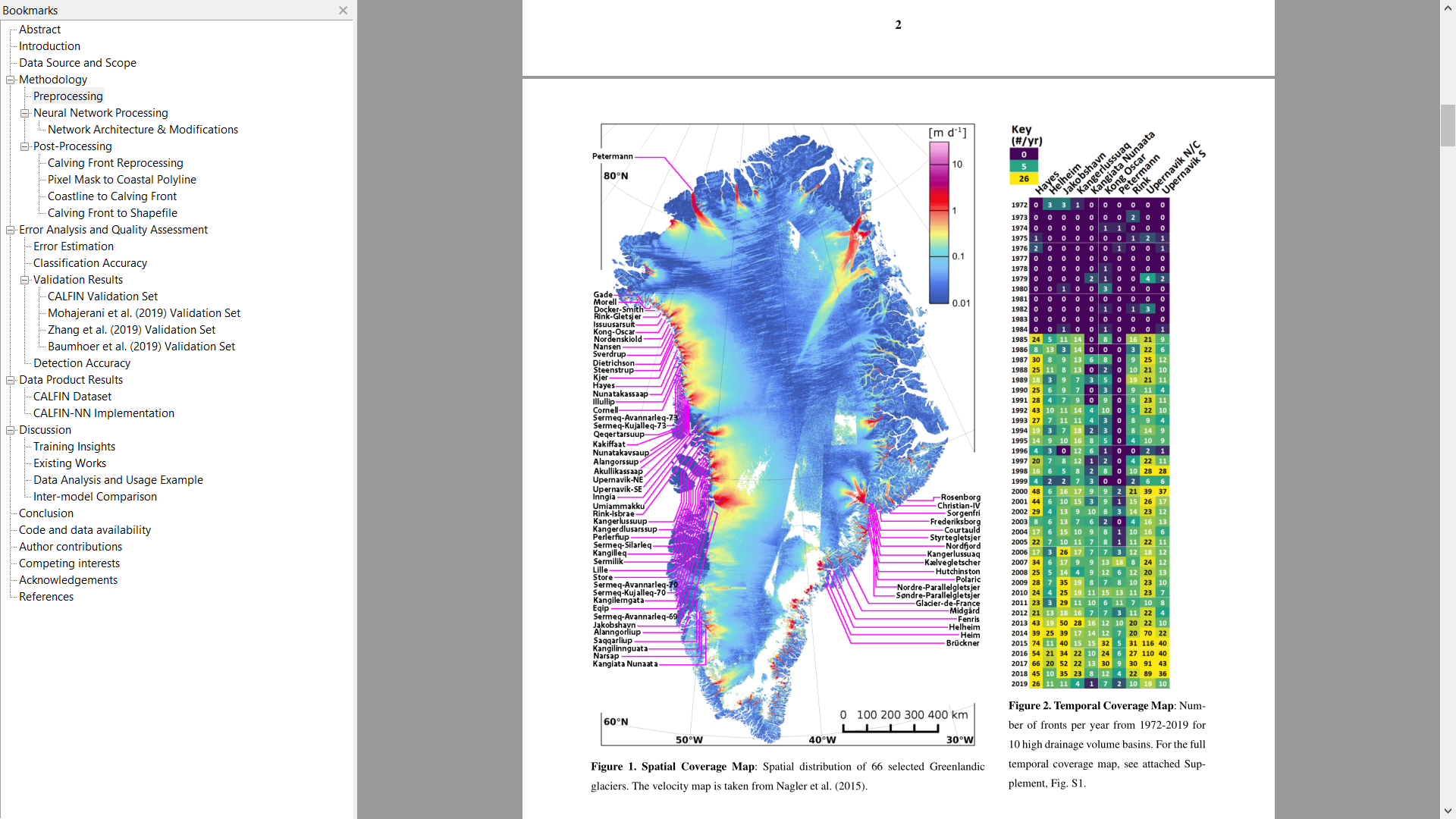
**Calving Front Machine (CALFIN): Glacial Terminus Dataset for East/West Greenland, 1972-2019 Usage Notes**

Spatio-temporal Coverage



Data Product Description

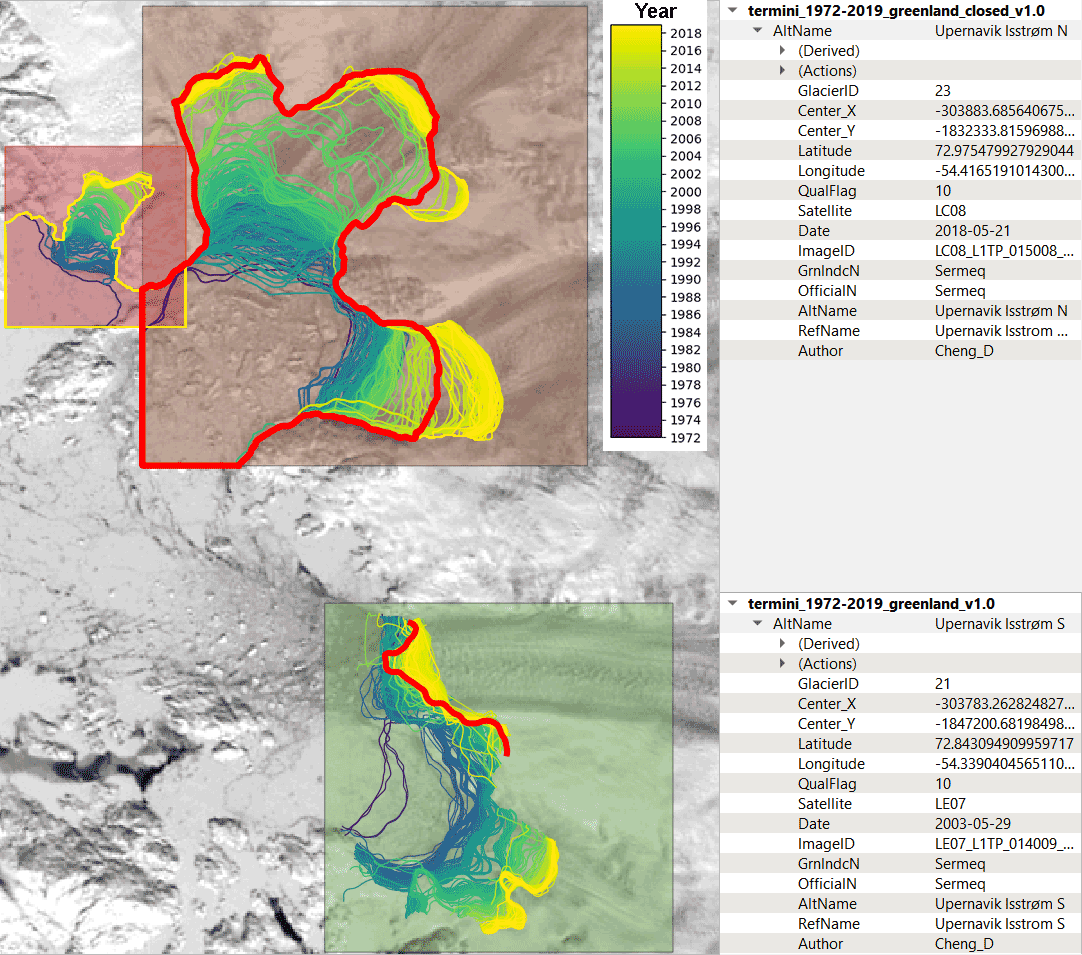
We provide two levels of data products.

* Level 0 products consist of fjord boundary GeoTiff masks, the domain Shapefiles used for subletting, a glacier names reference Shapefile, and the Landsat scene name ID list.
* Level 1 product consists of LineString Shapefiles with 22678 total features, and Polygon Shapefiles with 17,771 total features. Polygons are ocean masks that are constructed from merged calving front Line Strings, fjord boundaries, and domain boundaries. Both  
  Shapefiles share a feature schema derived from the [MEaSUREs glacial terminus positions dataset (NSIDC-0642)](https://nsidc.org/data/nsidc-0642), as detailed in Table S2:
  + level-1\_shapefiles-domain-termini-closed.zip
    - Polygon Shapefiles from 1972-2019, separated by glacial domain
  + level-1\_shapefiles-domain-termini.zip

| Shapefile Feature Schema Attribute Table | | |
| --- | --- | --- |
| **Data Field** | **Description** | **Format (Values)** |
| GlacierID | Numerical ID assigned to each glacier (as derived from MEaSUREs NSIDC-0642) | # ([1, 246]) |
| Center\_X | Mean X coordinate in EPSG:3413. | # ([-463626, 682313]) |
| Center\_Y | Mean Y coordinate in EPSG:3413. | # ([-2821269, -906747]) |
| Latitude | Latitude of center. | # ([64.29, 81.24]) |
| Longitude | Longitude of center. | # ([-63.17, -28.21]) |
| QualFlag | Quality flag to indicate digitization conditions | # (0 - Manually digitized, 3 - Manually digitized, w/ L7 SCE, 10 - Automatically digitized, 13 - Automatically digitized, w/ L7 SCE. See MEaSUREs NSIDC-0642) |
| Satellite | Satellite/sensor of the digitized source image | LXSS ([LM01, LC08]) See [usgs.gov/faqs/what-naming-convention-landsat- collections-level-1-scenes](https://www.usgs.gov/faqs/what-naming-convention-landsat-collections-level-1-scenes) |
| Date | Date of the digitized source image | YYYY-MM-DD ([1972-09-06, 2019-06-25]) |
| ImageID | Source image file name. | LXSS\_LLLL\_PPPRRR\_YYYYMMDD\_yyyymmdd\_CC\_TX (LC08\_L1TP\_026006\_20170702\_20170715\_01\_T1, etc.) |
| GrnlndcN | Greenlandic glacier name | NAME (New\_Greenl names from Bjørk et al., 2015 database of Greenland glacier names) |
| OfficialN | Officially recognized glacier name | NAME (Official\_n names from Bjørk et al., 2015 database of Greenland glacier names) |
| AltName | Alternative, Foreign, Old Greenlandic, or other glacier names | NAME (Foreign\_na, Old\_Greenl, Alternative names (Bjørk et al., 2015), or other names) |
| RefName | Reference glacier name, non-authoritative names used in CALFIN to denote grouped/unnamed glaciers | NAME (New\_Greenl, Official\_n, Foreign\_na, Old\_Greenl, Alternative names (Bjørk et al., 2015), or other names) |
| Author | Digitization author’s name | LastName\_FirstInitial (Cheng\_D) |

* + - LineString Shapefiles from 1972-2019, separated by glacial domain
  + level-1\_shapefiles-greenland-termini-closed.zip
    - Polygon Shapefiles from 1972-2019, containing all features in one file
  + level-1\_shapefiles-greenland-termini.zip
    - LineString Shapefiles from 1972-2019, containing all features in one file
  + Both Shapefile types are separated by domain, and share the following schema with that used by [MEaSUREs](https://nsidc.org/data/nsidc-0642):
    - Time Series: Sept. 1972 - June 2019
    - Temporal resolution: sub-seasonal
    - Spatial resolution: 30 meters
    - Spatial accuracy: <90 meters
    - Projection: EPSG:3413 (WGS 84 / NSIDC Sea Ice Polar Stereographic North)

Sample Data Record Usage



Example usage of the consolidated Polygon and LineString Shapefiles in QGIS.