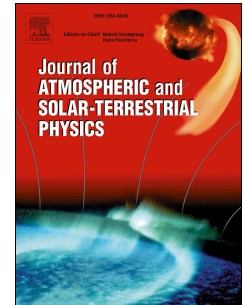


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1 Estimation of ionospheric sporadic E intensities from 2 GPS radio occultation measurements

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6 **Abstract**

7 The radio occultation experiment aboard the FORMOSAT-3/COSMIC
8 satellites enables the observation of phenomena in Earth's ionosphere on a
9 global scale. Numerous radio occultation profiles are used to analyse the
10 occurrence of sporadic E layers as well as its properties. We will present a
11 new method to approach additionally to the presence of sporadic E also its
12 intensity which is closely related to the blanketing frequency (*fbEs*) provided
13 by ionosondes. We observed that the sporadic E occurrence and its inten-
14 sity show a highly developed annual cycle with high occurrence rates and
15 intensities in the actual summer hemisphere. The global latitude/longitude
16 distribution of both parameters is strongly related to Earth's magnetic field
17 which is reflected by the missing of sporadic E observations along the mag-
18 netic equator.

19 *Keywords:* Ionosphere, Sporadic E layer, Radio Occultation,
20 FORMOSAT-3/COSMIC

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