

Soil Organic Carbon requirements for Sustainable Development Goal indicator 15.3.1

Brian O'Connor¹, Sara Minelli¹ and Neil Sims²

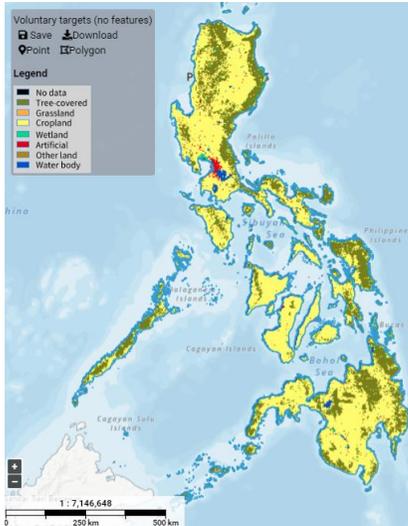
- 1. United Nations Convention to Combat Desertification (UNCCD)*
- 2. Commonwealth Scientific and Industrial Research Organisation (CSIRO)*



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SDG Indicator 15.3.1: Proportion of land that is degraded over total land area

3 ESSENTIAL VARIABLES:



LAND COVER



LAND PRODUCTIVITY

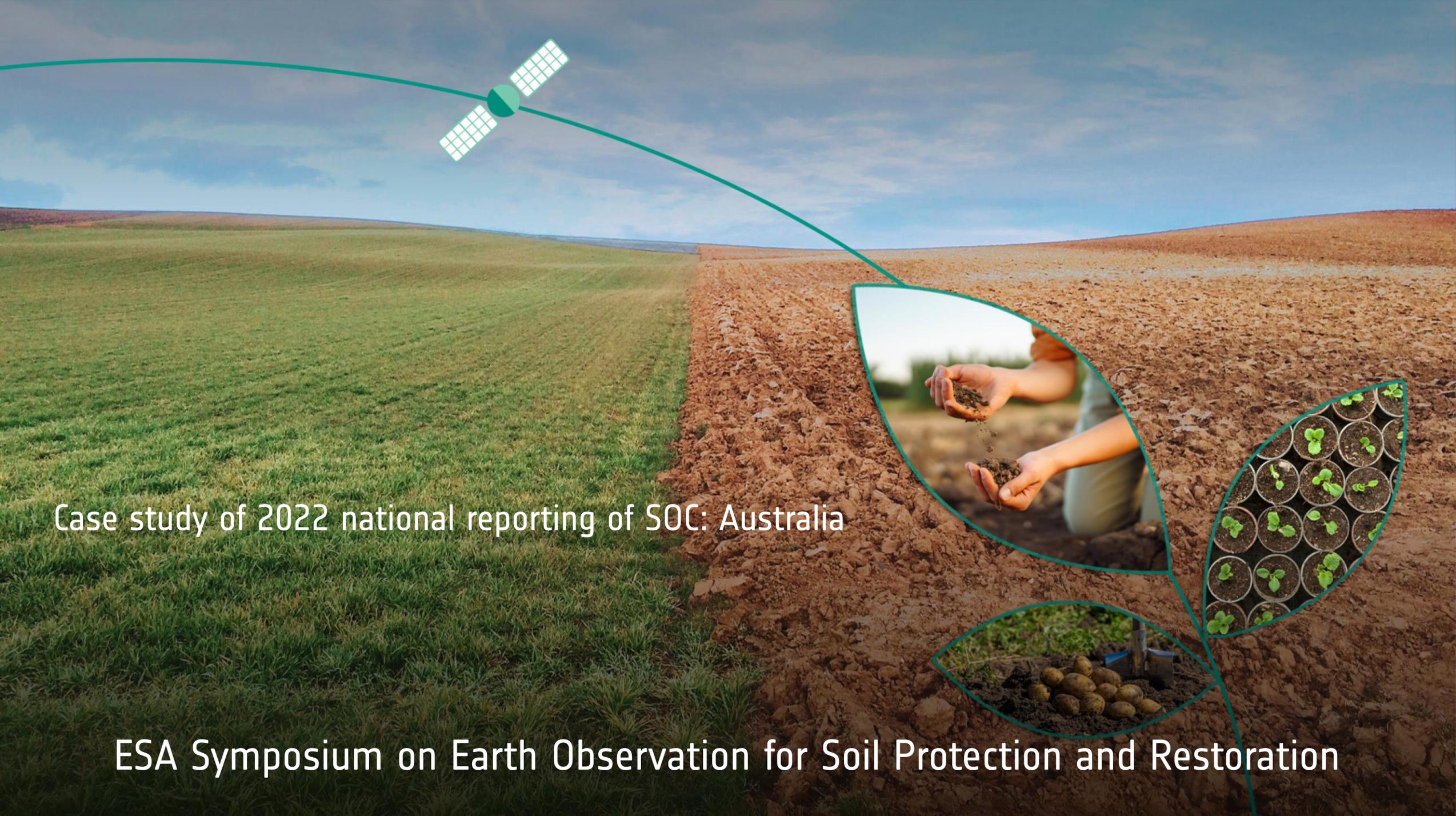
National estimates of the SOC stock in topsoil (0-30 cm) in tonnes per hectare



“ONE OUT ALL OUT”

SDG 15.3.1





Case study of 2022 national reporting of SOC: Australia

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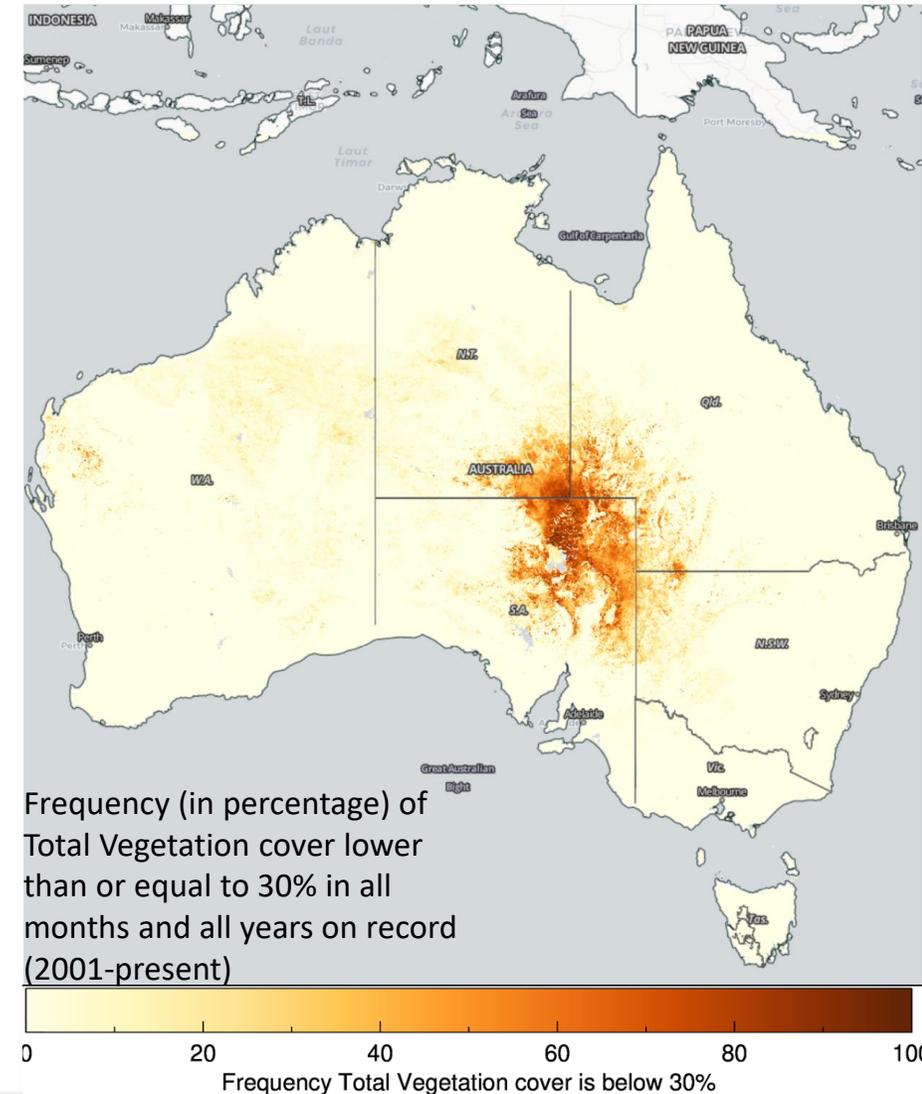
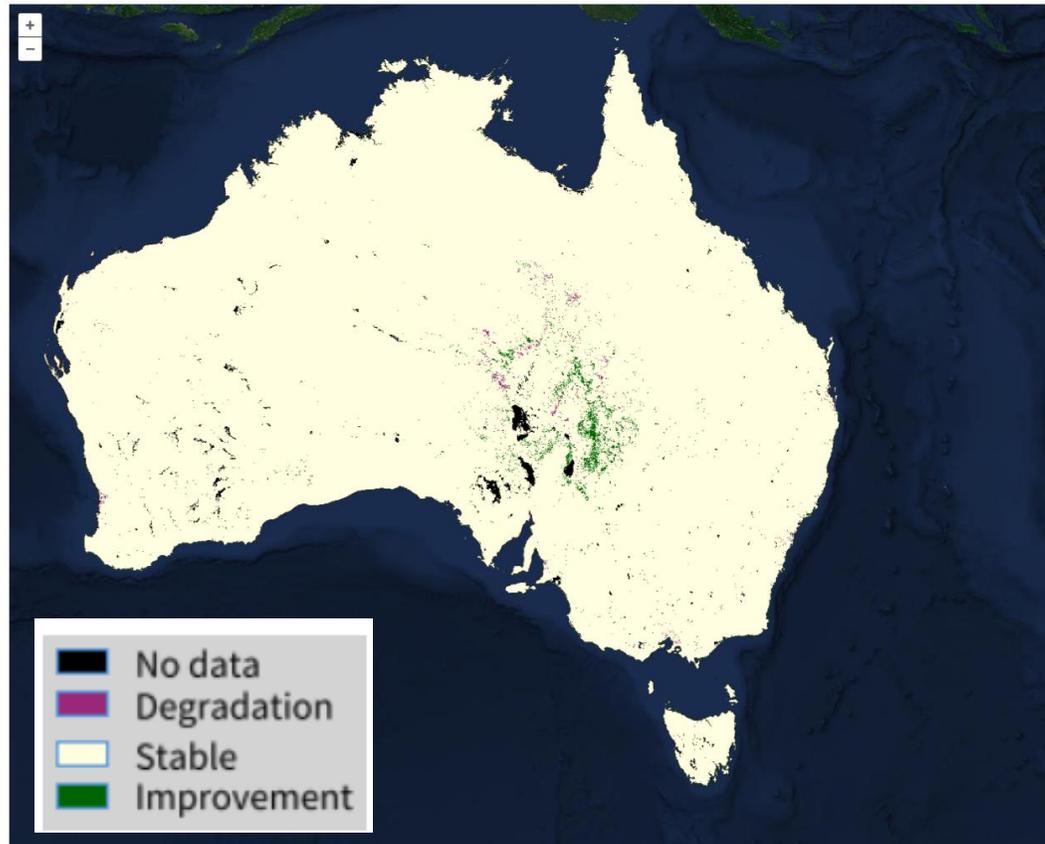
Introduction of challenges in 2022 reporting

Australia – Revision 1, 07/04/2022 05:54 – Spatial layers – SOC_DEGRADATION_REPORTING

Soil Organic Carbon Degradation (Reporting)

Size: 10.9 MB

Modified: 08/02/2022 08:28



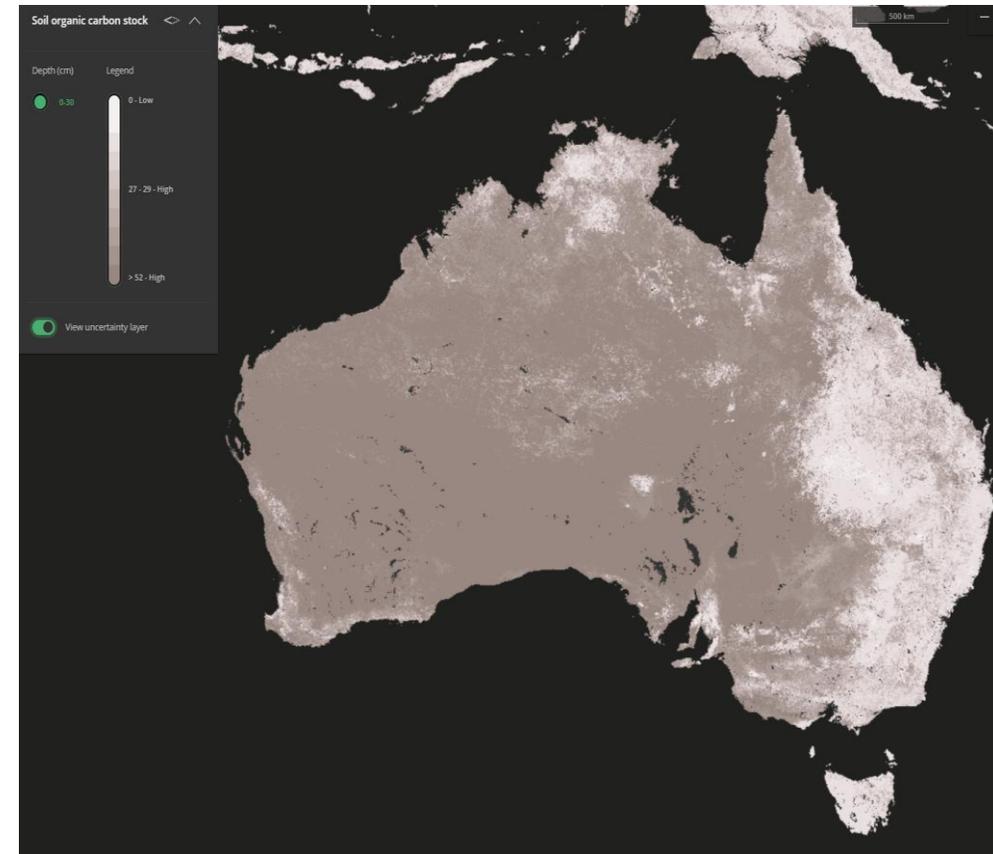
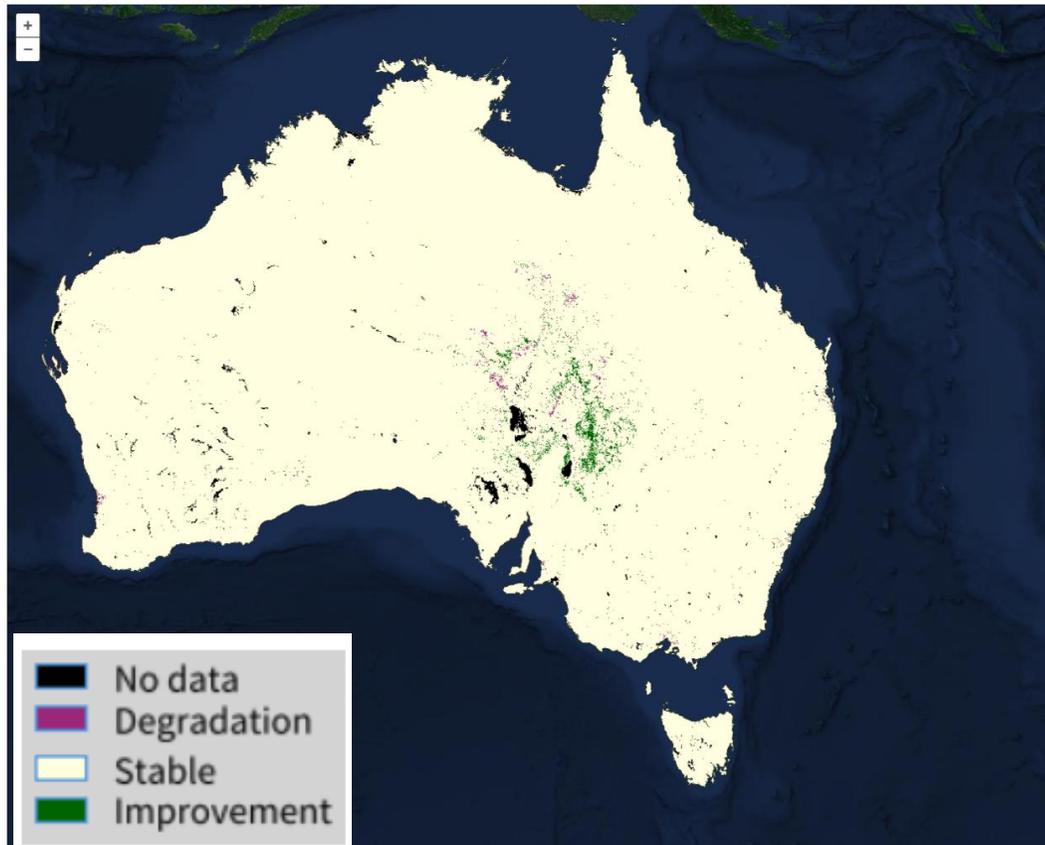
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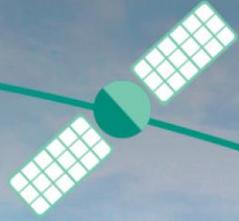
Take home messages

1. Overall, reporting rate on SOC is high due to the provision of default data but complexities in the SOC cycle make EO data difficult to use in certain contexts
2. Australia example (hyperarid, sparse veg cover, very low SOC stocks) shows there are potential errors in very small SOC stock changes
3. Consequently, we need to advise countries to know where the SOC indicator works well, and where it doesn't; this is key to trust
4. Our aim is to have more countries reporting with national data giving them ownership and higher confidence in the results



Thank you

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