ISO Geodetic Registry

Item class GeodeticDatum

Name Average Terrestrial System of 1977

Item statusVALIDIdentifier200AliasATS77

Information source Title The selection and implementation of a new

spatial reference system for Canada's Maritime

provinces

Author D. Gillis, A. Hamilton, R.J. Gaudet, J. Ramsay,

B. Seely, S. Blackie, A. Flemming, C. Carlin, S.

Bernard, L.G. LeBlanc

Publisher Canadian Institute of Geomatics

Publication date 2000
Series/Journal name Geomatica
Issue identification Volume 54, No. 1

Page 25-41

Information source Title The Evolution of Nova Scotia's Spatial

Referencing System from its Origins until 2012

Author J. Bond, W. Robertson

Publisher Canadian Institute of Geomatics

Publication date 2015
Series/Journal name Geomatica
Issue identification Volume 69, No. 4

Page 407-418

Information source Title A spatial referencing policy for the Province of

Nova Scotia: Policy Document

Author GeoNOVA Reference Coordinate System Policy

Node

Publisher GeoNOVA, Service Nova Scotia and Municipal

Relations

Publication date 2006-01

Data source ISO Geodetic Registry

Remarks In use from 1979. Replaced by NAD83(CSRS)v2.

Anchor definition ATS77 is a geocentric coordinate system defined by the Canadian

Geodetic Survey in 1977 for the Maritime provinces. It is a

conceptualization of a conventional terrestrial reference system using

the ATS77 reference ellipsoid. The ATS77 reference frame was realized by a set of coordinates in the ATS77 system. The coordinates were obtained from the 1979 Maritime Redefinition and Readjustment of the combined three provincial geodetic networks then in existence, using an October 1977 first-order federal network adjustment as

constraints. ATS77 is now known to be offset from the true geocenter by about 5 m.

Release date 1977

Scope Spatial referencing

Ellipsoid Average Terrestrial System 1977

Prime Meridian Greenwich

Extent

Canada - onshore and offshore - Maritimes
(New Brunswick, Nova Scotia, Prince Edward Island).

Geographic Bounding Box	West-bound longitude	-69.05
	North-bound latitude	48.07
	East-bound longitude	-63.7
	South-bound latitude	44.56

ISO Geodetic Registry

Item class Ellipsoid

Average Terrestrial System 1977

Item statusVALIDIdentifier26AliasATS77

Information source Title The selection and implementation of a new

spatial reference system for Canada's Maritime

provinces

Author D. Gillis, A. Hamilton, R.J. Gaudet, J. Ramsay,

B. Seely, S. Blackie, A. Flemming, C. Carlin, S.

Bernard, L.G. LeBlanc

Publisher Canadian Institute of Geomatics

Publication date 2000 Series/Journal name Geomatica Issue identification Volume 54, No. 1

Page 25-41

Information source Title New Brunswick Control Monument Database

Information: Explanation of Fields and Glossary of

Terms

Author Service New Brunswick

Publisher Service New Brunswick, Government of New

Brunswick

Publication date 2002-04-23

Data source ISO Geodetic Registry

Semi-major axis 6378135.0 m Inverse flattening 298.257 m

ISO Geodetic Registry

Item class PrimeMeridian

Name Greenwich

Item status VALID
Identifier 25

Alias Zero meridian

Information source Title Why the Greenwich meridian moved

Author S. Malys, J.H. Seago, N.K. Pavlis, P.K.

Seidelmann, G.H. Kaplan

Publisher Springer International Publishing

Publication date 2015-12

Series/Journal name Journal of Geodesy Issue identification Volume 89, No. 12

Page 1263–1272

Information source Title IERS Conventions (2010)

Author G. Petit, B.J. Luzum (eds)

Publisher Verlag des Bundesamts fur Kartographie und

Geodasie

Publication date 2010

Edition date

Series/Journal name IERS Technical Notes

Issue identification 36.0

Other citation details ISSN: 1019-4568

Data source ISO Geodetic Registry

Greenwich longitude 0.0 °