

## Distribution Functions in the Suprathermal Regime at and around Shocks

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The Compact Dual Ion Composition Experiment (CoDICE) onboard IMAP measures mass, charge, and full 3-D velocities of ions in the range 1.5-80keV/charge with the CoDICE-Lo sensor and mass and full 3-D distributions of particles in the 0.05-2 MeV/nuc range. Using the data from CoDICE it is possible to study how interplanetary events like shocks or CME fronts create suprathermal tails and how those tails decay with time. In particular we focus on events that happened in the first half of 2026, which resulted in generation of rather intense suprathermal tails, and how different species distributions (H+, He++, O6+, and He+) presented distinct k-distributions and decay times.