

### Test Values for WMM2020

The computation was carried out with double precision arithmetic. Single precision arithmetic can cause differences of up to 0.1 nT. Heights are with respect to the WGS 84 Ellipsoid. Grid Variation is with respect to the Grid North of the Universal Polar Stereographic Projection

Date	Height (km)	Lat (Deg)	Lon (Deg)	X (nT)	Y (nT)	Z (nT)	H (nT)	F (nT)	I (Deg)	D (Deg)	GV (Deg)
2020	0	80	0	6570.4	-146.3	54606.0	6572.0	55000.1	83.14	-1.28	-1.28
2020	0	0	120	39624.3	109.9	-10932.5	39624.4	41104.9	-15.42	0.16	
2020	0	-80	240	5940.6	15772.1	-52480.8	16853.8	55120.6	-72.20	69.36	-50.64
2020	100	80	0	6261.8	-185.5	52429.1	6264.5	52802.0	83.19	-1.70	-1.70
2020	100	0	120	37636.7	104.9	-10474.8	37636.9	39067.3	-15.55	0.16	
2020	100	-80	240	5744.9	14799.5	-49969.4	15875.4	52430.6	-72.37	68.78	-51.22
2022.5	0	80	0	6529.9	1.1	54713.4	6529.9	55101.7	83.19	0.01	0.01
2022.5	0	0	120	39684.7	-42.2	-10809.5	39684.7	41130.5	-15.24	-0.06	
2022.5	0	-80	240	6016.5	15776.7	-52251.6	16885.0	54912.1	-72.09	69.13	-50.87
2022.5	100	80	0	6224.0	-44.5	52527.0	6224.2	52894.5	83.24	-0.41	-0.41
2022.5	100	0	120	37694.0	-35.3	-10362.0	37694.1	39092.4	-15.37	-0.05	
2022.5	100	-80	240	5815.0	14803.0	-49755.3	15904.1	52235.4	-72.27	68.55	-51.47
Date	Height (km)	Lat (Deg)	Lon (Deg)	Xdot (nT/yr)	Ydot (nT/yr)	Zdot (nT/yr)	Hdot (nT/yr)	Fdot (nT/yr)	Idot (deg/yr)	Ddot (deg/yr)	
2020	0	80	0	-16.2	59.0	42.9	-17.5	40.5	0.02	0.51	
2020	0	0	120	24.2	-60.8	49.2	24.0	10.1	0.08	-0.09	
2020	0	-80	240	30.4	1.8	91.7	12.4	-83.5	0.04	-0.10	
2020	100	80	0	-15.1	56.4	39.2	-16.8	36.9	0.02	0.51	
2020	100	0	120	22.9	-56.1	45.1	22.8	9.8	0.07	-0.09	
2020	100	-80	240	28.0	1.4	85.6	11.4	-78.1	0.04	-0.09	
2022.5	0	80	0	-16.2	59.0	42.9	-16.2	40.7	0.02	0.52	
2022.5	0	0	120	24.2	-60.8	49.2	24.2	10.5	0.08	-0.09	
2022.5	0	-80	240	30.4	1.8	91.7	12.6	-83.4	0.04	-0.09	
2022.5	100	80	0	-15.1	56.4	39.2	-15.5	37.1	0.02	0.52	
2022.5	100	0	120	22.9	-56.1	45.1	23.0	10.2	0.07	-0.09	
2022.5	100	-80	240	28.0	1.4	85.6	11.6	-78.0	0.04	-0.09	