AUSWOT Workshop: Sydney

SWOT Mission overview
Surface water applications

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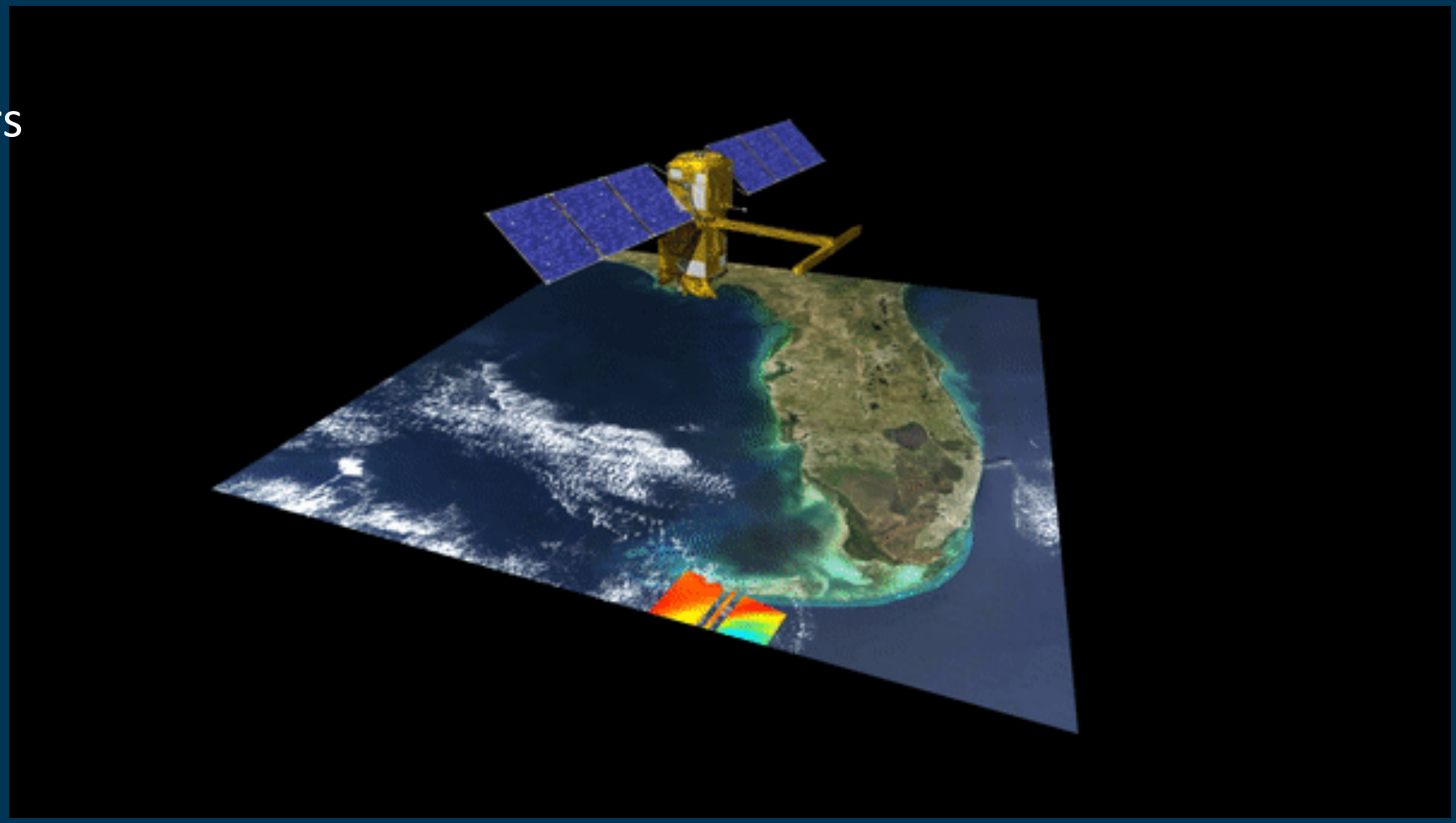
Australian Government
Bureau of Meteorology

Photo: Jim Crow Creek catchment, central Victoria JIM4373 (© Alison Pouliot)

What's SWOT's Surface Water Applications: https://swot.jpl.nasa.gov/hydrology.htm

Provides a comprehensive view of Earth's freshwater bodies from space and changing volumes of fresh water

- Lakes/reservoirs/reservoirs greater than 250m (ultimately 100m): lakes video
- river reaches (over 100m wide): rivers video



How is that useful in Australia?

- Flood, environmental flow delivery, compliance and drought monitoring
- Water resource assessment and accounting
- Coastal applications
  - Tides / surge for flood forecasting applications
  - Environmental applications: Mangroves

Murray irrigators lodge $750 million class action against MDBA claiming 'negligent' water management

ABC Riverina By Rosie King

Posted 14 May 2019, 3:03pm

PHOTO: An empty irrigation channel in the Southern Riverina. (ABC News: Will Kendrew)

Some river modelling SWOT applications trialled already on test data

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Research papers

River discharge estimation fr
using variational data assimil
model

Hind Oubanas [a,*], Igor Gejadze [a], Pierr

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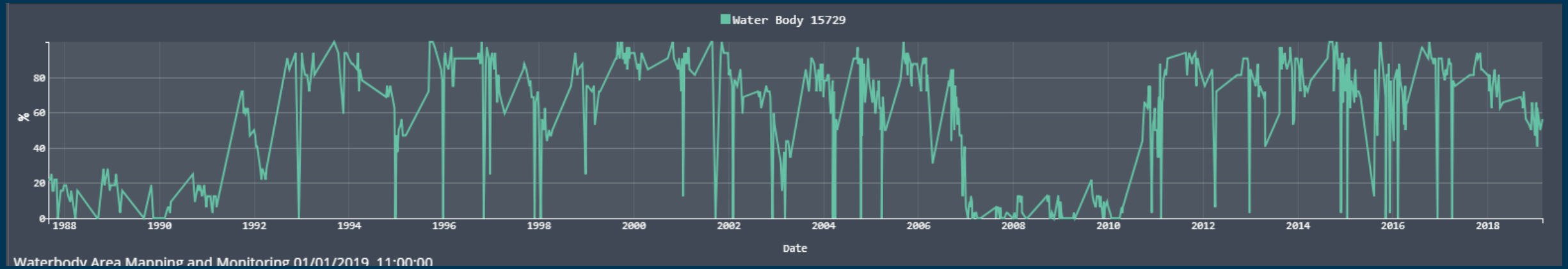
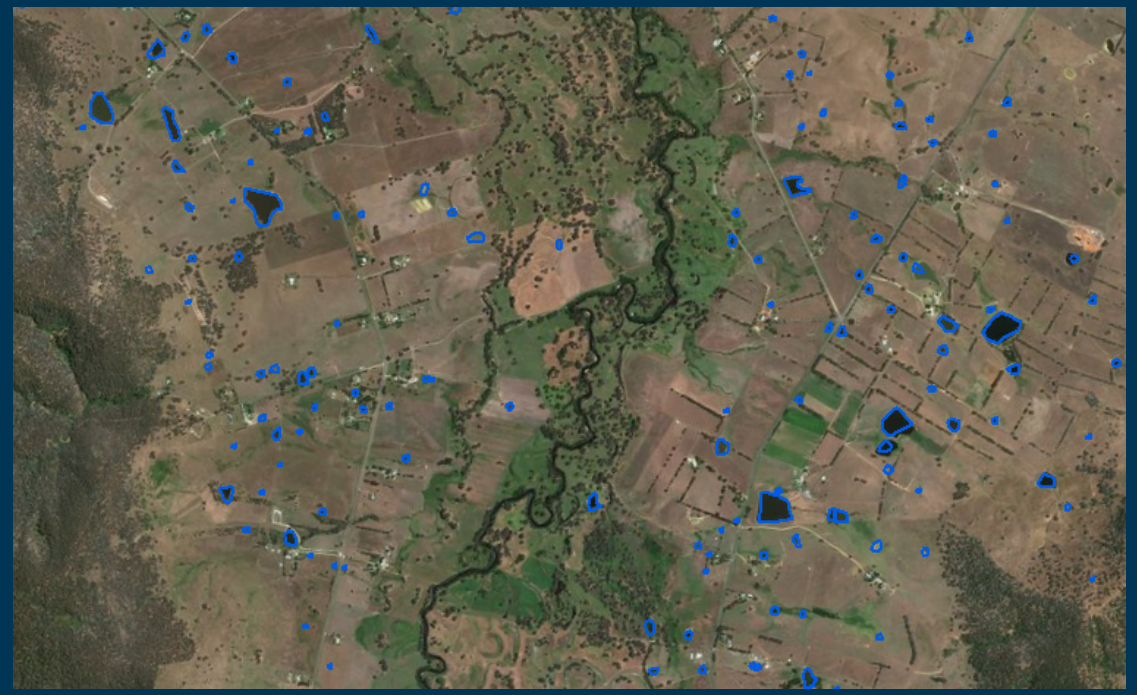
Supporting Information:

bed roughness in the context of a 1.5 D full Saint-Venant hydraulic model. Algorithms and procedures are

Billion $ question: how much water is being held and used e.g. Farm dams
- scale and accuracy important





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