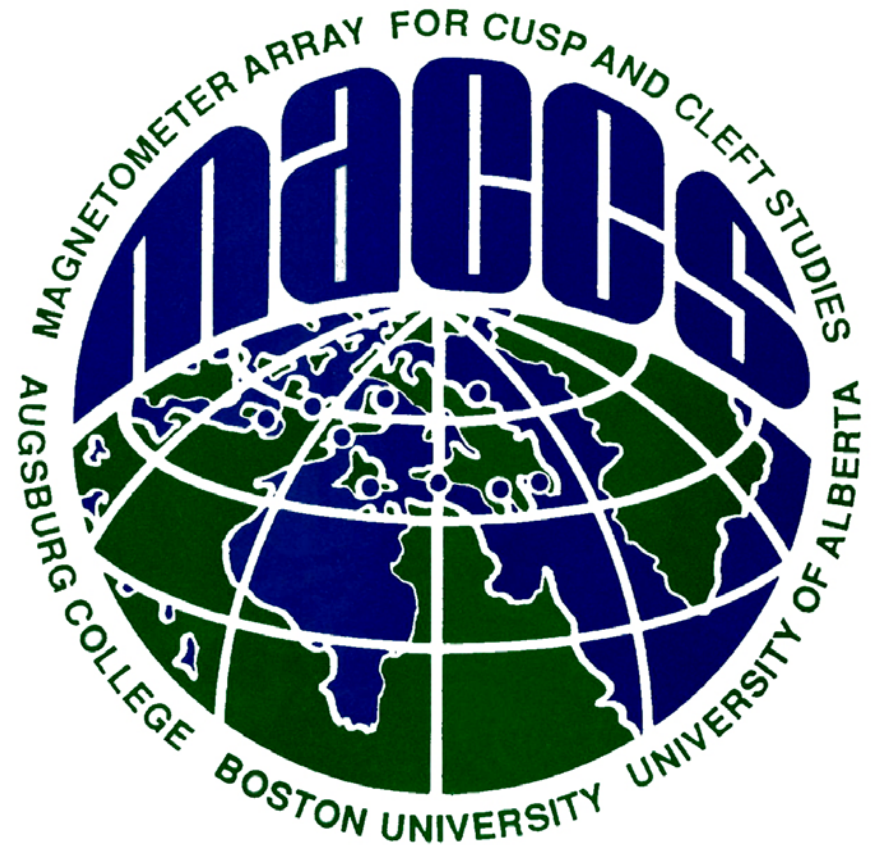
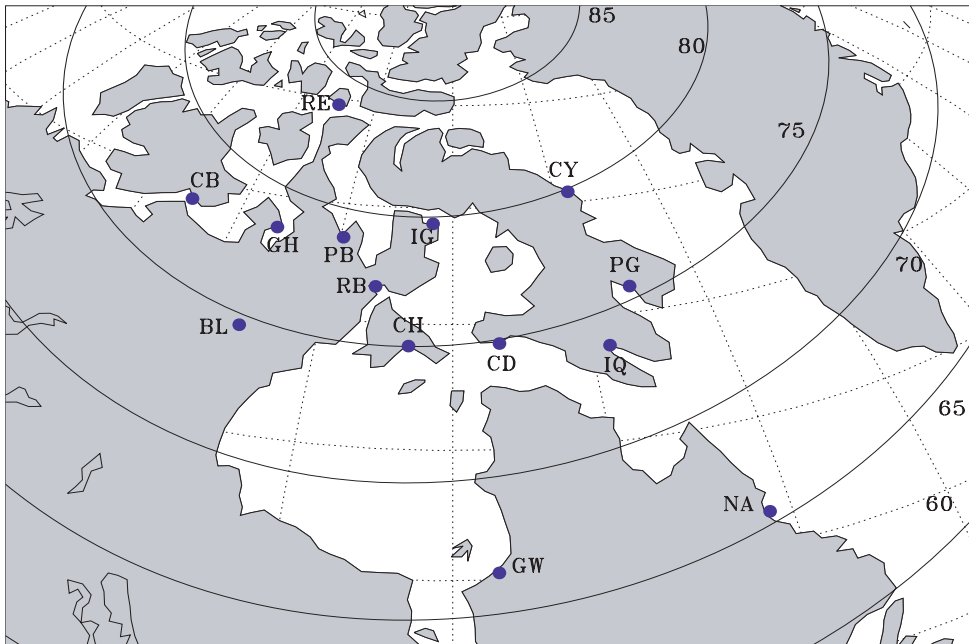


MACCS

The Magnetometer Array for Cusp and Cleft Studies, in Arctic Canada

Operated by Augsburg College
and Boston University



Supported by the Atmospheric
Sciences Division of the U. S.
National Science Foundation

Locations of the MACCS magnetometers and associated Canadian Standard Observatories

Site	Geographic		Geomagnetic		Local Mag. Noon	Year Deployed
	Lat.	Long.	Lat.	Long.		
MACCS						
Pangnirtung (PG)	66.1	294.2	75.2	20.1	15:00	1992
Clyde River (CY)	70.5	291.4	79.6	18.5	15:30	1993
Cape Dorset (CD)	64.2	283.4	74.6	1.2	16:45	1992
Igloodik (IG)	69.3	278.2	79.4	351.5	17:20	1993
Coral Harbour (CH)	64.1	276.8	74.8	349.2	17:30	1992
Repulse Bay (RB)	66.5	273.8	76.9	343.2	17:55	1992
Pelly Bay (PB)	68.5	270.3	78.6	335.5	18:25	1993
Gjoa Haven (GH)	68.6	264.1	78.2	323.4	19:15	1993
Nain	56.3	298.6	64.4	22.4	17:05	2000
CANADIAN OBSERVATORIES						
Great Whale (GWR)	55.3	282.3	65.9	351.2	15:38	
Iqaluit (IQ)	63.8	291.5	73.4	14.7	15:45	
Baker Lake (BK)	64.3	264.0	74.3	326.1	19:05	
Resolute Bay (RE)	74.7	265.0	83.5	315.8	19:45	
Cambridge Bay (CB)	69.1	255.0	77.5	306.9	20:25	

DATA and ACCESS

MACCS, all sites: 0.5-s sampling frequency

Canadian Standard Observatories: 1-s sampling frequency

Data from most MACCS sites are mailed monthly to the U.S. After coordinate rotation and despiking, 5-s and 1 min averages are archived on a web server at Augsburg College for public access:

<http://space.augsburg.edu/space>

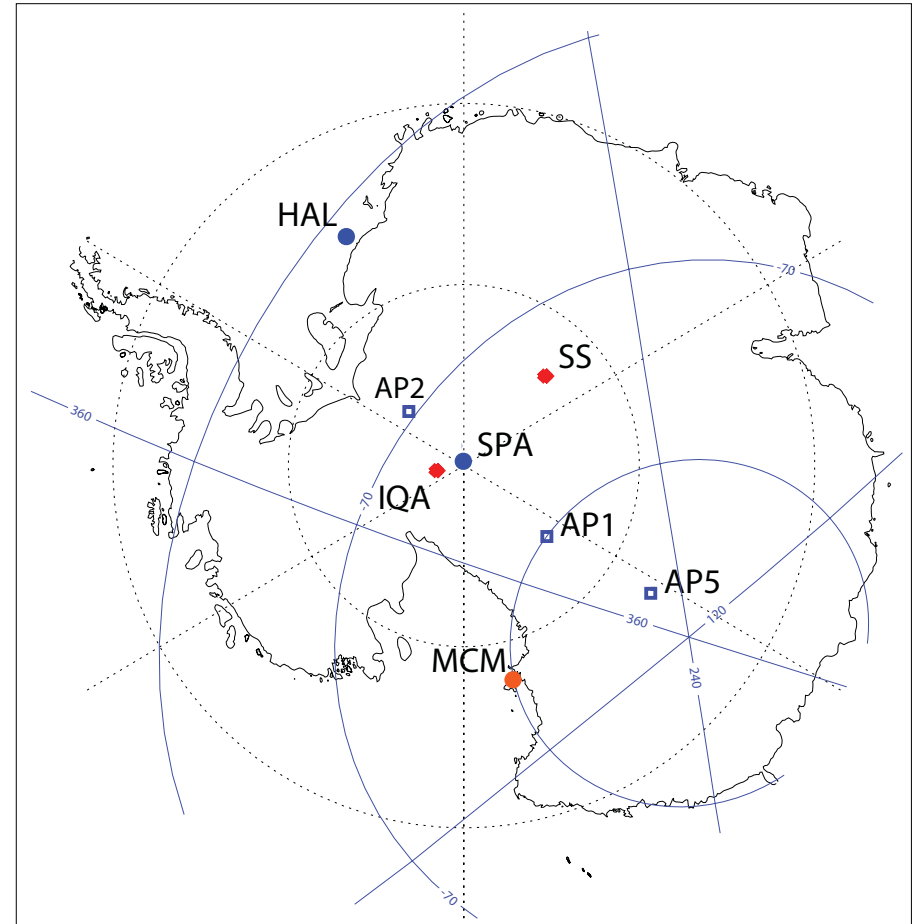
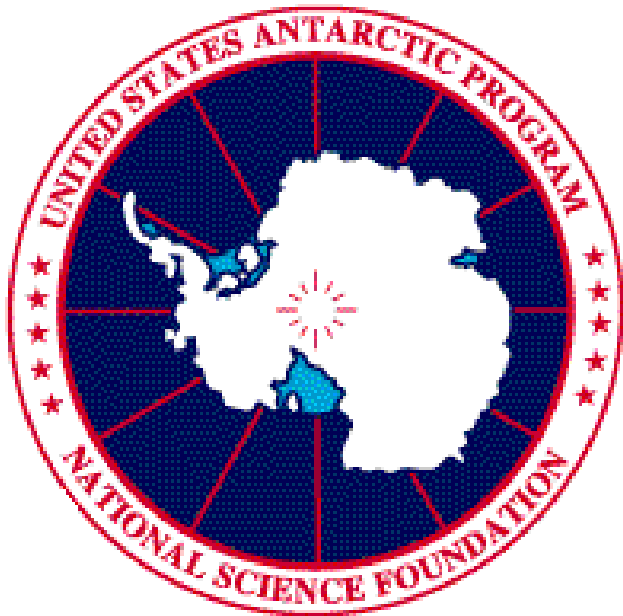
Data not yet available on the web may be requested by contacting:

Mark Engebretson engebret@augsborg.edu or Jennifer Posch posch@augsborg.edu

Two MACCS stations are now equipped with near-real-time Iridium satellite telephone communications: Coral Harbour (cusp latitude) and Nain (auroral latitude). Data from these stations are updated on the MACCS web site (both digital files and a partial day's magnetogram) every 15 minutes.

U.S. and U.K. Antarctic Stations

Both fluxgate and search coil magnetometers are currently operating at several research centers, in an array of automated geophysical observatories (AGOs), and at two conjugate sites.



U.S. and U.K. Magnetometer Arrays in Antarctica (and at two “conjugate” sites)

U. S. Support:

NSF (Office of Polar Programs)

U. K. Support:

British Antarctic Survey (BAS)

Site	Geographic		Geomagnetic		Year Deployed	Currently Operating
	Lat.	Long.	Lat.	Long.		
South Pole	90 S	----	74.0 S	18.4 E	1956	X
McMurdo	77.9 S	166.7 E	79.9 S	327.6 E	1955	X
Sondrestromfjord	67.0 N	309.3 E	74.2 N	42.8 E	1984	X
Iqaluit	63.8 N	291.4 E	73.3 N	14.3 E	1993	X
Halley (U.K.)	75.6 S	26.3 W	61.9 S	28.3 E	1956	X
U.S. AGO P1	83.9 S	129.6 E	80.1 S	16.8 E	1994	X
U.S. AGO P2	85.7 S	46.4 W	69.8 S	19.2 E	1993	X
U.S. AGO P3	82.8 S	28.6 E	71.8 S	40.1 E	1995	
U.S. AGO P4	82.0 S	96.8 E	80.0 S	41.5 E	1994	
U.S. AGO P5	77.2 S	123.5 E	86.7 S	29.4 E	1996	X
U.S. AGO P6	69.5 S	130.0 E	84.9 S	215.2 E	1997	
BAS LPMs (U.K)	(11 sites)				2001-2	X

South Pole, McMurdo, and U.S. AGOs

Fluxgates, all sites: Siena College, NJ Inst. Tech.	1-s sampling A. T. Weatherwax, L. J. Lanzerotti
Search Coils at manned sites: Augsburg College, U. of NH	0.1-s sampling M. J. Engebretson, M. R. Lessard
Search Coils at U. S. AGOs: Tohoku University	0.1-s sampling H. Fukunishi, Y. Takahashi (and M. J. Engebretson)

Halley, and BAS LPMs

Fluxgate at Halley: Fluxgates at LPMs: British Antarctic Survey (BAS)	1-s sampling most at 1-s sampling M. P. Freeman, M. C. Rose
Search Coils at Halley: Augsburg College, U. of NH	0.1-s sampling M. J. Engebretson, M. R. Lessard

DATA and ACCESS

Fluxgate data from SP, MC, U.S. AGOs, and Halley are available on a daily basis (but not in real time).

LPM (Low Power Magnetometer data involve up to a 1 year delay because of the remoteness of the sites, which are visited once per year.

Archived plots and/or files are available on the web at:

SP and MC: Siena College: <http://66.194.178.60/index.psp>

U.S. AGOs: Augsburg College: <http://space.augsburg.edu/ago/AGOChannel.html>

LPMs: BAS: http://www.antarctica.ac.uk/bas_research/instruments/lpm/data/index.php

Search Coil Plots (0-1 Hz spectrograms)

Augsburg College: <http://www.augsburg.edu/physics/data2.html>

Daily Halley spectrograms: <http://dabs.nerc-bas.ac.uk/qlook/>