Land Resources of Russia -- Maps of Permafrost and Ground Ice, Version 1

USER GUIDE

How to Cite These Data

As a condition of using these data, you must include a citation:

Kotlyakov, V. and T. Khromova 2002. *Land Resources of Russia -- Maps of Permafrost and Ground Ice, Version 1*. [Indicate subset used]. Boulder, Colorado USA. NASA National Snow and Ice Data Center Distributed Active Archive Center. https://doi.org/10.7265/zpm9-j983. [Date Accessed].

FOR QUESTIONS ABOUT THESE DATA, CONTACT NSIDC@NSIDC.ORG

FOR CURRENT INFORMATION, VISIT https://nsidc.org/data/GGD600



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1 DETAILED DATA DESCRIPTION

1.1 Format

Data are ESRI Shapefiles, converted from Arc/Info e00 files using the ARCSHAPE command. The Shapefiles are most easily imported into ESRI's ArcView, but most other GIS packages can import ESRI Shapefiles. ESRI also provides a free basic GIS package, ArcExplorer, on the ESRI web site.

Each Shapefile consists of three files: filename.dbf (attribute data), filename.shp (feature geometry) and filename.shx (feature geometry index). In all cases the cover# and cover-id field names were shortened to conform to the 10-character field name width limit for dBase files .dbf.

File names are

```
ggd600_permbnd_russia.dbf
ggd600_permbnd_russia.shp
ggd600_permbnd_russia.shx
ggd600_permext_russia.dbf
ggd600_permext_russia.shp
ggd600_permext_russia.shx
ggd600_permice_russia.dbf
ggd600_permice_russia.shp
ggd600_permice_russia.shx
ggd600_permtmp_russia.dbf
ggd600_permtmp_russia.shp
ggd600_permtmp_russia.shp
```

Following is a quick tutorial for defining the projection of this data set in ArcGIS. These steps were tested with ArcGIS 9:

- 1. Open ArcToolbox. Select **Data Management Tools** --> **Projections and Transformations** --> **Define Projection**.
- 2. In the **Define Projection** window, select an input shapefile for the "Input Dataset or Feature Class" field. The "Coordinate System" field now says "Unknown." Click the icon to the right of the "Coordinate System" field.
- 3. In the **Spatial Reference Properties** window that appears, click **Select** to select a predefined coordinate system. Click **Projected Coordinate Systems** --> **Polar**. **Select North Pole Lambert Azimuthal Equal Area.prj**. Click **Add**.

4. Back in the **Spatial Reference Properties** window, click **Modify**. Change the parameters to the following:

False_Easting: 0.0
False_Northing: 0.0
Central_Meridian: 100.0
Latitude_Of_Origin: 45.0

Leave the "Linear Unit" as meters. In the "Geographic Coordinate System" section, click **Modify**. For "Datum" and "Spheroid" select **<custom>**. For "Semimajor axis" and "Semiminor axis" enter **6370997.24063**. Click **OK** until **the Define Projection** wizard runs. The shapefiles are now projected.

Note: the Land Resources of Russia site defines the projection parameters as follows, for those who use the "projectdefine" Arc command:

Projection: Lambert Azimuthal

Units: Meters

Datum: None

Parameters:

6370997.24063 (radius of the sphere of reference)

100 0 0.000 (longitude of center of projection)

45 0 0.000 (latitude of center of projection)

0.00000 (false easting (meters))

0.00000 (false northing (meters))

While all spatial datasets on the "Land Resources of Russia" CD are stored in the Lambert Azimuthal projection, differences occur between the coverages in terms of resolution and scale. In particular, the outer boundary of Russia, islands, and water bodies may vary between data sets.

2 CONTACTS AND ACKNOWLEDGMENTS

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3 DOCUMENT INFORMATION

3.1 Document Creation Date

13 September 2002

3.2 Document Revision Date

24 January 2005