



# BAS CASE study

Hugh Evans

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European Space Agency

## BAS Case Study



**Objectives:** *Evaluate the accuracy and relevance of existing radiation belt models in Electric Orbit Raising scenarios. Establish improved statistics, models and specifications.*

Analyse data from the US TacSat-4 (DoD) and Van Allen Probes (NASA) missions. Compare in detail with existing models across a broad energy range, and build replacement engineering models as necessary. Investigate the variability of the environment on timescales relevant for EOR (days/weeks) and so produce statistics for use in specifications of the mission environment and appropriate margins. Propose changes to standards as appropriate.



## Status:



- PhD student employed to carry out the work: Alexander Lozinski
- 10 month duration
- 10k€ funding via CCN to VALIRENE Contract 4000117974/16/NL/LF (TRP)
- Kicked off in Feb 2018.

