

## Image of DoseCalcs Tool used by Space Radiation Analysis Group

In order to support mission planning, the Space Radiation Analysis Group maintains an extensive set of tools for estimating the exposure received by the crews of manned missions in Low Earth Orbit (LEO). This suite of tools includes time-resolved models of the Earth's magnetic field, maps of the radiation fluxes trapped in the geomagnetosphere, and trajectory translator/propagator algorithms. Space environment conditions (interplanetary proton flux, status of the electron belts, geomagnetic field conditions) are integrated with mission parameters (altitude and inclination of the spacecraft, location and timing of EVAs) in order to project crew exposures.