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Telescope Array 10 year Composition WILLIAM HANLON, University of Utah, TELESCOPE ARRAY COLLABORATION — Estimates of the composition of ultra high energy cosmic rays (UHECRs) can be inferred by recording the depth of air shower maximum, $X_{\max}$, for many showers and comparing the distributions to those predicted by Monte Carlo simulations. Telescope Array is designed to answer the question of what elements are present in the UHECR spectrum, which is still unknown. Composition is a strong constraint on models which describe the sources and propagation of UHECRs. In this talk we present the most recent results of nearly 10 years of Telescope Array hybrid $X_{\max}$ measurements which is found to agree with a predominantly light composition through comparison of the means and standard deviations of the $X_{\max}$ distributions. We further this analysis by presenting the first measurement of TA composition built upon an ad hoc four component model of protons, helium, nitrogen, and iron. Through a profile likelihood analysis we measure the distribution of fractions of the four elements that best agree with TA data and observe a predominantly light composition consisting of proton and helium between $10^{18.2} - 10^{19.1}$ eV, with small contribution from nitrogen and iron, which does not change with energy.

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