The polar lower thermospheric and mesospheric wind dynamics based on the 22 days of data obtained in September 2005

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In this paper, we will report characteristics of the mean wind, quasi-2 day wave, diurnal tide and semidiurnal tide derived from long-run data obtained by the EISCAT UHF radar at Tromsoe (69.6 deg. N) over 22 days from September 7 to 29, 2005. This data set gives us a good opportunity to study variations of mean winds and those waves. It should be pointed out that this kind of long run data is very rare. We have also analyzed the mesospheric wind data from 70 to 91 km obtained by the Tromsoe MF radar co-located at the EISCAT Tromsoe site. We will discuss altitude variations as well as temporal variations of the winds from 70 to 119 km around fall equinox in the polar lower thermosphere and mesosphere.