

Mars's dayside upper ionospheric composition is affected by magnetic field conditions

Paul Withers^{1,2}, C. L. Flynn¹, M. F. Vogt², M. Mayyasi², P. Mahaffy³, M. Benna³, M. Elrod³, J. P. McFadden⁴, P. Dunn⁴, G. Liu⁴, L. Andresson⁵, and S. England⁶

1 – Department of Astronomy, Boston University, Boston, MA, USA

2 – Center for Space Physics, Boston University, Boston, MA, USA

3 – Planetary Environments Laboratory, Goddard Space Flight Center, Greenbelt, MD, USA

4 – Space Sciences Laboratory, University of California Berkeley, Berkeley, CA, USA

5 – Laboratory of Atmospheric and Space Physics, University of Colorado Boulder, Boulder, CO, USA

6 – Department of Aerospace and Ocean Engineering, Virginia Tech, Blacksburg, VA, USA

Contents of this file

N/A

Additional Supporting Information (Files uploaded separately)

Caption for Figure S1

Introduction

One supporting information file is included. Each panel in the file shows density as function of altitude and longitude for a specified mass number. The selection, preparation, and quality of these data are discussed in the article.

Figure S1. Species-specific NGIMS ion density as a function of altitude and aerographic longitude from aerographic latitudes poleward of 30°S and solar zenith angles less than 90°. The color indicates the median value in each 5 km by 10° longitude bin. White bins contain fewer than five data points. Ion mass number is stated above each panel.