

SnowModel Outputs Over Northern Alaska Boreal Forest Snowpack, 2009–2023, Version 1 Technical Reference

1 INTRODUCTION

1.1 Data Set Overview

This data set contains model-derived estimates of spatially and temporally resolved snow water equivalent (SWE), snow depth, and snow density across a boreal forest region of Alaska, including the NASA SnowEx 2023 Alaska field campaign study areas. Model output data span 1 September 2009 to 31 May 2023.

1.2 File Information

1.2.1 Format

These data are provided in 14 granules (one granule per water year) formatted as .nc files (netCDF-4).

1.2.2 Naming Convention

Each granule conforms to either of the following naming conventions

`SnoModAk_snowmodel_100m_swed_snod_sden_WY20XX_v01.0.nc`,

where `SnoModAk` refers to the data set identifier, `snowmodel_100m_swed_snod_sden` refers to the data set contents (100 m resolution SnowModel-derived SWE, snow depth, and snow density), and `WY20XX` to the water year.

1.3 Spatial Information

1.3.1 Coverage

Northernmost Latitude: 65.97 ° N

Southernmost Latitude: 64.51° N

Easternmost Longitude: 143.98° W

Westernmost Longitude: 149.74° W

1.3.2 Geolocation

This data set conforms to the WGS 84 coordinate reference system ([EPSG 3338](#)).

1.4 Temporal Information

1.4.1 Coverage

1 September 2009 to 21 May 2023