

Supplement of

**Pyranometer offsets triggered by ambient meteorology:
insights from field and laboratory experiments**

by Oswald et al.

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Table S1: Characteristics of the different CMP21 pyranometers and the heating/ventilation systems used in this study.

January 2016 (Laboratory & Field Campaign 1)	System I	System II	System III	Reference
Acronym	EIG	KSO34	DAV	EIG
Serial number of CMP21	100393	100579	110716	100536
Sensitivity [$\mu\text{V}/\text{W m}^{-2}$]	8.80	9.02	8.95	8.76
Serial number of HV-system	0931666	34.2016	015	0931661
April/May 2016 (Field Campaign 2)				
Acronym	EIG	KSO34	DAV	EIG
Serial number of CMP21	100579	100579	100579	100536
Sensitivity [$\mu\text{V}/\text{W m}^{-2}$]	9.02	9.02	9.02	8.76
Serial number of HV-system	0931666	34.2016	015	0931661

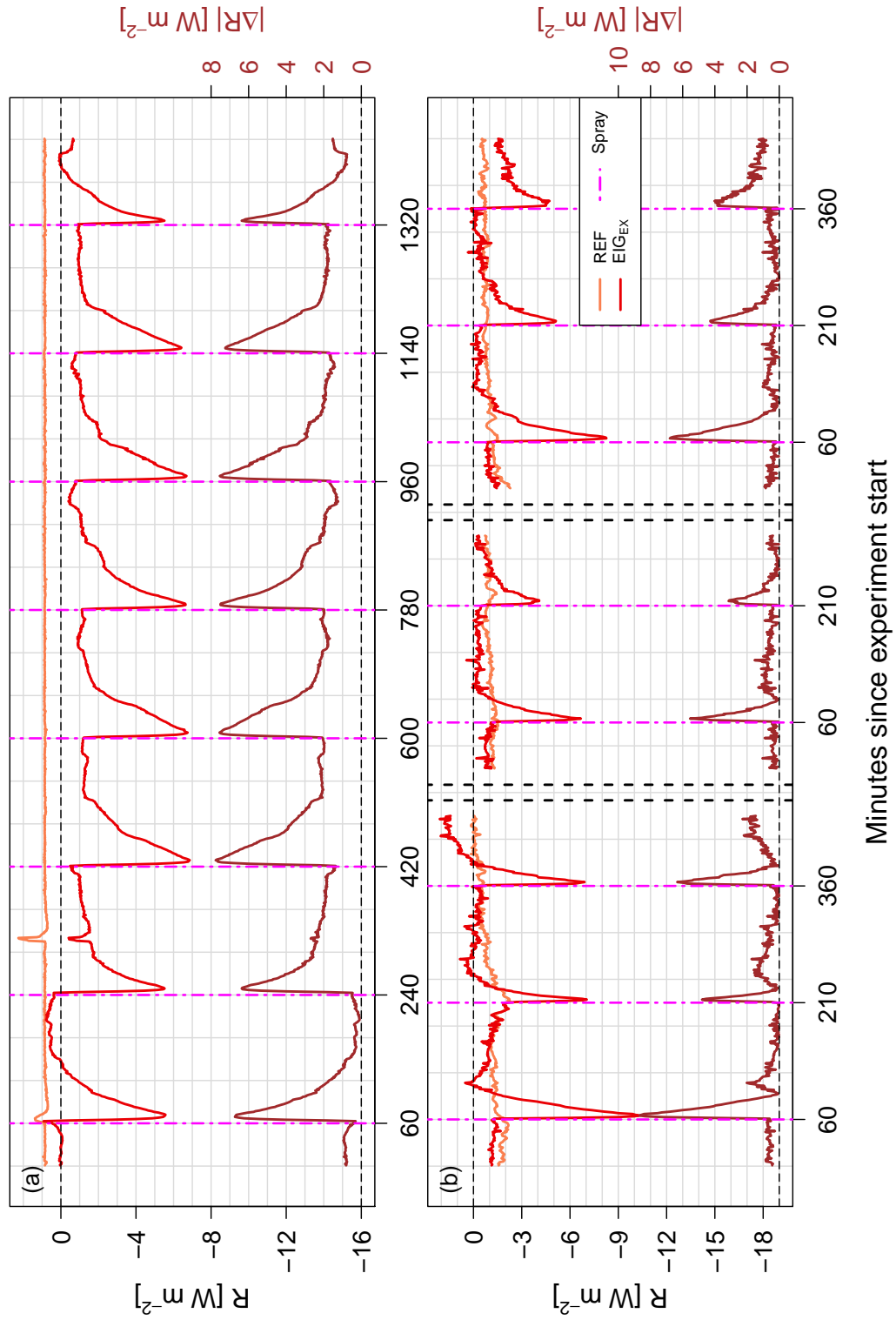


Figure S1: Time series of the radiation (R) measured by the reference (REF, coral, Eigenbrodt HV-system) and experimental pyranometer (EIGEX, red, Eigenbrodt HV-system) and absolute difference ($|\Delta R|$) between REF and EIGEX during (a) laboratory conditions and (b) ambient environmental conditions. All field measurements have been performed during nighttime. Measurement series is continuous in (a) while start point of subpanels (separated by vertical double dashed lines) in (b) is always 18:30 UTC. Note: scales of y-axes differ between panels.

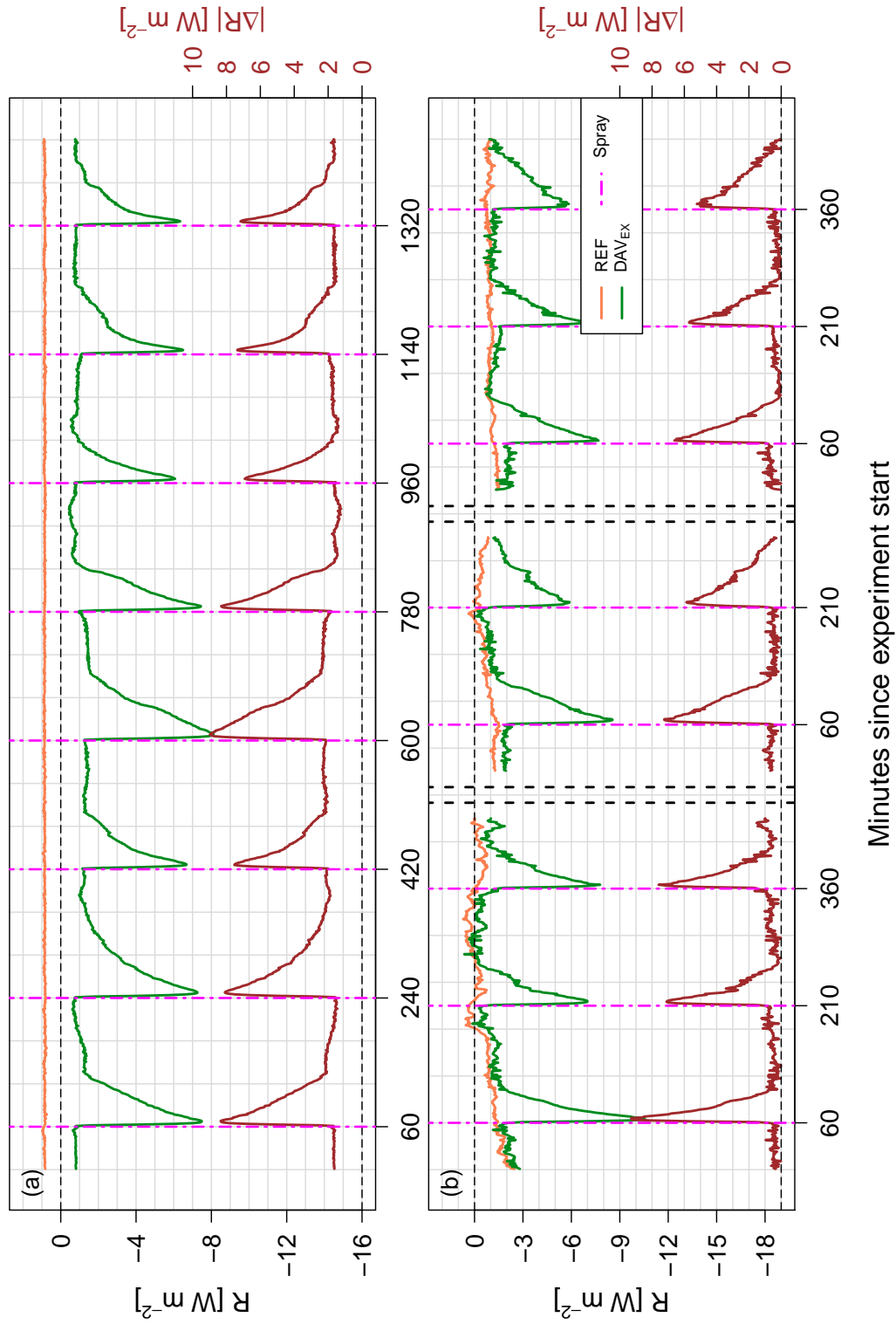


Figure S2: Time series of the radiation (R) measured by the reference (REF, coral, Eigenbrodt HV-system) and experimental pyranometer (DAV_{EX}, green, Davos HV-system) and absolute difference ($|\Delta R|$) between REF and DAV_{EX} during (a) laboratory conditions and (b) ambient environmental conditions. All field measurements have been performed during nighttime. Measurement series is continuous in (a) while start point of subpanels (separated by vertical double dashed lines) in (b) is always 18:30 UTC. Note: scales of y-axes differ between panels.