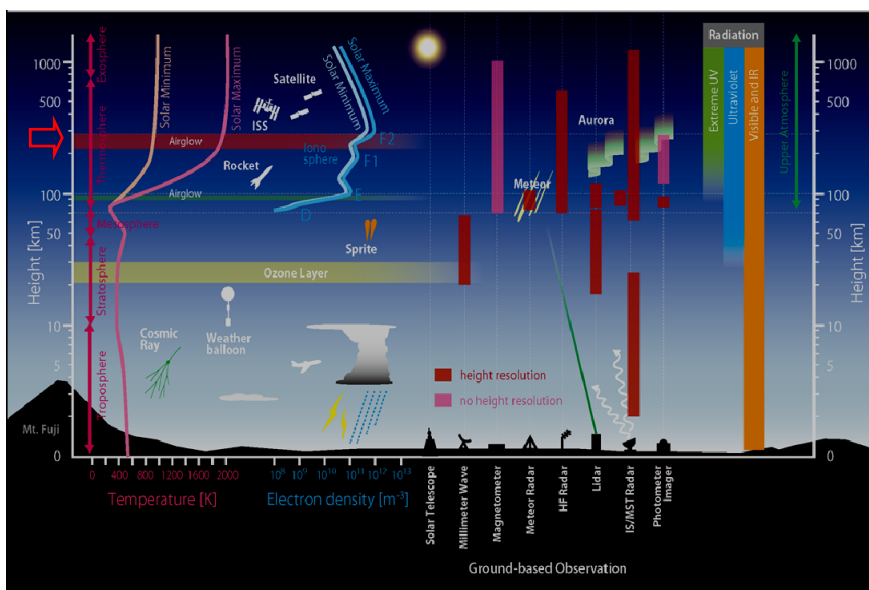


Yatagai, A., and S. Oyama, 2016: Thermospheric nocturnal wind climatology observed by Fabry-Perot interferometers over the Asia-Oceania region. *J. Meteor. Soc. Japan*, **94**, 525-536.

<https://doi.org/10.2151/jmsj.2016-026>

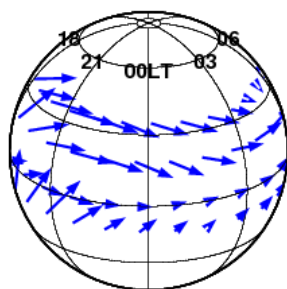
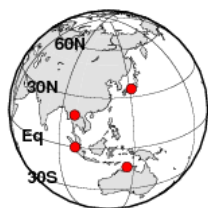


←Figure 1.

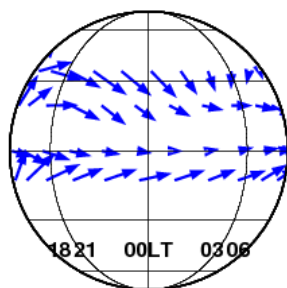
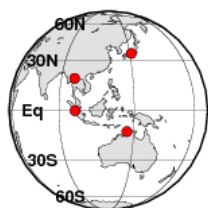
Typical features of the upper atmospheric parameters and their diagnostic instruments.

The instruments used in this study belong to the group of photometers used for observing nighttime airglow. The emission height of the red-line airglow (wavelength of 630.0 nm) is marked with an open red arrow.

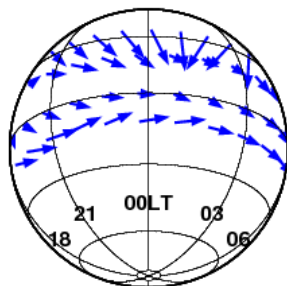
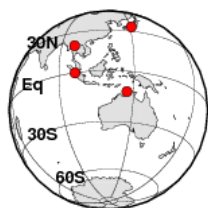
**Boreal Winter**  
(N,D,J,F)



**Equinox**  
(M,A,S,O)



**Boreal Summer**  
(M,J,J,A)



←Figure 2. Summary of the nocturnal thermospheric (~250 km) wind images for each season. Each small globe shows the night-side hemisphere (solstice or equinox) and location of the four stations used in this study.

- This study shows the horizontal structure of climatology of thermospheric nocturnal winds at a height of about 250 km in the Asia–Oceania region for the first time using observations made with Fabry–Perot interferometers (FPIs)
- The observation data were evaluated in the quality control process that involved consideration of cloud information, wind speed value, and the standard deviation of results obtained from synchronous fringe images. As the result, about 30% of observation data from all the four stations were analyzed to make the figures.
- The seasonal climatology reported here can be used to provide a background average wind status and distinguish modulations for anomalous events.