

Data Analysis Techniques for the Crew Active Dosimeter on ISS

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The Crew Active Dosimeter (CAD) is the first NASA crew worn real-time detector used for ISS operations. Several CADs have been deployed on ISS since 2020 as a means of quantifying individual absorbed doses to crew while in LEO. CADs autonomously collect and send absorbed dose, detector health metrics, and environmental data to Space Station Computers (SSCs) for downlink. This allows for real-time monitoring of crew absorbed dose values during a crew member's mission. Currently, the NASA Space Radiation Analysis Group (SRAG) reports this data on a weekly basis for data monitoring and quality assurance. Examples of the weekly report as well as the process for collection, processing and analysis will be presented. In addition, a detailed ongoing comparison between CAD and the Radiation Assessment Detector (RAD) with preliminary results will be shown.

This presentation will not be posted on the web-page.

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