Landsat 9/8 calibration and validation, overpass occurred between 0950 - 1010 local time (+8:00 UTC), 13 November 2021.

Location:

Paddock belonging to Foxdale Riding School, Baldivis, Western Australia (Latitude: -32.30993 N, Longitude: 115.864292 E).

ASD FS4 (S/N: 18551) Operator:

Rodrigo Garcia ([rodrigo.garcia@uwa.edu.au](mailto:rodrigo.garcia@uwa.edu.au))

GPS:

Garmin GPS 78s

Microtops operators:

Microtop scans were performed approximately every 10 minutes

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Methodology:

The ASD was turned on and allowed to warm up for 40 minutes, whilst the survey flags were laid out at the start and end positions of 11 transect lines that approximately covered 100 m x 100 m. The ASD was configured to average 25 spectra for each acquisition and a handheld Garmin 78s GPS unit was used to track the location of the ASD. Standard operating procedures for the ASD were followed, and in addition the viewing angle was adjusted slightly to minimise self-shading, though shadows were present on the white reference panel when performing optimisation and white reference panel reading. The white reference panel was placed near the start of Line 5 and levelled. Optimisation and white reference panel reading were taken at the following times:

1) prior to Line 1

2) after Line 2, before Line 3

3) after Line 4, before Line 5

4) after Line 6, before Line 7

5) after Line 8, before Line 9

10) before Line 10

The white reference panel was not moved throughout the validation exercise. The ASD spectral data were subsequently processed with ViewSpec V6.04 to generate radiance (using the calibration files listed below) and reflectance.

Calibration Date: 02 Dec. 2016

LMP185511.ill - Lamp, irradiance standard vector (Lamp: F1361)

10i185511.raw

25i185511.raw

35i185511.raw

Cos185511.raw

Ni185511.raw

BSE185511.ref - Reflectance standard vector used to compute Radiances