FILE NAME: Station Record AK 013.doc

LAST UPDATED: 8/28/23

**Happy Valley, ALASKA**

### Station Record AK013

**STATION:** AK013, Ostercamp site (013)

|  |  |  |  |
| --- | --- | --- | --- |
| **PROJECT MANAGER:**  Phone:  FAX:  E-mail: | C.A. Seybold  USDA NRCS  Federal Bldg., Rm. 152  Lincoln, NE 68508  (402) 437-4132  (402) 437-5336  cathy.seybold@lin.usda.gov | F. E. Nelson  Department of Geography  University of Delaware  Newark, Delaware 19711  (302) 831-0852  (302) 831-6654  fnelson@udel.edu | Ostercamp |

**LOCATION:** Happy Valley, AK.

GPS (08/11/07): 69º 09’ 23.7” N

148º 50’ 14.9” W

1037 ft elevation

GPS (08/12/09): 69º 09’ 23.7” N

148º 50’ 14.9” W

1020 ft elevation

GPS (08/12/10): 69º 09’ 23.7” N

148º 50’ 14.9” W

1043 ft elevation

GPS (08/11/12): 69º 09’ 23.7” N

148º 50’ 15.0” W

1040 ft elevation

**INSTRUMENTATION:**

Summary

| Quantity | Description | Comments |
| --- | --- | --- |
| (1) | Campbell CR-10 datalogger SN:  Wiring panel SN: | Removed 2006 |
| (1) | Campbell CR-10X datalogger SN:  Wiring panel SN: | Installed 2007; Removed 2008 |
| 1 | Campbell CR-10X-2M datalogger SN:  Wiring panel SN: | Installed 2008 |
| 1 | Campbell AM416 multiplexer SN: |  |
| (1) | Campbell SM192 storage module. | Removed 2006. |
| 1 | Campbell Storage module SM4M | Installed 2007. |
| 1 | Campbell PS12LA power supply. |  |
| 1 | 12 Ah battery | Replaced 2008 |
| 1 | Campbell 10W Solar panel. |  |
| 1 | Campbell ENC 16/18 enclosure. |  |
| 1 | MRC soil temperature probe |  |
| 1 | Campbell 107 Air Temperature & Shield | Installed 2007. |

| MULTIPLEXER  POSITION | STACK | VITEL PROBE  SERIAL # | DEPTH  (in) | COMMENTS |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

**HISTORY:**  August 11, 2007: Station re-initiated. Station was not working. It was determined from the previous year that the station had a bad wiring panel. A CR10X wiring panel was installed with a CR10X data logger and storage module. The original wiring and resister were used when wiring the MRC to the datalogger. An air temperature sensor and shield was installed and mounted on an existing tripod about 40 ft away. Readings are taken every 20 min and hourly averages stored. Lithium battery was 3.129 V.

August 13, 2008: Station was not working properly. Was able to connect to datalogger, but could not see any measurements. Station time was not correct—wrong year, etc. Downloaded program and reset the clock. Everything appeared to be working okay. Lithium battery was 3.1 volts and battery was 13.1 volts. Downloaded storage module via datalogger at site. Swapped storage modules.

August 18, 2008: Replaced 12 Ahr battery. Replaced data logger with CR10X-2M that was came from Westdock7. Downloaded the Oster2 CSI program and everything seemed to be working okay. Air temp was reading 0.88 C and battery was 13.1 volts. Bring T-post for next time (to put solar panel on).

August 12, 2009: Downloaded data from data logger and swapped storage modules. Lithium battery is 3.12 volts. Station clock is 13 min behind—reset clock. Air temp was reading 13°C. MRC is 11 cm out of the ground. MRC\_1 was reading -248. Bring T-post for next time (to put solar panel on).

August 12, 2010: Downloaded data from data logger (with RECON) and swapped storage modules. Lithium battery is 3.13 volts; battery was 13.5 volts. Station clock is 1.5 min ahead. Air temp was 17.2°C. MRC is 11 cm out of the ground. Put solar panel on a garden post about 8 inches off the ground, facing south.

August 11, 2012: Downloaded data from data logger (with RECON) and swapped storage modules. Lithium battery is 3.14 volts; battery was 13.68 volts. Station clock is 6 min ahead; reset clock. Air temp was 9.4°C, calm, overcast with occasional drizzle, and buggy. MRC is 12 cm out of the ground.

August 12, 2014: Swapped storage modules.

August 15, 2015: AEK. Swapped storage modules. Really should replace tarp. Did not see MRC to measure. Swapped storage modules about 4:30 pm.

August 14, 2016: AEK. Swapped storage modules.

August 14, 2017: Swapped storage modules.

August 12, 2018: Swapped storage modules.

August 12, 2019: Swapped storage modules. The NEMA box was covered in a green tarp and the module removed says “Ostercamp” on it. This NEMA box was located very close to the CALM mast. Might consider not using tarps and just spray painting like the Sagwon sites; or replacing the tarp at this site.

August 12, 2021: Swapped storage modules. The MRC probe was 16.5 cm above the ground.

August 11, 2022: Swapped storage modules. The MRC probe was 18 cm above the ground.

August 8, 2023: Swapped storage modules. The MRC probe was 16 cm above the ground.

**DATA:**

DATALOGGER OUTPUT:

| COL | OUTPUT | UNITS | LOCATION | SENSOR | COMMENTS |
| --- | --- | --- | --- | --- | --- |
| 1 | Station ID | N/A | N/A | Campbell CR10 | 013 |
| 2 | Year | N/A | N/A | Campbell CR10 |  |
| 3 | Day | N/A | N/A | Campbell CR10 |  |
| 4 | Time | N/A | N/A | Campbell CR10 | AK savings time |
| 5 | Battery | Volts | Enclosure | Campbell CR10 |  |
| 6 | Int Temp | °C | Datalogger | Campbell CR10 |  |
| 7 | Air Temp | °C | 1.5 m | Campbell 107 |  |
| 8 | Soil Temp | °C | Vegetation | MRC Temperature Probe | Not working |
| 9 | Soil Temp | °C | Soil 0 cm | MRC Temperature Probe |  |
| 10 | Soil Temp | °C | Soil 5 cm | MRC Temperature Probe |  |
| 11 | Soil Temp | °C | Soil 10 cm | MRC Temperature Probe |  |
| 12 | Soil Temp | °C | Soil 15 cm | MRC Temperature Probe |  |
| 13 | Soil Temp | °C | Soil 20 cm | MRC Temperature Probe |  |
| 14 | Soil Temp | °C | Soil 25 cm | MRC Temperature Probe |  |
| 15 | Soil Temp | °C | Soil 30 cm | MRC Temperature Probe |  |
| 16 | Soil Temp | °C | Soil 35 cm | MRC Temperature Probe |  |
| 17 | Soil Temp | °C | Soil 45 cm | MRC Temperature Probe |  |
| 18 | Soil Temp | °C | Soil 70 cm | MRC Temperature Probe |  |
| 19 | Soil Temp | °C | Soil 95 cm | MRC Temperature Probe |  |
| 20 | Soil Temp | °C | Soil 120 cm | MRC Temperature Probe |  |
| 21 | Soil Temp | °C |  | MRC Temperature Probe | Reference value |

DATA PROCESSING ALGORITHMS:

DATA STORAGE AND ACCESS:

MRC1 veg °C, MRC2 0 cm °C, MRC3 5 cm °C, MRC4 10 cm °C, MRC5 15 cm °C, MRC6 20 cm °C, MRC7 25 cm °C, MRC8 30 cm °C, MRC9 35 cm °C, MRC10 45 cm °C, MRC11 70 cm °C, MRC12 95 cm °C, MRC13 120 cm °C, MRC ref.

**SOILS:**

CLASSIFICATION:

**LANDSCAPE:**

SLOPE:

ASPECT:

ELEVATION:

**VEGETATION:**

GROUND COVER:

CANOPY COVER:

**COMMENTS:**

**NOTES FOR NEXT STATION VISIT:** Routine maintenance.