

# GLOBAL ATMOSPHERIC WIND CIRCULATION

REFERENCE MODEL V4.1

Date: 2023-10-27

Source: Meteorological Standards Bureau

LATITUDINAL ZONE	PRESSURE BELT	PREVAILING WIND	DIRECTION	MEAN VELOCITY
90N - 60N	Polar High	Polar Easterlies	↖ <sup>TM</sup> NE to SW	15-20 kts
60N - 30N	Subpolar Low	Westerlies	↗— SW to NE	25-45 kts
30N - 0	Subtropical High	NE Trade Winds	↖ <sup>TM</sup> NE to SW	10-15 kts
Equator (0)	ITCZ (Doldrums)	Variable / Light	↕ <sup>2</sup> Convergent	0-5 kts
0 - 30S	Subtropical High	SE Trade Winds	↘— SE to NW	10-15 kts
30S - 60S	Subpolar Low	Westerlies	↖ <sup>~</sup> NW to SE	30-50 kts
60S - 90S	Polar High	Polar Easterlies	↘— SE to NW	15-25 kts

**ITCZ:** Intertropical Convergence Zone where trade winds meet.

**Coriolis Effect:** Primary driver for directional deflection.

**Note:** Velocities fluctuate based on seasonal thermal shifts.