ISSN 2096-3955
(Bimonthly)
Volume 6, Issue 4, July 2022
Pages 305-430

Earth and Planetary Physics

Contents

COVER

In Zhu MH and Yu YQ et al. (doi: 10.26464/epp2022037), the effects of polarization-reversed electromagnetic ion cyclotron (EMIC) waves on the ring current dynamics are presented. Inclusion of the polarization reversal at higher latitudes can reduce the bounce-averaged EMIC wave-induced pitch angle diffusion coefficients compared with a pure left-handed polarization. Global simulations indicate that after including the polarizaiton reversal, the global distribution of proton precipitating flux is slightly impacted and the ring current pressure is increased by approximately 10% at most. See pages 329–338.