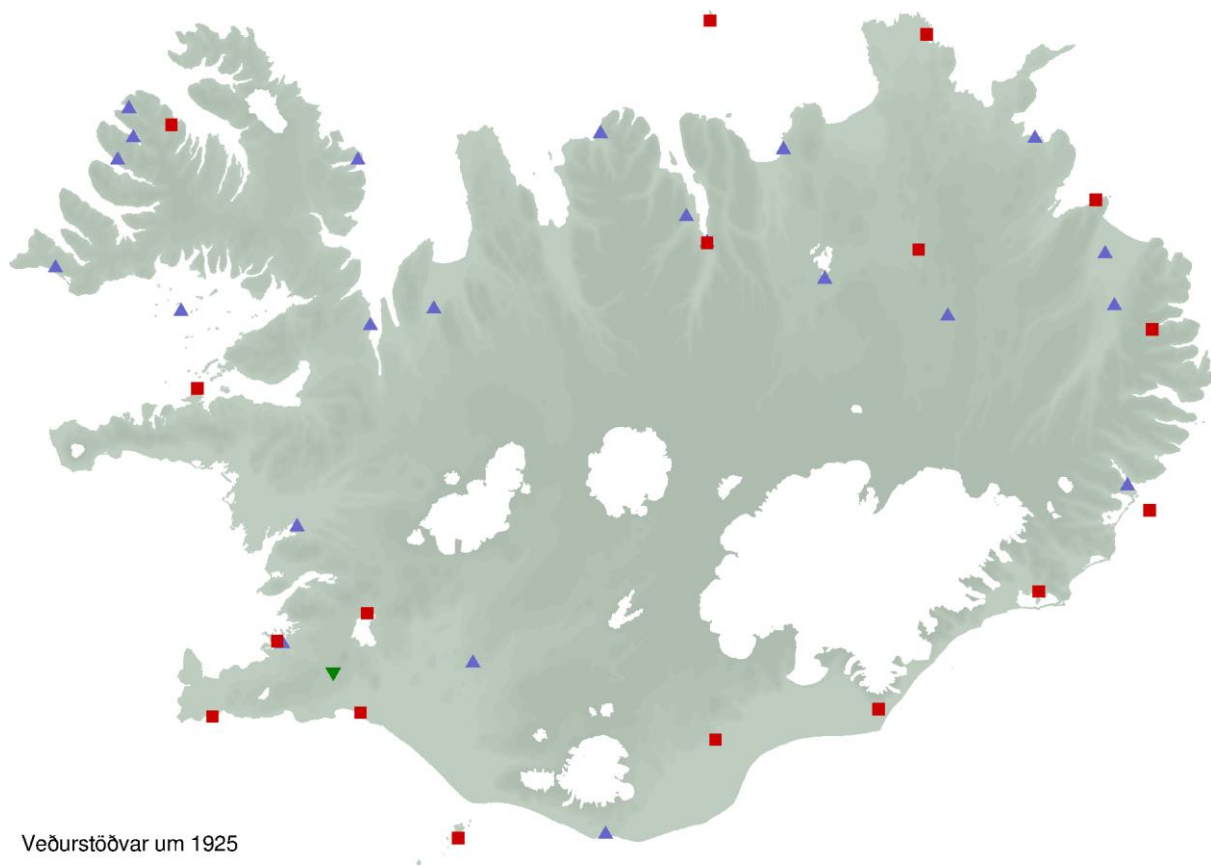
Veðurstöðvar 1. janúar 1920



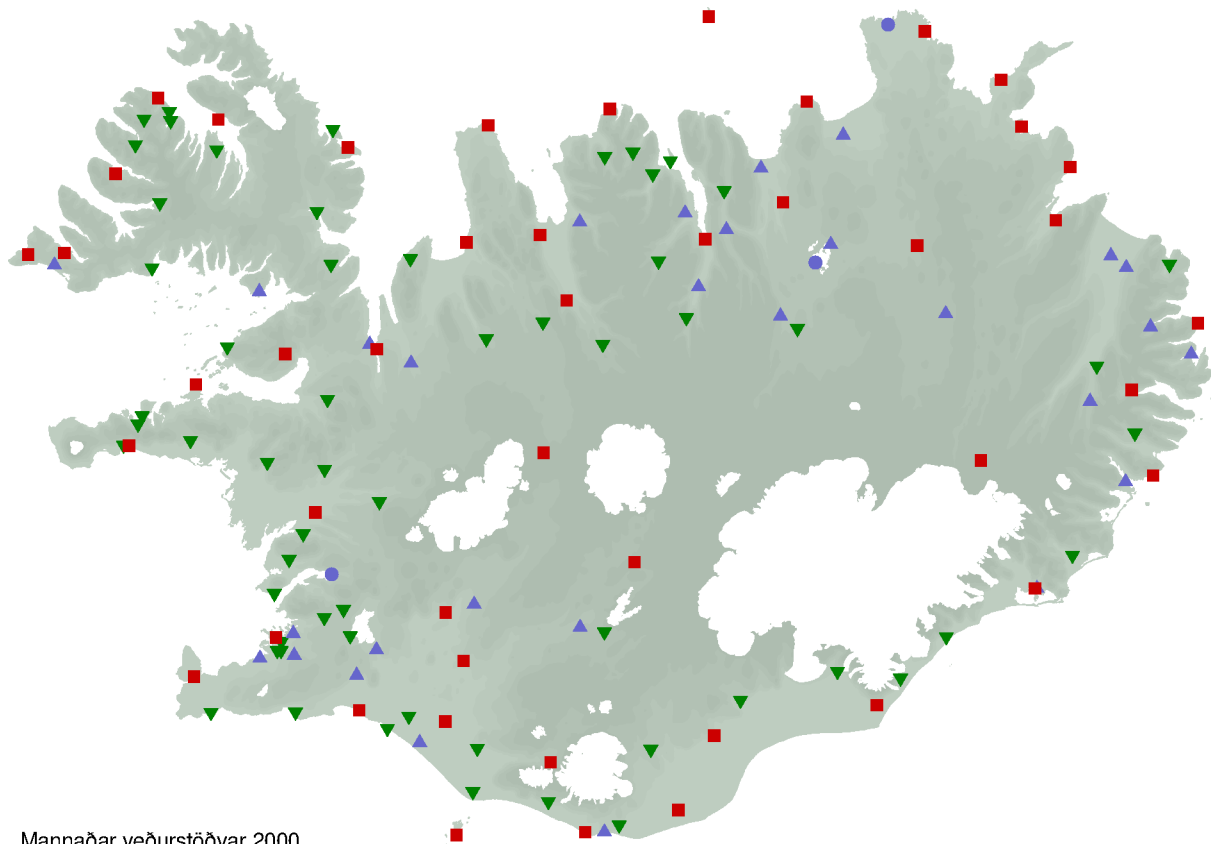
# Fjöldi mannaðra veðurstöðva



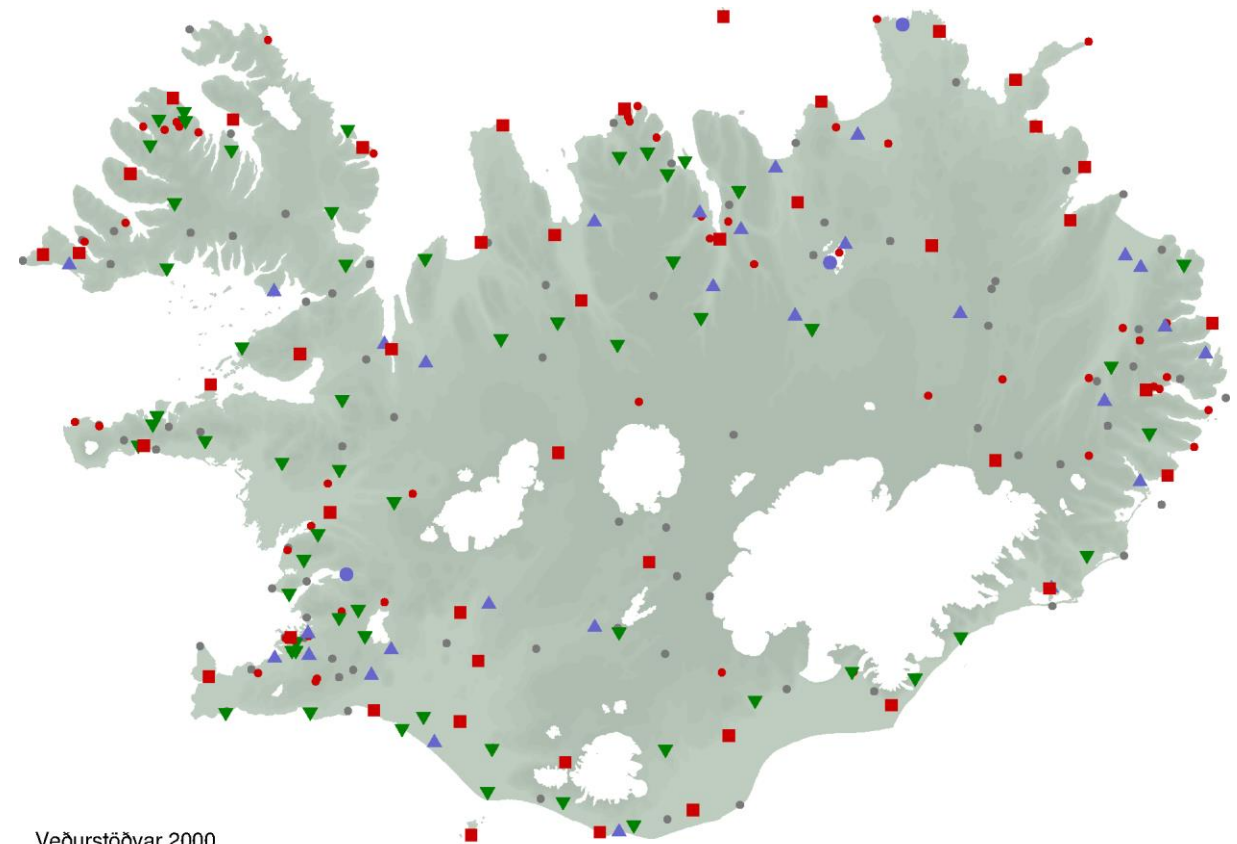
# 1925 & 1965



# Um aldamót

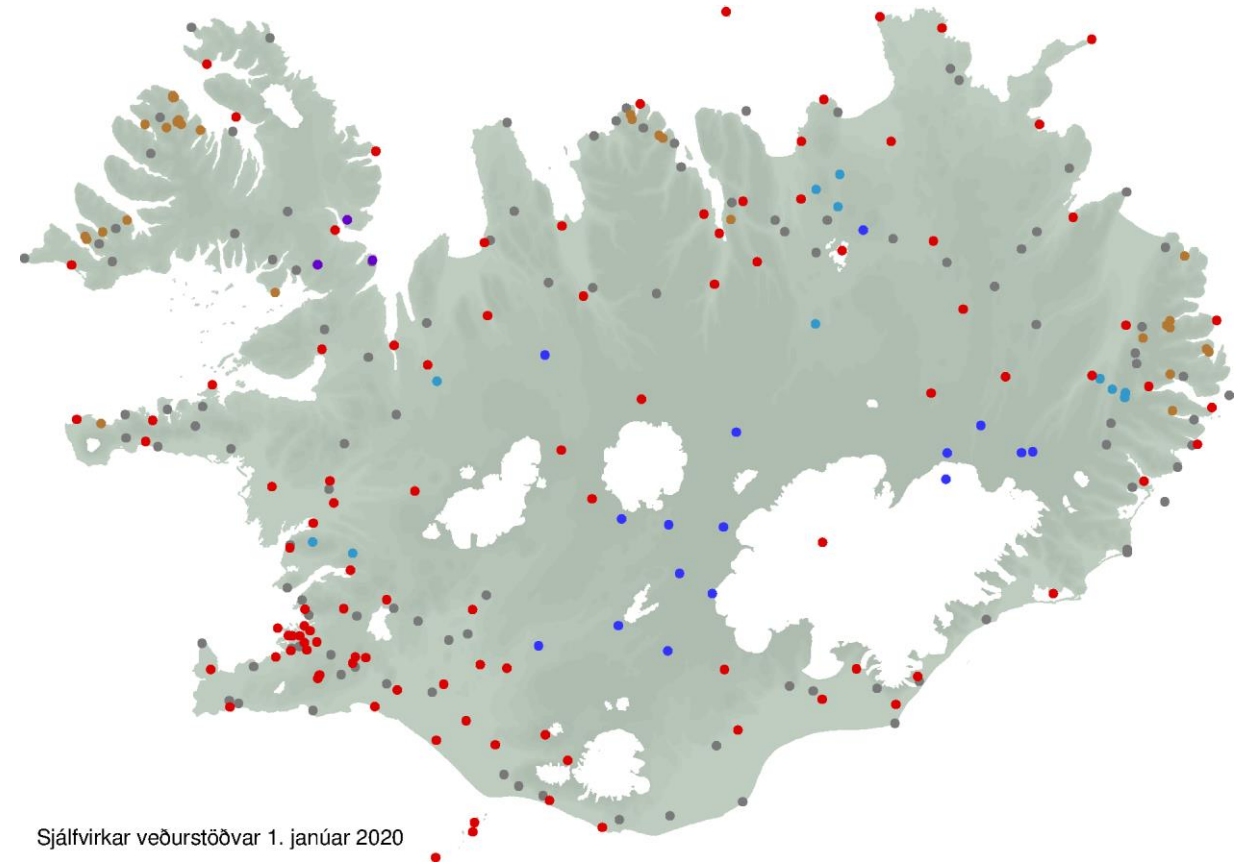
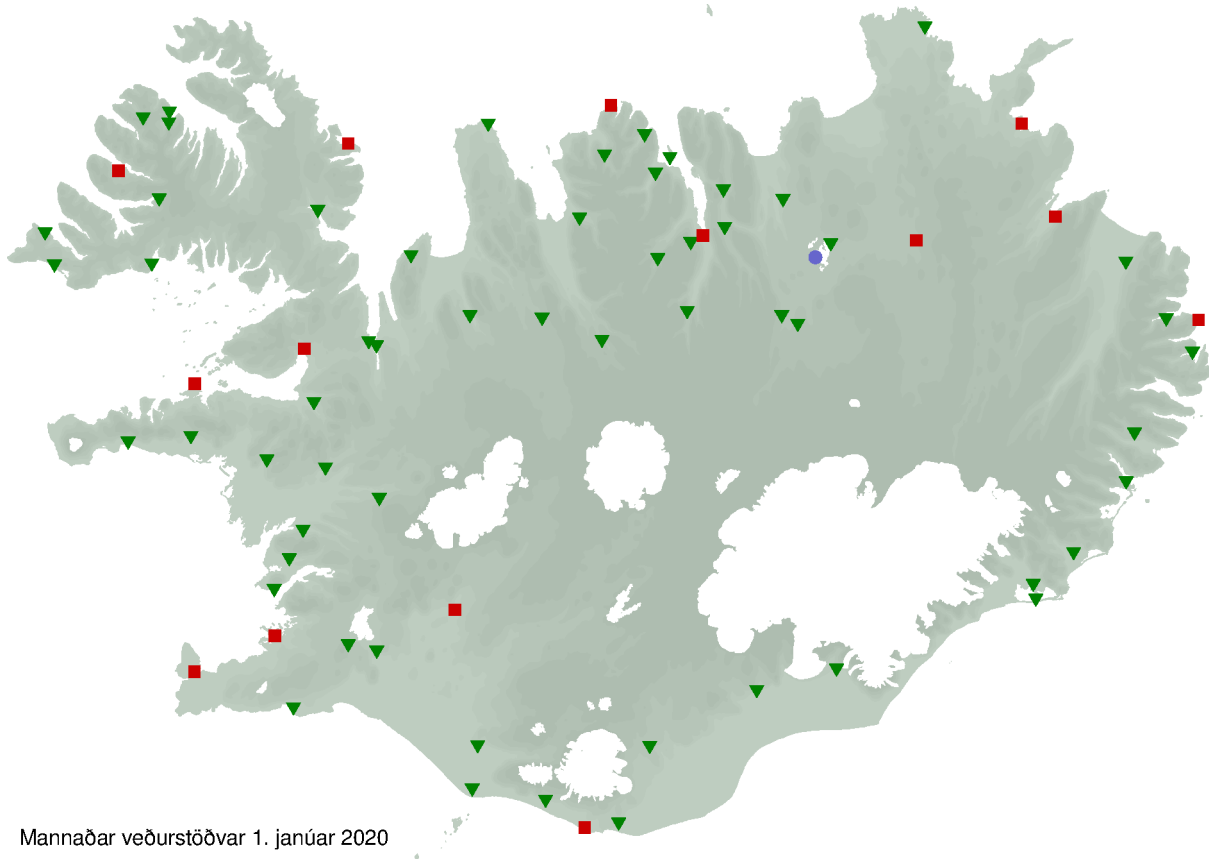


Mannaðar veðurstöðvar 2000

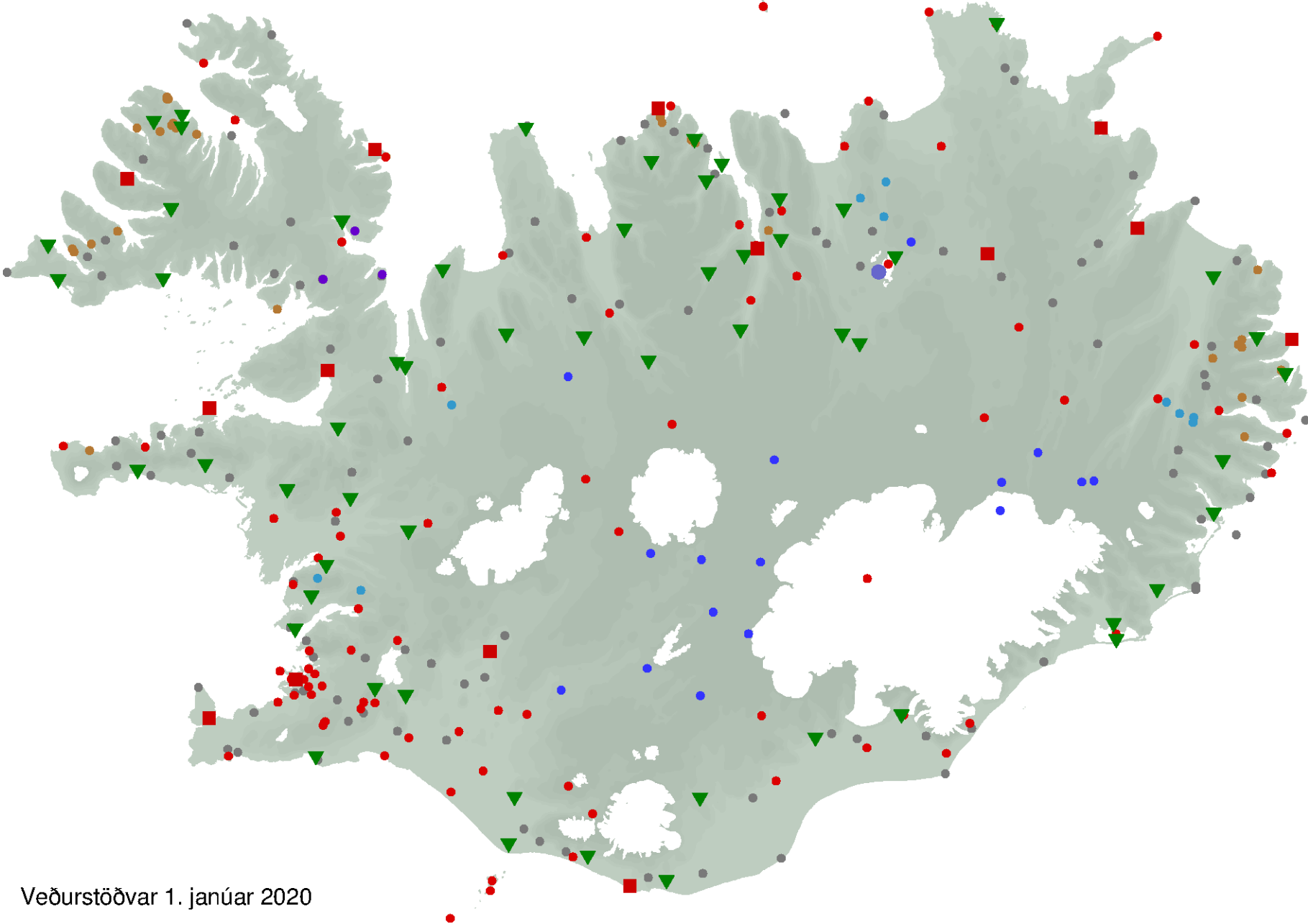


Veðurstöðvar 2000

# Veðurstofan 100 ára

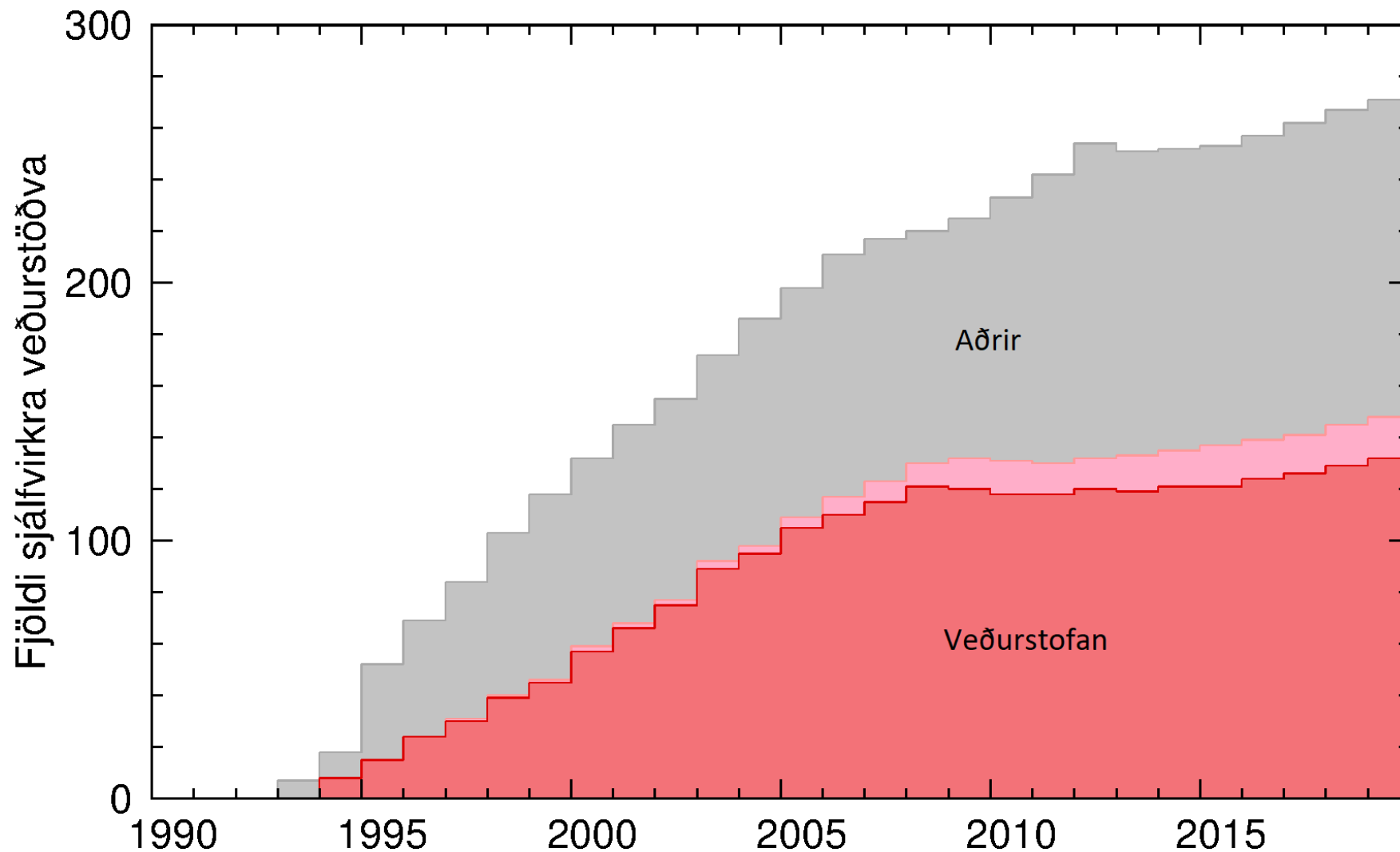


2020



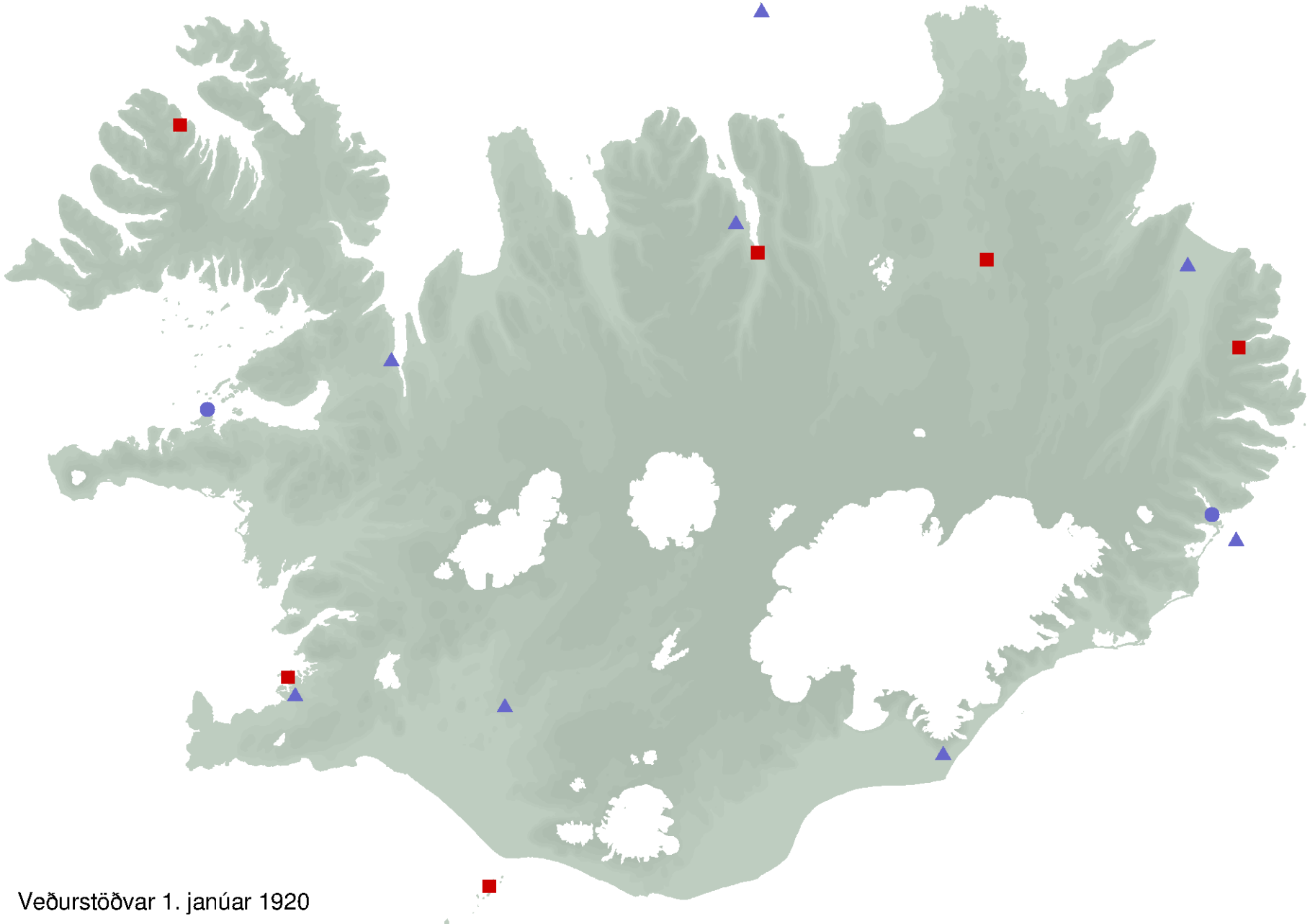
Veðurstöðvar 1. janúar 2020

# Fjöldi sjálfvirkra veðurstöðva



- Miklar breytingar eru að verða á kerfi veðurstöðva á Íslandi – sjálfvirkar stöðvar taka við af veðurathugunarmönnum
- Ýmsir veðurbættir henta ágætlega fyrir sjálfvirka mæla og þannig fást þéttari og fyllri upplýsingar með áreiðanlegum tímaröðum; má þar nefna hita, vind og loftþrýsting
- Aðrir þættir henta illa fyrir sjálfvirka mæla; má þar nefna sjónmetna þætti, skýjategundir, snjódýpt, snjóhulu, veðurlýsingu (veður) og ýmis sérstök veðurfyrirbæri
- Með sjálfvirknivæðingu breytist eðli sumra mælinga sem verða ekki að fullu sambærilegar við eldri mannaðar athuganir
- Slíkt misræmi getur reynst bagalegt við skoðun á langtímaleitni í tengslum við rannsóknir á loftslagsbreytingum

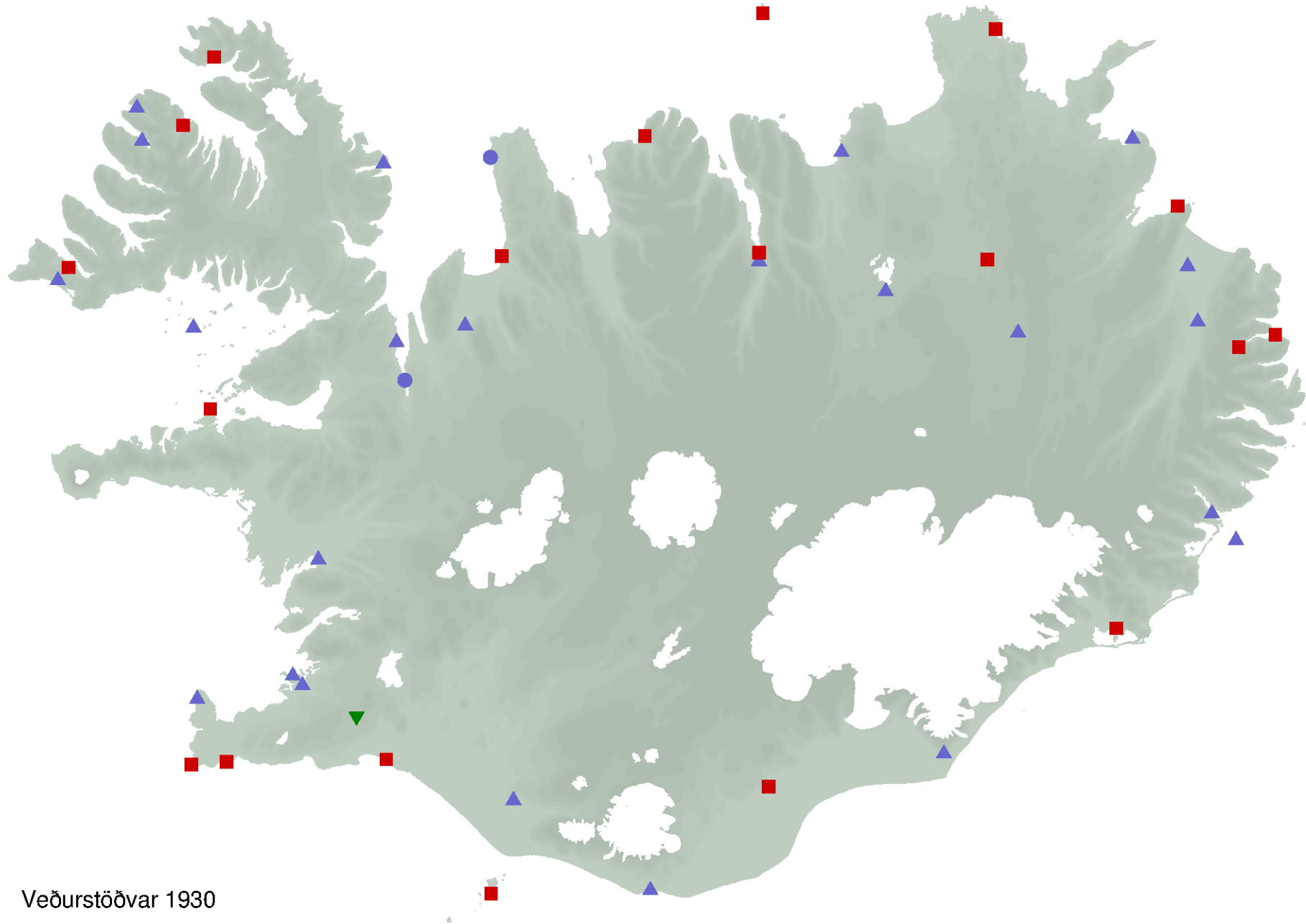
1920



Veðurstöðvar 1. janúar 1920

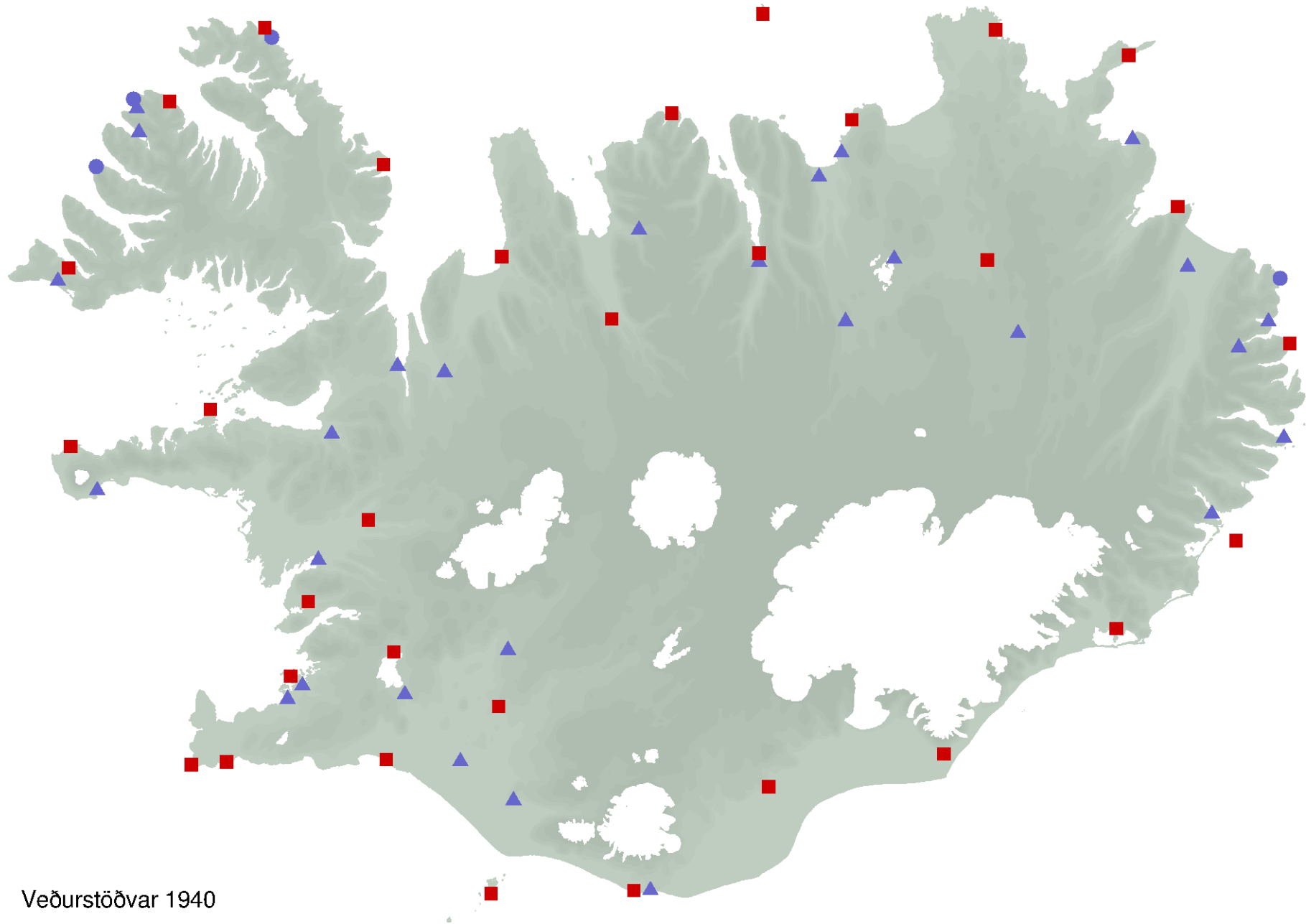


# 1930



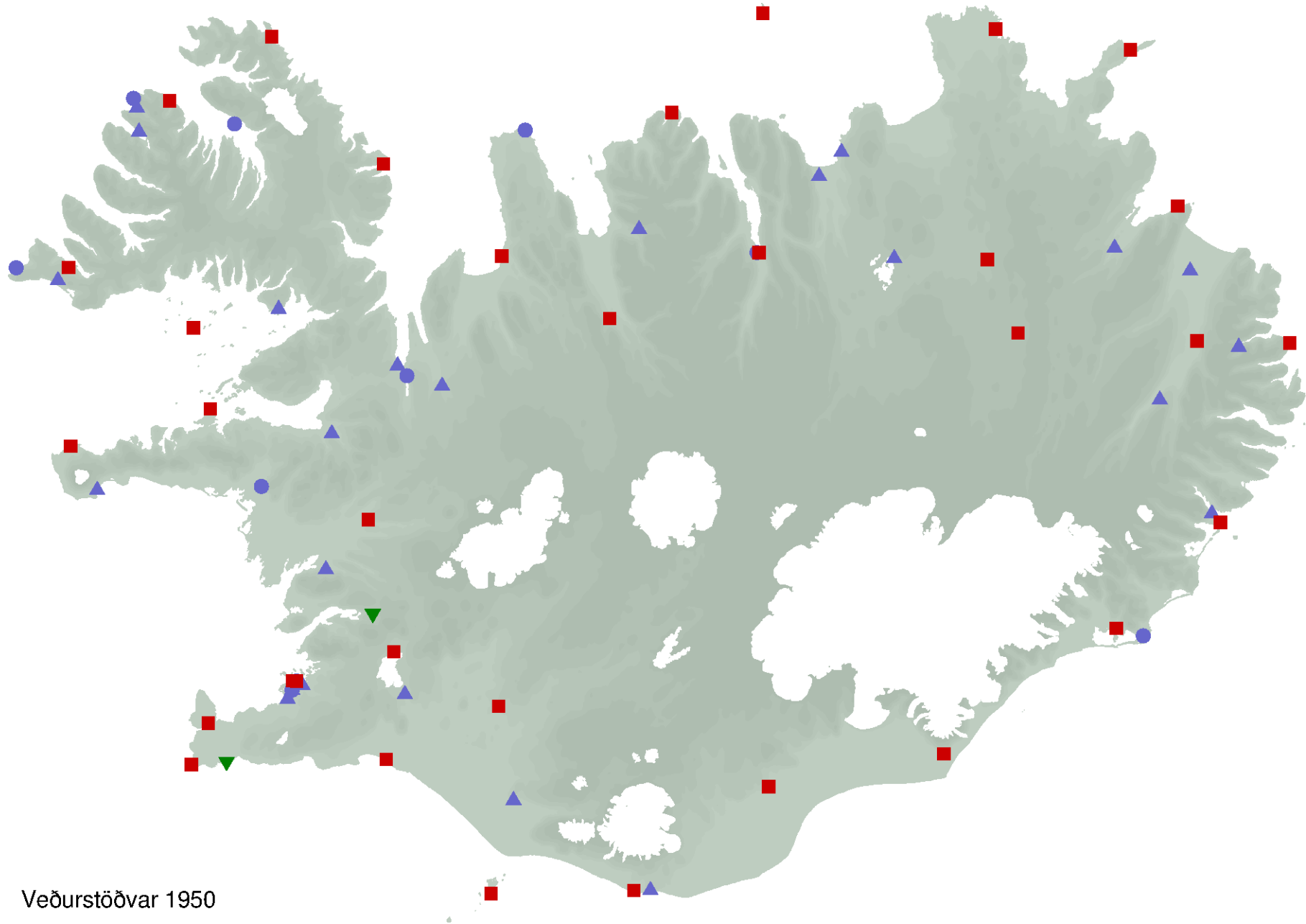
Veðurstöðvar 1930

# 1940



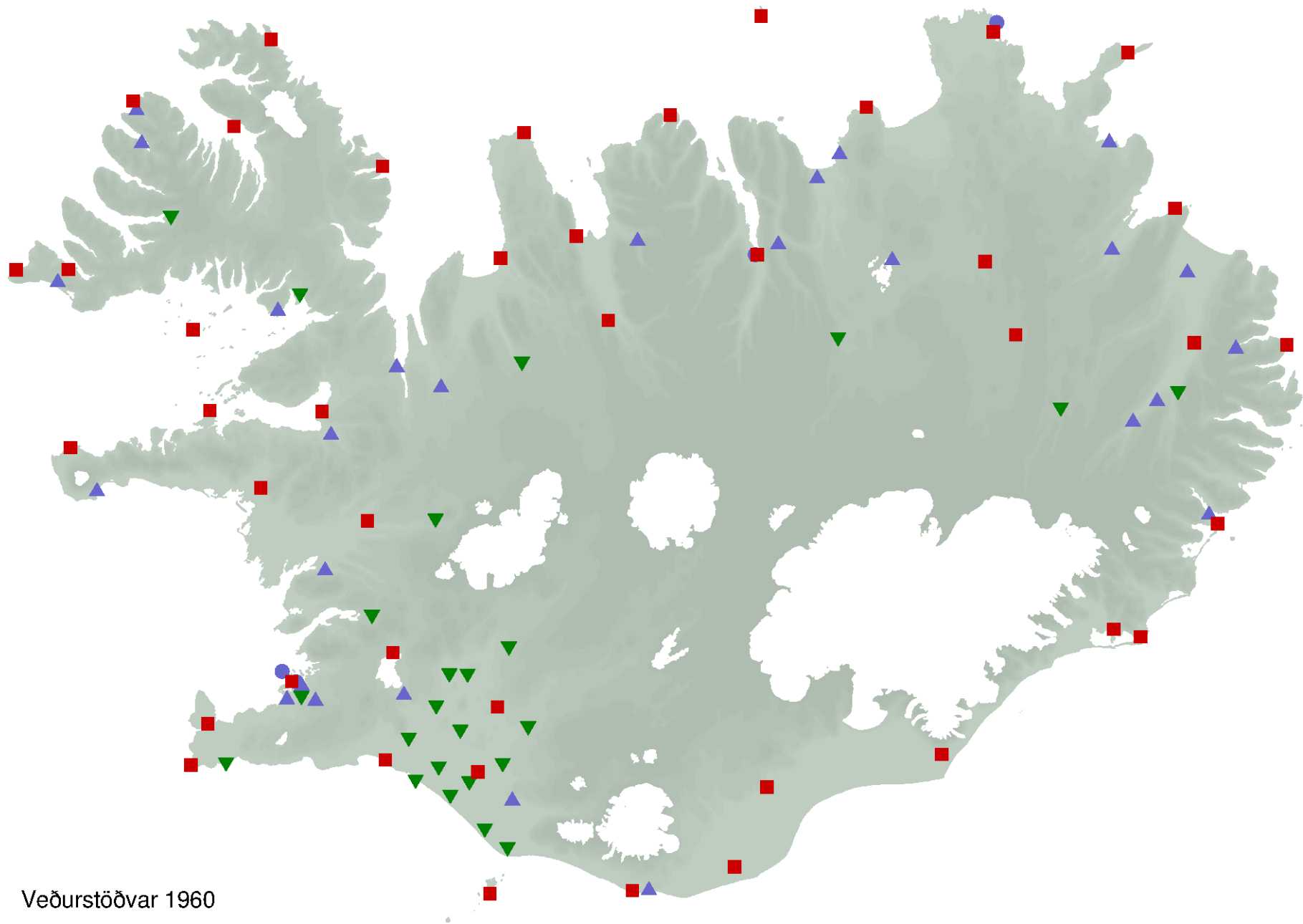
Veðurstöðvar 1940

# 1950



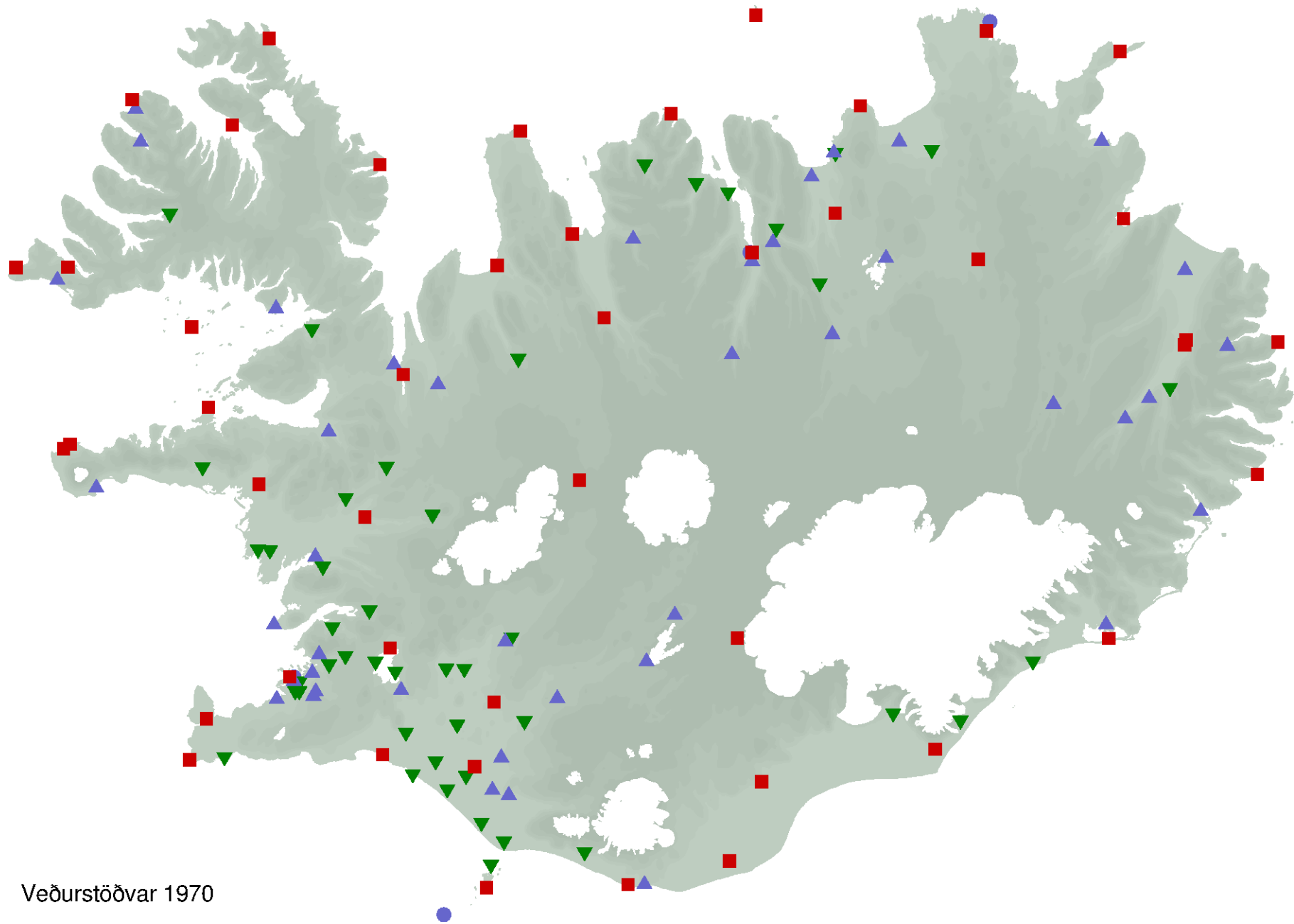
Veðurstöðvar 1950

# 1960



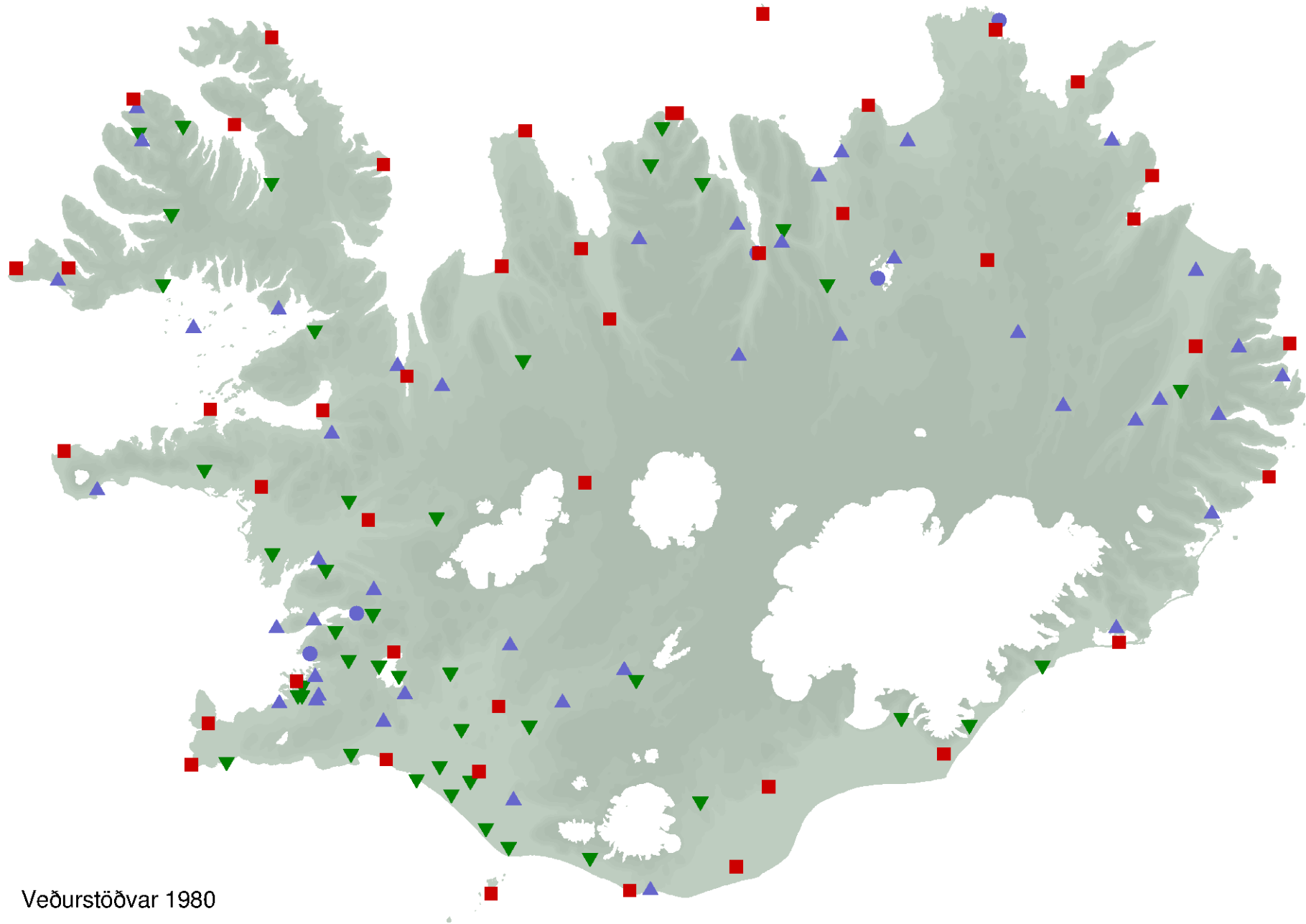
Veðurstöðvar 1960

# 1970



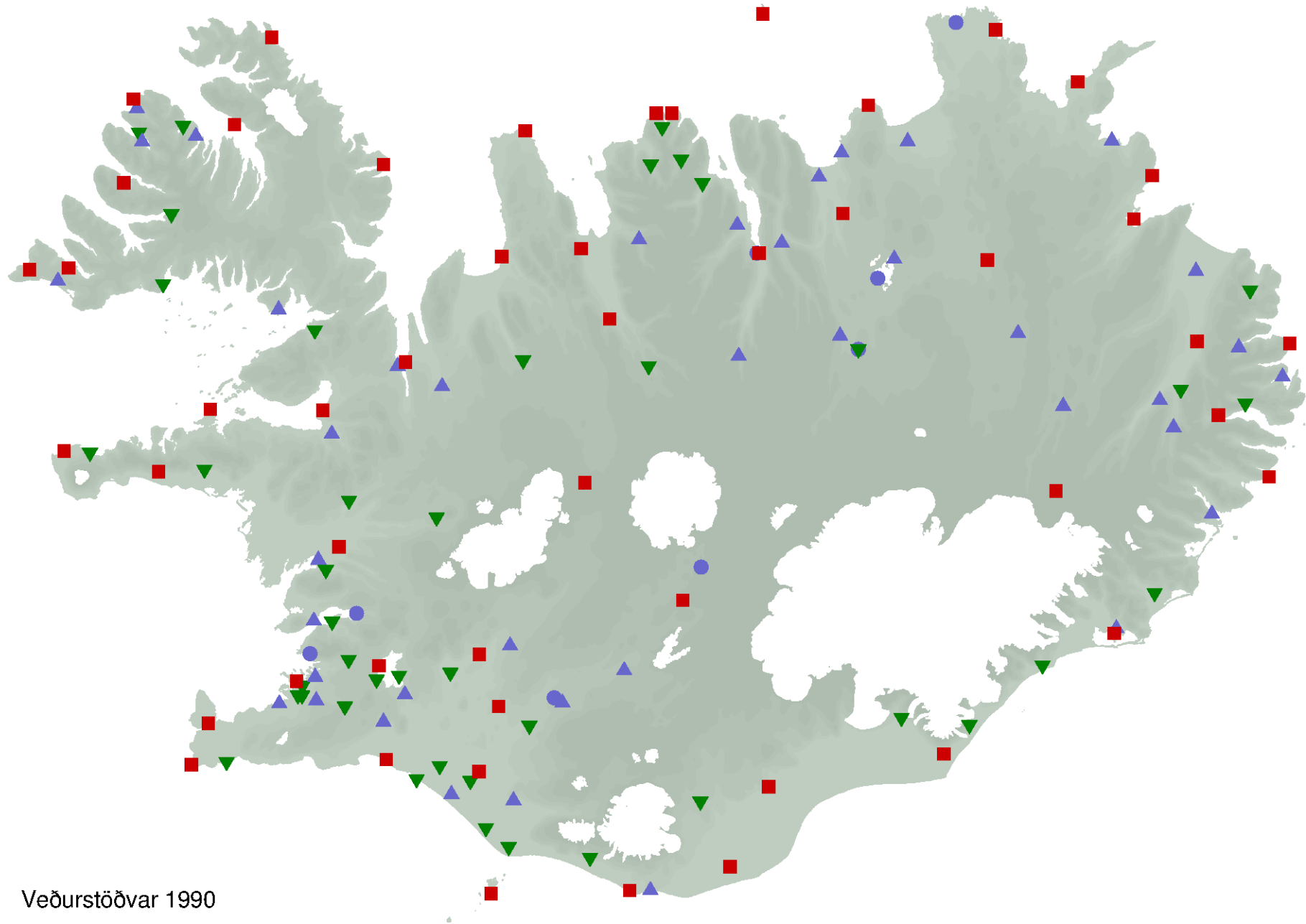
Veðurstöðvar 1970

# 1980



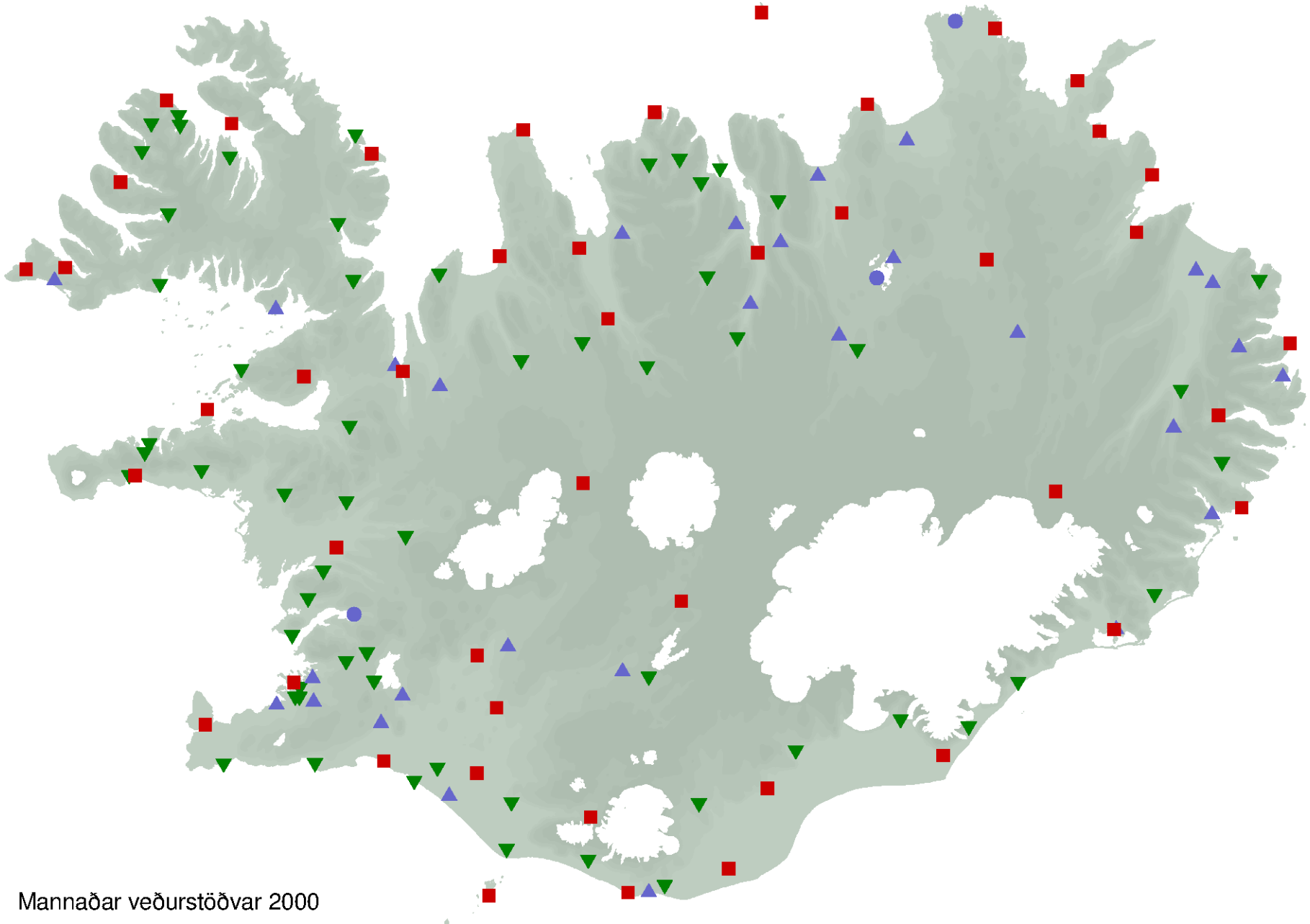
Veðurstöðvar 1980

# 1990



Veðurstöðvar 1990

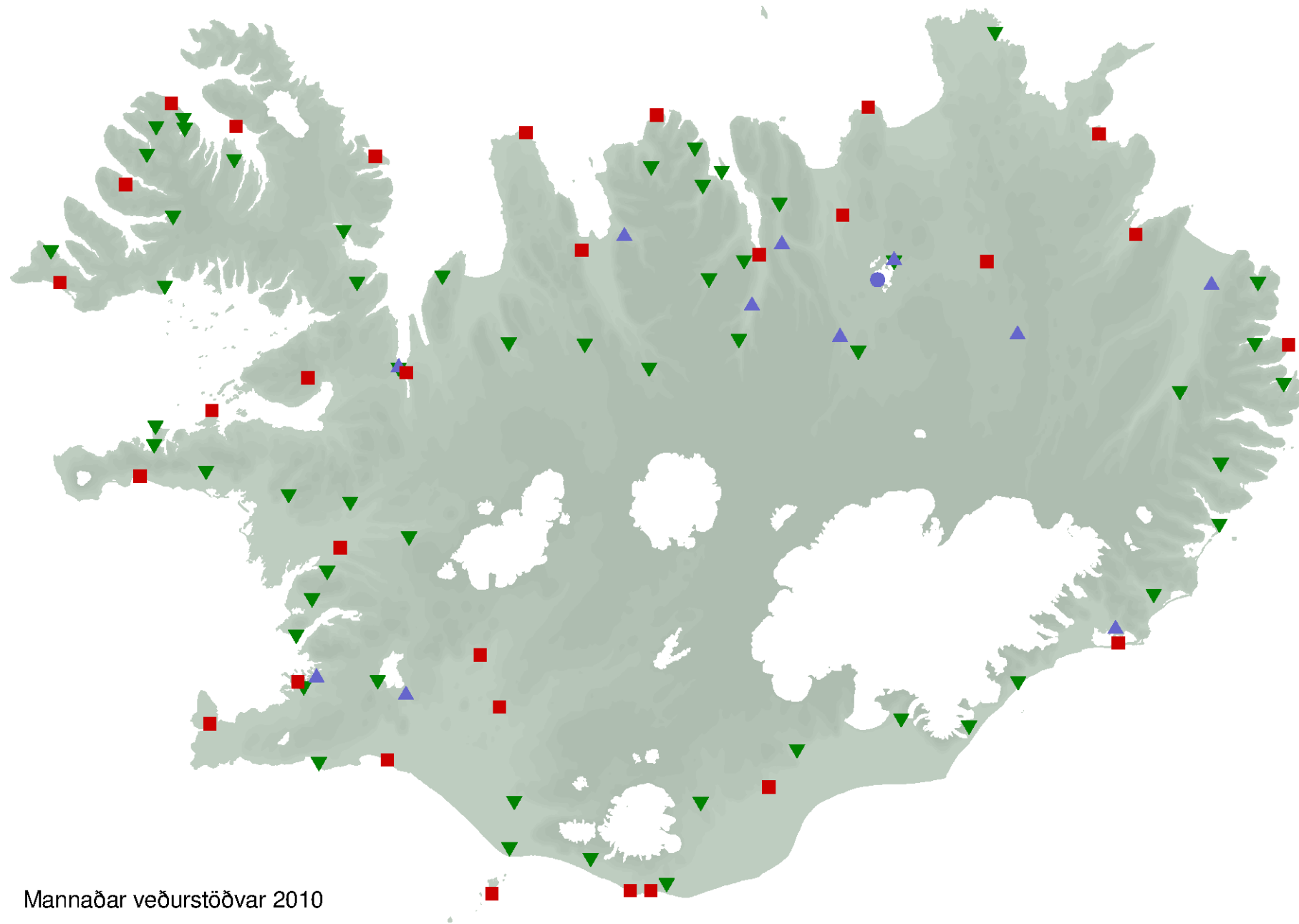
2000



Mannaðar veðurstöðvar 2000

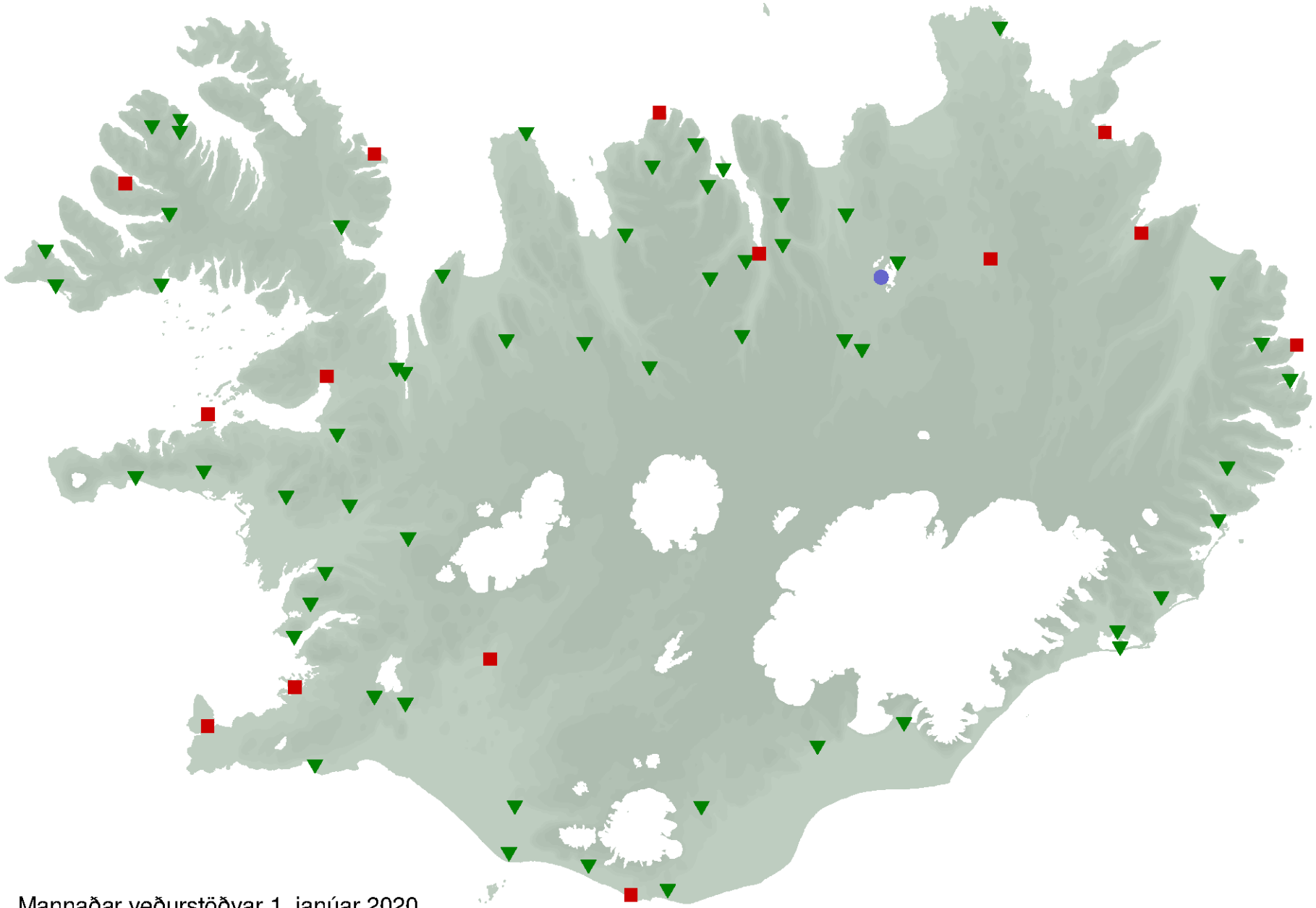


# 2010



Mannaðar veðurstöðvar 2010

2020



Mannaðar veðurstöðvar 1. janúar 2020

