

Rocket Measurement of Ozone Concentration Using KSR-420S

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Abstract

The first sounding rocket in Korea, KSR-420S has been under the development at Korea Aerospace Research Institute (KARI), and is expected to be launched in 1993 to measure the vertical ozone profile over the Korean Peninsula. The KSR-420S is expected to provide the first in situ measurement of ozone concentrations over the Korean Peninsula. An optical ozone detector has been developed at Korea Research Institute of Standards and Science (KRISS), and its calibration has been completed recently. Also, sun-sensor has been developed for measurement of the angle between the sun and the KSR-420S. In this paper, measurement principles of the ozone detector in KSR-420S, its calibration data, ozone measurement procedure and data reduction algorithm are presented with sample calculations.