# EGU21-12808

# South African Land Degradation Monitor (SALDI) – An overview of recent advancements

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SPACES II – Science Partnerships for the Adaptation to Complex Earth System Processes in Southern Africa
South African SALDi Land Degradation Monitor

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## SALDI – An overview of recent advancements

Land degradation is a serious thread to reaching Sustainable Development Goals (SDGs)

South Africa has a well known land degradation hazard & history

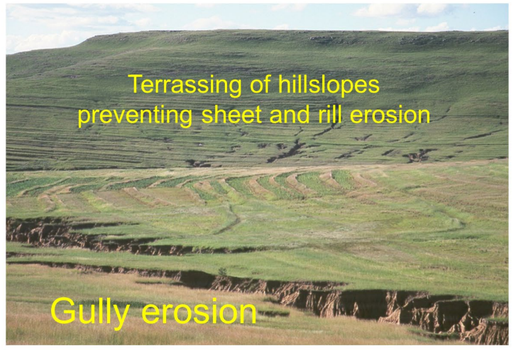


Fig.: Land degradation and land conservation

SALDi aims to …

- Remote sensing based change detection monitor
- Investigate land surface – atmosphere feedbacks using RESM (WRF-Hydro)
- Advance soil degradation / soil erosion assessment
- Understand socio-economic implications

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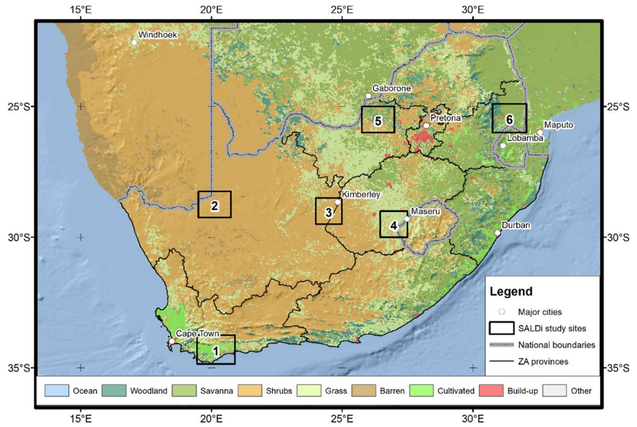


Fig. 1: Saldi study region and study sites (1 to 6)
(data sources: ETOPO30, ESRI 2013, Friedl et al. 2010)

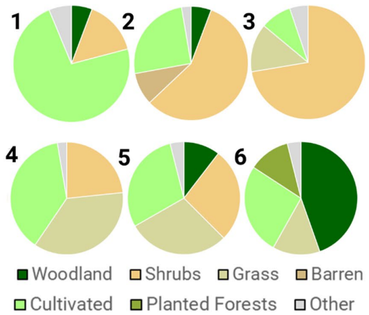


Fig. 2: Land cover characteristics of study sites
(data source: CD: NGI 2018)
1: Overberg, 2: Kai !Garib, 3: Sol Plaatje, 4: Mantsopa,
5: Bojanala Platinum, 6: Ehlanzeni

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## SALDI – An overview of recent advancements

### Forthcoming detailed SALDi presentations

**13:45** **Zhenyu Zhang (Augsburg) et al. :** Hydroclimatic modelling using WRFHydro: impact of soil properties on hydro-climate modelling

**13:47** **Chris Schmullius (Jena) et al. :** Earth Observation Strategy overview

**13:49** **Insa Otte (Würzburg) et al. :** Earth Observation Data Cube development

**13:49** **Marcel Urban (Jena) et al. :** Slangbos encroachment monitoring

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