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Plasma produced in an internal coil device RT-1. The internal coil made of high temperature superconductor (a diameter and a weight of the coil are 50 cm and 110 kg, respectively) is magnetically levitated in the vacuum vessel during a few hours within a position accuracy of 100 micrometers. The plasma is produced by a microwave of electron cyclotron range of frequencies, and high beta plasma confined by dipole magnetic field is explored. (Yuichi OGAWA *et al.*, Plasma and Fusion Research Vol.4, 020 (2009) <http://www.jspf.or.jp/PFR/>)

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