

# Net Radiometer Comparison Data

Two replicate Apogee model SN-500 net radiometers were compared with a Kipp & Zonen model CNR4 net radiometer for 2.5 years over an irrigated alfalfa field. The field was harvested three times during the growing season and was snow covered from December to March. Data were filtered to remove measurements immediately following precipitation events and when condensation occurred on the CNR4 domes (dew point temperature higher than air temperature). The Apogee Instrument has heated domes to minimize condensation. Differences between the instruments was typically less than  $20 \text{ W m}^{-2}$  and was associated with small differences in incoming longwave irradiance measured with upward-looking pyrgeometers.

Figure 1 (left side is replicate sensor one, right side is replicate sensor two)

Comparison of Net Radiation measurements, Apogee SN-500 vs. Kipp & Zonen CNR 4.

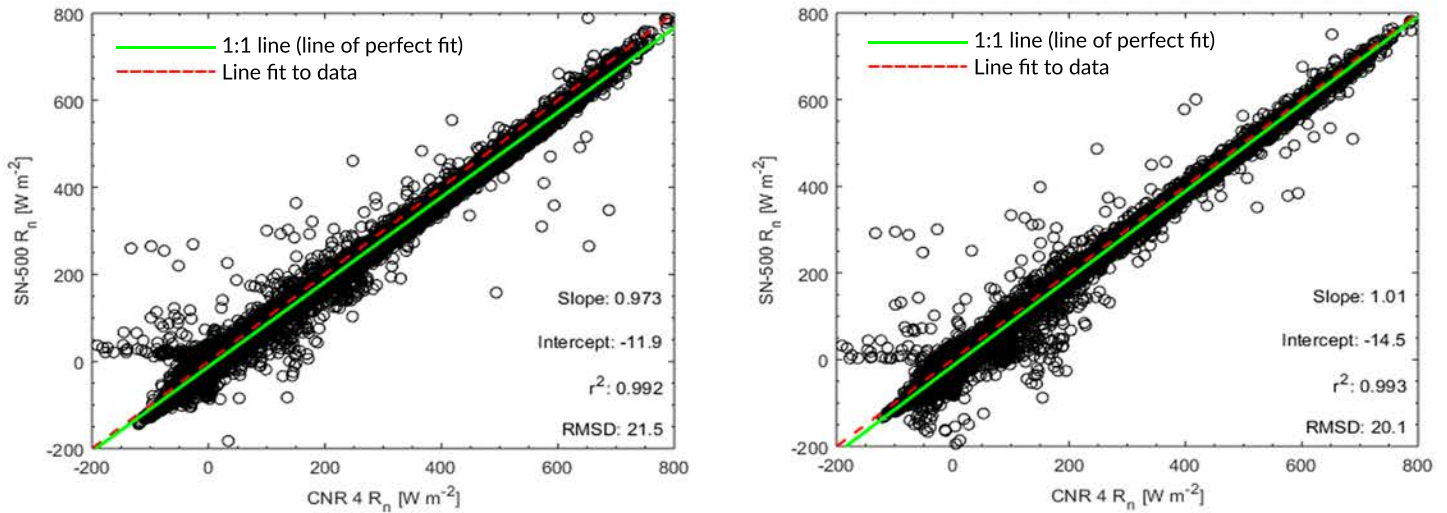


Figure 2: Apogee SN-500 and KZ CNR4 difference from -100 to +800 W per m2. (left side is replicate sensor one, right side is replicate sensor two). Green and red lines show AM and PM averages.

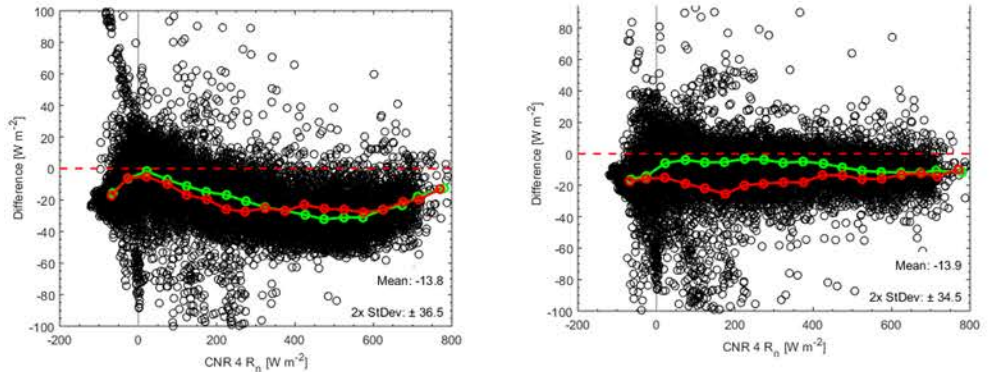


Figure 3: Apogee SN-500 and KZ CNR4 difference with solar zenith angle. (left side is replicate sensor one, right side is replicate sensor two). Green and red lines show AM and PM averages.

