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PEM29-P32 Room:Convention Hall Time:May 22 18:15-19:30

Preliminary results of multi-direction lidar system experiments

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Shinshu University, Nagoya University and RIKEN developed an all solid-state, high-power Na lidar for the temperature/wind measurements in the MLT region over EISCAT radar site in Tromso (69N), Norway. The lidar has a higher power (~4W@589nm) compared with other Na lidars. This high power laser enables us to acquire the data with quite high temporal resolution (~3 min) , even if we use a standard size telescope (35 cm diameter). This suggests a new observation method like a scanning lidar using a multi-direction telescope such as Meade LX200-ACF35. The laser transmitter has two rotary stages, which are horizontally/vertically placed. Two 45-degree mirrors are on each rotation axis which enable laser to transmit all the direction. In this talk, we show some preliminary results of directing laser and the telescope.

Keywords: sodium, lidar, three diminutional