

# Correction: Updated and validated solar irradiance reference spectra for estimating environmental photodegradation rates

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CORRECTION

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## Correction: Updated and validated solar irradiance reference spectra for estimating environmental photodegradation rates

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Correction for 'Updated and validated solar irradiance reference spectra for estimating environmental photodegradation rates' by Jennifer N. Apell and Kristopher McNeill, *Environ. Sci.: Processes Impacts*, 2019, 21, 427–437.

Table 1 in the original article shows an incorrect value for the ozone parameter. Below is the correct version of Table 1.

In addition, the citations for the use of the SMARTS model were incomplete. Ref. 1 and 2 listed below should have been included.

These changes do not affect the results, conclusions, or reference irradiance spectra that were published.

Table 1 Chosen inputs for SMARTS used for comparison against data and calculation of reference spectra

Parameter	Value
Site pressure	Calculated based on latitude and altitude
Atmosphere	Appropriate selection of reference atmosphere based on site latitude and season
Water vapor	Variable (in cm, from AERONET data) or calculated from reference atmosphere
Ozone	Variable (in DU, from remote sensing data) or 300 DU
Gaseous absorption	Light pollution
Carbon dioxide	407 ppm
Extraterrestrial spectrum	1361 W m <sup>-2</sup> Gueymard 2004
Aerosol model	Shettle & Fenn rural model <sup>30</sup>
Turbidity	Variable (from AERONET data) or 0.1
Albedo	None

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

## References

- 1 C. Gueymard, *SMARTS2: a simple model of the atmospheric radiative transfer of sunshine: algorithms and performance assessment*, Florida Solar Energy Center Cocoa, FL, 1995.
- 2 C. A. Gueymard, Parameterized transmittance model for direct beam and circumsolar spectral irradiance, *Sol. Energy*, 2001, 71, 325–346.

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