

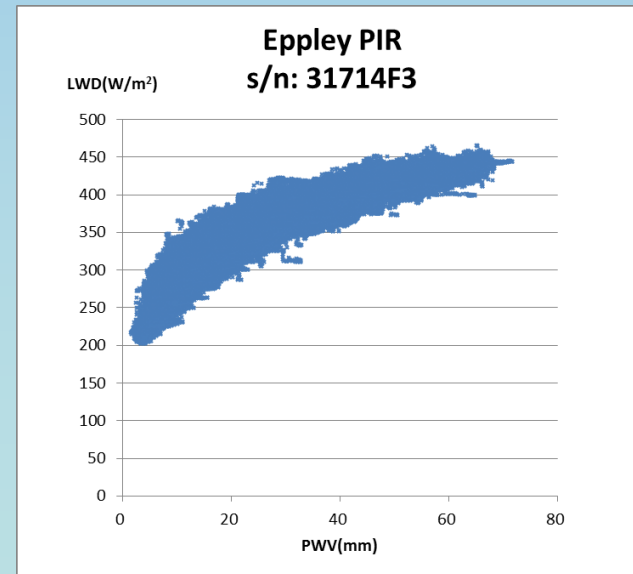
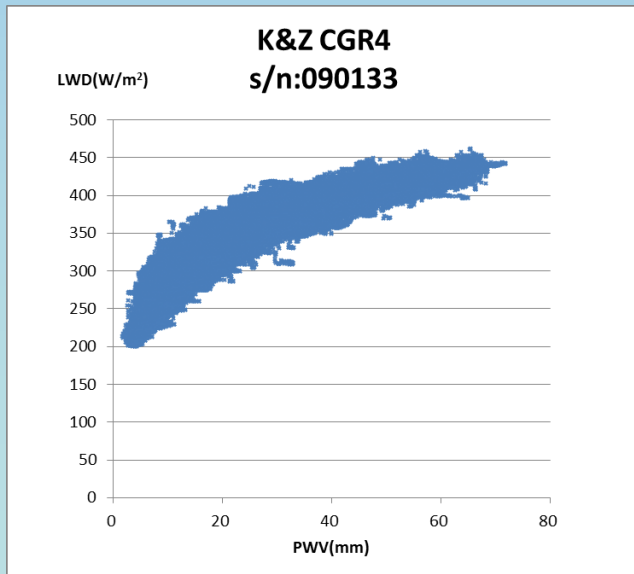
# BSRN IR Working Group report

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# WG IR Activities

## 1) How do CG4 and Eppley PIR behave in wet climate with high IWV?

- Nozomu : Comparison between CG4 & PIR for IWV at Tateno, Japan for IWV 10 mm to 70 mm



# WG IR Activities

2) Resolve discrepancies in IRIS-Pyrgeometer comparisons from DWD (Klaus) (Recalibration at PMOD/WRC)

➤ Klaus: Instruments participated at IPgC-II. Analysis is still ongoing

3) Organisation of next Pyrgeometer comparison during IPC-XII (2015)

➤ IPgC-II, Report to be written.

➤ Please contact Julian if you are interested in analysing some of the data.

4) Upwelling longwave - Which Calibration to use : BB or WISG? First check how large an effect to expect.

➤ Laurent: Check thermopile signals for upwelling radiation from Payerne

➤ Reda, Jörgen : Check signals from NREL data

# WG IR Activities

## 5) How-to eventually recalibrate BSRN Data

- Stephan : NF Project and presentation at BSRN. Report & Publication TBD
- Laurent: Investigate the uncertainty of 1 minute data versus 1 second data
- Reda : Document available from a previous ARM Meeting on this effect due to the  $T^4$  term.

## 6) Comparison of pyrgeometer calibrations from different sources

- Tom Kirk compared different calibration coefficients from his pyrgeometer which participated at IPgC-II – analysis ongoing. Report to be submitted within a few weeks.
- Reda: Comparison of NREL, NOAA, Eppley, PMOD calibrations: ARM science team meeting document to be forwarded to WG IR members
- Julian, Tom: Comparison of PMOD Eppley PIR cals (BB and WISG) with Eppley cals from Archive

# WG IR Activities

- 7) Stability of pyrgeometers over time: can a recent calibration be used backwards in time?
- Stephan: Analysis of BSRN calibration records from PMOD archive
  - Reda: NREL reruns calibrations with stable coefficients and compare to Eppley cal.
  - Julian, Joe, Reda : Investigate stability of K dome term over time from past BB calibrations.

# WG IR Activities - summary

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- 2) Resolve discrepancies in IRIS-Pyrgeometer comparisons from DWD
- 3) Organisation of next Pyrgeometer comparison during IPC-XII (2015)
- 4) Upwelling longwave - Which Calibration to use : BB or WISG?
- 5) How-to eventually recalibrate BSRN Data
- 6) Comparison of pyrgeometer calibrations from different sources
- 7) Stability of pyrgeometers over time: can a recent calibration be used backwards in time?