Interactive comment on “Reduction in Earth Reflected Radiance during the Eclipse of 21 August 2017” by Jay Herman et al.

Jay Herman et al.
jay.r.herman@nasa.gov

Received and published: 11 May 2018

Please see the attached supplement for more details

A reply to Referee 2 was submitted earlier

I have added a new figure and text describing the comparison between POLDER and EPIC related to the Maignan et al. 2004 paper. I have also added a mention of the Maignan et al. paper in the introduction.

"Measured backscattered radiances of the entire sunlit Earth were obtained during the 21 August 2017 eclipse from EPIC (Earth Polychromatic Imaging Camera) on the DSCOVR (Deep Space Climate Observatory) satellite. EPIC obtains synoptic observations of the Earth from an orbit around the L1 point (Lagrange 1) 1.5 million km from C1"
Earth (Herman et al., 2018). EPIC top of the atmosphere TOA albedo measurements, made at a backscatter angle of 172°, are in the enhanced reflectivity regime (hotspot angles). EPIC non-eclipse day TOA albedos are compared to POLDER surface reflectivity measurements at 8° (Maignan et al., 2004). This study focuses on data from two selected locations during the 21 August.

Please also note the supplement to this comment: https://www.atmos-meas-tech-discuss.net/amt-2017-475/amt-2017-475-AC2-supplement.pdf