CanVec is a digital cartographic reference product produced by Natural Resources Canada. It originates from the best available geospatial data sources covering Canadian territory, offers quality topographic information in vector format complying with international geomatics standards.

CanVec contains more than 60 topographic features organized into 8 themes: Transport Features, Administrative Features, Hydro Features, Land Features, Man-Made Features, Elevation Features, Resource Management Features, and Toponymic Features.

Common uses
CanVec can be used in Web Map Services (WMS) and geographic information systems (GIS) applications and used to produce thematic maps. Because of its many attributes, CanVec allows for extensive spatial analysis.

Accessing the data
There are two methods for accessing CanVec data:

- Prepackaged files (static files): A selection of prepackaged files is offered by theme and at different scales. These prepackaged files are published at least once a year or when significant changes occur.
- Customized area (dynamic files): The Geospatial Data Extraction tool allows you to define a custom area, which is no longer limited to the National Topographic System (NTS) nor the area of a province or territory. Data updates are offered approximately every two months. Only 1:50 000 and 1:250 000 scales are available with the Geospatial Data Extraction tool.

Technical specifications

<table>
<thead>
<tr>
<th>Datum</th>
<th>NAD83 CSRS</th>
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<tr>
<td>Scales</td>
<td>1:50 000, 1:250 000, 1:1 000 000, 1:5 000 000 and 1:15 000 000</td>
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<tr>
<td>Coordinate system</td>
<td>Geographic (latitude and longitude)</td>
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<td>Compression format</td>
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<td>Distribution formats:</td>
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</table>
  - Prepackaged files: Shapefile (ESRI™) and FGDB (ESRI™) |
  - Geospatial Data Extraction tool: GML (Geography Markup Language), Shapefile (ESRI™) and FGDB (ESRI™) |

Metadata
The dataset metadata is in XML format according to the North American Profile (NAP) national standards.

CanVec data sources
- National Topographic Data Base (NTDB), legacy
- Mapping the North project, completed in 2011
- Updates using data from the GeoBase initiative
- Updates using satellite imagery (e.g. Landsat 7, Spot, Radarsat)

Theme names
- Transport networks in Canada – CanVec – Transport Features
- Administrative boundaries in Canada – CanVec – Administrative Features
- Lakes and rivers in Canada – CanVec – Hydro Features
- Wooded areas, saturated soils and landscape in Canada – CanVec – Land Features
- Constructions and land use in Canada – CanVec – Man-Made Features
- Elevation in Canada – CanVec – Elevation Features
- Mines, energy and communication networks in Canada – CanVec – Resource Management Features
- Geographical names in Canada – CanVec – Toponymic Features