

Space Weather Users Workshop

Australian Defence Force Update

- Australian Space Operations Centre

AIR FORCE

Firstly, some context

- What does the ADF use space for?
 - Satellite communications
 - Remote sensing
 - PNT

More context

- To bring military effects to bear, we need to understand;
 - Our capabilities
 - Our opposing force's capabilities, and
 - The environment

So what?

- Did my communications satellite just get jammed or did it get zapped by a flare?
- Is my PNT solution still good enough for a precision strike?
- Did my imagery satellite just experience a SEU or is it malfunctioning?

The real life context

➤ Sparse funds.

Therefore:

- The ADF concentrates effort (cash) on the warfighting effects.
- We leverage the capabilities that exist elsewhere in Government, e.g BoM, academia and overseas for the bulk of our SW awareness.
- Foster niche applications of SW effects, e.g. HF radar

Having said that

- There exists a general intent to foster space weather expertise, especially as they impact the SSA mission.
- \$10m for UNSW to increase the Technology Readiness Levels (TRL) of SSA related activities.

Overview of some capabilities

- C-Band Radar in Learmonth for LEO SSA
- Space Surveillance Telescope (3.0m, f/1) in Learmonth for GEO and synoptic survey
- Cubesats, e.g VBMM

Questions?

AIR FORCE

