



Supplement of

Was Australia a sink or source of CO_2 in 2015? Data assimilation using OCO-2 satellite measurements

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1 Enhanced Vegetation Index (EVI) anomalies (relative to 2000-2014 mean) for 2015

Figure S1. Enhanced Vegetation Index (EVI) anomalies (relative to 2000-2014 mean) for 2015.



Figure S2. AWAP rainfall anomalies (relative to 2000-2014) for 2015.

3 Percentage of increase in rainfall in Australia (relative to 2000-2014 mean) for 2015



Figure S3. Percentage of increase in rainfall in Australia (relative to 2000-2014 mean) for 2015.



Figure S4. Fires across Australia for 2015 based on GFED (version 4) dataset.



Figure S5. Fires anomalies (relative to 2000-2014 mean) for 2015.

6 Wind direction analysis

6.1 Wind directions at TCCON sites



Figure S6. Wind rose TCCON Darwin location for 2015.



Figure S7. Wind rose TCCON Wollongong location for 2015.



Figure S8. Wind rose TCCON Lauder location for 2015.



Frequency of counts by wind direction (%)

Figure S9. Wind rose at Gunn Point site, Australia 2015



Frequency of counts by wind direction (%)

Figure S10. Wind rose at Ironbark site, Australia 2015



Frequency of counts by wind direction (%)

Figure S11. Wind rose at Burncluith site, Australia 2015



Frequency of counts by wind direction (%)

Figure S12. Wind rose at Cape Grim site, Australia 2015



Figure S13. Ensemble flux mean derived by the MIP OCO-2 LNLG flux inversion for 2015.



Figure S14. TM5 posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S15. CAMS posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S16. PCTM posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S17. CSU posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S18. AMES posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S19. UO posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S20. UT posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.



Figure S21. CT posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015



Figure S22. CMS-Flux posterior fluxes using assimilated data from OCO-2 LNLG observations for 2015.