SWEAP takes a scoop: Overview of the coronal and solar wind plasma instruments on Parker Solar Probe

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The Solar Wind Electrons Alphas and Protons (SWEAP) Investigation on Parker Solar Probe is the four sensor instrument suite responsible for determining the properties of ions and electrons in the coronal and solar wind thermal plasma. The Solar Probe Cup looks directly at the Sun around the Sun to make rapid measurements of ions and electrons flowing directly away from the Sun. The Solar Probe Analyzers look ahead (SPAN-A) and behind (SPAN-B) the spacecraft and make detailed maps of ions and electrons from all other directions in the sky. This talk reviews the SWEAP instrument suite, its commissioning status, and preliminary observations.