



Australian Government

Geoscience Australia

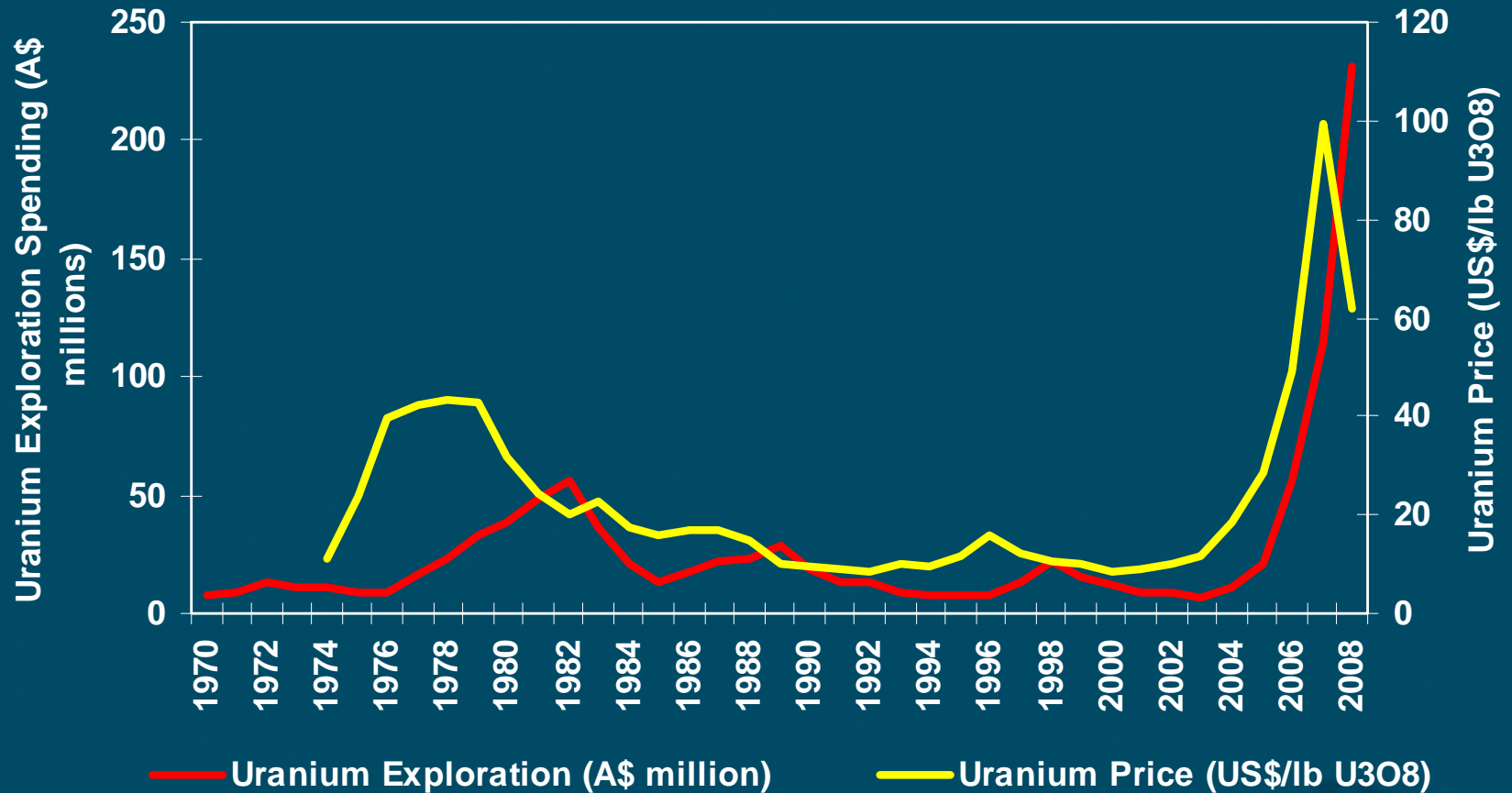
A New Radiometric Map and Data Set for Australia: Implications for Uranium Exploration

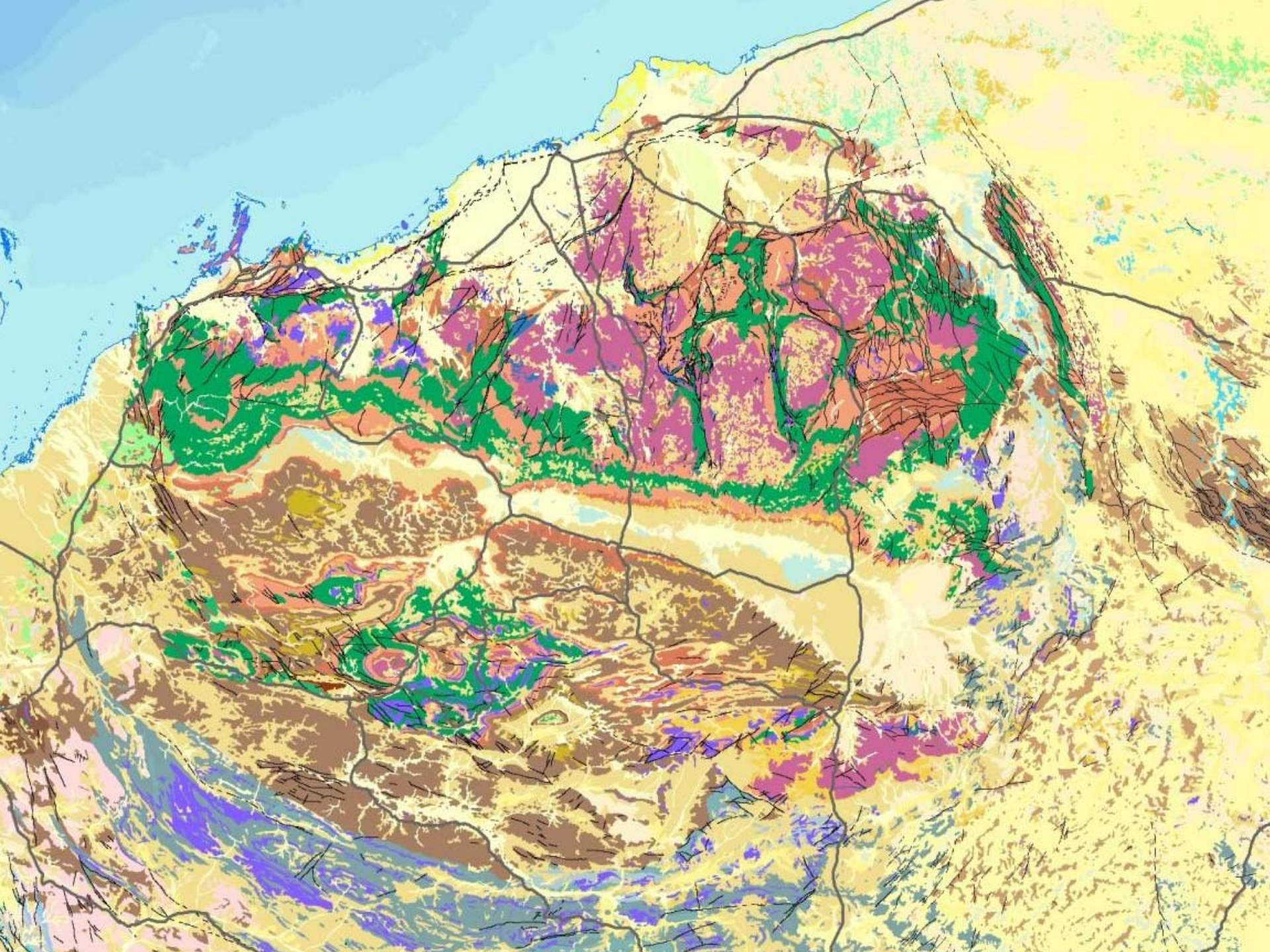
Dr Neil Williams PSM

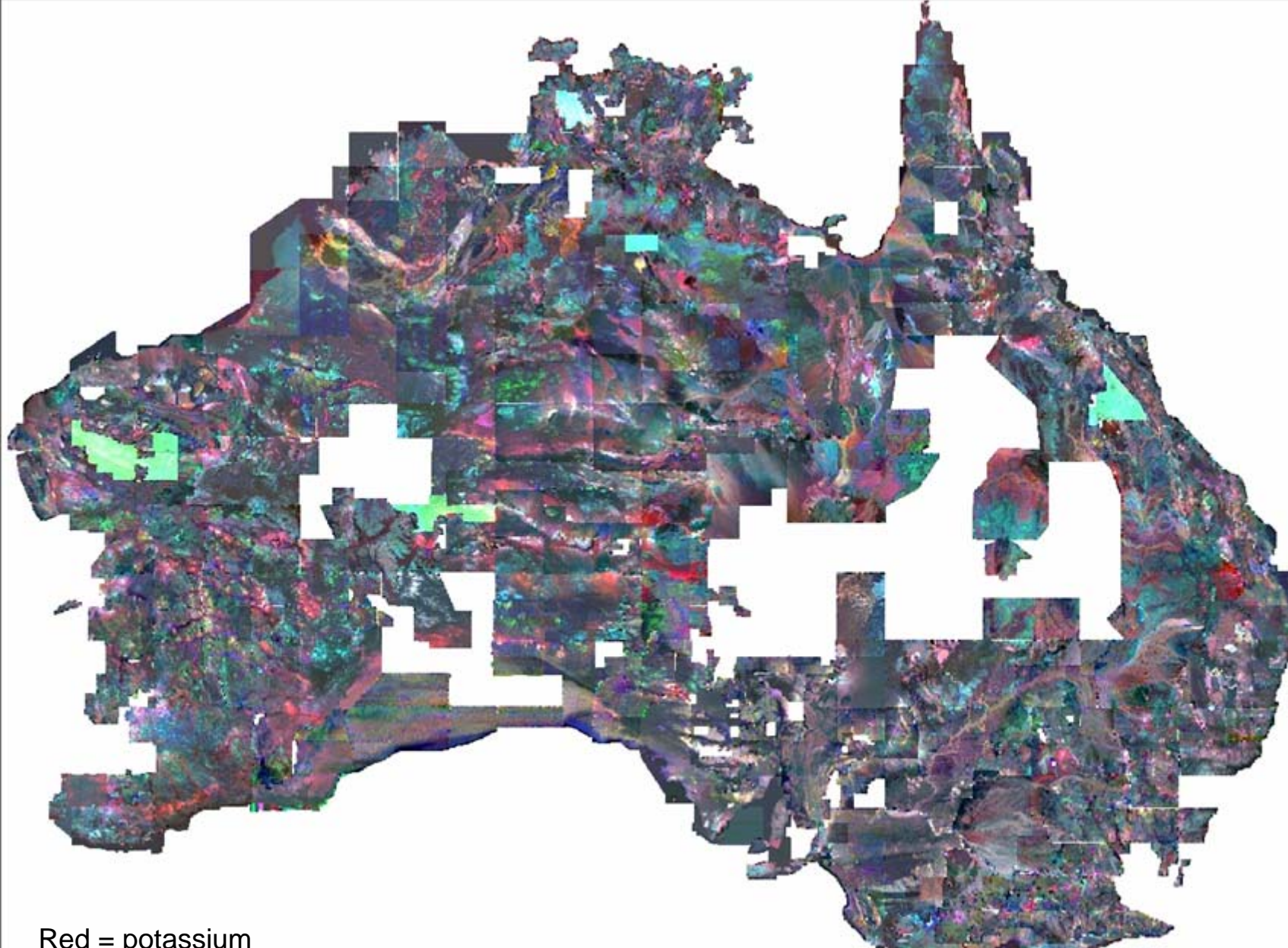
CEO

Geoscience Australia

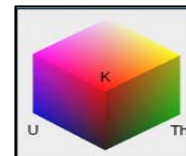
Australian Uranium Exploration



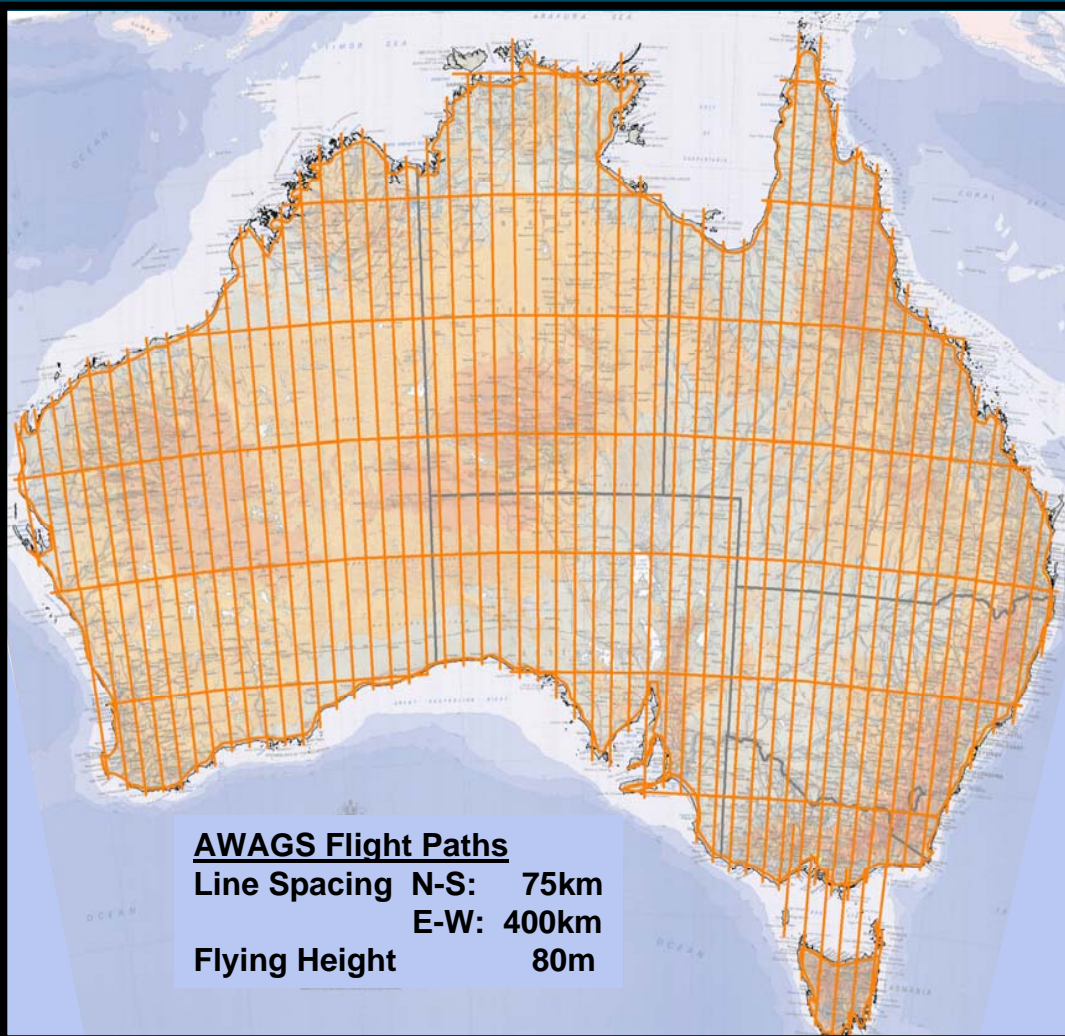




Red = potassium
Blue = uranium
Green = thorium

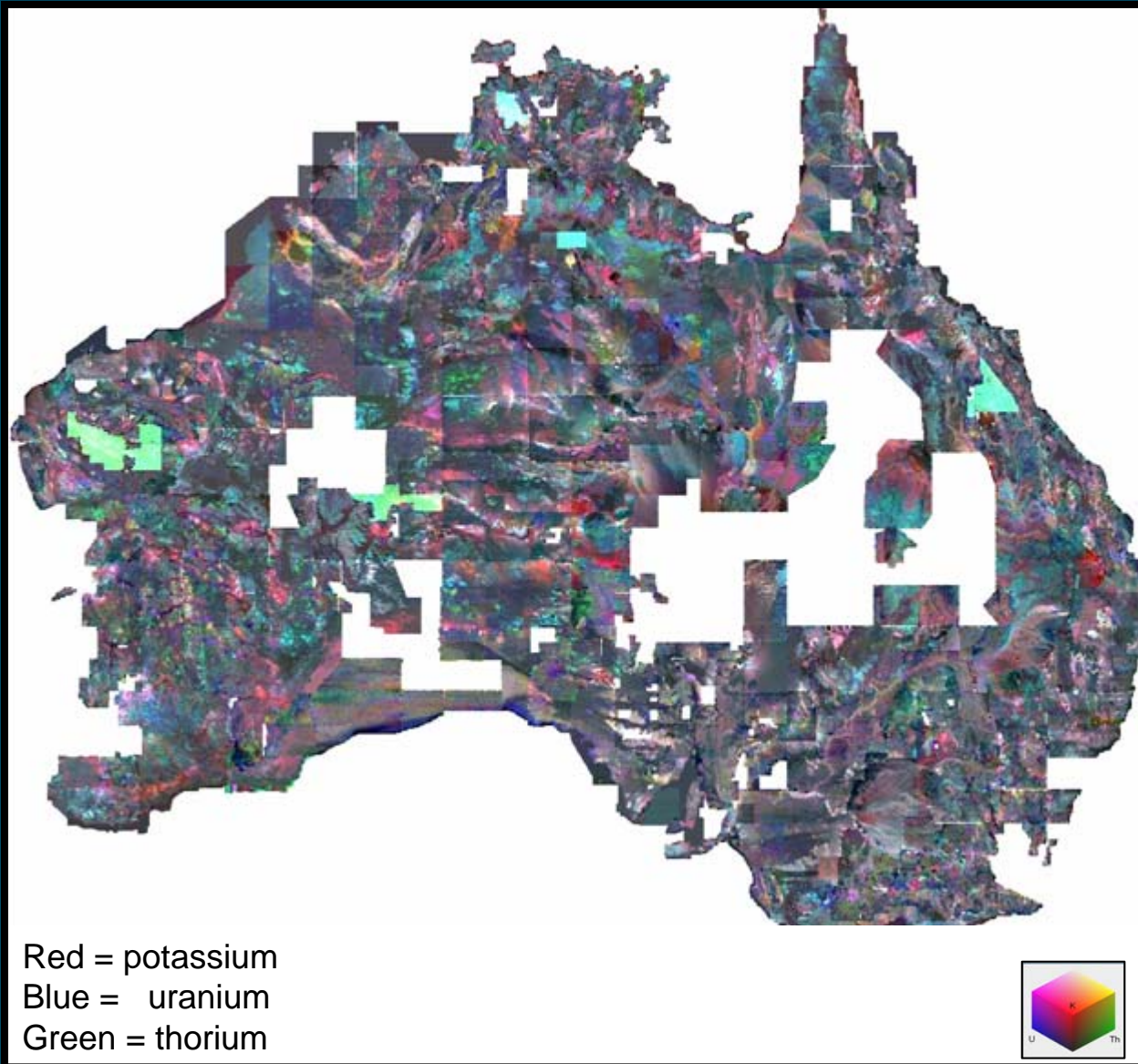


New Radiometrics Map of Australia

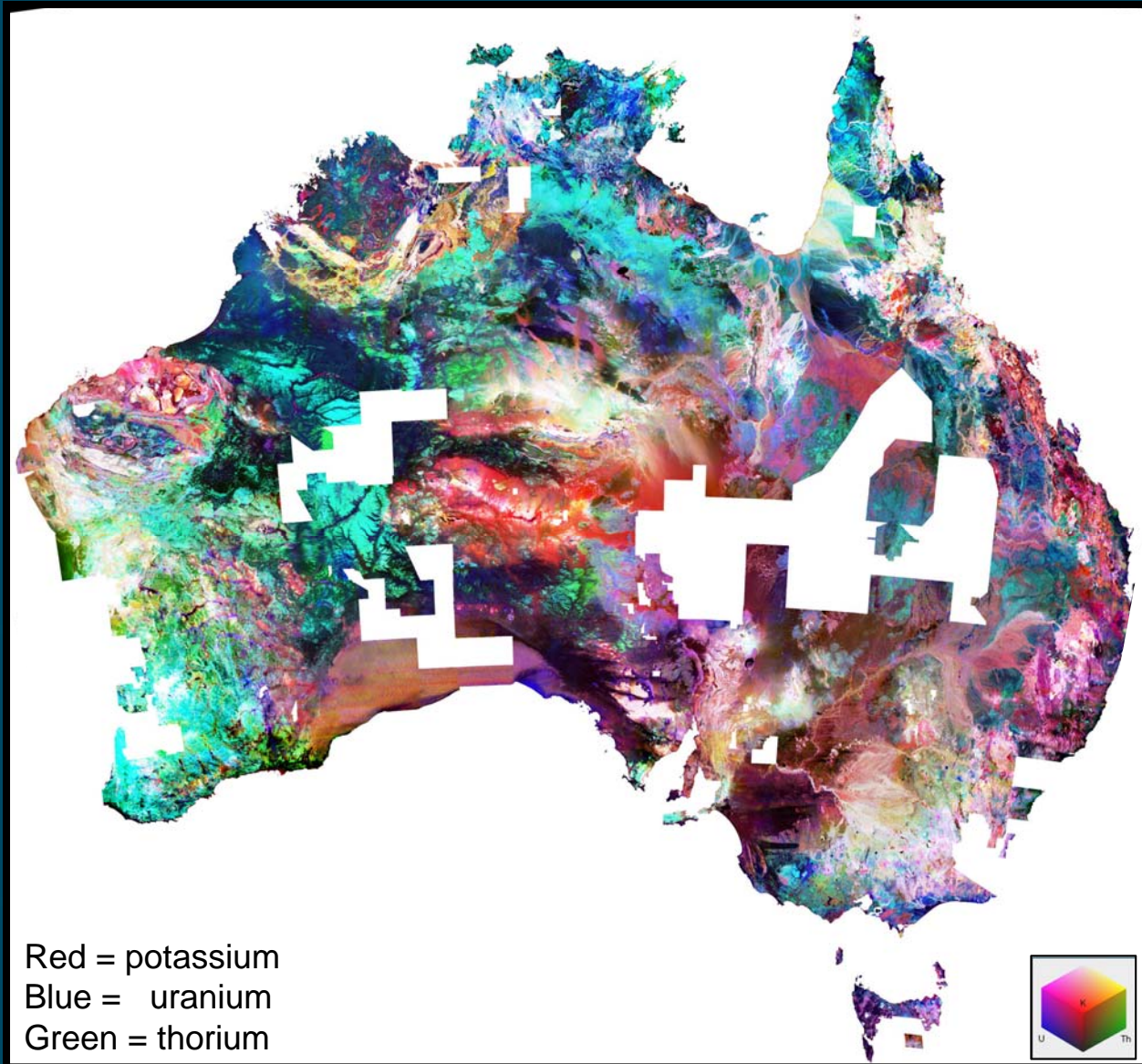


- Australia Wide Airborne Geophysical Tie-line Survey (AWAGS)
- 140,000km - \$2.6million
- Largest airborne survey ever flown (by area)
- Only survey to cover an entire continent
- Radiometrics and magnetics data
- Established a datum for levelling all existing and future surveys

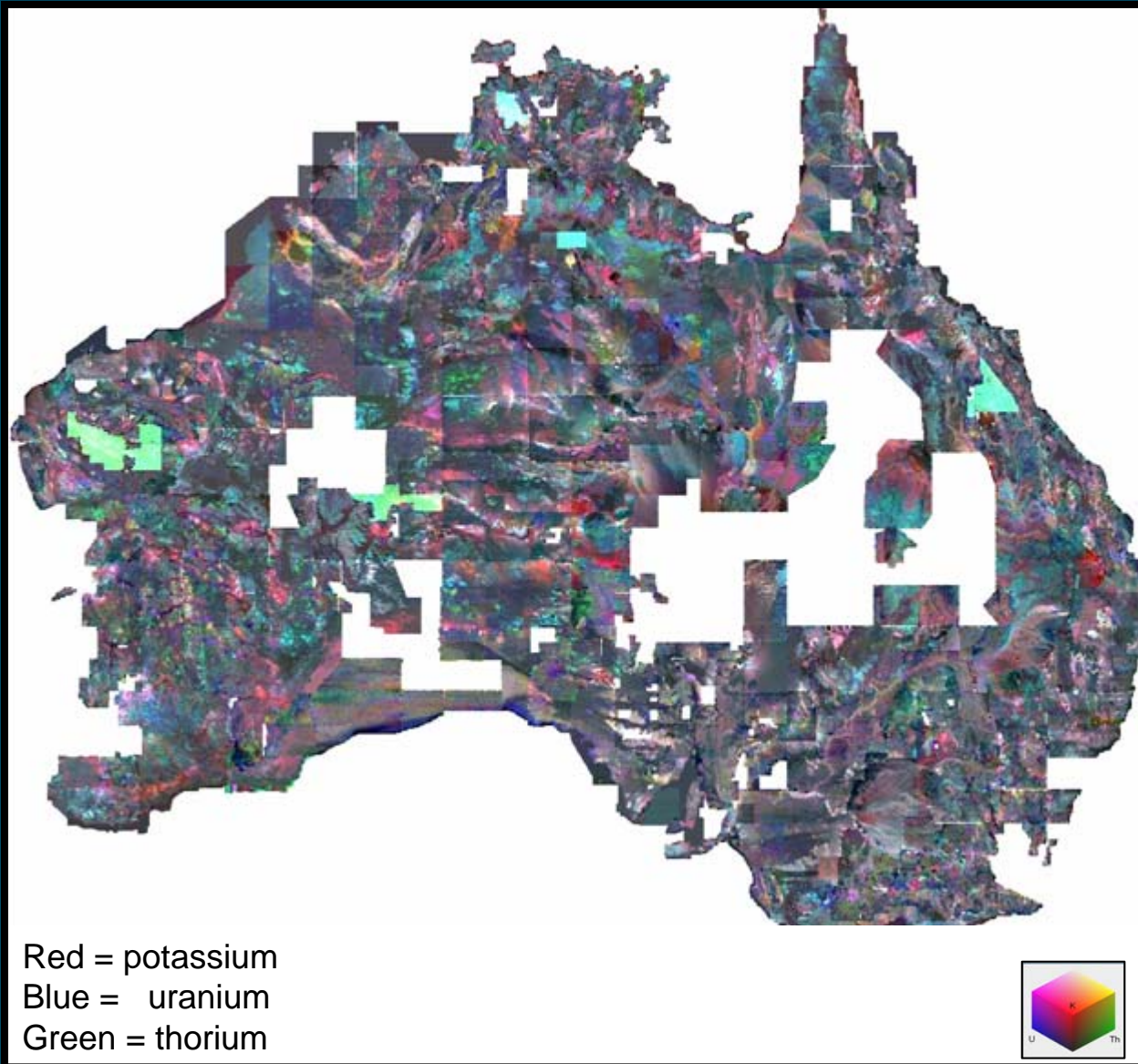
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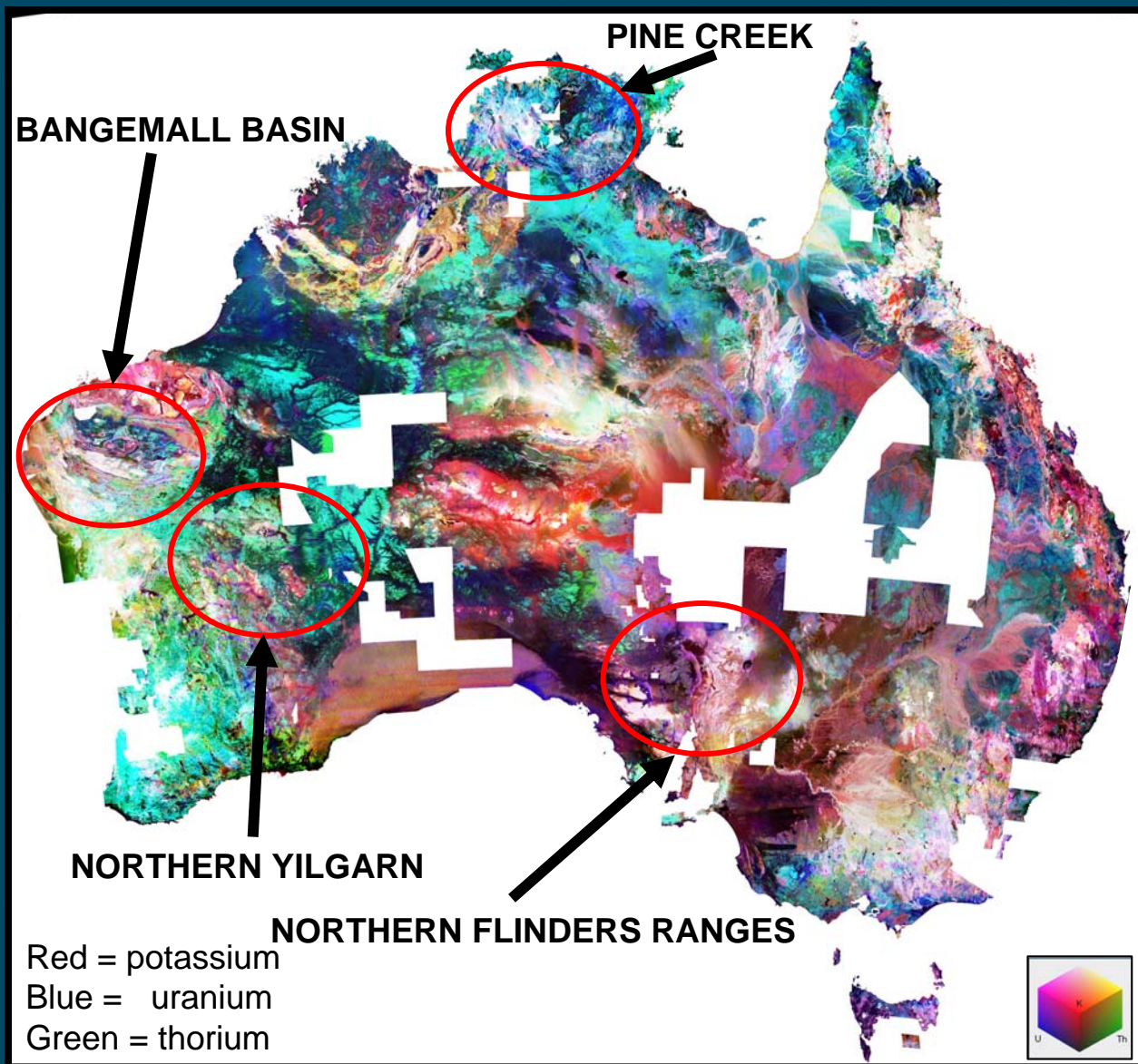
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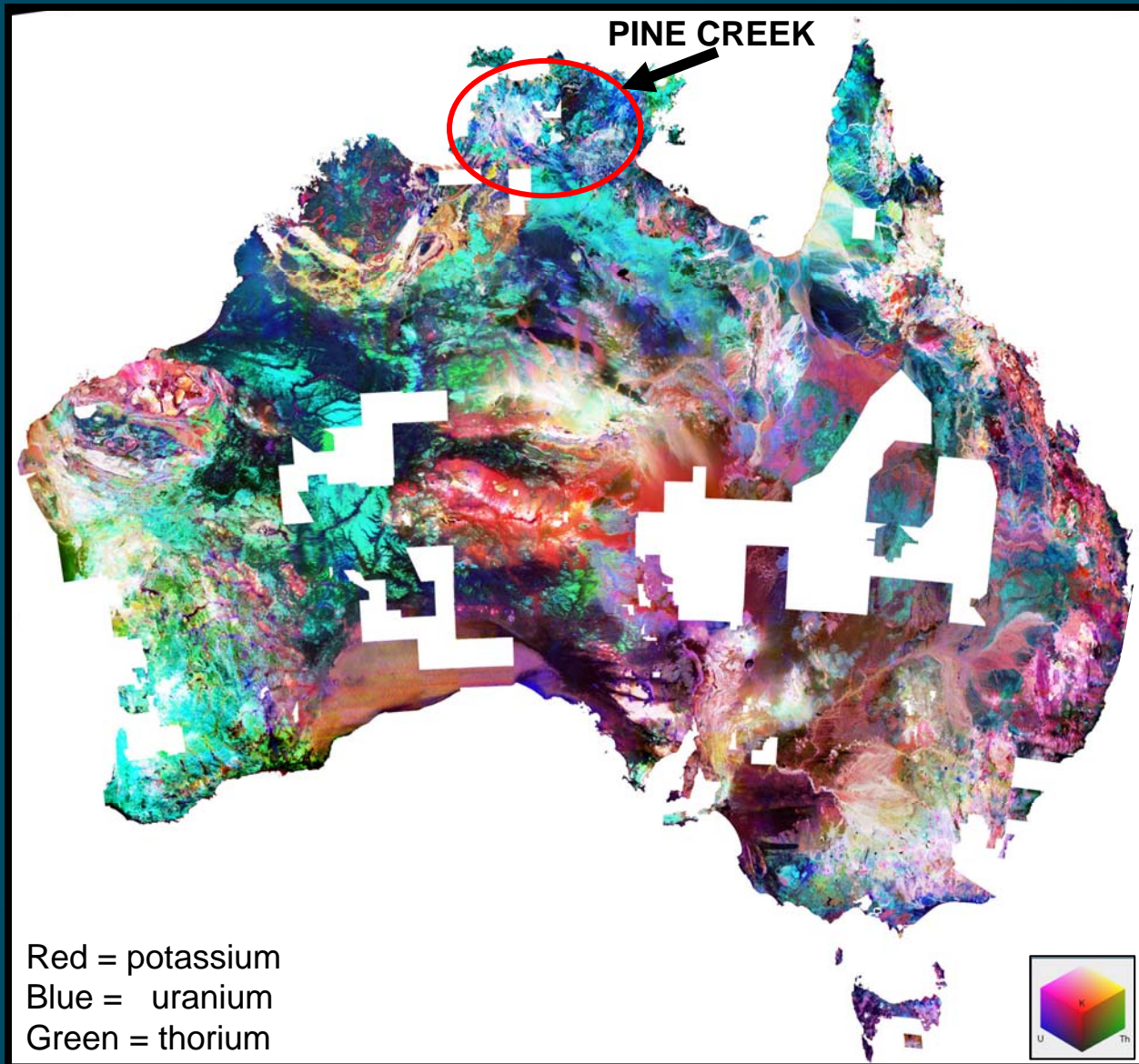


New Radiometrics Map of Australia



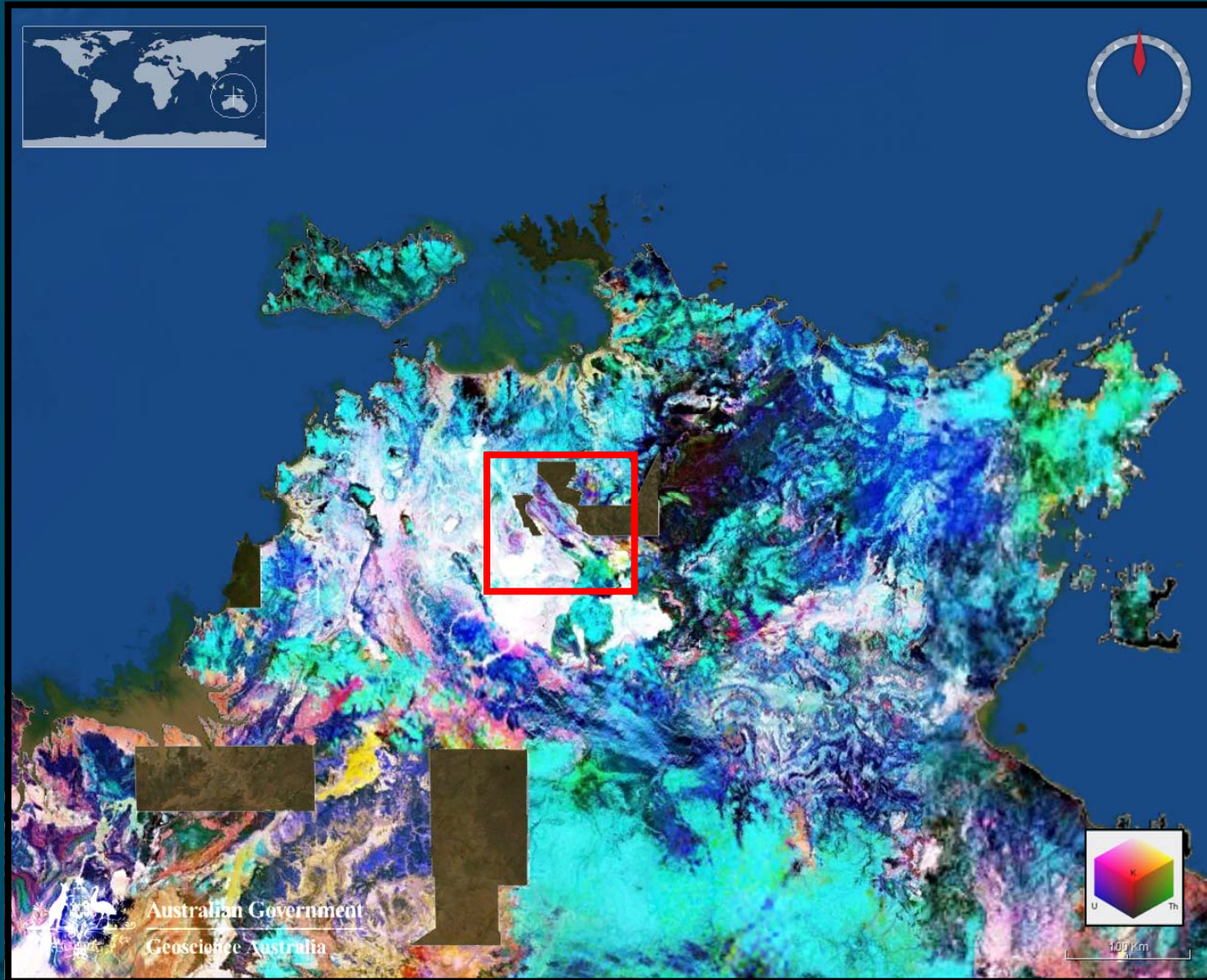
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Pine Creek Region

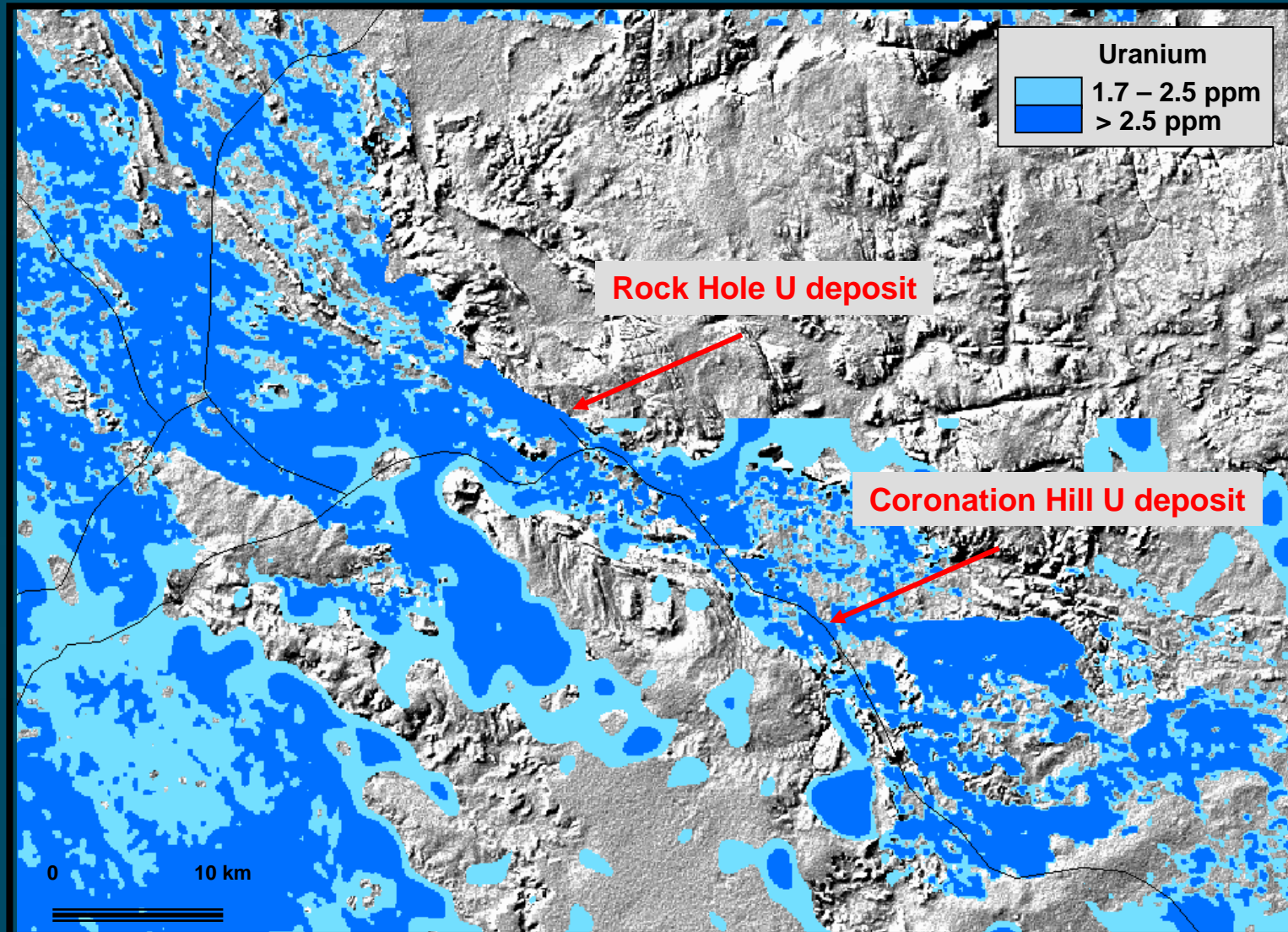


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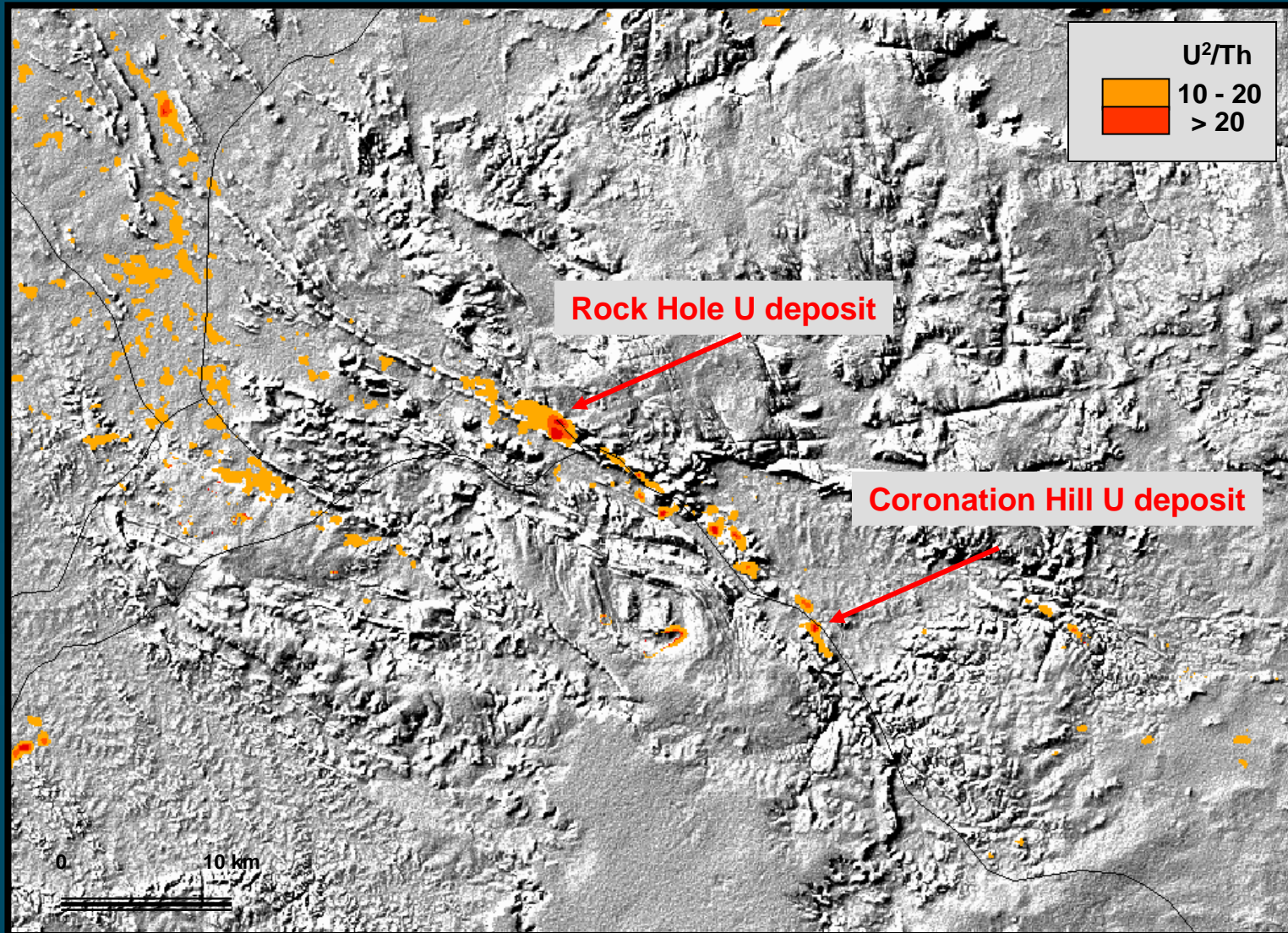
Pine Creek Region



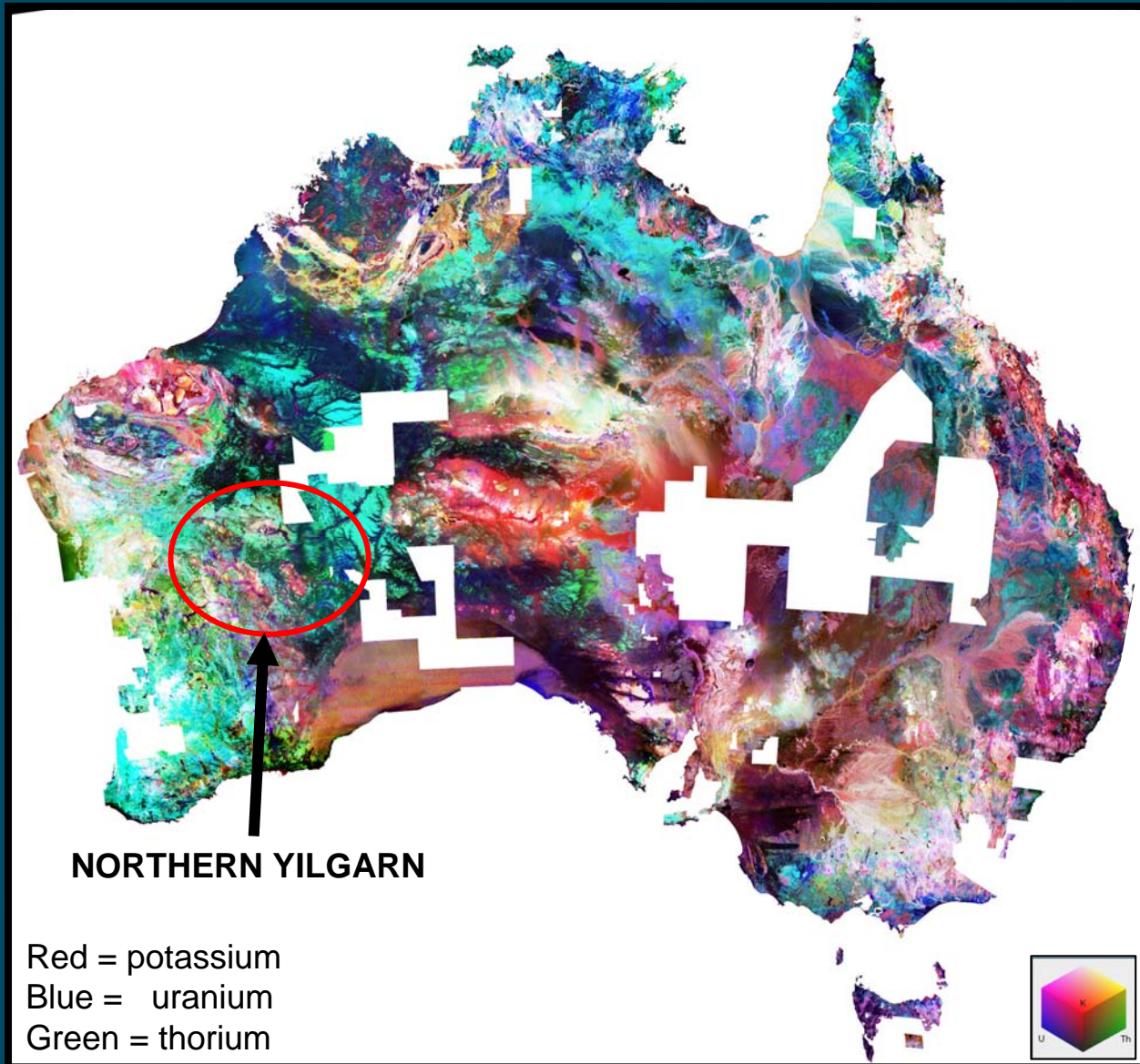
Pine Creek Region



Pine Creek Region

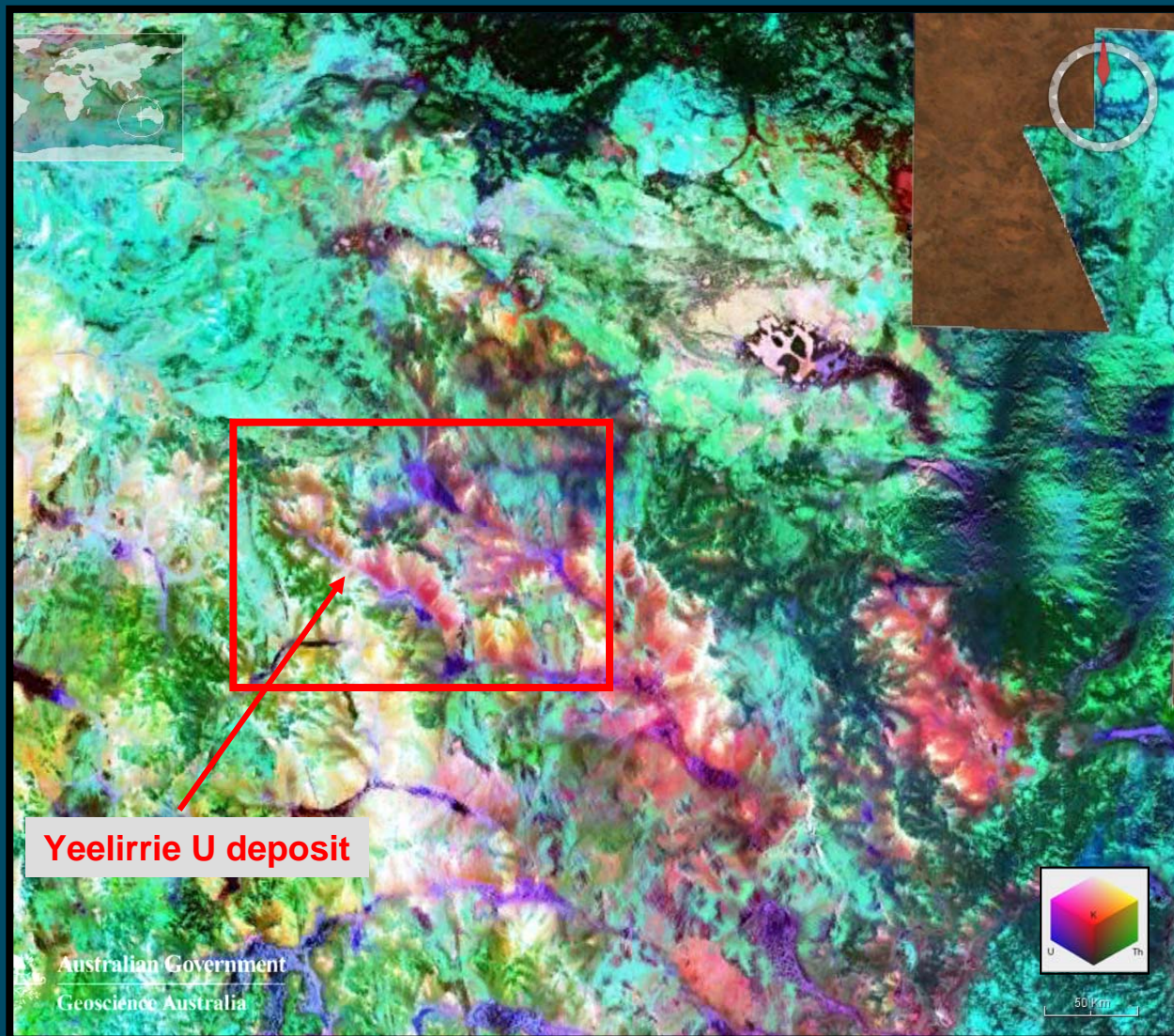


Northern Yilgarn Region

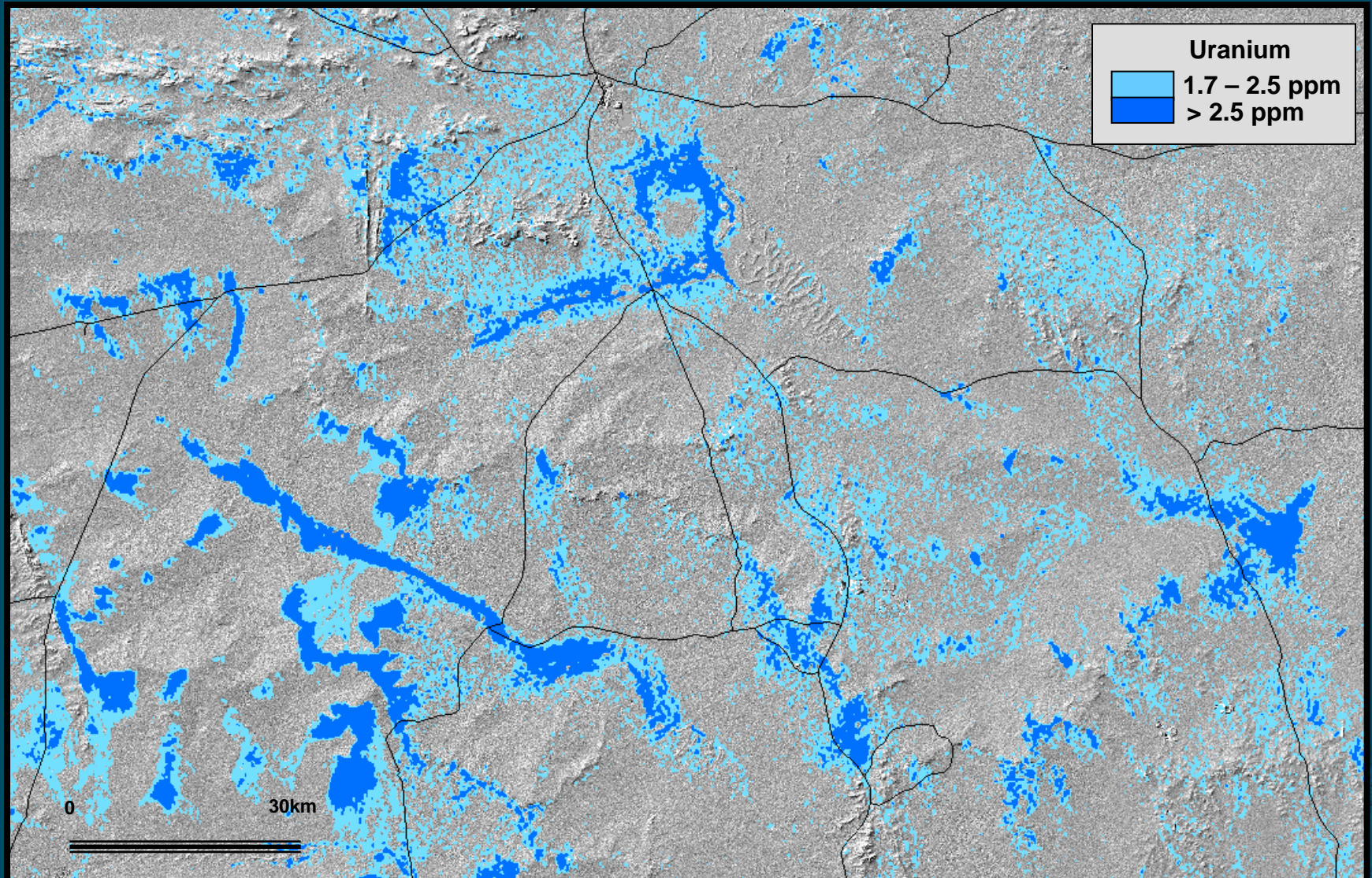


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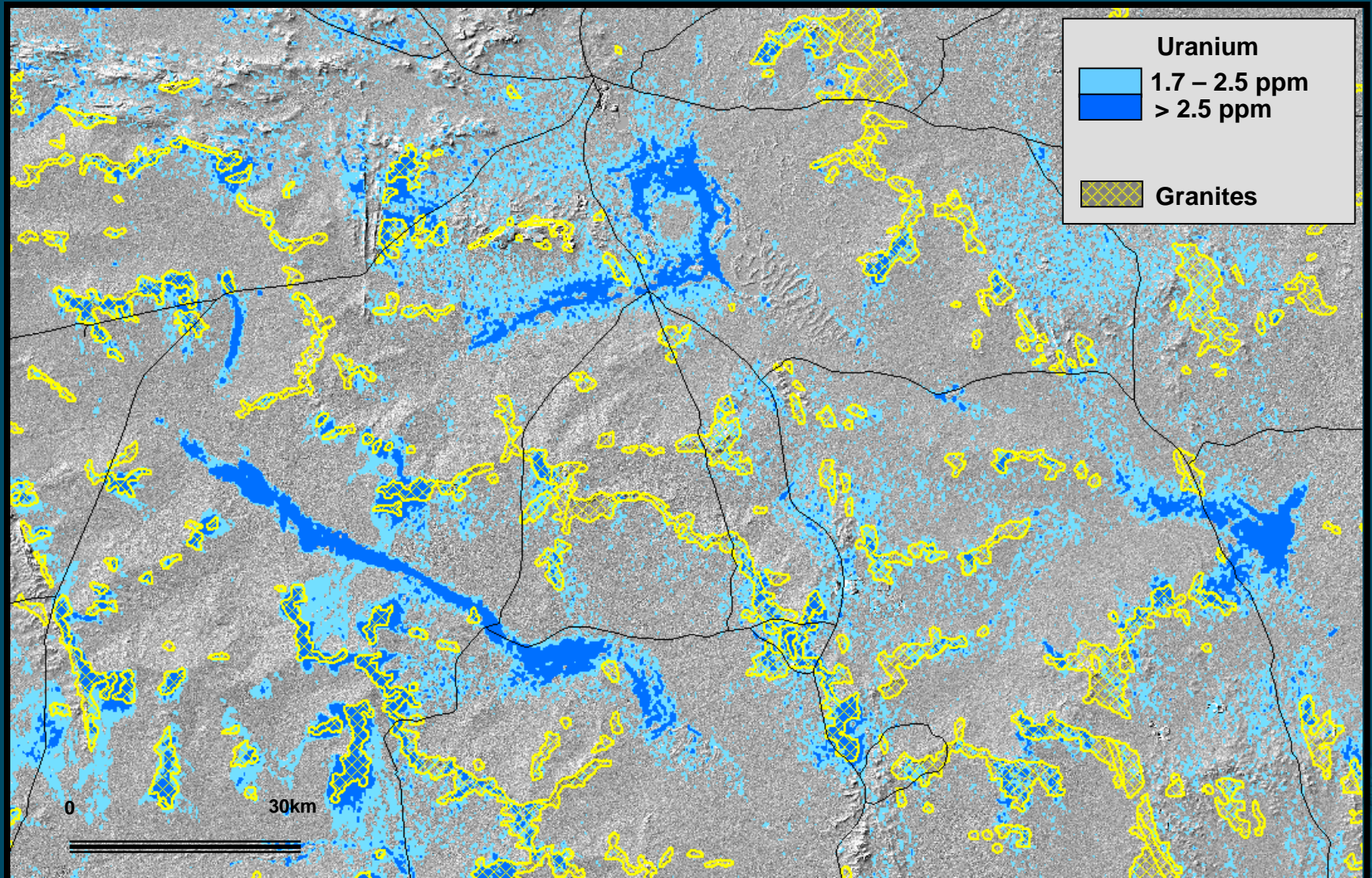
Northern Yilgarn Region



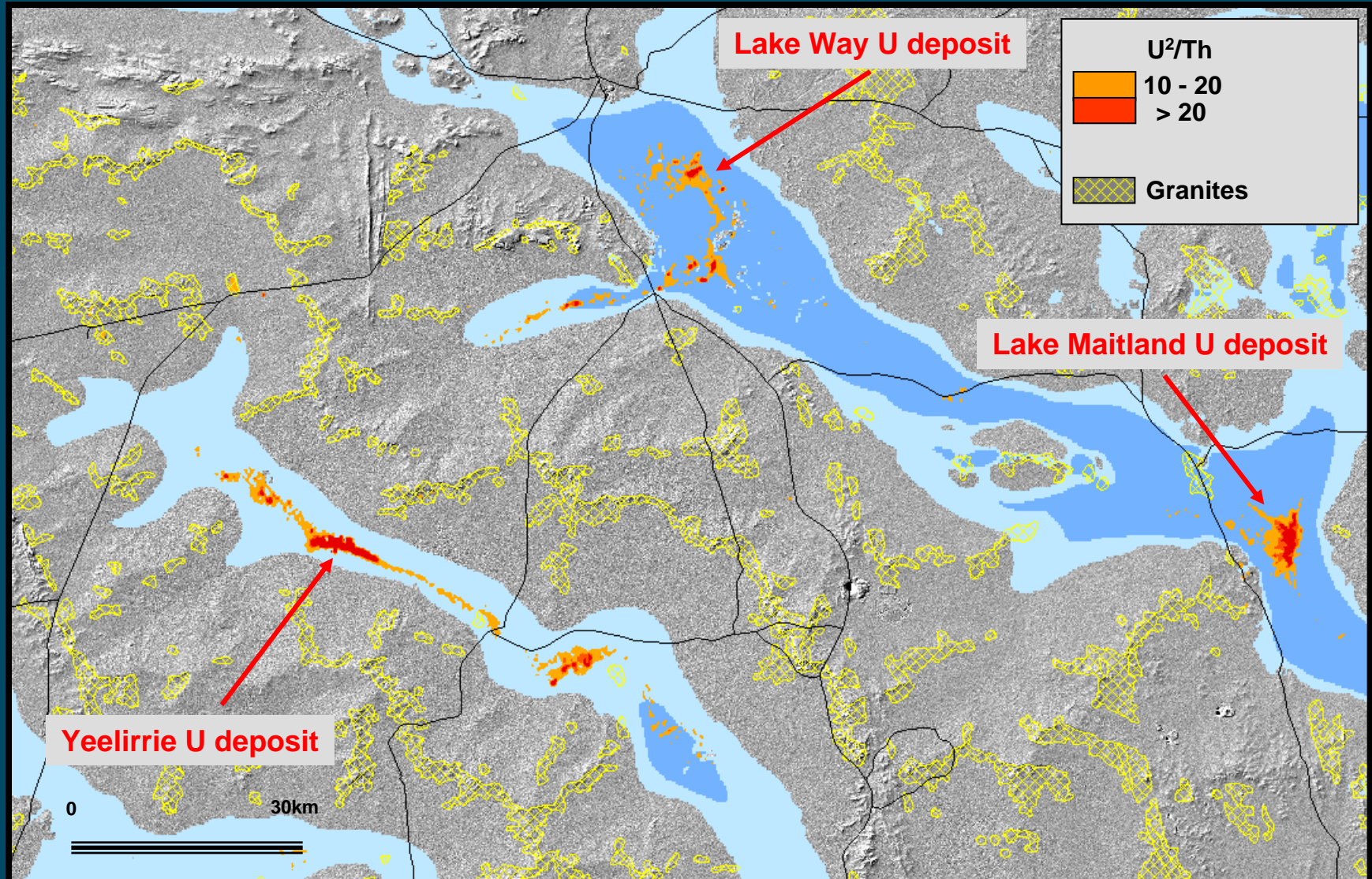
Yeelirrie region: U channel over the hillshaded SRTM DEM



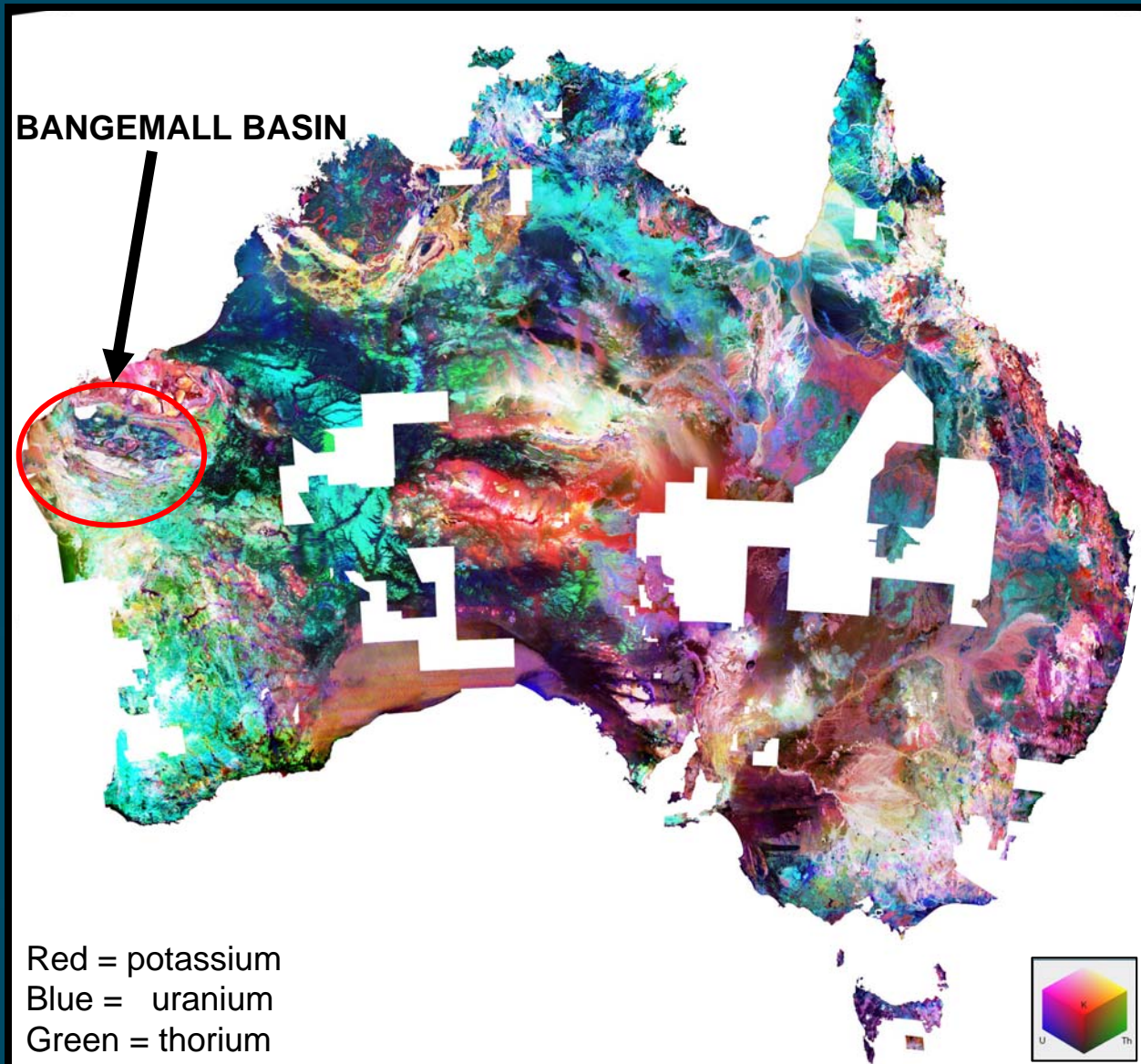
U channel and mapped granite outcrop (shown in yellow) over the SRTM DEM



U²/Th with palaeochannels highlighted in blue

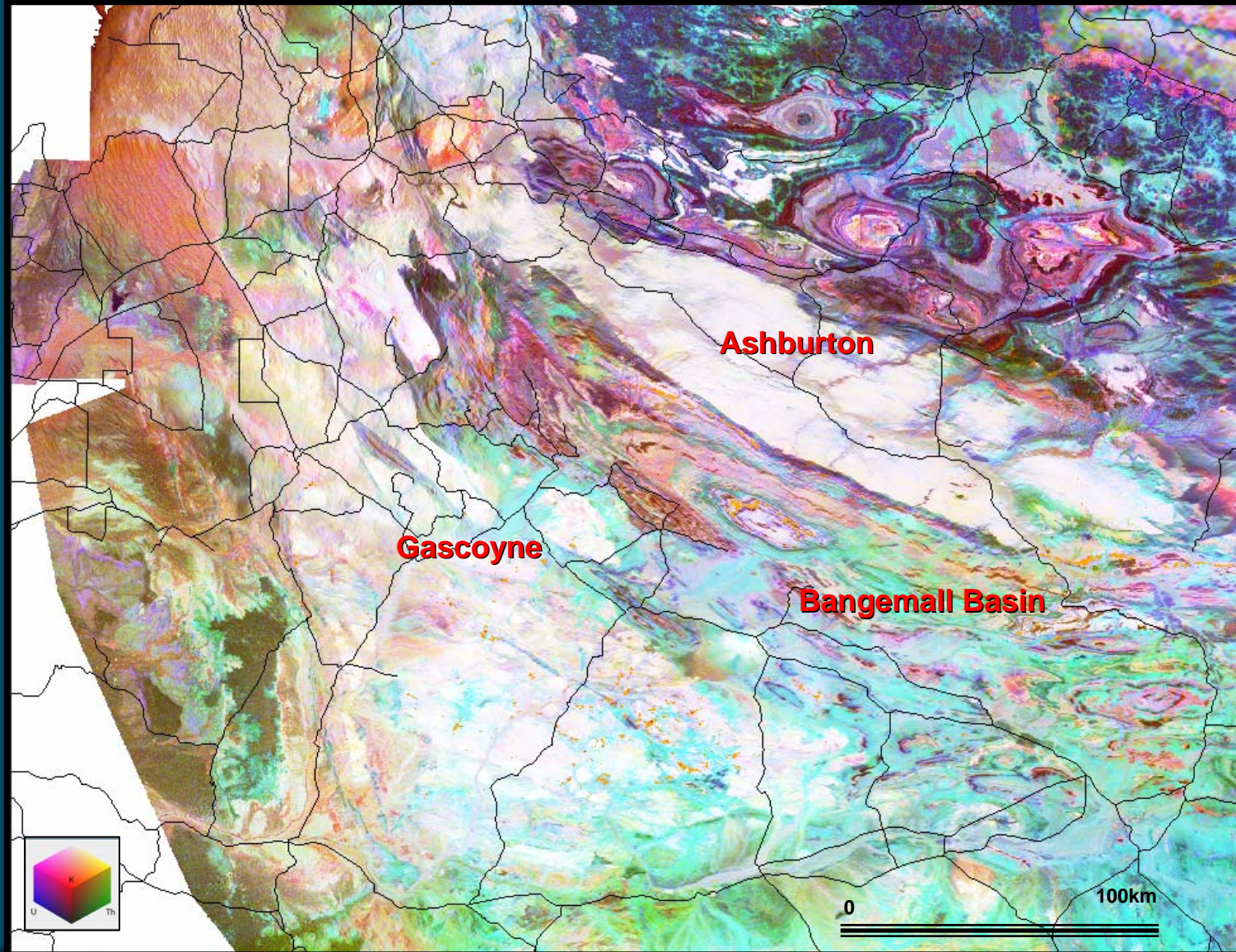


Bangemall Basin Region

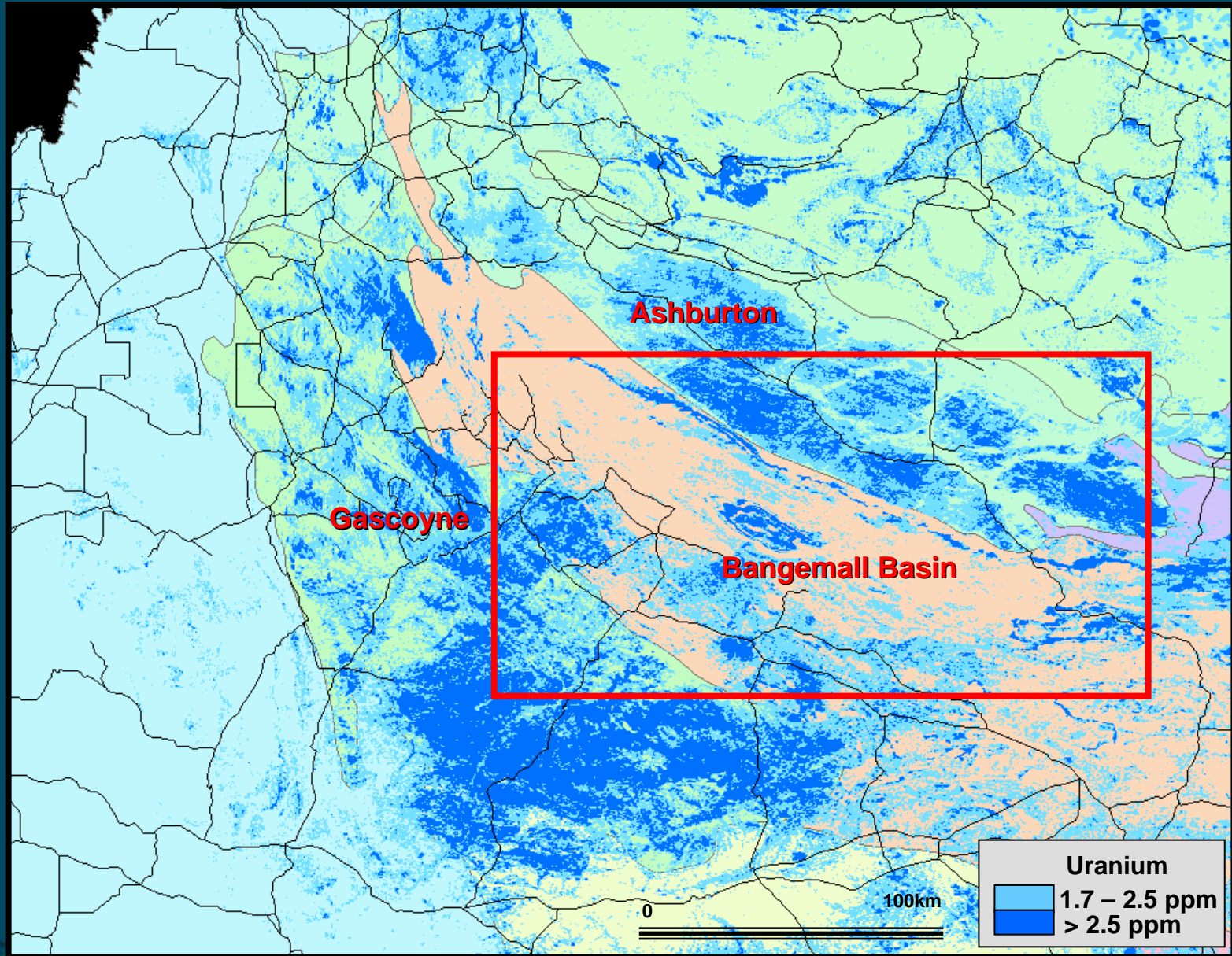


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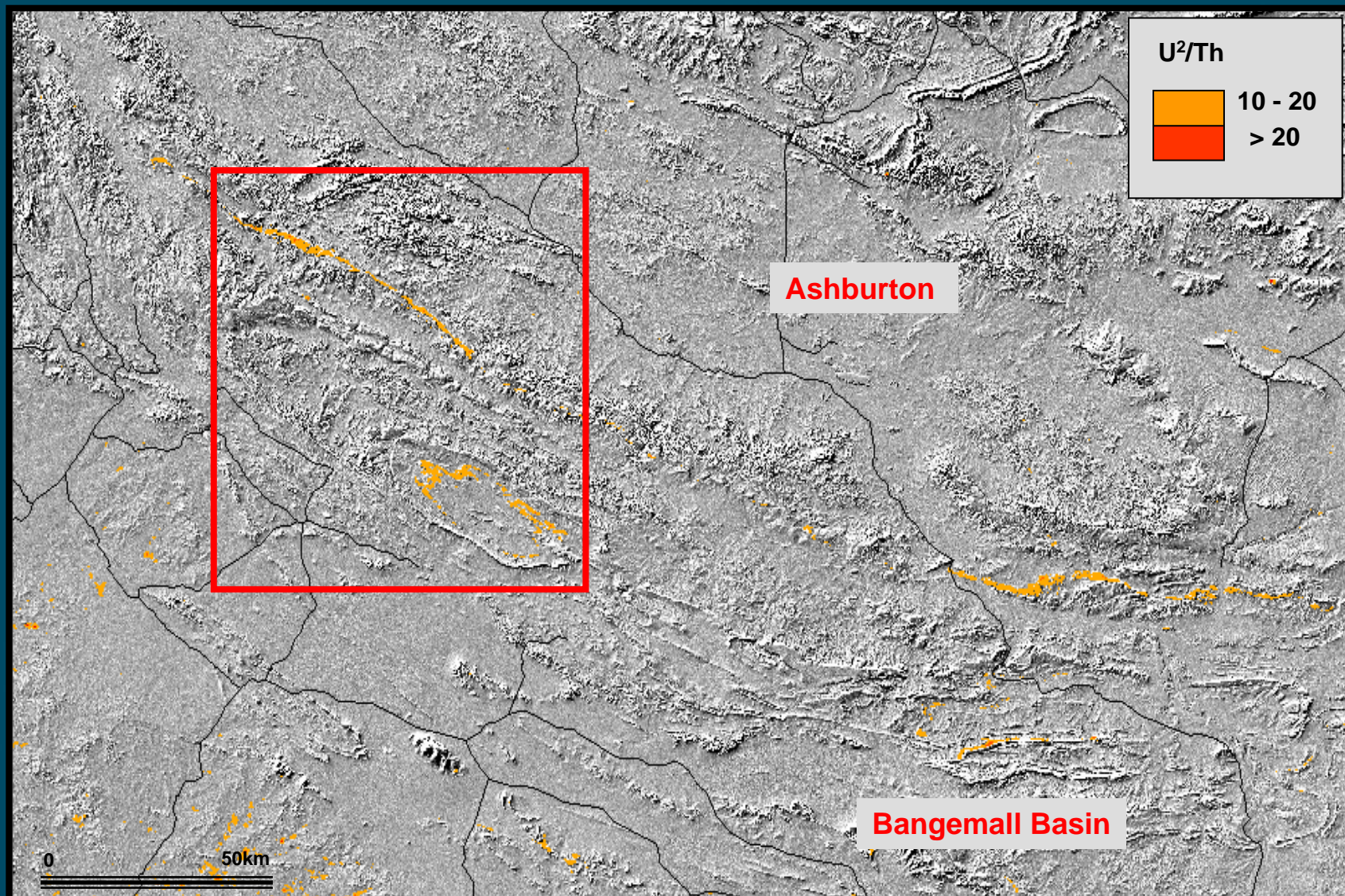
Bangemall Basin Region



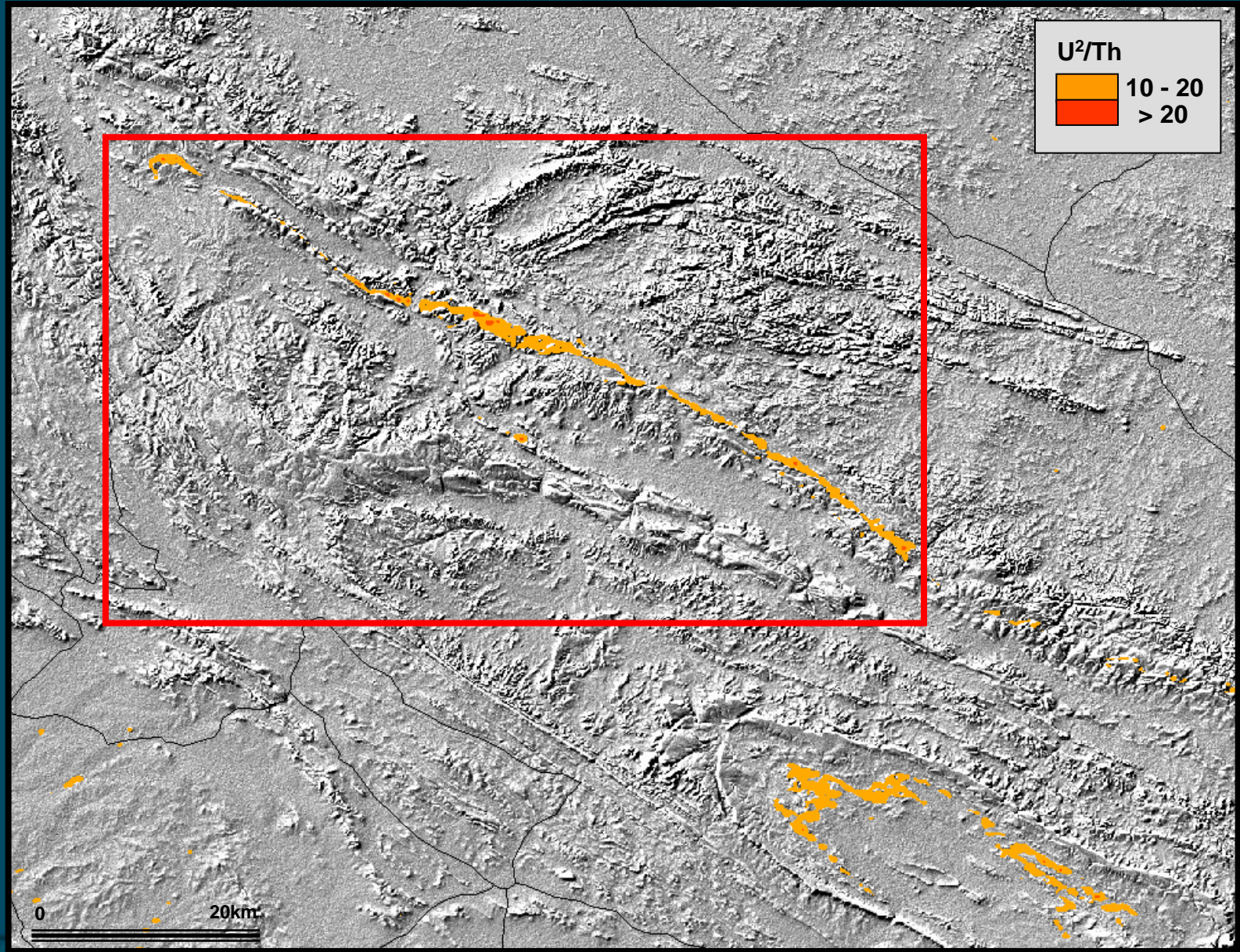
Bangemall Basin



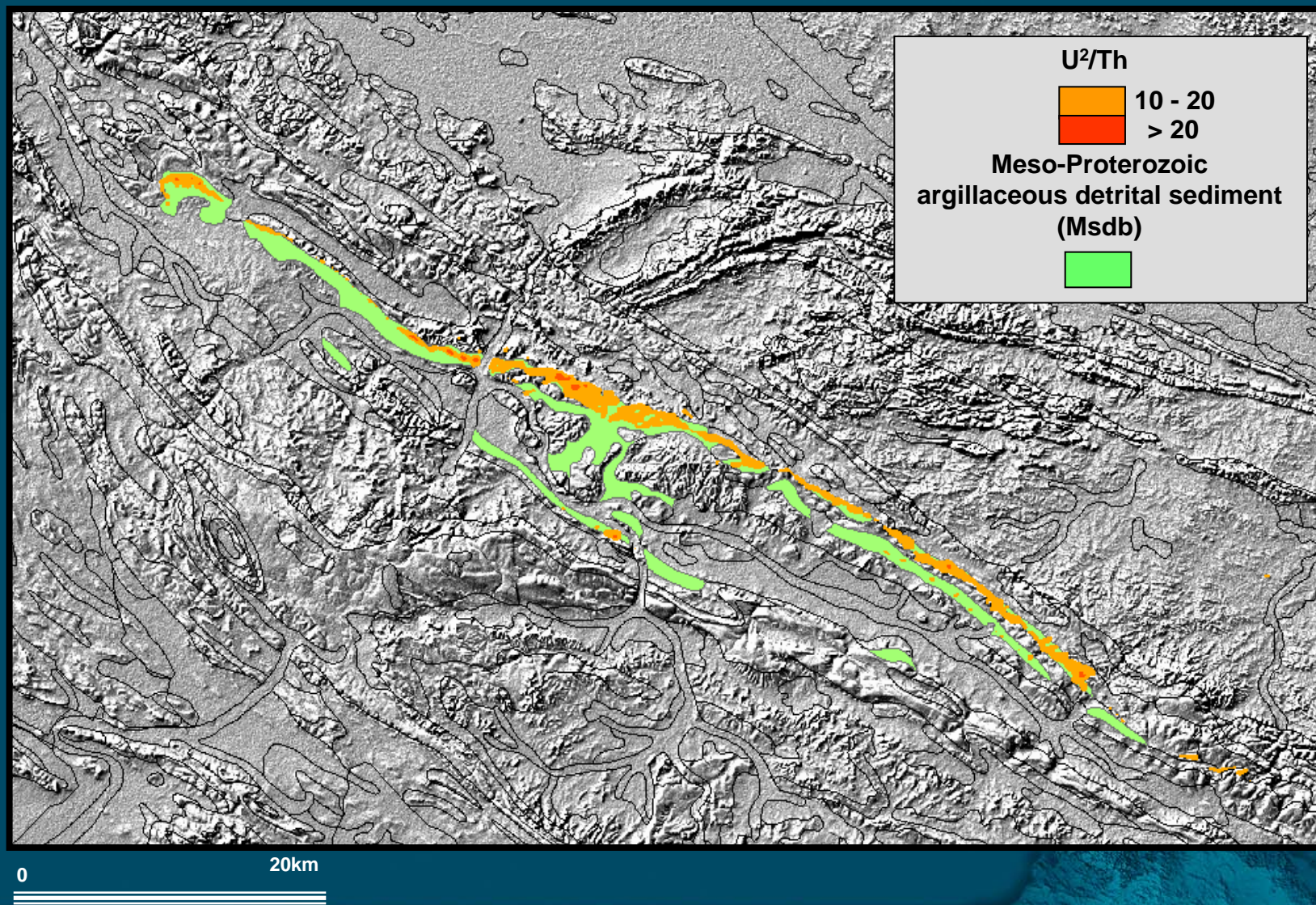
Bangemall Basin: U²/Th over the SRTM DEM



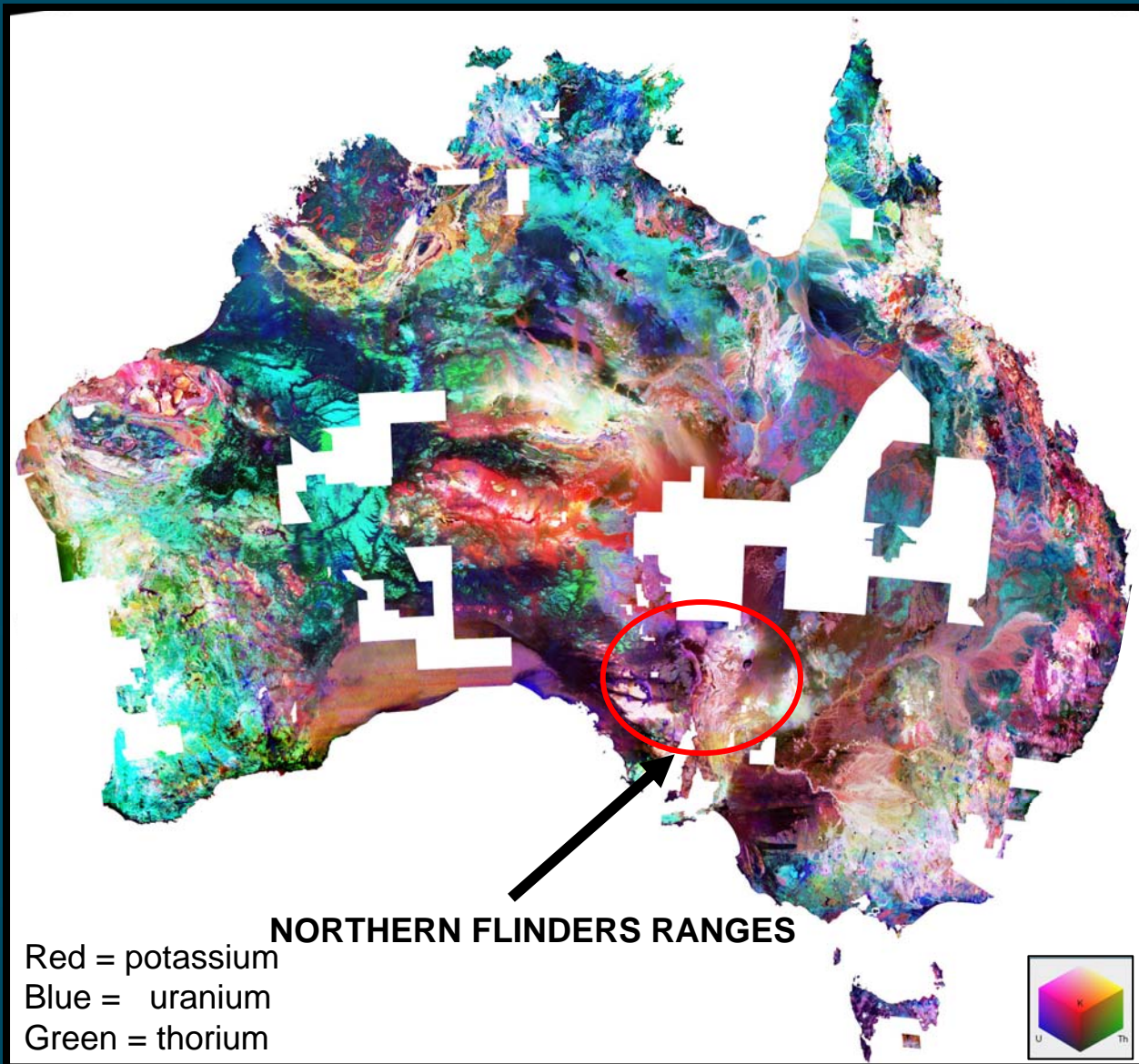
Bangemall Basin: U²/Th over the SRTM DEM



Bangemall Basin: U²/Th over the SRTM DEM

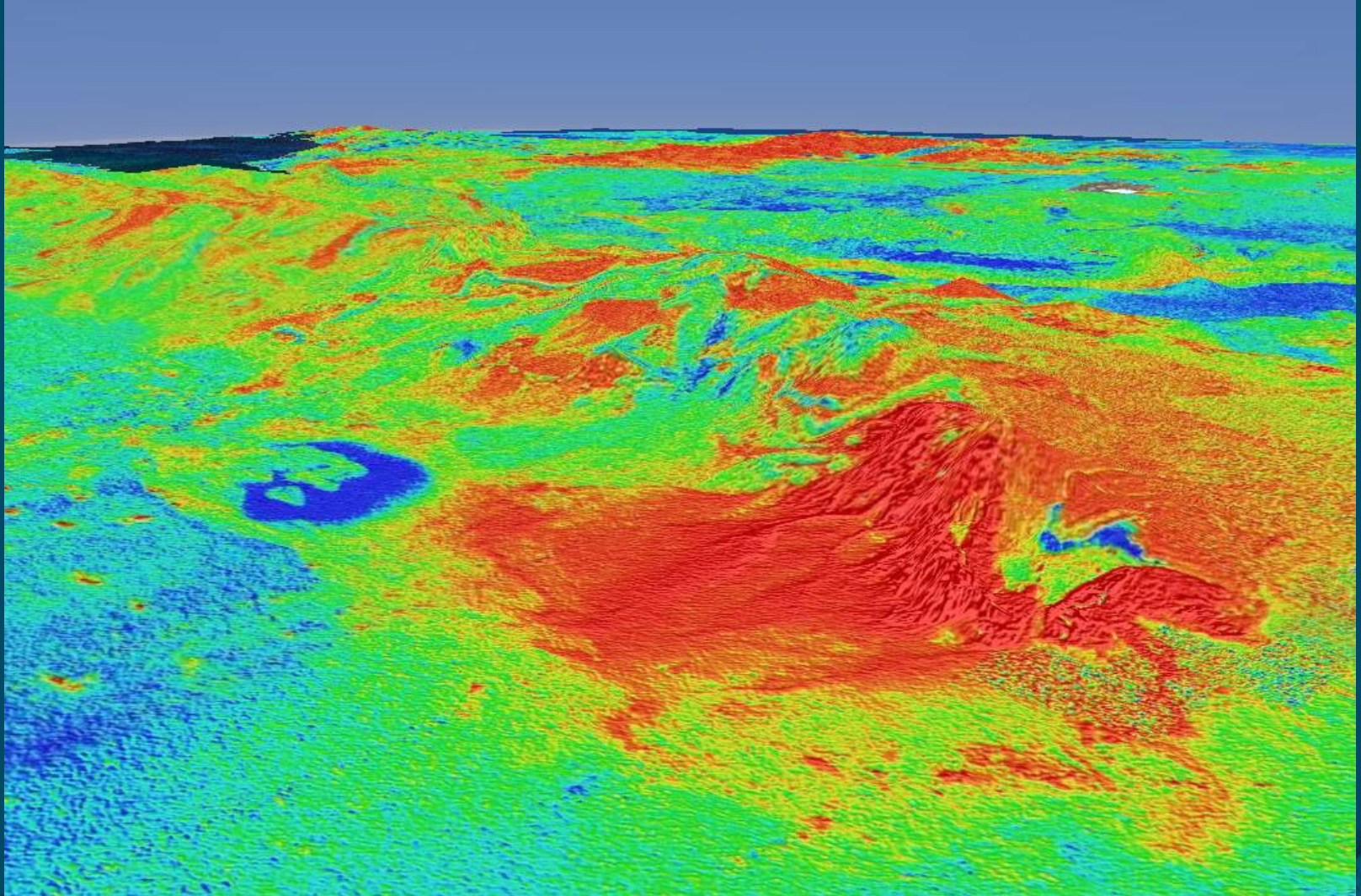


Northern Flinders Ranges

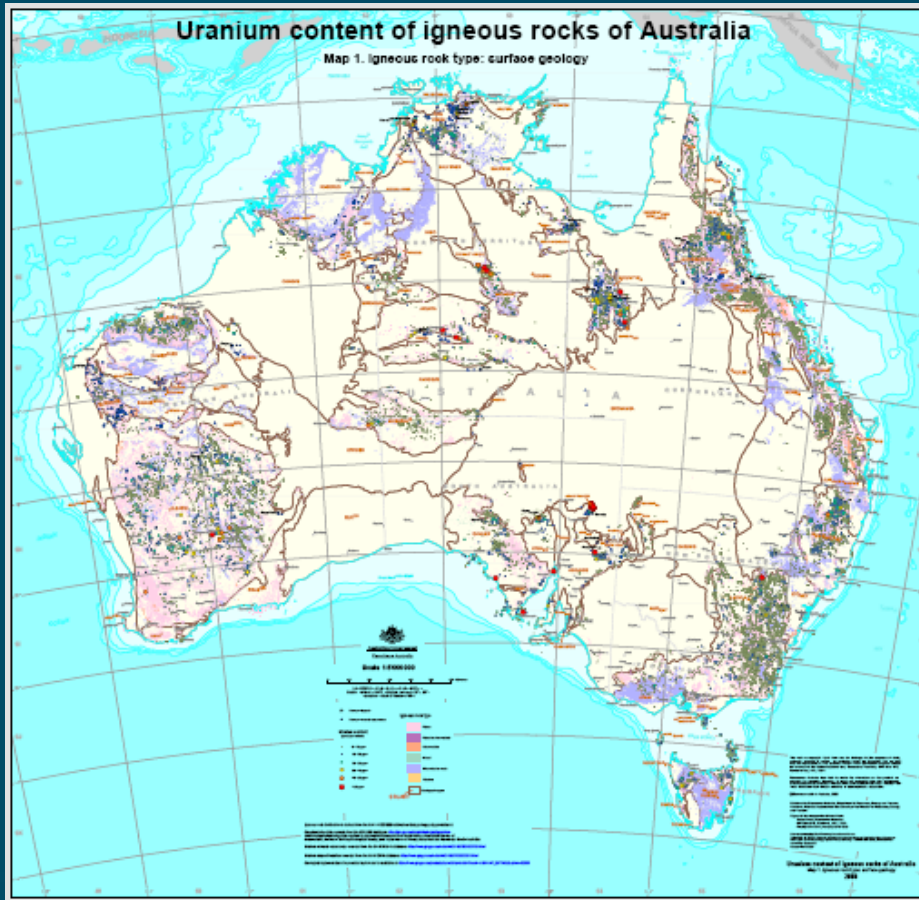


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Northern Flinders Ranges



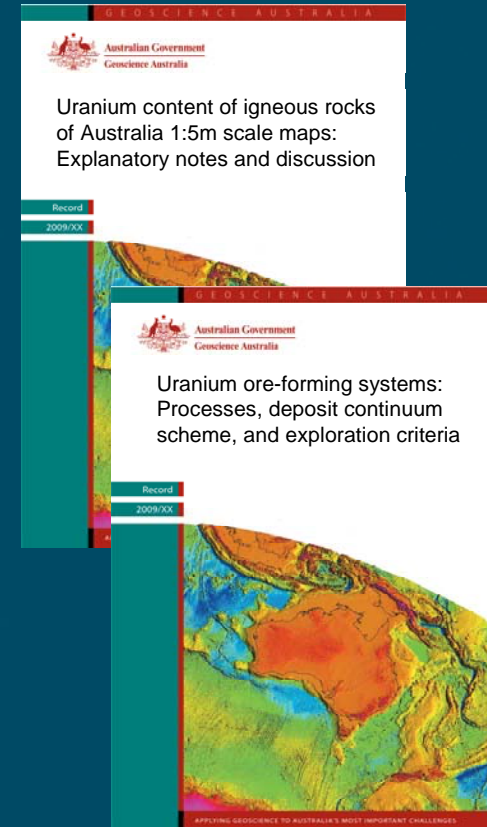
Uranium content in igneous rocks maps: WR geochem + 1:1m surface geology & solid geology



(Anthony Schofield)

Onshore Energy Security Program: New data and concepts for uranium exploration

- Release of 3 maps and report on *Uranium content of igneous rocks of Australia*
- Release of report on *Uranium ore-forming systems*



Visit Geoscience Australia booth for more information

Summary

- Australia is under-explored for uranium
- New precompetitive data sets like those underpinning the 1:1m digital geology map of Australia, and the radiometrics map will be invaluable of uranium-exploration project generation

THANK YOU