RLC FOREST COVER OF THE KRASNOYARSK REGION, RUSSIA, 1973

Summary:

This data set consists of a 1:2 million scale forest cover map for the land area of the Krasnoyarsk Region, Russia. Thirty-two land cover classes are distinguished. These data were digitized from maps of the Atlas of Forests of the USSR (Anon. 1973). This map should be viewed not as a map of actual forest cover but rather as a map of dominant tree species. Very few tree species are defined, and generally, each polygon and color has only one tree species assigned to it.

Unlike other data sets associated with this project, this data set is available only in ArcView shapefile format (vector). A graphic map is also available in JPEG format (see Figure 1). Please read all documentation before using these files.

Forests of Krasnoyarsk, Russia (1973)
(Scale: 1:2 million)

Legend:
- Aspen
- Birch
- Burned Areas
- Cutting Areas
- Dwarf Arctic Birch
- Fir
- Larch
- Map Classification Error
- Mixed Deciduous
- Nonforest
- Off Map
- Scotch Pine
- Siberian Pine
- Sparse Aspen
- Sparse Birch
- Sparse Larch
- Sparse Scotch Pine
- Sparse Siberian Pine
- Sparse Spruce
- Spruce
- Spruce-Fir
- Spruce-Fir, Spruce Dominant
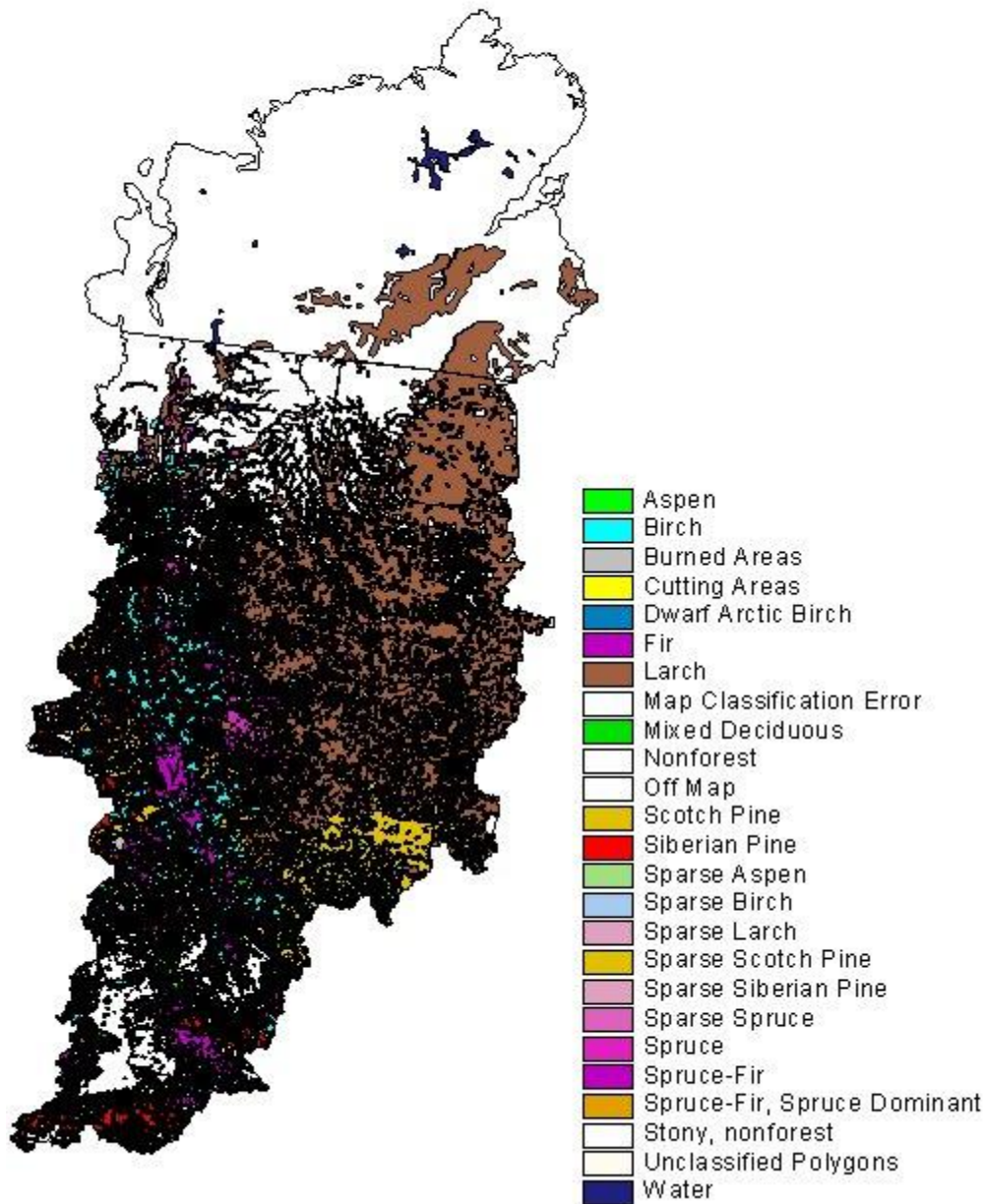- Stony, nonforest
- Unclassified Polygons
- Water

Figure 1. Forest Cover Map for the Land Area of the Krasnoyarsk Region, Russia

Data Citation:

Cite this data set as follows:

Stone, T. A., P. Schlesinger, and V. A. Alexeyev. 2003. RLC Forest Cover of the Krasnoyarsk Region, Russia, 1973. Data set. Available on-line [http://www.daac.ornl.gov] from Oak Ridge

Table of Contents:

1. Data Set Overview:

Data Set Contents:

This data set consists of a 1:2 million scale land cover map for the land area of the Krasnoyarsk Region, Russia.

Related Data Sets:

See other Russian Land Cover data sets.

Title of Investigation:

Measuring Changes to Russian Forest Over the Last 25 Years

Investigator(s) Name and E-mail:

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Technical Contact(s) Name, Telephone, and E-mail:

Variable	Description	Units	Instrument	Range
Forest Cover Classes	Forest cover classes defined in footnote.	unitless	Atlas of Forests of the USSR (1973)	0 - 115

Forest Cover Classes footnote:

CODE	CLASS
0	Unclassified Polygons
1	Scotch Pine
2	Spruce
3	Fir
4	Spruce-Fir
5	Larch
6	Siberian Pine
13	Birch
14	Aspen
15	Nonforest
16	Water
17	Sparse Scotch Pine
19	Sparse Spruce
21	Sparse Larch
22	Sparse Siberian Pine
24	Sparse Birch
26	Sparse Aspen
27	Burned Areas
28	Cutting Areas
29	Off Map
30	Stony, nonforest
33	Mixed Deciduous
38	Map Classification Error
39	Nonforest
40	Sparse Scotch Pine
41	Map Classification Error
98	Spruce-Fir, Spruce Dominant
99	Dwarf Arctic Birch
100	Off Map
115	Nonforest

Future Modifications and Plans:

Not available

2. Data Characteristics:

Study Area:

Spatial Coverage:

Min. X: -1144310
Max. X: 1636312

Min. Y: -453218
Max. Y: 2354392
In meters from 104.5 degrees E, 56.5 degrees N

Spatial Resolution:

1:2,000,000

Projection:

Lambert Azimuthal Equal Area

Grid Description:

Not applicable

Temporal Coverage:

Not applicable

Parameter or Variable:

Data Organization:

Please read all companion documentation before using these files:
ftp://daac.ornl.gov/data/russian_land_cover/forest_map_krasnoyarsk/comp/fmap73_kr_readme.txt and
ftp://daac.ornl.gov/data/russian_land_cover/forest_map_krasnoyarsk/comp/fmap73_kr_projection.txt.

Granule Name or Description:

fmap73_kr.zip

Data Format:

Vector map of forest polygons in the Krasnoyarsk Region (1973). Data are in ArcView shapefile format (compressed).

Sample Data Record:

Not applicable.

3. Application and Derivation:

Typical Application of Data:

Regional-, national-, and sub-national-level forest and land use change assessments

Theory of Measurements:

Not available

Derivation Techniques and Algorithms:

Formulae:

Not available

Processing Steps:

This data set was derived from six source map sheets. Each sheet size is slightly different from the others because each is on a different page in the Atlas of Forests of the USSR (1973). All of the polygons on the map sheets were digitized, edited, and labeled using the Rootspro(c) Digitizing System. Each map sheet was imported into ArcInfo for UNIX, where it was transformed to real world coordinates using Digital Chart of the World (DCW) and World Vector Shoreline (WVS) vectors for control. Each of the map sheet coverages was reprojected from Equi-Distant Conic projection to Lambert Azimuthal Equal Area projection using ArcInfo's PROJECT command and the parameters below (See Processing Changes). Accurate mosaiking of the map sheets within ArcInfo proved to be less than satisfactory. None of the map sheets had embedded real world coordinates, and fifty control points were used in each case. The subsequent vector coverages was converted into ArcView shapefile format.

Processing Changes:

Datum : Undefined
Delta WGS84 : 0 0 0
Ellipsoid : Sphere
Radius of sphere: 6370997.0000
Origin long : 104.5
Origin lat : 56.5
false Easting: 0.0
False Northing: 0.0 meters

Special corrections/Adjustments:

Not applicable

Calculated Variables:

Not applicable

Graphs and Plots Used in Analysis:

Not applicable

4. Quality Assessment:

Data Usage Guidance:

Errors and Limitations:

Error Sources:

Not Available

Limitations of the Data:

This map should not be viewed as a map of actual forest cover. It should be viewed as as a map of dominant tree species. Very few tree species are defined, and generally, each polygon and color has only one tree species assigned to it. As in other maps, the polygons are discreet entities, tree species categories do not blend into one another. In nature, vegetation types and forms tend to go through gradual transitions from one group of plant species to another. This gradual transition is lost in cartographic products when a line is drawn that separates two units of land cover. Maps that are produced from satellite data are generally raster products that do not define well-bounded polygons and, in a sense, may be more representative of nature.

Known Problems with the Data:

Not Available

Quality Assessment Activities:

Not available

Other Relevant Information about the Study:

Not available

5. Acquisition Materials and Methods:

Source or Platform Collection Environment:

Not available

Source or Platform Program Management:

Not available

Source or Platform Mission Objectives:

Coverage Information:

Not available

Attitude Characteristics:

Not available

Data Collection System:

Not available

Communication Links:

Not available

List of Sensors or Instruments:

Analysis

Ground Segment Information:

Data Acquisition and Processing:

Not available

Latitude Crossing Times:

Not available

Sensor or Instrument Descriptions

Key Variables:

Not available

Principles of Operation:

Not available

Sensor or Instrument Measurement Geometry:

Not available

Manufacturer of Sensor or Instrument:

Not available

Calibration:

Specifications:

Not applicable

Tolerance:

Not applicable

Frequency of Calibration:

Not applicable

Other Calibration Information:

Not applicable

Data Acquisition Methods:

These data were digitized from maps of the Atlas of Forests of the USSR (1973).

Observations

Data Notes:

Not Available

6. Data Description and Access:

Data Access:

This data set is available from the Oak Ridge National Laboratory (ORNL) Distributed Active Archive Center (DAAC).

Data Archive Center:

Contact for Data Center Access Information:

E-mail: uso@daac.ornl.gov
Telephone: +1 (865) 241-3952
FAX: +1 (865) 574-4665

Product Availability:

Data can be accessed electronically on the ORNL DAAC's anonymous FTP site or from the DAAC's search and order system. Data files are also available by request from uso@daac.ornl.gov.

Reading the Media:

Not applicable

Software and Analyses Tools:

Not applicable

7. References:

The published reference for the source data is as follows:

Anon. 1973. Atlas of Forests for the Soviet Union, Main Geodetic and Cartographic Organization for the Ministries of the USSR, Moscow, 222 pp.

8. Glossary and Acronyms:

Glossary:

Not available

Acronyms:

Acronym Definition
ASCII   American Standard Code for Information Interchange
DCW   Digital Chart of the World
JPEG   Joint Photographic Experts Group
RMS   Root Mean Square
WVS   World Vector Shoreline

9. Document Information:

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http://daac.ornl.gov