OLTARIS – OVERVIEW AND RECENT UPDATES

C. A. Sandridge
NASA Langley Research Center, MS 188E, Hampton, VA 23681, c.a.sandridge@nasa.gov

The On-Line Tool for the Assessment of Radiation in Space (OLTARIS) is a web-based set of tools and models that allow engineers and scientists to assess the effects of space radiation in spacecraft, habitats, rovers, and spacesuits. The site is intended to be a design tool for those studying the effects of space radiation for current and future missions as well as a research tool for those developing advanced material and shielding concepts. The tools and models are built around the HZETRN radiation transport code and are currently focused on human-related responses.

OLTARIS was deployed in 2008. Since that time, many improvements and additional capabilities have been added to the site. The purpose of this poster/presentation is to give an overview of the current capabilities of OLTARIS and focus on the updates to the site since the last workshop presentation in 2014.

OLTARIS currently has 240 active accounts - 87 accounts are government (including NASA, ORNL, JPL, AFRL, and FAA), 76 are university professors/researchers/students, and 51 are industry (including Boeing, Space X, Lockheed-Martin, ATK, Northrup Grumman, and Bigelow Aerospace). There have been 14,000 jobs run through OLTARIS since counting began in November 2009. ITAR restrictions were recently reversed, so the site is now available to registered users worldwide.

The poster/presentation will include more details about the current capabilities and show examples of how the tool is used for typical scenarios. For more information, go to https://oltaris.nasa.gov and register for an account.