RLC SELECTED INFRASTRUCTURE DATA FOR THE FORMER SOVIET UNION, 1993

Summary:

This data set consists of roads, drainage, railroads, utilities, and population center information in readily usable vector format for the land area of the Former Soviet Union (FSU). The reason for offering this data set was to create a completely intact vector layer that could readily be used to aid in mapping efforts for the area of the FSU. The five vector data layers were assembled from the Digital Chart of the World (DCW 1993). Individual record attributes were stored for population centers only. Vector maps for the FSU are in ArcView shapefile format. A graphic map using all of the DCW data for a selected area is included with the data set (see Figure 1).

Vector data for the Former Soviet Union

A sample of data on the CDROM for the area near Vladivostok, Primorye





Data Citation:

Cite this data set as follows:

Stone, T. A., and P. Schlesinger. 2003. RLC Selected Infrastructure Data for the Former Soviet Union, 1993. Data set. Available on-line [http://www.daac.ornl.gov] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, U.S.A. doi:10.3334/ORNLDAAC/698.

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1. Data Set Overview:

Data Set Contents:

Five vector data layers from the DCW are assembled here, including roads, drainage, railroads, utilities, and population centers. Individual record attributes were stored for population centers only.

Related Data Sets:

See other Russian Land Cover data sets.

Title of Investigation:

Measuring Changes to Russian Forest Over the Last 25 Years

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Future Modifications and Plans:

Not available.

2. Data Characteristics:

Study Area:

The entire land area of the FSU, in decimal degrees of latitude and longitude. Spatial resolution is 1:1 million in Geographic projection.

Temporal Coverage:

The web site of the map room of the Pennsylvania State University Library used the 1993 version of the the Digital Chart of the World at 1:1,000,000 scale.

Parameter or Variable:

Table for: allfsudn.tar.gz

Variable	Description	Units	Instrument	Range
DRAINAGE	Drainage networks	Unitless	Not applicable	Not applicable

DRAINAGE footnote: Drainage - 288,356 records - No attributes stored during processing

Table for: allfsupp.tar.gz

Variable	Description	Units	Instrument	Range
Population center	Population	Unitless	Not Applicable	Not Applicable.

Population center footnote:

Population Centers - 26,967 records - ppptype

ppptname

1 = Populated place

2 = Populated place (associated with place names within urbanized areas)

3 = Village, strategic, or landmark place associated with a special symbol identified with an operational navigation chart (ONC) marginal note

Table for: allfsurd.tar.gz

Variable	Description	Units	Instrument	Range
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Roads Road networks Unitiess Not Applicable. Not Applicable

Roads footnote: Roads - 80,811 records- No attributes stored during processing

Table for: allfsurr.tar.gz

Variable	Description	Units	Instrument	Range
Railroads	Map of railroads	Unitless	Not Applicable.	Not Applicable.

Railroads footnote: Railroad - 16,383 records - No attributes stored during processing

Table for: allfsuut.tar.gz

Variable	Description	Units	Instrument	Range
Utilities	Map of utilities	Unitless	Not Applicable.	Not Applicable.

Utilities footnote: Utilities - 18,503 records - No attributes stored during processing

Data Organization:

Granule Name or Description:

allfsudn.tar.gz

Data Format:

Vector map of drainage networks for the FSU in ArcView shapefile format (compressed). Contains three files: allfsudn.shp, allfsudn.shx, and allfsudn.dbf.

Sample Data Record:

Not applicable

Granule Name or Description:

allfsupp.tar.gz

Data Format:

Vector (points) map of population centers for the FSU in ArcView shapefile format (compressed). Contains three files: allfsupp.shp, allfsupp.shx, and allfsupp.dbf.

Sample Data Record:

Not applicable

Granule Name or Description:

allfsurd.tar.gz

Data Format:

Vector map of road networks for the FSU in ArcView shapefile format (compressed). Contains three files: allfsurd.shp, allfsurd.shx, and allfsurd.dbf.

Sample Data Record:

Not applicable

Granule Name or Description:

allfsurr.tar.gz

Data Format:

Vector map of railroads for the FSU in ArcView shapefile format (compressed). Contains three files: allfsurr.shp, allfsurr.shx, and allfsurr.dbf.

Sample Data Record:

Not applicable

Granule Name or Description:

allfsuut.tar.gz

Data Format:

Vector map of utilities for the FSU in ArcView shapefile format (compressed). Contains three files: allfsuut.shp, allfsuut.shx, and allfsuut.dbf.

Sample Data Record:

Not applicable

3. Application and Derivation:

Typical Application of Data:

The reason for generating this data set was to create a completely intact vector layer that could readily be used to aid in mapping efforts for the area of the FSU.

Theory of Measurements:

Not available

Derivation Techniques and Algorithms

The source data were acquired from the DCW Server, Pennsylvania State University Libraries. See World Wide Web address: <u>http://www.maproom.psu.edu/dcw/</u>.

Source vector data were ingested into Arc Info and reprojected as needed to Geographic coordinates. Coverages of common themes were appended together and topologically cleaned, and the tile borders were dissolved to form single coverages. The resulting shapefiles were exported from these ArcInfo coverages.

Attributes were not stored for roads, utilities, railroads, and drainage.

4. Quality Assessment:

Data Usage Guidance:

Errors and Limitations:

Error Sources:

Not applicable

Limitations of the Data:

Not applicable

Known Problems with the Data:

Not applicable

Quality Assessment Activities

Not available

Other Relevant Information about the Study:

Not available

5. Acquisition Materials and Methods:

Source or Platform Collection Environment:

DCW Server, Pennsylvania State University Libraries. See World Wide Web address: <u>http://www.maproom.psu.edu/dcw/</u>

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:

Digitizer

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:

The source data were acquired from the DCW Server, Pennsylvania State University Libraries. See World Wide Web address: <u>http://www.maproom.psu.edu/dcw/</u>.

Observations

Data Notes:

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: <u>uso@daac.ornl.gov</u> Telephone: +1 (865) 241-3952 FAX: +1 (865) 574-4665

Product Availability:

Data can be obtained 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 <u>uso@daac.ornl.gov</u>.

Reading the Media:

Not available

Software and Analyses Tools:

Not available

7. References:

The web site of the Pennsylvania State University Library map room uses the 1993 version of the the DCW 1:1,000,000 scale. The source data are described there as an Environmental Systems Research Institute (ESRI), Inc., product originally developed for the U.S. Defense Mapping Agency. See http://www.maproom.psu.edu/dcw/dcw_about.shtml for more information.

8. Glossary and Acronyms:

Glossary:

Acronyms:

Acronym Definition

- ASCII American Standard Code for Information Interchange
- DCW Digital Chart of the World
- ESRI Environmental Systems Research Institute
- JPEG Joint Photographic Experts Group
- ONC Operational Navigation Chart

9. Document Information:

2003/11/25

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2003/11/25

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http://daac.ornl.gov