

## Supplement: “Accurate 3D radiative transfer simulation of spectral solar irradiance during the total solar eclipse of August 21, 2017”

Paul Ockenfuß, Claudia Emde, Bernhard Mayer, Germar Bernhard

This supplement includes the following subfolders:

Fig16:

- Files “**Wvl\*\*\*Clear.result**”: Simulated irradiance values with no eclipse effects applied (“clearsky”). Format: Date, Time, Irradiance [ $\mu\text{W}/(\text{cm}^2 \text{ nm})$ ]
- Files **(UV/Vis/IR)Series\_PlotValues.txt**: Simulated values during the eclipse like shown in Fig 16: UVSeries\_PlotValues.txt: Fig 16 a), VisSeries\_PlotValues.txt: Fig. 16 c), IRSeries\_PlotValues.txt: Fig 16 e). These values are already corrected for the average deviation between the simulated values and measurement between 19:00 and 20:00 for every wavelength.

Fig 17:

- “**Spectrum\_PlotValues.txt**”: Simulated eclipse and clearsky irradiance for a continuous spectrum from 310nm to 1030nm in [ $\mu\text{W}/(\text{cm}^2 \text{ nm})$ ] in 10nm steps at 17:20:00