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ABoVE Vegetation Structure & Function Working Group

Synthesis Activity:

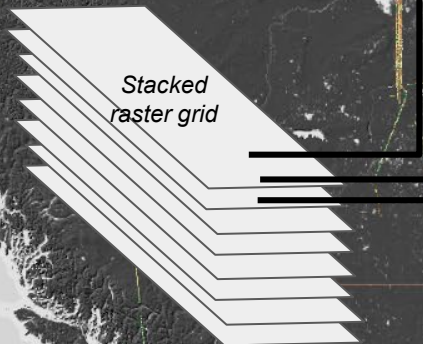
LVIS L2 vegetation structure estimates for ABoVE analyses

Enriching LVIS Level 2 data of forest structure with waveform-based estimates of cover and processing to analysis-ready grids for storage on ABoVE Science Cloud

Summary of Synthesis Activity Tasks:

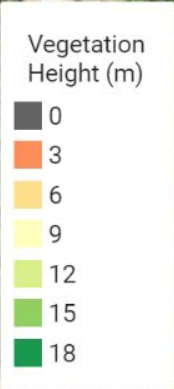
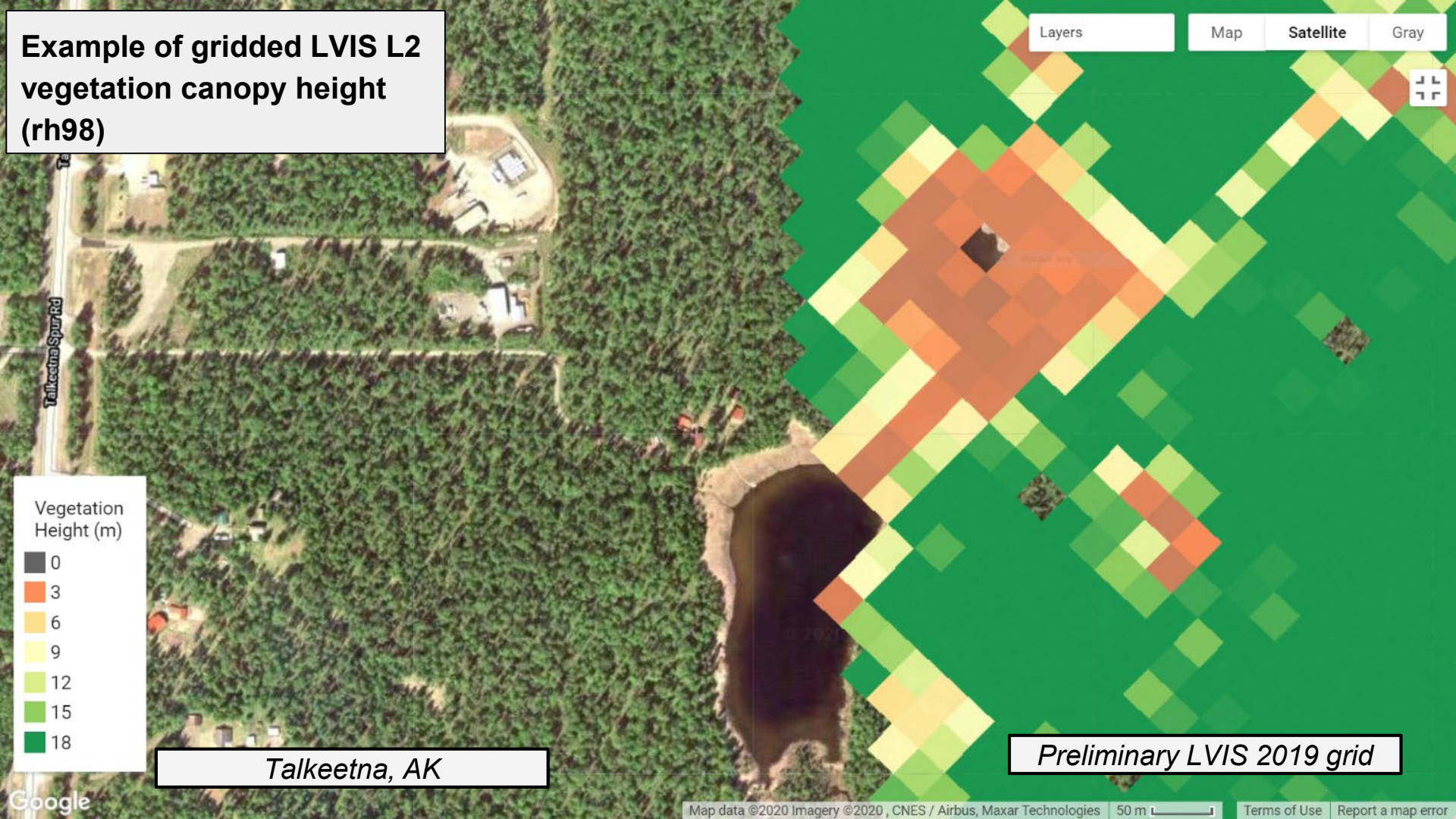
1. **Enriching dataset:** *adding a footprint-level canopy cover (%) estimate*
2. **Gridding:** *converting LVIS L2 footprint points to analysis-ready stacked geotiff raster grids*
3. **Code distribution:** *releasing gridding code via public repository (R, bash)*
4. **Data staging:** *making grids available on ABoVE Science Cloud*

<u>id</u>	<u>lat</u>	<u>lon</u>	<u>rh98</u>	<u>rh90</u>	<u>...</u>
1					
2	LVIS L2 data table				
3					
...					



**Example of gridded LVIS L2
vegetation canopy height
(rh98)**

Layers Map Satellite Gray



Talkeetna, AK

Preliminary LVIS 2019 grid

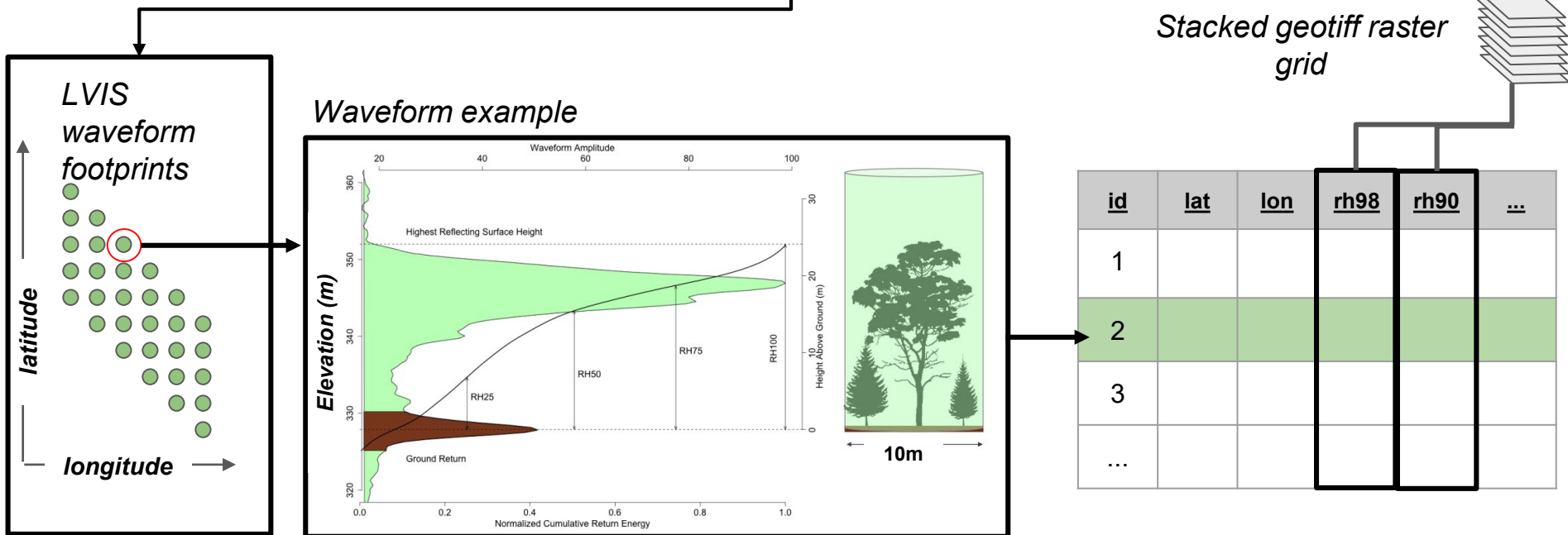
What is LVIS L2 lidar data?

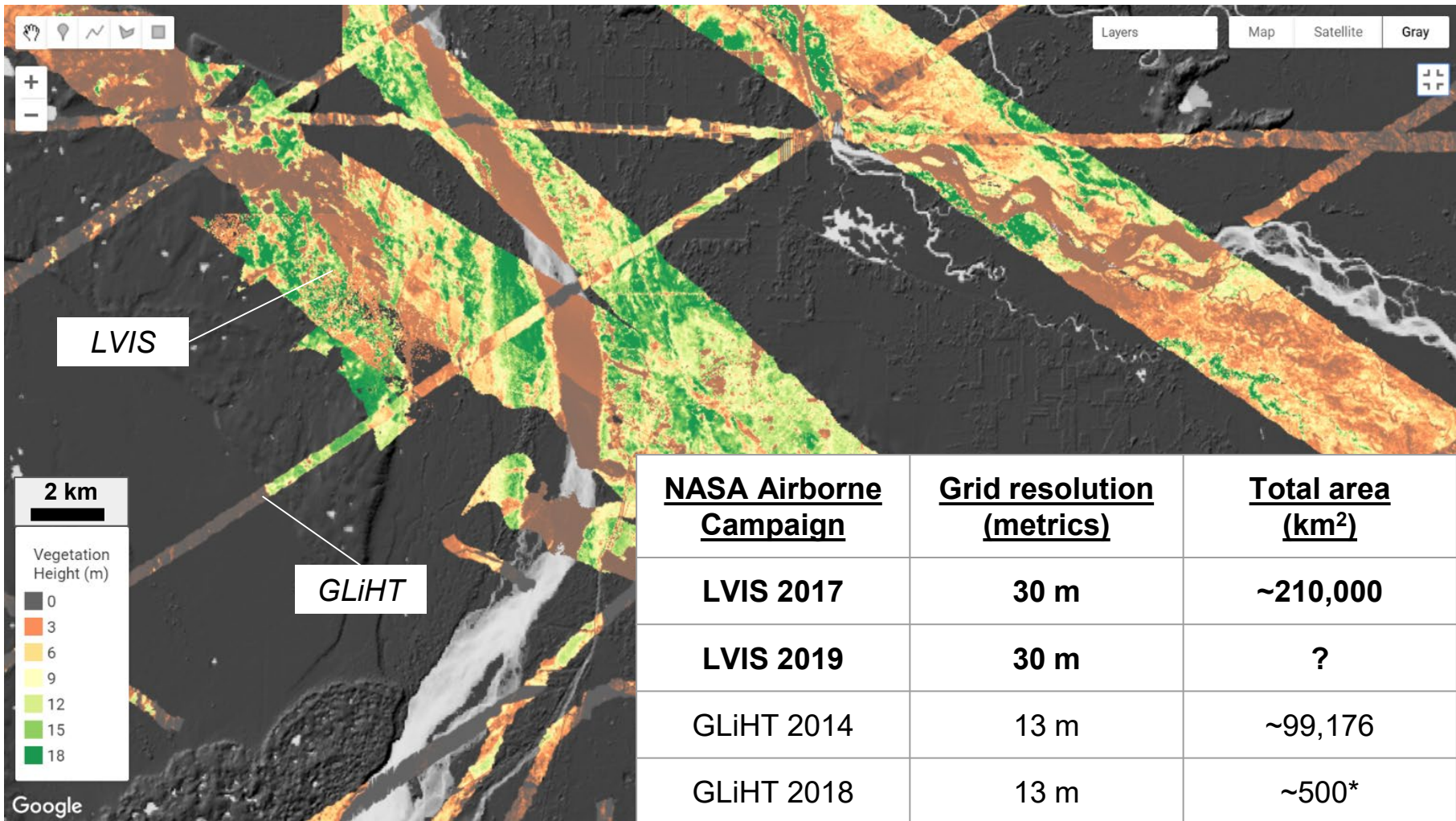
<https://insidc.org/data/LVISF2/versions/1>



Data Set ID: LVISF2

LVIS Facility L2 Geolocated Surface Elevation and Canopy Height Product, Version 1





<u>NASA Airborne Campaign</u>	<u>Grid resolution (metrics)</u>	<u>Total area (km²)</u>
LVIS 2017	30 m	~210,000
LVIS 2019	30 m	?
GLiHT 2014	13 m	~99,176
GLiHT 2018	13 m	~500*

