Mean winds in the Upper Middle Atmosphere at Poker Flat (65.1 N, 147.5 W) during 1998-2000

kishore Pangaluru[1], S.P. Namboothiri[1], Kiyoshi Igarashi[1], Yasuhiro Murayama[1], Brenton Watkins[2]

[1] CRL, [2] GI, Univ. of Alaska

http://ionet-us.crl.go.jp/kishore/kishore.html

Mesospheric winds have been measured with a new MF radar at Poker Flat, Alaska (65.1 N, 147.5 W). We present the mean wind characteristics derived through the analysis of the data collected over a period of 27 months (October 1998 – December 2000). Winds are calculated in real time by using the conventional full correlation analysis (FCA). Below 90 km the zonal winds exhibit a dominant annual oscillation with a westward jet in summer and an eastward jet in winter. The maximum summer westward jet exceeds 30 m/s and occurs at around 74 km. Meanwhile the winter eastward jet has a maximum value of >20 m/s and found to occur at around 60 km. Above 90 km the zonal circulation is purely eastward at all times of the year.

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