

Canadian Seismic Station Report

FDSN Meeting, Perugia, Italy

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Geological Survey of Canada

The Geological Survey of Canada (GSC) currently operates or cooperates with the siting, data acquisition, and archiving of 4 deployments for which the data are fully open: the Canadian National Seismograph Network (CNSN), the Canadian High Arctic Seismic Monitoring Experiment (CHASME), the Federal Northern Ontario network (FEDNOR), and the Portable Observatories for Lithospheric Analysis and Research Investigating Seismicity (POLARIS). All but the CHASME deployment are received in real time. All data are archived at the [Canadian National Data Centre \(CNDC\)](#) in Ottawa and disseminated via [AutoDRM](#) and [NetDC](#) . Plans are underway to install a DHI interface at the CNDC.

1 Description of Networks/Deployments and Plans

1.1 CNSN

The [Canadian National Seismograph Network](#) is a permanent network owned and operated by the GSC primarily for monitoring earthquakes occurring on and near the Canadian landmass. In addition, some stations are contributed to the IMS as part of Canada's contribution to nuclear test ban treaty verification, to the Atlantic and Pacific Tsunami Warning Systems, to the FDSN as part of the FDSN network, etc. For more detailed information, see the [CNSN Station Book pages](#).

Plans for CNSN over the next year or so include:

- BTB (Vancouver Island): convert from short period vertical to 3-c broad-band - by August 2007
- BLBC (Eastern BC): convert to digital (SPD and S13) - by August 2007
- PLBC (Northern BC): convert from POLARIS to CNSN; exchange digitizer for a GD2 and seismo for a CMG 3ESP; change telemetry from satellite to Internet to improve availability - by June 2007.
- scout for a new Yukon station, about half way between WHY and DAWY (perhaps around Pelly Crossing) by June 2007. Installation TBD, perhaps FY 08/09.
- KUQ (Northern Quebec): upgrade from dialup to real-time continuous. Use either local ISP for Internet access or convert to Libra-type station (satellite). May also convert from short period vertical to 3-C broad-band. Completion summer/fall 2007 (hopefully).

- BMSB (Vancouver Island): convert/harden from temporary ETS to permanent CNSN. May also do this for a few other Vancouver Island ETS stations. Expected early 2008.
- RES, FRB and INK: upgrade to IMS Auxiliary specifications for certification; will involve seismo and digitizer change.
- Potential new broad-band stations in future:
 - Mackenzie Valley, NT, perhaps near Norman Wells
 - Central BC, Labrador and the western Arctic (to replace MBC)

1.2 CHASME

The Canadian High Arctic Seismic Monitoring Experiment was designed with two main goals: to improve the sparse network coverage across the High Arctic region in order to gain new information about local and regional seismicity and to study regional variations in the structure of the crust and upper mantle in more detail than had previously been possible. Seven temporary broadband seismograph stations were deployed in summer 2000 in communities across the Canadian High Arctic and western Greenland, the latter being shared with the ongoing *GLATIS** project. The stations were instrumented with [Nanometrics ORION digitizers](#) and Guralp CMG-3ESP and CMG-40T seismometers. The digitizers were housed in buildings within the communities, using local mains power, and were maintained by local operators such as RCMP officers, airport workers and local scientists. The stations did not operate in real-time; instead, the waveform data were extracted periodically by swapping out the 2GB removable hard disks approximately once per month and shipping them to the CNDC for processing and analysis.

Though originally viewed as a temporary deployment to last a few years at most, 3 stations are still operating: Tuleg , Pond Inlet, and Eureka.

[* The *GLATIS* project (Greenland Lithosphere Analysed Teleseismically on the Ice Sheet) is a joint venture between the Geological Survey of Denmark & Greenland, the National Survey & Cadastre, Denmark, the Danish Lithosphere Centre, the Geological Survey of Canada, the University of Copenhagen, Geoforschungszentrum Potsdam and Université Joseph-Fourier (Grenoble), France.]

1.3 POLARIS

The [Portable Observatories for Lithospheric Analysis and Research Investigating Seismicity](#) is a geophysical research consortium comprised of Canadian Universities, Provincial Governments, and the GSC. It is focused on investigation of the structure and dynamics of the Earth's lithosphere and the prediction of earthquake ground motion. When originally instituted in 2001, it comprised 3 subnetworks of roughly 30 broad-band seismometers each, located in south-western British Columbia (BC), the Northwest Territories (NT), and Southern Ontario. These subnets were designed to have a lifespan of 4-5 years after which the equipment would be moved.

The first such moves started in 2005. Instruments from the BC were subnet moved to the BC interior or the Gulf of St Lawrence region. Some instruments from the NWT were moved to western Hudson Bay, while some from Southern Ontario were moved to eastern Hudson Bay. This summer remaining instruments from the NWT subnet will be removed. There is also a plan to install new stations at the Bruce and Darlington nuclear power plants, with the GSC contracted to do the monitoring.

1.4 FEDNOR

With funding from Industry Canada's Federal Economic Development Initiative for Northern Ontario (FEDNOR), together with funds and assistance from the POLARIS Consortium, a total of 19 broad-band digital seismographs were installed in Northern Ontario in 3 phases over 2003, 2004 and 2005. The rationale in part was to study crustal structure related to diamonds, and to assess seismic hazard as it relates to mine safety. The 18 FEDNOR stations currently operating are scheduled to be redeployed next year.

2. List of Stations by Network/Deployment

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
EUNU	EUREKA	NU	80.053	-86.416	0.628	CMG-3R	100	CHASME
PINU	POND INLET	NU	72.697	-77.975	0.036	CMG-3R	100	CHASME
TULEG	TULE	GR	76.537	-68.824	0.038	CMG40T	100	CHASME
A11	ST-ROCH-DES-AULNAIES	QC	47.242	-70.198	0.061	CMG-3R	100	CNSN
A16	RIVIERE OUELLE	QC	47.471	-70.006	0.015	CMG-3R	100	CNSN
A21	ST-ANDRE	QC	47.704	-69.69	0.046	CMG-3R	100	CNSN
A54	MISERE	QC	47.457	-70.412	0.381	CMG-3R	100	CNSN
A61	SAINTE MATHILDE	QC	47.693	-70.09	0.358	CMG-3R	100	CNSN
A64	SAINT-SIMEON	QC	47.826	-69.892	0.137	CMG-3R	100	CNSN
ALB	ALBERNI	BC	49.272	-124.828	0.026	L4	100	CNSN
BBB	BELLA BELLA	BC	52.185	-128.113	0.014	CMG-3I	40	CNSN
BIB	BOWEN ISLAND	BC	49.409	-123.31	0.037	S-13	100	CNSN
BLBC	BLUE RIVER	BC	52.043	-119.241	2.362	WMII	100	CNSN
BMBC	BULL MOUNTAIN	BC	56.045	-122.131	1.1	CMG-3E	40	CNSN
BNAB	BONILLA	BC	53.493	-130.637	0.016	L4	100	CNSN
BNB	BARRY INLET	BC	52.576	-131.752	0.756	S-13	100	CNSN
BPBC	BROOKS PENINSULA	BC	50.157	-127.771	0.732	S-13	100	CNSN
BTB	BUTTLE LAKE	BC	49.468	-125.521	1.64	S-13	100	CNSN
CBB	CAMPBELL RIVER	BC	50.032	-125.364	0.317	CMG-3I	40	CNSN
CNQ	COTE-NORD	QC	49.302	-68.074	0.2	S-13	100	CNSN
CRLO	CHALK RIVER	ON	46.038	-77.38	0.168	S-13	100	CNSN
DAQ	LAC DARAN	QC	47.964	-71.243	0.939	S-13	100	CNSN
DAWY	DAWSON	YT	64.066	-139.391	0.808	CMG-3E	40	CNSN
DIB	DAWSON INLET	BC	53.202	-132.477	0.068	CMG-3I	100	CNSN
DLBC	DEASE LAKE	BC	58.437	-130.027	0.978	CMG-3I	40	CNSN
DOWB	DOWNIE SLIDE	BC	51.518	-118.516	0.594	S-13	100	CNSN
DPQ	ST-JEAN-DES-PILES	PQ	46.68	-72.777	0.167	S-13	100	CNSN
DRLN	DEER LAKE	NL	49.256	-57.504	0.238	STS-1	40	CNSN
EDB	ELIZA DOME	BC	49.874	-127.12	0.189	CMG-3E	40	CNSN
EDM	EDMONTON	AB	53.222	-113.35	0.73	CMG-3E	40	CNSN
EEO	ELDEE	ON	46.641	-79.073	0.398	S-13	100	CNSN
EFO	EFFINGHAM	ON	43.092	-79.312	0.168	S-13	100	CNSN

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
ETB	ESTEVAN POINT	BC	49.376	-126.538	0.001	S-13	100	CNSN
FCC	FORT CHURCHILL	MB	58.762	-94.087	0.039	CMG-3E	40	CNSN
FNBB	FORT NELSON	BC	58.89	-123.01	0.618	CMG-3T	40	CNSN
FRB	IQALUIT	NU	63.747	-68.547	0.018	CMG-3T	40	CNSN
FSB	FORT ST. JAMES	BC	54.477	-124.328	0.747	S-13	100	CNSN
GAC	GLEN ALMOND	QC	45.703	-75.478	0.062	STS-1	40	CNSN
GAC	GLEN ALMOND	QC	45.703	-75.478	0.062	S-13	100	CNSN
GBN	GUYSBOROUGH	NS	45.408	-61.513	0.038	CMG-3E	100	CNSN
GDR	GOLD RIVER	BC	49.781	-126.055	0.1	S-13	100	CNSN
GGN	SAINT GEORGE	NB	45.117	-66.822	0.03	CMG-3R	40	CNSN
GOBB	GALIANO ISLAND	BC	48.949	-123.51	0.161	S-13	100	CNSN
GRQ	GRAND-REMOUS	QC	46.607	-75.86	0.29	S-13	100	CNSN
GSQ	GROSSES-ROCHES	QC	48.914	-67.111	0.398	S-13	100	CNSN
GTO	GERALDTON	ON	49.745	-86.961	0.35	S-13	100	CNSN
HAL	HALIFAX	NS	44.638	-63.592	0.064	S-13	100	CNSN
HNB	HANEY	BC	49.275	-122.579	0.183	CMG-3E	40	CNSN
HOLB	HOLBERG	BC	50.641	-128.132	0.564	S-13	100	CNSN
HOPB	HOPE	BC	49.387	-121.421	0.248	CMG-3E	40	CNSN
HYT	HAINES JCT.	YT	60.825	-137.504	1.416	S-13	100	CNSN
I10H1	PINAWA	MB	50.202	-96.027	0.246	MB2000	20	CNSN
I10H2	PINAWA	MB	50.207	-96.04	0.237	MB2000	20	CNSN
I10H3	PINAWA	MB	50.206	-96.012	0.239	MB2000	20	CNSN
I10H4	PINAWA	MB	50.187	-96.019	0.242	MB2000	20	CNSN
ICQ	ISLETS-CARIBOU	QC	49.522	-67.272	0.058	CMG-3T	40	CNSN
INK	INUVIK	NT	68.307	-133.52	0.04	CMG-3E	40	CNSN
KAPO	KAPUSKASING	ON	49.45	-82.508	0.21	CMG-3E	40	CNSN
KGNO	KINGSTON	ON	44.227	-76.493	0.089	CMG-3R	40	CNSN
KUQ	KUUJJUAQ	QC	58.109	-68.411	0.054	S-13	100	CNSN
LG4Q	LAGRANDE4	QC	53.627	-74.097	0.168	S-13	100	CNSN
LLLB	LILLOOET	BC	50.609	-121.882	0.7	CMG-3T	40	CNSN
LMN	CALEDONIA MTN.	NB	45.852	-64.806	0.363	CMG-3E	40	CNSN
LMQ	LA MALBAIE	QC	47.548	-70.327	0.419	CMG-3E	40	CNSN
LZB	MOUNT LAZARD	BC	48.612	-123.824	0.844	CMG40T	100	CNSN
MASB	MASSET	BC	54.015	-132.023	0.015	L4	100	CNSN
MAYB	MOUNT MAYNARD	BC	50.403	-127.172	1.414	S-13	100	CNSN
MGB	MOUNT GREY	BC	49	-124.698	1.3	CMG-3R	100	CNSN
MNB	MOUNT DAINARD	BC	52.198	-118.383	2.271	WMII	100	CNSN
MNQ	MANICOUAGAN	QC	50.533	-68.774	0.564	S-13	100	CNSN
MNT	MONTREAL	QC	45.502	-73.623	0.112	CMG-3E	40	CNSN

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
MOBC	MORSBEY	BC	53.197	-131.898	0.675	CMG-3E	40	CNSN
MOQ	MONT-ORFORD	QC	45.312	-72.254	0.841	S-13	100	CNSN
NCRB	NEWCASTLE RIDGE	BC	50.404	-126.055	1.293	S-13	100	CNSN
NDB	NADEN	BC	53.955	-132.942	0.686	S-13	100	CNSN
NLLB	NANAIMO LOST LAKE	BC	49.227	-123.988	0.192	CMG-3E	40	CNSN
OTT	OTTAWA	ON	45.394	-75.717	0.077	CMG-3R	100	CNSN
OTT	OTTAWA	ON	45.394	-75.717	0.077	S-13	100	CNSN
OZB	MT. OZZARD	BC	48.96	-125.493	0.671	CMG-3E	40	CNSN
PFB	PORT RENFREW	BC	48.575	-124.444	0.465	CMG40T	100	CNSN
PGC	SIDNEY	BC	48.65	-123.451	0.005	CMG-3E	40	CNSN
PHC	PORT HARDY	BC	50.707	-127.432	0.033	CMG-3T	40	CNSN
PLBC	PLEASANT CAMP	BC	59.455	-136.366	0.279	CMG-3R	100	CNSN
PNT	PENTICTON	BC	49.317	-119.617	0.55	CMG-3T	40	CNSN
QCQ	QUEBEC	QC	46.779	-71.276	0.091	S-13	100	CNSN
RES	RESOLUTE	NU	74.687	-94.9	0.015	CMG-3E	40	CNSN
RUBB	PRINCE RUPERT	BC	54.326	-130.252	0.012	CMG-3E	40	CNSN
SADO	SADOWA	ON	44.769	-79.142	0.243	CMG-3I	40	CNSN
SCHQ	SCHEFFERVILLE	PQ	54.832	-66.833	0.497	CMG-3T	40	CNSN
SHB	SECHELT	BC	49.593	-123.88	1.143	CMG-3E	40	CNSN
SJNN	ST. JOHN'S	NL	47.595	-52.678	0.146	CMG-3E	100	CNSN
SLEB	SALE MOUNTAIN	BC	51.167	-118.134	2.075	CMG-3T	40	CNSN
SMQ	STE-MARGUERITE	QC	50.222	-66.703	0.344	S-13	100	CNSN
SNB	SATURNA ISLAND	BC	48.776	-123.171	0.408	CMG-3E	40	CNSN
SOLO	SIOUX LOOKOUT	ON	50.021	-92.081	0.373	S-13	100	CNSN
TBO	THUNDER BAY	ON	48.647	-89.408	0.468	S-13	100	CNSN
TRQ	MONT-TREMBLANT	QC	46.222	-74.556	0.853	S-13	100	CNSN
TXB	TEXADA ISLAND	BC	49.697	-124.436	0.515	S-13	100	CNSN
ULM	LAC DU BONNET	MB	50.25	-95.875	0.251	CMG-3T	40	CNSN
VDB	VEDDER MOUNTAIN	BC	49.026	-122.103	0.404	S-13	100	CNSN
VGZ	GONZALES	BC	48.414	-123.324	0.067	CMG-3E	40	CNSN
VIB	VAN INLET	BC	53.252	-132.541	1.008	CMG-3I	100	CNSN
VLDQ	VALDOR	QC	48.19	-77.757	0.093	CMG-3R	40	CNSN
WALA	WATERTON LAKE	AB	49.059	-113.912	1.4	CMG-3E	40	CNSN
WBO	WILLIAMSBURG	ON	45	-75.275	0.085	S-13	100	CNSN
WHY	WHITEHORSE	YT	60.66	-134.881	1.292	CMG-3E	40	CNSN
WOSB	WOSS	BC	50.161	-126.57	0.955	S-13	100	CNSN
WPB	WATTS POINT	BC	49.648	-123.208	0.28	S-13	100	CNSN
WSLR	WHISTLER	BC	50.127	-122.921	0.906	CMG-3E	40	CNSN
YKB0	Yellowknife	NT	62.606	-114.606	0.194	S-13	20	CNSN

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
YKB1	Yellowknife	NT	62.402	-114.606	0.145	S-13	20	CNSN
YKB2	Yellowknife	NT	62.425	-114.606	0.15	S-13	20	CNSN
YKB3	Yellowknife	NT	62.449	-114.606	0.158	S-13	20	CNSN
YKB4	Yellowknife	NT	62.471	-114.606	0.164	S-13	20	CNSN
YKB6	Yellowknife	NT	62.516	-114.606	0.174	S-13	20	CNSN
YKB7	Yellowknife	NT	62.539	-114.606	0.177	S-13	20	CNSN
YKB8	Yellowknife	NT	62.562	-114.605	0.171	S-13	20	CNSN
YKB9	Yellowknife	NT	62.583	-114.604	0.213	S-13	20	CNSN
YKR1	Yellowknife	NT	62.493	-114.945	0.141	S-13	20	CNSN
YKR2	Yellowknife	NT	62.493	-114.896	0.145	S-13	20	CNSN
YKR3	Yellowknife	NT	62.493	-114.848	0.146	S-13	20	CNSN
YKR4	Yellowknife	NT	62.493	-114.8	0.149	S-13	20	CNSN
YKR5	Yellowknife	NT	62.493	-114.75	0.154	S-13	20	CNSN
YKR6	Yellowknife	NT	62.493	-114.702	0.161	S-13	20	CNSN
YKR7	Yellowknife	NT	62.493	-114.654	0.167	S-13	20	CNSN
YKR8	Yellowknife	NT	62.493	-114.606	0.167	S-13	20	CNSN
YKR9	Yellowknife	NT	62.493	-114.556	0.172	S-13	20	CNSN
YKW1	Yellowknife	NT	62.482	-114.484	0.171	STS-1	20	CNSN
YKW1	Yellowknife	NT	62.482	-114.484	0.171	CMG-3T	100	CNSN
YKW2	Yellowknife	NT	62.434	-114.604	0.144	STS-1	20	CNSN
YKW3	Yellowknife	NT	62.562	-114.61	0.17	STS-1	20	CNSN
YKW3	Yellowknife	NT	62.562	-114.61	0.17	S-13	100	CNSN
YKW4	Yellowknife	NT	62.492	-114.743	0.161	STS-1	20	CNSN
ATKO	ATIKOKAN IRON MINE	ON	48.823	-91.6	0.383	CMG-3E	100	FEDNOR
EPLO	EXP. LAKE	ON	49.674	-93.726	0.437	CMG-3E	100	FEDNOR
HSMO	Haileybury	ON	47.371	-79.666	0.306	CMG-3E	100	FEDNOR
KASO	Kasabonika Lake	ON	53.528	-88.641	0.192	CMG-3E	100	FEDNOR
KILO	KIRKLAND LAKE	ON	48.497	-79.723	0.314	CMG-3E	100	FEDNOR
LDIO	LAC DES ISLE MINE	ON	49.175	-89.596	0.5	CMG-3P	100	FEDNOR
MALO	MCALPINE LAKE	ON	50.024	-79.763	0.271	CMG-3E	100	FEDNOR
MSNO	Moosonee	ON	51.291	-80.615	-0.015	CMG-3E	100	FEDNOR
MUMO	MUSSELWHITE MINE	ON	52.613	-90.391	0.316	CMG-3P	100	FEDNOR
NANO	Aroland Nakina	ON	50.354	-86.968	0.309	CMG-3E	100	FEDNOR
NSKO	Neskantaga Airport	ON	52.197	-87.931	0.241	CMG-3E	100	FEDNOR
OTRO	OTTER RAPIDS	ON	50.182	-81.629	0.109	CMG-3E	100	FEDNOR
PKLO	PICKLE LAKE	ON	51.499	-90.352	0.376	CMG-3T	100	FEDNOR
PNPO	PUKASKWA	ON	48.596	-86.285	0.219	CMG-3T	100	FEDNOR
RLKO	Red Lake	ON	51.07	-93.758	0.362	CMG-3T	100	FEDNOR

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
SILO	SUTTON INLIER	ON	54.479	-84.913	0.195	CMG-3P	100	FEDNOR
SUNO	SUDBURY ONAPING	ON	46.644	-81.344	0.343	CMG-3E	100	FEDNOR
TIMO	Timmins	ON	48.466	-81.303	0.392	CMG-3E	100	FEDNOR
ACTO	ACTON	ON	43.609	-80.062	0.36	CMG-3P	100	POLARIS
AKVQ	Akulivik	QC	60.808	-78.191	0.017	CMG-3E	40	POLARIS
ALFO	ALFRED	ON	45.628	-74.884	0	CMG-3E	100	POLARIS
ALGO	ALGONQUIN PARK	ON	45.954	-78.051	0.235	CMG-3P	100	POLARIS
ALRB	Anaheim Lake	BC	52.51	-125.084	1.237	CMG-3E	100	POLARIS
AP3N	Apex site 3	NU	69.459	-84.462	0.437	CMG-3E	40	POLARIS
ARVN	Arviat	NU	61.098	-94.07	-0.023	CMG40T	40	POLARIS
BANO	BANCROFT	ON	45.02	-77.928	0.36	CMG-3P	100	POLARIS
BATG	Bathurst	NB	47.277	-66.06	0.336	CMG-3E	100	POLARIS
BOXN	BOX LAKE	NT	63.852	-109.717	0.436	CMG-3P	40	POLARIS
BRCO	BRUCE PENN.	ON	44.244	-81.442	0.273	CMG-3P	100	POLARIS
BUKO	BUCK LAKE	ON	45.442	-79.399	0.317	CMG-3P	100	POLARIS
BULN	Bullion Camp, Hudson Bay	NU	66.397	-93.125	0.33	CMG-3E	40	POLARIS
CHEG	Cheticamp	NS	46.808	-60.674	0.446	CMG-3E	100	POLARIS
CLSB	Cack Lake	BC	52.759	-122.555	0.792	CMG-3E	100	POLARIS
CLWO	COLLINGWOOD	ON	44.449	-80.301	0.485	CMG-3E	100	POLARIS
CODG	Codroy	NL	47.841	-59.254	0.05	CMG-3E	100	POLARIS
COWN	CONTWYOTO LAKE 2	NT	65.268	-111.186	0.513	CMG-3P	40	POLARIS
CTLN	CASTOR LAKE	NT	64.429	-116.019	0.552	CMG-3E	40	POLARIS
DELO	DELORO MINE	ON	44.518	-77.619	0.213	CMG-3P	100	POLARIS
DSNO	Sudbury Deeper SNO site	ON	46.471	-81.187	-1.723	Trillium	200	POLARIS
ELFO	Elginfield	ON	43.193	-81.316	0.298	CMG-3E	100	POLARIS
FLLB	Fletcher Lake Big Creek	BC	51.739	-123.106	1.189	CMG-3E	100	POLARIS
GALN	GAMETI LAKE	NT	64.117	-117.314	0.34	CMG-3E	40	POLARIS
GASG	Gaspe	QC	48.946	-66.116	0.261	CMG-3E	100	POLARIS
GBLN	GRIZZLE BEAR LAKE	NT	64.2	-112.993	0.392	CMG-3P	40	POLARIS
GIFN	Gifford Fjord, Baffin Is	NU	69.994	-81.638	0.092	CMG-3E	40	POLARIS
GLWN	GLOW WORM LAKE	NT	64.725	-109.33	0.449	CMG-3P	40	POLARIS
ILKN	ILKN	NT	64.224	-115.129	0.266	CMG40T	40	POLARIS
ILON	Igloolik	NU	69.371	-81.824	0.051	CMG-3E	40	POLARIS
INUQ	Eastern Hudson Bay (HuBL	QC	58.451	-78.119	0.012	CMG-3E	40	POLARIS
IVKQ	Ivujivik	QC	62.418	-77.911	0.007	CMG-3E	40	POLARIS
JERN	Jericho Mine	ON	66.019	-111.467	0.476	CMG-3P	40	POLARIS
JOSN	Sedna, Hudson Bay	NU	63.162	-91.542	0.295	CMG40T	40	POLARIS
KILO	KIRKLAND LAKE	ON	48.497	-79.723	0.314	CMG-3E	100	POLARIS

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
KLBO	KILLBEAR PROVINCIAL PARK	ON	45.357	-80.213	0.177	CMG_3T	100	POLARIS
KNDN	KENNADY LAKE	NT	63.419	-109.201	0.421	CMG-3P	40	POLARIS
LAIN	Lailor River NWS	NU	69.109	-83.536	0.32	CMG-3E	40	POLARIS
MADG	Iles de la Madeleine	QC	47.275	-61.689	0.078	CMG-3E	100	POLARIS
MALG	Malagash	NS	45.79	-63.327	0.022	CMG-3E	100	POLARIS
MALO	MCALPINE LAKE	ON	50.024	-79.763	0.271	CMG-3E	100	POLARIS
MCKN	MACKAY LAKE NORTH	NT	64.198	-110.213	0.431	CMG-3P	40	POLARIS
MEDO	"Medina,NY"	NY	43.165	-78.455	0.191	CMG-3P	100	POLARIS
MGTN	MARGARET LAKE	NT	63.686	-109.591	0.411	CMG-3P	40	POLARIS
MLON	MARLO LAKE	NT	63.97	-109.895	0.418	CMG-3P	40	POLARIS
MPPO	MURPHY'S POINT	ON	44.77	-76.265	0.143	CMG-3P	100	POLARIS
MRHQ	MORIN HEIGHTS	QC	45.887	-74.213	0.422	CMG-3E	100	POLARIS
MUMO	MUSSELWHITE MINE	ON	52.613	-90.391	0.316	CMG-3P	100	POLARIS
NATG	Natashquan	QC	50.287	-62.81	-0.002	CMG-3E	100	POLARIS
OTRO	OTTER RAPIDS	ON	50.182	-81.629	0.109	CMG-3E	100	POLARIS
PECO	PRINCE EDWARD COUNTY	ON	43.934	-76.994	0.092	CMG-3P	100	POLARIS
PEMO	PEMBROKE ON	ON	45.677	-77.247	0.18	CMG-3P	100	POLARIS
PKRO	PICKERING	ON	43.964	-79.071	0.197	CMG-3P	100	POLARIS
PLIO	"PELEE ISLAND, STONE ALVAR"	ON	41.751	-82.628	0.143	CMG-3P	100	POLARIS
PLVO	PLEVNA	ON	45.04	-77.075	0	CMG-3P	100	POLARIS
QILN	QILILUGAQ EXPLORATION CAM	NU	66.653	-86.371	0.095	CMG-3E	40	POLARIS
RAMB	"Ramsey,South West of Ques"	BC	52.632	-123.123	1.259	CMG40T	100	POLARIS
RSPO	RESTOULE PROV. PARK	ON	46.073	-79.76	0.264	CMG-3E	100	POLARIS
SABG	Sable Island	NS	43.931	-60.008	0	CMG-3E	100	POLARIS
SEDN	Sedna, Hudson Bay	ON	63.25	-91.208	0.121	CMG-3E	40	POLARIS
SILO	SUTTON INLIER	ON	54.479	-84.913	0.195	CMG-3P	100	POLARIS
SNPN	SNAP LAKE	NT	63.518	-110.908	0.458	CMG-3P	40	POLARIS
SNQN	Sanikiliuq	NU	56.542	-79.225	0.015	CMG-3E	40	POLARIS
SRLN	Sarcpa Lake old Dewline	NU	68.551	-83.324	0.261	CMG-3E	40	POLARIS
SSNO	Sudbury SNO site	ON	46.471	-81.187	0.277	Trillium	200	POLARIS
STCO	ST. CATHERINES	ON	43.21	-79.171	0.096	CMG-3P	100	POLARIS
STLN	Stellar Camp, Hudson Bay	NU	67.312	-92.985	0.204	CMG-3E	40	POLARIS
SULB	Vanderhoof	ON	53.279	-124.358	1.171	CMG-3E	100	POLARIS
SUNO	SUDBURY ONAPING	ON	46.644	-81.344	0.343	CMG-3E	100	POLARIS
TALB	Tatla Lake	BC	52.015	-124.254	1.127	CMG-3E	100	POLARIS
THMB	Thunder Mountain	BC	52.549	-124.132	1.126	CMG-3E	100	POLARIS
TIGG	Tignish	PE	47.002	-63.998	0.008	CMG-3E	100	POLARIS
TOBO	TOBERMORY, BRUCE PENNINSULA	ON	45.226	-81.523	0.169	CMG-3E	100	POLARIS
TORO	LESLIE STREET SPIT, TORONTO	ON	43.614	-79.343	0.08	CMG40T	100	POLARIS

STATION	LOCATION	PROV	LAT	LON	ELEV	SENSOR	SPS	NETWORK
TYNO	TYNESIDE	ON	43.095	-79.87	0.205	CMG-3P	100	POLARIS
VIMO	VICTOR MINE	ON	52.817	-83.745	0.078	CMG-3P	100	POLARIS
WAGN	Wager Bay, Hudson Bay	NU	65.879	-89.445	0	CMG-3E	40	POLARIS
WEMQ	Wemindji	QC	53.053	-77.974	0.172	CMG-3E	100	POLARIS
WLVO	WESLEYVILLE	ON	43.924	-78.397	0.07	CMG-3P	100	POLARIS
YBKN	Baker Lake, Hudson Bay	NU	64.319	-96.003	0.025	CMG-3E	40	POLARIS
YOSQ	Second James Bay	QC	52.867	-72. 2	0.649	CMG-3E	100	POLARIS
YOUB	Youbou, Lake Cowichan	BC	48.901	-124.262	0.771	CMG-3P	100	POLARIS
YRTN	RANKIN INLET AIRPORT	NU	62.81	-92.109	0.001	CMG-3E	40	POLARIS

3. Map of current Canadian Stations

