

The relations between plasma waves and auroras in the polar cap observed by the Akebono satellite

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We investigated the relations between auroras and plasma waves observed by the Akebono satellite in the polar cap connected lobe in the magnetotail with the flux tube.

As a result, we make clear that the characteristics of the plasma waves associated with the polar cap arc is almost same as auroral oval.

And, we find the narrow band electrostatic waves associated with the polar rains which is observed above an altitude of 6,000km in the polar cap.