

**Table S1** The names of the observatories whose data were used in the polar graphs (Fig. S2), their IAGA codes and geomagnetic quasi-dipole (QDP) coordinates for epoch 1921.4.

Observatory name	IAGA code	Quasi-dipole coordinates	
		Latitude	Longitude
Alibag	ABG	11.44°N	141.80°E
Apia	API	-15.13°N	259.07°E
Cheltenham	CLH	51.90°N	351.01°E
De Bilt	DBN	49.38°N	85.37°E
Eskdalemuir	ESK	54.31°N	80.28°E
Honolulu	HON	21.50°N	266.68°E
Seddin	SED	48.43°N	91.45°E
Sitka	SIT	59.72°N	274.70°E
Sodankyla	SOD	62.79°N	109.29°E
Stará Ďala (ÓGyalla)	OGY	42.99°N	94.09°E
Tucson	TUC	39.30°N	310.53°E
Val Joyeux	VLJ	46.34°N	81.72°E
Vieques	VQS	32.07°N	3.74°E
Vassouras	VSS	-8.17°N	21.88°E
Watheroo	WAT	-41.56°N	183.68°E