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Preliminary SuperTIGER Abundances of Galactic Cosmic-Rays for the Charge Interval Z=41-60 and Prospects for SuperTIGER- 2^1 NATHAN WALSH, Washington University in St. Louis, SUPERTIGER COLLAB-ORATION — Launched on December 8, 2012 from Williams Field, Antarctica, the SuperTIGER (Trans-Iron Galactic Element Recorder) instrument flew for 55 days on a long-duration balloon flight at a mean altitude of 125,000 feet. Super-TIGER measured the relative abundances of Galactic cosmic-ray nuclei with well resolved individual element peaks in the charge range Z=10-40. In addition to these measurements made with high statistical precision, SuperTIGER made exploratory measurements of the relative abundances up to Z=60. Although the statistics are low in this charge range, we will show how these relative abundances compare to those reported by HEAO3. A second fight, SuperTIGER-2, is planned for December 2017, during solar minimum which we estimate will result in SuperTIGER-2 collecting about 20 percent more particles per unit time. The combined data sets of SuperTIGER-1 and 2 will be used to improve statistics in the Z=30-40 range and to measure individual elemental abundances up to Z=60.

1 This

research

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