

Abstract Submitted
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Spectroscopic diagnostics on the VX-50¹ ELLA M. SCIAMMA,
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V.T. JACOBSON, Ad Astra Rocket Company, Houston — We have used hydrogen
spectra to estimate electron temperature on VX-50, a 20 kW helicon plasma with
a 20 KW ICRF acceleration section, using absolutely calibrated spectroscopic mea-
surements of the Balmer series. The time evolution of the hydrogen spectra shows a
transition from an ionizing plasma to a recombining plasma and back during a shot.
We used a collisional radiative mode to estimate electron temperatures along with
electron density measurements from an interferometer.

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