

SnowEx23 Airborne Lidar Scans Raw, Version 1

1 INTRODUCTION

1.1 Data Set Overview

This data set provides raw lidar data from two regions of Alaska, USA collected as part of the NASA SnowEx 2023 field campaign. The study sites include a boreal forest environment in the Fairbanks region of central Alaska (the Bonanza Creek Experimental Forest, Caribou Poker Creek watershed, and Farmer's Loop/Creamer's Field) and a coastal tundra environment in the North Slope region of the northern Alaska coastal plain (Arctic coastal plain and Upper Kuparuk Toolik). Processed data, including digital terrain models, snow depth, and canopy height derived from Point Cloud Digital Terrain Models (PCDTMs) are available as [SnowEx23 Airborne Lidar-Derived 0.25M Snow Depth and Canopy Height, Version 1](#).

1.2 File Information

1.2.1 Format

The data are available as compressed LIDAR Aerial Survey files (.laz).

1.2.2 Naming Convention

The data are named according to the following convention and as described in Table 1.

SNEX23_Lidar_Raw_[site]_SWATH[XX]_0.25M_[yyyymmdd]_V01.0.[laz]

Table 1. File Naming Convention

Variable	Values	Description
SNEX23_Lidar_Raw		NSIDC data set ID
[site]	ACP, BCEF, CPCW, FLCF, UKT	Site code: ACP (Arctic Coastal Plain), BCEF (Bonanza Creek Experimental Forest), CPCW (Caribou Poker Creek Watershed), FLCF (Farmer's Loop/Creamer's Field), and UKT (Upper Kuparuk Toolik)
SWATH[XX]		Flight swath identification number
[yyyymmdd]		Lidar acquisition date: 4-digit year, 2-digit month, 2-digit day

Variable	Values	Description
V01.0		Data set version 1.0

2 RELATED DATA SETS

[SnowEx at NSIDC | Data Sets](#)

[SnowEx23 Airborne Lidar-Derived 0.25M Snow Depth and Canopy Height, Version 1](#)