Supplemental material for - *Distinguishing multicellular life on exoplanets by testing Earth as an exoplanet*

**Outline**

Table S1 – page 2

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**Table S1** – Similar to table 1, but calculated with 670 and 865. Absolute change of reflectance (between 1-3 ° phase angle and 20--30° phase angle) for band 865 nm, NDVI and the percent change for band 865 nm for the Amazon, Sahara, all land and the world.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Amazon | Sahara | All Land | World |
| 865 nm | 0.029 | 0.007 | 0.013 | 0.024 |
| NDVI | 0.045 | 0.004 | 0.007 | 0.038 |
| Per 865 nm | 10 | 2.3 | 14.4 | 18.3 |



**Figure S1** – NDVI calculated with 670 nm and 865 nm for a cloud free land scenario at phase angles 20-30°.



**Figure S2** - (a) Averaged NDVI calculated with 670 nm and 865 nm at different phase angles for a cloud covered Earth (red), all terrestrial land (black), the Amazon region (green), and the Sahara region (blue). Averaged reflectance at different phase angles at 670 nm (b) and 865 nm (c). (d) Average change in reflectance (i.e. 1-3° minus 3-6°) at different phase angles for the four scenarios for NDVI, 670nm, and 865nm.