

Centre d'information géographique, statistique et gouvernemental

Geographic, Statistical and Government Information Centre

Metadata

National Capital Commission Digital Orthophotos (1994-2003)

Description

The digital orhophotos are aerial photographs that have been scanned into digital format, then processed and rectified to remove any perspective effects resulting from uneven terrain.

Data Use Restrictions

Use of the data is restricted to faculty, students and staff of the University of Ottawa for research and teaching. A license agreement must be signed. The NCC should be acknowledged on any derivative product, such as a map or an image.

Data Format

Georeferenced images 1994-1998: JPEG format 2001-2003: Tiff format

Accessing the Data

The digital orthophotos are available at the GSG. Consult staff for further information.

Citation Format

National Capital Commission. 1998. Digital Orthophotos [Gatineau-Ottawa]. [computer file]. Ottawa, Ontario.

Specific Information

2003

Date of Photography:	April 30, May 3, 2003
Scale of Photography:	1:6000
Camera Focal Length:	152.910 mm.
Film type:	Black&white (Kodak Double X)
Forward overlap:	80% +/- 4%
Side overlap:	50% +/- 5%
Sun angle:	Greater than 25 degrees.
Datum:	NAD83
Pixel resolution:	0.1 m (10 cm)

Control:

Horizontal control was provided by pre-photo targeting. Targets are placed on twelve (12) ground control points. These targets are white on a black background in the form of a cross with a leg length of +/- 1.2metres, providing an overall diameter of +/- 3.0 metres for the target. For easy identification and accurate positioning in the soft-copy instrument, the central part of the cross was left open, showing black on the photo.

Accuracy Standards:

Digital orthoimagery is accurate in planimetry for 1:2000 digital mapping with a standard deviation ≤ 0.6 metres (or 90% of well defined features within one (1) metre from their true position). DTM collection accurate to standard deviation less than 0.5 metres.

2001

Date of Photography:	May 5 and 6th 2001
Scale of Photography:	1:16000
Camera Focal Length:	152.468 mm.
Film type:	Black&white (Kodak 2405 DX aerographic)
Forward overlap:	60% + 4% (supplementary lines in downtown core are $80%$)
Side overlap:	30% +/- 5%
Sun angle:	Greater than 25 degrees.
Datum:	NAD83
Pixel resolution:	0.25 m (25 cm)

Control:

All photographs are GPS controlled. Three dual-frequency receivers are used in the photography phase of the project. One GPS receiver in the aircraft, and two GPS receivers on monitor sites with known 3D dimension coordinates.

Targeting:

Targets are places on twenty-eight (28) ground control points. These targets are white on a black background in the form of a cross with a leg length of +/- 1.2metres, providing an overall diameter of +/- 3.0 metres for the target. For easy identification and accurate positioning in the soft-copy instrument, the central part of the cross was left open, showing black on the photo. Fourteen (14) photo identifiable vertical control points were surveyed to be used as check points before they are utilized in the block adjustment.

Accuracy Standards:

Digital orthoimagery is accurate in planimetry for 1:2000 digital mapping with a standard deviation ≤ 0.6 metres (or 90% of well defined features within one (1) metre from their true position). DTM collection accurate to standard deviation less than 0.6 metres. The error propogation phase of the block adjustment should produce results with mean standard deviation (MSTD) accurate to the following guidelines:

Coordinate	Error Propogation MSTD
Easting	0.3m
Northing	0.3m
Height	0.4m

1998

Date of Photography:	October 11, 1998
Scale of Photography:	1:21800
Camera Focal Length:	6 inch
Datum:	NAD83
Pixel resolution:	0.5 m (50 cm)

Control:

All photographs are GPS controlled. This was supplemented by surveying 21 photo identified control points.

Targetting: None.

Accuracy: Within 1 metre of true ground position.

1997

May 17, 1997
1:16600
60%
30%
152.923 mm.
NAD83
0.25 m (25 cm)

Control:

All photographs are controlled by surveying photo-identifiable points.

Targetting:	None.
Accuracy:	Within 1 metre of true ground position.

1994

Date of Photography:	August 19, 1994
Scale of Photography:	1:10000
Forward overlap:	80%
Side overlap:	20%
Camera Focal Length:	12 inch
Film:	Panchromatic
Datum:	NAD83
Pixel resolution:	0.25 m (25 cm)

Control:

All photographs are controlled by surveying photo-identifiable points and using existing Aerial Triangulation reports. Existing vector data was also used for providing additional control.

Targetting:	None.
Accuracy:	Within 1 metre of true ground position.