

## Simulation experiment of ionosphere D region and development of rocket born mass spectrometer

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A simulation experiment of photochemical reactions in the D region is being performed in a vacuum chamber.

The chamber is filled with NO and water vapor. The gas mixture is irradiated by 16 deuterium lamps in order to ionize NO. A quadropole mass spectrometer with differential pumping is used for measurement of positive ion species in the chanber.