Seasonal and annual dynamics of frozen ground, central highland of Iceland, Version 1

# USER GUIDE

#### How to Cite These Data

As a condition of using these data, you must include a citation:

Thorhalsdottir, T.E. 1998. Seasonal and annual dynamics of frozen ground, central highland of *Iceland, Version 1.* [Indicate subset used]. Boulder, Colorado USA. NSIDC: National Snow and Ice Data Center. https://doi.org/10.7265/m78z-mn18. [Date Accessed].

FOR QUESTIONS ABOUT THESE DATA, CONTACT NSIDC@NSIDC.ORG

FOR CURRENT INFORMATION, VISIT https://nsidc.org/data/GGD9



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#### Notice:

This data set was first published on the 1998 CAPS CD. The text for this document was taken unchanged from that CD.

# 1 DATA DESCRIPTION

The results of a "... 9-year study ... to investigate the seasonal and annual dynamics of frozen ground and explore the relationship with environmental factors. The presence/absence of frozen ground and active layer thickness were recorded three times over the growing season (4-7 July, 1-4 August, and 20-24 August) at 51 permanent points in different plant communities and on 12 palsas." (Thorhallsdottir 1996, p. 237)

Frozen ground and active layer depth data, with monthly thawing and freezing degree days, precipitation and snow depth, for 1983-1991. Here are the total numbers of permanent stations where measurements were made: 33 stations in 1983, 59 stations in 1984, 63 stations in 1985-91. For the active layer depth they were divided into palsa tops (2 in 1983 but 12 after that) and all other (including several different plant communities, 51 stations for most years).

## 1.1 File Information

### 1.1.1 Format

Data are in text format.

### 1.1.2 File Naming Convention

- Columns:
  - o Year
  - kjuly = proportion of stations with frozen ground 4-7 July
  - kjulaug = ditto on 1-4 August
  - kaugust = ditto on 20-24 August
  - o aldjulyo = mean active layer depth (cm) on 4-7 July, palsas excluded
  - sejulyo = standard error of the mean for the above
  - aldjulyp and sejulyp are as above but for palsas only
  - o aldjao = active layer depth (cm) on 1-4 August, palsas excluded
  - $\circ$  sealdjao = s.e. of above
  - aldjap and sealdjap are as above but for palsas only
  - o aldaugo = mean active layer depth (cm) on 20-24 August, palsas excluded
  - sealdaugo = s.e. of above
  - aldaugp and sealdaugp are as above but for palsas only
  - kyrbefore = proportion of stations with frozen ground in late August of the year before
  - o dd5, dd6, dd7 and dd8 are monthly degree days above zero

- precip56, precip7.....etc precipitation (mm)
- o snow9....snow12 is snowdepth in cm for those months
- o frdd is frost degree days, i.e. below zero
- Format:
  - Year: yyyy
  - All other columns: nnn.nnnn

## 1.2 Spatial Information

### 1.2.1 Coverage

Location: Thjorsarver, Central Highland, Iceland Latitude: 63° 30' N Longitude: 18° 40' W

## 1.3 Temporal Information

#### 1.3.1 Coverage

Time period: 1982 - 1992

## 2 CONTACTS AND ACKNOWLEDGMENTS

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## 3 DOCUMENT INFORMATION

### 3.1 Publication Date

25 January 25, 2021

### 3.2 Date Last Updated

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