

The authors thank the reviewers for their comments of the manuscript. Please find responses to specific comments below.

**Reviewer comment:**

Add details in the methods section regarding the satellite data products (i.e., EVI, NDVI) used. Currently it is impossible to tell which versions were used.

**Response:**

This is a good point. We added a section in the methods section (section 2.14, L253-259)

*2.14 Remotely sensed land surface greenness*

Normalized difference vegetation index (NDVI) and Enhanced Vegetation Index (EVI) values were derived from the MODIS Terra Vegetation Indices 16-Day L3 Global 250m product (MOD13Q1), which uses atmospherically corrected surface reflectance masked for water, clouds, heavy aerosols, and cloud shadows (Didan 2015). At 250m spatial resolution, the pixel containing Cumberland Plain was assumed to be representative for the footprint and values of that pixel between 1.1.2014 and 31.12.2017 were extracted.

**Reviewer comment:**

L221. The wind speed in Eq 5 is the mean horizontal wind speed. Use a more appropriate symbol (e.g.,  $u$ ) that is consistent with the literature.

**Response:**

We replaced  $W_s$  by  $U$ , we chose  $U$  (upper case) instead of  $u$  to avoid confusion with  $u^*$ . We updated equation (5) and Line 221 “mean horizontal wind speed ( $U$ ,  $m s^{-1}$ )

**Reviewer comment:**

L309. Here “canopy conductance” is used, but elsewhere “surface conductance” is used. Check the entire manuscript and be consistent with terminology throughout.

**Response:**

Amended. We checked throughout the text, and L309 was the only occurrence of “canopy conductance”. We replaced it with “surface conductance”.

**Reviewer comment:**

L477. What is “250 m<sup>2</sup> enhanced vegetation index”?

**Response:**

We deleted the “250 m<sup>2</sup>” words. The EVI methods is explained in the method section (2.14, L253-259).

**Reviewer comment:**

L478 & 479. Sentence referring to PC/Gs,max, median/75% quantile, GPP/Gs is confusing. The ratios don’t appear in the figure.

**Response:**

We replaced this text with “Monthly PC and monthly  $G_{s,\max}$  are calculated as the median of half-hourly GPP and half-hourly  $G_s$  when PPF [800-1200  $\mu\text{mol m}^{-2} \text{s}^{-1}$ ] and D [1-1.5 kPa] [...], L478-483