

TSIS-1 Publication List

2026

DeLand, M. T. et al. (2026), Spectral irradiance observations and projections for Solar Cycle 25. *Earth and Space Science*, 13, e2025EA004810. <https://doi.org/10.1029/2025EA004810>

Bak, J., et al. (2026), *GEMS ozone profile retrieval: impact and validation of version 3.0 improvements*, *Atmospheric Measurement Techniques*, 19, 119–134. <https://doi.org/10.5194/amt-19-119-2026>

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Amdur and Huybers (2025), Negative trend in total solar irradiance over the satellite era, *Proceedings of the National Academy of Sciences*, 122, e2417155122, <https://doi.org/10.1073/pnas.2417155122>

Chatzistergos et al. (2025), Revisiting the SATIRE-S irradiance reconstruction: Heritage of Mt Wilson magnetograms and Ca II K observations, *Astronomy & Astrophysics*, 696, A204, <https://doi.org/10.1051/0004-6361/202451002>

Derand et al. (2025), Seasonal asymmetries in lag between insolation and temperature, *Journal of Atmospheric and Solar-Terrestrial Physics*, 268, 106441, <https://doi.org/10.1016/j.jastp.2025.106441>

Edmonds (2025), Is the variability of ENSO due to frequency modulation by the long term variation in solar activity?, *Journal of Atmospheric and Solar-Terrestrial Physics*, 269, 106490, <https://doi.org/10.1016/j.jastp.2025.106490>

Fedorov and Frolov (2025), Change in Earth's solar climate over the period from 1900 to 2100, *Solar-Terrestrial Physics*, 11, 12, <https://doi.org/10.12737/stp-111202502>

Jaine et al. (2025), Total solar irradiance using a traceable solar spectroradiometer, *Atmospheric Measurement Techniques*, 18, 7177, <https://doi.org/10.5194/amt-18-7177-2025>

Jha et al. (2025), Historical reconstruction of solar surface magnetism from cycle 1-24 using the Synthetic Active Region Generator (SARG) and the Advective Flux Transport (AFT) model, *arXiv*, 2511.19371 (in press at *Ap. J.*), <https://doi.org/10.48550/arXiv.2511.19371>

Kong and Jing (2025), Effect of different solar spectral irradiance data in different climate zones, *IOP Conference Series: Earth and Environmental Science*, 1522, 012020, <https://doi.org/10.1088/1755-1315/1522/1/012020>

- Kopp (2025)**, Solar irradiance measurements, *Living Reviews in Solar Physics*, 22, 1, <https://doi.org/10.1007/s41116-025-00040-5>
- Lee and Wu (2025)**, Dynamic Impact of the Southern Annular Mode on the Antarctic Ozone Hole Area, *Remote Sensing*, 17 (5), 835, <https://doi.org/10.3390/rs17050835>
- Lin et al. (2025)**, Direct solar radiation distribution and driving mechanisms on planetary surfaces, *Icarus*, 429, 116402, <https://doi.org/10.1016/j.icarus.2025.116402>
- Meftah (2025)**, SOLSPEC-NG: compact UV spectrometer for high-precision solar spectral irradiance, *Proceedings of SPIE*, 13623, 136230Q, <https://doi.org/10.1117/12.3021045>
- Montillet et al. (2025)**, Assessment of instrument performance of the FY3E/JTSIM/DARA radiometer through the analysis of TSI observations, *Remote Sensing*, 23, 3902, <https://doi.org/10.3390/rs17233902>
- Nadezhda and Vokhmyanin (2025)**, Long-lived sunspots in historical records from 1660 to 1676, *Solar Physics*, 300, 17, <https://doi.org/10.1007/s11207-025-02417-x>
- Prieto-Fernández and Barbosa (2025)**, Assessment of Instrument Performance of the FY3E/JTSIM/DARA Radiometer Through the Analysis of TSI Observations, *Remote Sensing*, 17(23), 3902, <https://doi.org/10.3390/rs17233902>
- Qiu et al. (2025)**, Significant influence of solar activity on centennial-scale variability of Holocene peat, *Science China Earth Sciences*, 68, 3050, <https://doi.org/10.1007/s11430-024-1422-5>
- Reda et al. (2025)**, Modeling decadal and centennial solar UV irradiance changes, *Solar Physics*, 300, 173, <https://doi.org/10.1007/s11207-025-02573-w>
- Schulze-Walewski et al. (2025)**, The TRUTHS cryogenic solar absolute radiometer (CSAR), *Proceedings of SPIE*, 13699, 136992G, <https://doi.org/10.1117/12.3014567>
- Snow et al. (2025)**, Calibration of the solar position sensor on GOES-R as a proxy for total solar irradiance, *Journal of Space Weather and Space Climate*, 15, 7, <https://doi.org/10.1051/swsc/2025007>
- Sowmya et al. (2025)**, Solar Variability in the Mg II h and k Lines, *The Astrophysical Journal*, 980, 173, <https://doi.org/10.3847/1538-4357/ad173a>
- Wang et al. (2025)**, Internal Heat and Energy Imbalance of Uranus, *arXiv*, 2502.20722, <https://doi.org/10.48550/arXiv.2502.20722>
- Wright et al. (2025)**, The influence of climate variability on transatlantic flight times, *Atmospheric Chemistry and Physics*, 25, 18267, <https://doi.org/10.5194/acp-25-18267-2025>

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