

## The Plasma Wave Analyzer onboard SS-520-2 rocket and examination of the capability.

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The rocket experiment was successfully conducted in Norway, on December 4 2000, in order to study the heavy ion heating and acceleration mechanism in the cusp region of the polar magnetosphere. The Plasma Wave Analyzer (PWA) onboard the rocket SS-520-2 was newly developed and it perfectly operated

during the whole rocket flight interval. Since this PWA subsystem adopted new designs, which lead to the sophisticated digital-type receivers on board future planetary missions, the success of the rocket experiment is very important for future space science as well as for the cusp physics. In the present paper, we will examine the capability of this newly designed plasma wave receiver system based on the observation data.