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Compiled data

1. Electro-Chemical Cell (ECC) ozonesonde

ECC balloon-borne ozonesondes are launched at Uchinoura. The purpose of the observation is to obtain the vertical distribution of atmospheric ozone and to compare with the ozone density obtained by the ROOZ. Usually the balloon-borne ozonesondes are launched on one day before and on the same day when the rocket-borne ozonesonde observations are conducted. We use KC-79 and KC-96 (after 1998) type ECC ozonesondes which are used by Japan Meteorological Agency for ozone observation. Photogaph 7 shows ECC ozonesonde launching at Uchinoura.

2. Temperature

The temperature sensor is a wire of Fe - Ni alloy with a diameter of 20 mm and approximate length of 18 cm. The atmospheric temperature is obtained by measuringthe electrical resistence of the metal wire as it depends on the temperature of the ambient atmosphere. The temperature characteristics details of the wire is described elsewhere (Watanabe et al., 1992).

3. Wind components

The radar tracking data consisted of range distance, azimuthal and elevation angles of the payload from the ground receiver with a sampling rate of 1s. We calculate the distance and azimuth between the payload and the point of the receiver projected to the horizontal plane including the payload. Two sets of the distance and the azimuth enables us to determine the magnitude and direction of the horizontal wind (Watanabe et al., 1992).