| | |
|---|---|
| **Station name** | NASA SE |
| People present | |
| Purpose | Maintenance / installation / take-down / quick visit / emergency |
| Date | 19 June 2021 |

**Notes:** drilling using milwaukee

| **AWS to do list** | | **Check after maintenance** | | |
|---|---|---|---|---|
| **Part** | **Part shipped (Y/N)** | **Shipped part number** | **Part number upon departure.** | |
| **Radiometer** | | | | Clean? Y/N |
| | | | | |
| **Iridium modem IMEI number** | | | | |
| Inclinometer/compass | | Attached to the radiometer? Y/N | | |
| Satellite antenna | | | | |
| Wind sensor | | Black box pointing toward the radiometer (i.e. along the boom)? Y/N | | |
| Temperature / humidity assembly | | Fan spins? Y/N Sounds OK? Y/N | | |
| | | | | |
| Sonic ranger (lower) | | Old sensor with new membrane? Y/N | | |
| Sonic ranger (upper) | | Old sensor with new membrane? Y/N<br>NB: make sure not being buried next winter | | |
| Thermistor string | | Initial depth of upper sensor: | | |
| Solar panel | | Clean? Y/N | | |
| GPS antenna | | At top of logger enclosure? Y/N | | |
| Data logger | | Type is CR1000 or CR1000X or what? | | |
| Multiplexer | | Clicking during measurement cycle? Y/N | | |
| Logger enclosure | | Replaced (including everything inside)? Y/N<br>New desiccant bags? Y/N new | | |
| Battery box | | New box? Y/N<br>New desiccant bags? Y/N | | |
| Extension inserted? | | Length: —<br>Notes: | | |
| Mast | | New AWS mast? Y/N | | |

NSE 66° 28.667'
estim. 42° 29.651'
2021

SDOME 63° 8.924'
estim. 44° 48.988'
2021

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- NSE work 19 June included digging 2.5 m to recover existing AWS logger box
- light winds
- Norwegian: Bent did most of the digging.
- present JEB, APA, DUA, CLAN

  + Borek crew Jim + chantal.
- Norwegian skiers visited the site the day before.



Scale: 1 square = _____

NSE total time on site 5.00 hours.

solar panel top 50 cm

top of mast 5

" " of top 90

mast core 1 13cm

| run | g | | |
|---|---|---|---|
| 1 | 1778 | 33 cm | Q1 |

NSE old station 2021:
N 66.477759°
W 42.493844°

NSE new station 2021:
N 66.477778°
W 42.493665°

| | | | |
|---|---|---|---|
| 2 | 2689 g | 80 cm | Q1 |
| 3 | 1549 | 101 cm | Q1 |
| 4 | 2520 | 134 cm | Q2 |
| 5 | 1666 | 159 cm | Q2 |
| 6 | 2964 | 201 | Q1.5 |

Scale: 1 square = _____

NSE probing 19 June

hard layer @ 110 cm

PSS

178, 110*, 175, 173, 110*, 173

Hard layer: 125, 113, 113, 108, 105
109

PSS 172, 168, 168, 170

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Core run 2 9 cm

| | | | |
|---|---|---|---|
| 1 | 1924 g | | 83 cm @ 1 |
| 2 | 1210 g | PSS year 2020 | 117 cm @ 1 |
| 3 | 1130 g | | 40 cm @ 2 |
| | 386 g | | 13 cm |

underlain by ice hoar

170 cm total depth!

site: NSE 2021 old  date: June 19, 2021

lat:  lon:  elev:

who: JASON BOX

| | ρ | ρ | T | layering etc |
|---|---|---|---|---|
| depth | 79 | 1 | -9 | |
| 10-20 | 83 | 1 | -10 | thin @ 26 crust |
| 20-30 | 88 | 2 | -11 | |
| 40 | 89 | 2 | -11 | 2mm @ 36 inclined layer |
| 50 | 94 | 1 | -12 | @ 42 + 50 |
| 60 | 116 | 3 | -11 | |
| 70 | 100 | 3 | -13 | 4 mm hoar |
| 80 | 98 | 1 | -13 | @ 79 |
| 90 | 95 | 1 | -14 | |
| 100 | 98 | 3 | -15 | 103, 108 |
| 120 | 105 | 2 | -16 | |
| 130 | 95 | 1 | -17 | 136-137 |
| 140 | 98 | 2 | -16.5" | 142 hoar 0.5cm |
| 150 | 100 | 3 | -17.5 | crust 149 |
| 160 | 98 | 3 | -15.5 | " 158 |
| 170 | 103 | | -17.5 | ice lens 168 7mm |
| 180 | 114 | -760 | | 177-179 |
| 190 | -760 | 167 | -15 | most ice |
| 200 | 372 | | -15 | |
| | | 177cm | | |

rooms 165

⊗ 140-150 111+

⊗ 130-135 112

cm  9  Scale: 1 square = _____

NSE 19 June

old GCNet

top of upper boom radiometer @ -105 cm

final survey of new AWS

wind 1 278 cm

sonic " 232

Duffy bottom 259

enc door bottom 195

wind 2 270 395 cm
+125

137 373
375

boom difference is 120

lower boom 359
239

upper boom bottom

T string uppermost sensor
-30 cm