

How we define our alerts

SPACECAST is defining a series of warning and alerts according to different types of hazards and risks for satellites. We plan to implement these later in the project.

Internal charging

Internal charging usually occurs after a period when the high energy electron flux has been elevated for typically 24 - 48 hours or more. SPACECAST keeps a record of the changes in the electron flux over the last 24 hours, and combines these with a forecast for the next 3 hours. Hence we have a forecast system which monitors the gradual build up of the flux, and can also forecast when it will reach a dangerous level. We will provide a warning once we have reached half the danger level, which then gives satellite operators another 24 hours or so to monitor the radiation environment. Satellite operators can take action on this timescale.