

IHOP 2002 Logbook Transcription: 5/24/02 – 6/3/02: Joseph Alfieri & Heather McIntyre

- 1) Site: 4
Date: 6/5/02
Arrive: 1105
Depart: 1200
Conditions: Overcast and raining. Light wind from the SW. Approx. 18C.
Observers: JU/JA
Maintenance: None
Measurements/Notes:
 - Trime soil moisture
 - Soil core taken
- 2) Site: 5
Date: 6/5/02
Arrive: 1215
Depart: 1300
Conditions: Overcast. Light wind from the SW. Approx. 17C.
Observers: JU/JA
Maintenance: None
Measurements/Notes:
 - Trime soil moisture
 - Soil core taken
- 3) Site: 6
Date: 6/5/02
Arrive: 1425
Depart: Overcast and raining. Light wind from the S.
Conditions: Observers: JU/JA
Maintenance: None
Measurements/Notes:
 - Partial Trime soil moisture; due to the wet conditions, this measure could not be completed
 - Soil core taken
- 4) 4) Site: 4
Date: 6/6/02
Arrive: 1120
Depart: 1255
Conditions: Clear with light S.breeze.
Observers: JU/JA/HM
Maintenance: Domes cleaned at 1226-1227.
Measurements/Notes:
 - LAI measured along transects and in view of the IR thermometer.
 - MSR measured along the transects and in the view of the IR thermometer.

- IR/veg ht. measured along transects and in view of the IR thermometer
- Photography of the site

5) Site: 5

Date: 6/6/02

Arrive: 1305

Depart: 1408

Conditions: Clear with light S.breeze. Approx 28C.

Observers: JU/JA/HM

Maintenance: Domes cleaned at 1311-1314.

Measurements/Notes:

- LAI measured along transects and in view of the IR thermometer.
- MSR measured along the transects and in the view of the IR thermometer.
- IR/veg ht. measured along transects and in view of the IR thermometer
- Photography of the site

6) Site: 6

Date: 6/6/02

Arrive: 1555

Depart: 1700

Conditions: Clear and calm. Approx 30C.

Observers: JU/JA/HM

Maintenance: Domes cleaned.

Measurements/Notes:

- LAI measured along transects and in view of the IR thermometer.
- MSR measured along the transects and in the view of the IR thermometer.
- IR/veg ht. measured along transects and in view of the IR thermometer
- Photography of the site

7) Site: 10

Date: 6/7/02

Arrive: 1425

Depart: 1730

Conditions: Clear and very warm. Approx. 36C.

Due to the rain during the previous week to 10 days, the site has greened up significantly.

Observers: JA/HM

Maintenance: Domes and krypton cleaned at 1700-1705. Also, relocated a mouse that had taken up residency in the datalogger box to an adjacent field; repaired the IR thermometer and heat flux plate that had been damaged; and, seal the wire port used by the mouse.

Measurements/Notes:

- Trime soil moisture measured
- Soil core taken 10m west of the flux tower at 1612
- LAI measured along transects and in view of the IR thermometer.
- MSR measured along transects and in the view of the IR thermometer.
- IR temp. measured along transects and in view of the IR thermometer

- Photography of the site

- 8) Site: 1
 Date: 6/8/02
 Arrive: 0950
 Depart: 1205
 Conditions: Clear, warm, and very windy. Strong wind from the south.
 Observers: JA/HM & Megan O'Connell.
 Maintenance: Domes cleaned at 1150.
 Measurements/Notes:
- Trime soil moisture measured
 - Soil core taken 10m west of the flux tower at 1120; again, due to the very loose nature of the soil at this site, the top layers of soil collapse. Thus, the only 2 levels – 0 to 5cm & 5 to 8cm – are discerned.
 - MSR measured along transects and in the view of the IR thermometer.
 - IR temp measured along transects and in view of the IR thermometer. No vegetation ht is measured since this is a bare field.
 - Photography of the site
- 9) Site: 2
 Date: 6/8/02
 Arrive: 1245
 Depart: 1600
 Conditions: Clear, warm, and very windy. Strong wind from the south.
 Observers: JA/HM & Megan O'Connell
 Maintenance: Domes cleaned at 1257.
 Measurements/Notes:
- Trime soil moisture measured
 - Soil core taken 5m west of the solar panel at 1310.
 - MSR measured along transects and in the view of the IR thermometer.
 - LAI taken along transects. Due to the very high winds the metal frame of the umbrella utilized with LAI was twisted and broken.
 - IR temp and veg ht measured along transects and in view of the IR thermometer.
 - Photography of the site
- 10) Site: 3
 Date: 6/9/02
 Arrive: 1132
 Depart: 1540
 Conditions: Clear and hot with light S breeze. Approx. 31C.
 Observers: JA/HM
 Maintenance: Domes cleaned at 1249
 Measurements/Notes:
- Trime soil moisture measured
 - Soil core taken at the SW corner of the electric fence at 1218
 - MSR measured along transects and in the view of the IR thermometer.

- LAI taken along transects and in the view of the IR thermometer.
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Xylem potential of sage measured.
- Photography of the site

11) Site: 10

Date: 6/9/02

Arrive: 1545

Depart: 1515

Conditions: Clear and hot

Observers: JA/HM

Maintenance: Checked the equipment to ensure that it was fully operational. Also, checked to determine if the steel wool plugs remained in place.

12) Site: 4

Date: 6/12/02

Arrive: 1130

Depart: 1410

Conditions: Partly cloudy and warm. Approx 28C. Strong wind from the South

Ground still quite damp due to overnight storms.

Observers: JA/HM

Maintenance: Cleaned and checked level of domes at 1138-1140.

Measurements/Notes:

- Trime soil moisture
- Soil core taken at 1210 8m west of radiometer sawhorses
- MSR measured along transects and in the view of the IR thermometer.
- LAI taken along transects and in the view of the IR thermometer. Location 7 omitted b/c of standing water.
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Porometry taken along transects on the clump grass common to the southern portion of the site. Locations 3 & 7 omitted due to the wetness of the ground.
- Photography of the site

13) Site: 5

Date: 6/12/02

Arrive: 1425

Depart: 1625

Conditions: Partly cloudy and warm. Approx 31C. Strong wind from the South

Observers: JA/HM

Maintenance: Cleaned and checked level of domes 1525.

Measurements/Notes:

- Trime soil moisture
- Soil core taken at 1500 2m west of solar panel
- LAI taken along transects and in the view of the IR thermometer.
- MSR measured along transects and in the view of the IR thermometer.
- IR temp and veg ht measured along transects and in view of the IR thermometer.

- Photography of the site
- 14) Site: 6
Date: 6/12/02
Arrive: 1700
Conditions: T-storms.
Site characterization not conducted due to inclement weather.
- 15) Site: 9
Date: 6/14/02
Arrive: 0935
Depart: 1240
Conditions: Cool and clear with a few scattered clouds. A light wind from NNW
Observers: JA/HM & Dev N
Maintenance: Cleaned and checked level of domes 0950.
Measurements/Notes:
 - Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
 - Soil core taken at 945am 2m west of solar panel
 - Porometry taken along transects and in the view of the IR thermometer. Also, the porometers of JA and DN were compared and found to agree satisfactorily.
 - LAI taken along transects and in the view of the IR thermometer.
 - MSR measured along transects and in the view of the IR thermometer.
 - IR temp and veg ht measured along transects and in view of the IR thermometer.
 - Photography of the site
- 16) Site: 8
Date: 6/14/02
Arrive: 1430
Depart: 1704
Conditions: Clear with a few scattered clouds. A light wind from NNW. 26C.
Observers: JA/HM
Maintenance: Cleaned and checked level of domes 1442.
Measurements/Notes:
 - Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
 - Soil core taken 5m west of the radiometer sawhorse at 1505
 - Porometry taken along transects and in the view of the IR thermometer..
 - LAI taken along transects and in the view of the IR thermometer.
 - MSR measured along transects and in the view of the IR thermometer.
 - IR temp and veg ht measured along transects and in view of the IR thermometer.
 - Photography of the site
- 17) Site: 7
Date: 6/14/02

Arrive: 1732

Depart: 1916

Conditions: Clear with a few scattered clouds. A light wind from NNW 26C.

Observers: JA/HM

Maintenance: Cleaned and checked level of domes 1821.

Measurements/Notes:

- Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
- Soil core taken at 1745 2m west of solar panel
- Porometry taken along transects and in the view of the IR thermometer..
- LAI taken along transects and in the view of the IR thermometer.
- MSR measured along transects and in the view of the IR thermometer.
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Photography of the site

18) Site: 1

Date: 6/15/02

Arrive: 1515

Depart: 1645

Conditions: Clear with a few scattered clouds. Strong southerly winds. 29C.

Observers: JA/HM

Maintenance: Cleaned and checked level of domes 15-18-1520.

Measurements/Notes:

- Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
- Soil core taken at 10m west of the flux tower at 1540.
- MSR measured along transects and in the view of the IR thermometer.
- IR temp measured along transects and in view of the IR thermometer. Additionally, the effect of the angle at which the IR thermometer view the surface was investigated and found to be negligible.
- Photography of the site

19) Site: 2

Date: 6/15/02

Arrive: 1715

Depart:

Conditions: Heavy clouds to the north; few scattered clouds to the south. Very strong winds. Warm. 32C.

Observers: JA/HM

Maintenance: Cleaned and checked level of domes 1718.

Measurements/Notes:

- Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
- Soil core taken 5m west of solar panel at 1745.

Characterization aborted due to the rapid approach of severe thunderstorms from the northwest.

- 20) Site: 10
Date: 6/16/02
Arrive: 1004
Depart:
Conditions: Clear with a few scattered clouds with a light wind. 21C.
Observers: JA/HM
Maintenance: Cleaned and checked level of domes & Krypton 1030-1040.
Data download (s: 109061 e: 227069)
Measurements/Notes:
 - Trime soil moisture along transects and next to the soil core and profilers.
 - Soil core taken at 1125 5m west of the flux tower.
 - Porometry taken along transects and in the view of the IR thermometer..
 - LAI taken along transects and in the view of the IR thermometer.
 - MSR measured along transects and in the view of the IR thermometer at 1740.
 - IR temp and veg ht measured along transects and in view of the IR thermometer.
 - Photography of the site.
- 21) Site: 2
Date: 6/16/02
Arrive: 1505
Depart: 1659
Conditions: Clear with a few scattered clouds. 25C.
Observers: JA/HM
Maintenance: None
Measurements/Notes:
 - Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
 - Soil core taken 5m west of solar panel at 1520.
 - MSR measured along transects and in the view of the IR thermometer.
 - LAI measured along transects and in the view of the IR thermometer
 - IR temp and veg ht measured along transects and in view of the IR thermometer.
 - Porometry measured along transects
- 22) Site: 3
Date: 6/16/02
Arrive: 1810
Depart: 1850
Conditions: Clear with a few scattered clouds.
Observers: JA/HM
Maintenance: None
Measurements/Notes:
 - MSR measured along transects and in the view of the IR thermometer.
 - LAI measured along transects and in the view of the IR thermometer

23) Site: 3 (standard and diurnal characterization)

Date: 6/17/02

Arrive: 0600

Depart: 1930

Observers: JA/HM

Maintenance: Domes cleaned at 1005

Measurements/Notes:

Diurnal measurements taken on 5 sage plants within 5m of flux tower
at 0700, 1000, 1400, 1800

Xylem Potential

Porometry

Trime soil moisture

IR temp/ veg ht

Standard

- Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
- Soil core taken 5m west of radiometer sawhorses at 1116.
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- LAI taken under optimal conditions at dawn was compared to LAI measured using the umbrella method; The pair of test do not correspond.

24) Site: 6

Date: 6/19/02

Arrive: 1300

Depart: 1530

Conditions: Clear and warm with strong southerly wind. 33C. The wheat field has been harvested.

Observers: JA/HM

Maintenance: Domes cleaned 1303-1305

Measurements/Notes:

- Trime soil moisture along transects and next to the soil core, profilers, and radiometer.
- Soil core taken at 1305 5m west of solar panel.
- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Porometry measured along transects
- Photographs taken.

25) Site: 9

Date: 6/20/02

Arrive: 1000

Depart: 1122

Conditions: Clear. South wind. 29C

Observers: HM/JU

Maintenance: Electric fence knocked down and has no current, makeshift repair with electric/duct tape to set up again. Notify ATD about fence.

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Photographs taken
- Veg samples collected

26) Site: 8

Date: 6/20/02

Arrive: 1150

Depart: 1258

Conditions: Mostly clear, small cumulus forming. Approx.20 knot winds from the south. 31C. Humid.

Observers: HM/JU

Maintenance: none

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Veg. samples collected
- Photographs taken

27) Site: 7

Date: 6/20/02

Arrive: 1331

Depart: 1500

Conditions: increasing cumulus, beginning partly cloudy, light south winds. 33C

Observers: HM/JU

Maintenance: None

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Photographs taken.
- veg. samples collected

28) Site: 5

Date: 6/24/02

Arrive: 1450

Depart: 1530

Conditions: Clear and warm with moderate south wind. 35C.

Observers: JA/HM

Maintenance: None

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Photographs taken.

29) Site: 6

Date: 6/24/02

Arrive: 1620

Depart: 1730

Conditions: Clear and calm. Very warm, 36C.

Field in the process of being plowed under.

Observers: JA/HM

Maintenance: None

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Photographs taken.

30) Site: 3

Date: 6/27/02

Arrive: 1115

Depart: 1230

Conditions: Sunny, clear. Calm winds, Hot, 95F+.

Observer: HM

Maintenance: None

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer
- IR temp and veg ht measured along transects and in view of the IR thermometer.
- Photographs taken.

31) Site: 2

Date: 6/27/02

Arrive: 1330

Depart: 1415

Conditions: Sunny, cumulus developing. Winds moderate from the south, Hot, 95F+.

Observer: HM

Maintenance: None

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- LAI measured along transects and in the view of the IR thermometer *LAI ran out of RAM during the last few measurements
- IR temp and veg ht measured along transects and in view of the IR thermometer.

Photographs taken

32) 33) Site: 1

Date: 6/27/02

Arrive: 1500

Depart: 1630

Conditions: Sunny, cumulus building from the south. Strong southerly winds, Approx. 20-30 knots, Hot, 95F+.

Observer: HM

Maintenance: None

Measurements/Notes:

- MSR measured along transects and in the view of the IR thermometer.
- IR temp measured along transects and in view of the IR thermometer. *IR measurement was taken pointing down only.
- No LAI was taken, the field had recently been plowed.
- Photographs taken.