# ARCS Radiometer Verification Check Using Comparison Instruments Form

## I. Verification information

| | Verification Check |
|---|---|
| This is a (check which): | X |

| Date: | GMT Begin Time: | GMT End Date: | GMT End Time: | ARCS # |
|---|---|---|---|---|
| 10/9/2006 | 22:57 | 11/9/2006 | 00:43 | 3 |
| MM/DD/YY | | MM/DD/YY | | |

| | SKYRAD | GNDRAD | CAL Loggers 1 | CAL Loggers 2 |
|---|---|---|---|---|
| Configuration version | V060307.00 | V060518.00 | | |
| Campbell Logger Serial Numbers | 5972 | 5966 | | |

| Instrument / System: | TWP OMS Part Number(s): | Channels to be tested |
|---|---|---|
| PIRD1 | PIR | X |
| PIRG2 | PIR | X |
| PSPG | PSP | X |
| PSPD 8-48 | B&W | X |
| UVB | 501A V3 | |
| IRT | KT19.85 | |
| NIP | NIP | X |
| NET | REBS Q*7.1 | |
| PIR GNDRAD | PIR | |
| PSP GNDRAD | PSP | |
| MFRSR | MFR7-HEAD / MFRSR-Logger Board | |
| Tracker | KZ | |

Verify that serial number of Campbell loggers above are correct. (yes / no) **yes**

| Location (eg. PNNL, Manus): | Participant(s): | Issued by: | Signature(s): |
|---|---|---|---|
| Darwin | Troy Culgan | | |
| | | | |

Radiometer Simulator Unit

| Reference Instrument(s): | RSU # | nominal volts | 10-pin | 4-pin |
|---|---|---|---|---|
| | 7 | | 0 / .00113 | 0 / 0.00506 |
| | | nominal R | Case 10.0 K Ohms | |
| | | | Dome 100 K Ohms | |

Does push button illuminate (if not replace batteries) in RSU Unit **yes**

## II. Initial Values

note: values observed on Loggernet Computer by 1) opening loggernet, 2) selecting relevant logger, 3) clicking the connect button, 4) clicking numeric 1 from data displays, 5) clicking on ADD, 6) Select inlocsN1.

| | | | | | |
|---|---|---|---|---|---|
| for PIRs Select: | Dome_R | Case_R | Dome_T | Case_T | PIR_W/m2 |
| for PSPs and NIP Select | PSP_mV | PSP_W/m2 | | | |

Paste the above into fields to be read after attaching the RSU.

| **Channel of Instrument/System** | PSP_mV Reading when short applied | PSP_mV Reading when Voltage applied | PSP_W/m2 Reading when short applied | PSP_W/m2 Reading when Voltage Applied |
|---|---|---|---|---|
| **PSPG** | 0 | 5.05 | 0 | 601.51 |
| **PSPD 8-48** | 0 | 5.05 | -0.04 | 605.75 |
| **NIP** | 0 | 5.05 | 0 | 619.76 |
| **PSPgnd** | 0 | 5.02 | 0 | 597.62 |

| | Dome_R Reading when short applied | Case_R Reading when short applied | Dome_T Reading when short applied | Case_T Reading when short applied | PIR_W/m2 Reading when short applied | PIR_W/m2 Reading when voltage applied |
|---|---|---|---|---|---|---|
| **PIR1D** | 100.18 | 10 | 248.6 | 298.13 | 1372.85 | 1572.93 |
| **PIR2G** | 100.18 | 10 | 248.6 | 298.14 | 1372.9 | 1660.49 |
| **PIRgnd** | 100 | 10 | 248.6 | 298.14 | 1372.71 | 1582.26 |

| | Net _mv when short applied | Net_mv when voltage applied |
|---|---|---|
| **PIR1D** | 0 | 0.77 |
| **PIR2G** | 0 | 1.11 |
| **PIRgnd** | 0.09 | 0.8 |

| Document(s) Referenced: |
|---|
| PRO(RAD)-RSU |
| |

| Document(s) Updated: |
|---|
| PRO(RAD)-RSU |
| |

**PROBLEMS:**

**NOTES:**