

NSIDC-0771: Ancillary Data for NSIDC Polar Stereographic Grids

1 LATITUDE/LONGITUDE GRIDS

Polar stereographic grids provide arrays of the latitude or longitude, in degrees, at grid cell centers for the 6.25km, 12.5km, and 25km grids for the Northern and Southern Hemispheres.

For more detail on the polar stereographic grids, see https://nsidc.org/data/polar-stereo/ps_grids.html.

1.1 File Names

Naming structure:

```
NSIDC0771_LatLon_PS_N(S)<resolution>km_v1.0.nc
```

Northern Hemisphere files:

```
NSIDC0771_LatLon_PS_N6.25km_v1.0.nc  
NSIDC0771_LatLon_PS_N12.5km_v1.0.nc  
NSIDC0771_LatLon_PS_N25km_v1.0.nc
```

Southern Hemisphere files:

```
NSIDC0771_LatLon_PS_S6.25km_v1.0.nc  
NSIDC0771_LatLon_PS_S12.5km_v1.0.nc  
NSIDC0771_LatLon_PS_S25km_v1.0.nc
```

2 GRID CELL AREA

Polar stereographic grids provide arrays of the surface area, in square meters, of grid cells for the 6.25km, 12.5km, and 25km grids for the Northern and Southern Hemispheres.

To ensure cell area consistency between grids of different resolution, the grid cell areas were first computed for polar stereographic grids at 1.5625km resolution (not included here). These values were appropriately summed to yield the cell surface areas for the provided grids.

2.1 File Names

Naming structure:

NSIDC0771_CellArea_PS_N(S)<resolution>km_v1.0.nc

Northern Hemisphere files:

NSIDC0771_CellArea_PS_N6.25km_v1.0.nc

NSIDC0771_CellArea_PS_N12.5km_v1.0.nc

NSIDC0771_CellArea_PS_N25km_v1.0.nc

Southern Hemisphere files:

NSIDC0771_CellArea_PS_S6.25km_v1.0.nc

NSIDC0771_CellArea_PS_S12.5km_v1.0.nc

NSIDC0771_CellArea_PS_S25km_v1.0.nc