

# Davis Weather Station Log ATM-01 Dysart Rd. – C. till

Site Location

Lat: 42.3754 N Long: 92.3011 W Elev: 295 m

Access: 5 mi S. from Waterloo on Dysart Rd;

Between fields ~120 m from road

**Cover Conditions** 

2004 season: soybeans; Sprout 5/10, FullCover 7/??, Harvest

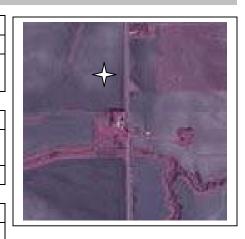
10/1??

2005 season:

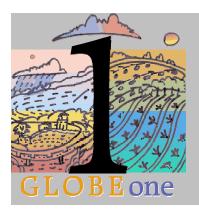
**Soil Characteristics** 

**BD=1.30** +/- **0.20**; 20 cm org silt-clay to sandy y/o clay

No slope



Data Log		
Dates	Notes	
5/10 to 12/31/04	Soil temp data looks good! Air temp range: 33 to –25 C	
5/10 to 11/2/04	Precip data looks good! Major events: 5/22 and 8/4	
6/2 to 10/10/04	Soil moisture data: SM@10cm missing (value ~200; reset to99)	
	(Kurt waited until crops were out to replace this sensor)	
	Surface drying noticeable after 7/15. Profile is driest SeptOct.	



# Davis Weather Station Log ATM-02 Dysart Rd – no till

Site Location

Lat: 42.3717 N Long: 92.2916 W Elev: 301 m

Access: 5.25 mi S. from Waterloo on Dysart Rd; E. on farm road to old farmstead, 60 m into field

**Cover Conditions** 

2004 season: soybeans; Sprout 5/10, FullCover 7/??, Harvest

9/??

2005 season:

**Soil Characteristics** 

**BD=1.65** +/- **0.10**; very sandy – all levels

S facing slope



Data Log		
Dates	Notes	
5/10 to 12/31/04	Period of record. Air temp range: 33 to –25 C	
6/7 to 8/19	Precip. Missing – tipping bucket had been restricted by a spider web	
	Soil moisture: surface drying after 7/15; profile is driest AugSept.	
8/19 to 9/13	All soil moisture and temperature missing – data logger problem??	
9/13 to 9/19	Problems with time code (behind by 18.5 hrs) corrected by adding	
	.7604167 to archived SM & ST values between these dates.	
9/12 to 11/2	SM@60cm is constantly above 70 cbars – check this spring if reading	
	does not come down.	



### Davis Weather Station Log ATM-03 Jesup Rd. – C. till

Site Location

Lat: 42.4109 N Long: 92.1180 W Elev: 317 m

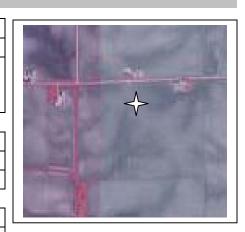
Access: 9 mi E. from Waterloo on US 20; 2.5 mi S. on ?? Rd; .25 mi E on Jesup Rd; 150m S. from rd opposite house below minor terrace

### **Cover Conditions**

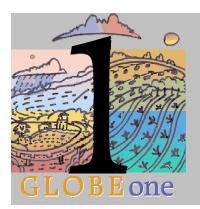
2004 season – corn; Sprout 5/10, FullCover 7/??, Harvest 9/?? 2005 season -

### **Soil Characteristics**

BD=1.40 +/- 0.10; 60 cm org clay loam to y/o sandy clay No slope



Data Log		
Dates	Notes	
5/10 to 12/31/04	Soil temp data looks good! Air temp range: 33 to –25 C	
5/10 to 11/2/04	Precip. data looks good! Major events: 5/21-5/23	
5/10 to 11/2/04	Soil moisture data looks good! Surface drying noticeable after 6/6.	
	Profile is driest AugOct.	



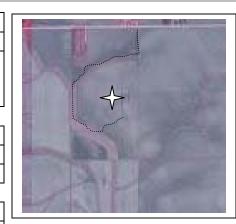
# Davis Weather Station Log ATM-04 Jesup Rd. – no till

	Site Location	
Lat: 42.3952 N	Long: 92.1153	Elev: 307 m
Access: 9 mi E. from	n Waterloo on US 20;	2.5 mi S. on ??
Rd: 1 mi E on Jesur	o Rd: 1 mi S on <mark>??</mark> Rd:	75 mi W on <mark>??</mark>

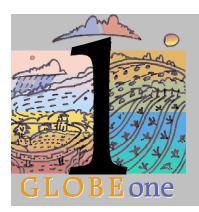
Rd; follow pasture strip S, as shown.

<b>Cover Conditions</b>
2004 season – corn; Sprout 5/10, FullCover 7/??, Harvest 9/??
2005 season -

### Soil Characteristics BD=1.60 +/- 0.10; 15 cm org. clay loam to y/o sandy clay SW facing slope



Dates	N. A
	Notes
5/10 to 12/31/04	Period of record. Air temp. range: 33 to –25 C
	Major precip events: 5/21-5/23
	Soil moisture: surface drying after 6/24; Profile is driest AugOct.
7/23 to 8/5/04	All soil moisture and temperature missing – missing file???
10/22 to 11/2/04	All soil moisture and temperature missing – missing file???



# Davis Weather Station Log ATM-05 Big Rock Rd. – C. till

 Site Location

 Lat: 42.5587 N
 Long: 92,2902 W
 Elev: 319 m

Access: 4 mi N on 63; 2.5 mi E on Big Rock Rd; Follow pasture strip NE to 2<sup>nd</sup> draw to NW to end

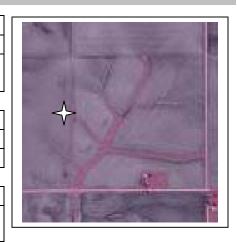
**Cover Conditions**2004 season – corn; Sprout 5/10, FullCover 7/??, Harvest 9/??

2005 season -

**Soil Characteristics** 

**BD=1.30** +/- **0.10**; 70 cm org. loam to y/o clay

E facing slope



	Data Log		
Dates	Notes		
5/10 to 12/31/04	Period of record. Air temp. range: 33 to –25 C		
	Major precip. events: 5/21-5/23, 8/27		
	Soil moisture: surface drying after 7/3; profile is not too dry		
10/10 to 11/3/04	All soil moisture and temperature missing – missing file???		



# Davis Weather Station Log ATM-06 Big Rock Rd. – no till

Site L		
Lat: 42.5631 N Long:	92.2854 Elev: 33	31 m

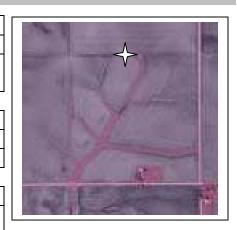
Access: 4 mi N on 63; 2.5 mi E on Big Rock Rd; Follow pasture strip NE to end.

### **Cover Conditions**

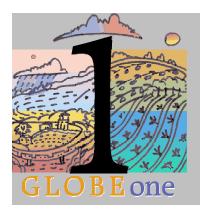
2004 season – corn; Sprout 5/10, FullCover 7/??, Harvest 9/?? 2005 season -

### **Soil Characteristics**

BD=1.10 +/- 0.05; 10 cm org. clay loam to rocky y/o clay, water Minor SE facing slope



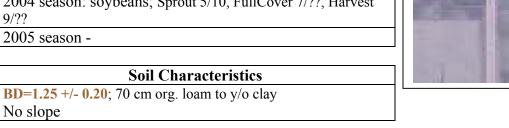
Data Log		
Dates	Notes	
5/10 to 12/31/04	Period of record. Air temp. range: 32 to –25 C	
	Major precip. events: 5/21-5/23, 8/27	
	Soil moisture: surface drying after 6/5; profile is driest SeptOct.	
10/22 to 11/3/04	All soil moisture and temperature missing – missing file???	



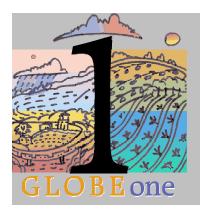
### Davis Weather Station Log ATM-07 *Hwy 63 N − C. till*

**Site Location** Lat: 42.6069 N Long: 92.3352 W Elev: 327 m Access: 7.5 mi N on Hwy 63; 90 m E off road opposite house

**Cover Conditions** 2004 season: soybeans; Sprout 5/10, FullCover 7/??, Harvest



Data Log		
Dates	Notes	
5/10 to 12/22/04	Soil temp data looks good! Air temp range: 33 to –25 C	
5/10 to 11/21/04	Precip. data looks good! Major events: 8/27	
5/10 to 11/21/04	Soil moisture data looks good! Surface drying noticeable after 6/9.	
	Profile is driest in Sept.	
	1	



### Davis Weather Station Log ATM-08 Hwy 63 N – no till

Site LocationLat: 42.5961 NLong: 92.3329 WElev: 318 mAccess: 7 mi N on Hwy 63; .25 mi E on ?? Rd; follow

pasture strip S then E to within 50 m of site to S

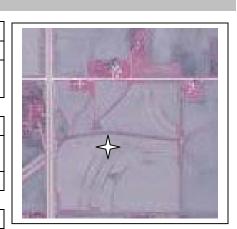
### **Cover Conditions**

2004 season: soybeans; Sprout 5/10, FullCover 7/??, Harvest 9/??

2005 season -

### **Soil Characteristics**

BD=1.45 +/-0.05; Soil: 70 cm org. loam to rocky y/o clay NNW facing slope



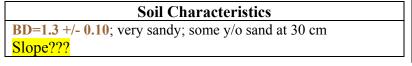
Data Log		
Dates	Notes	
5/10 to 12/31/04	Soil temp data looks good! Air temp range: 33 to –25 C	
5/10 to 11/3/04	Precip. data looks good! Major events: 8/27	
5/10 to 11/3/04	Soil moisture data looks good! Surface drying noticeable after 7/19.	
	Profile is driest SeptOct.	

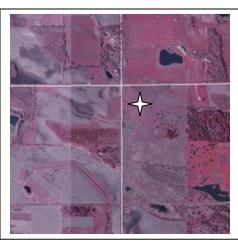


### Davis Weather Station Log ATM-09 Sand Prairie

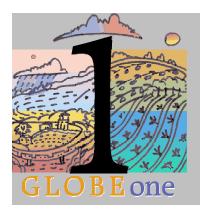
Site Location		
Lat: 42.5951 N	Long: 92.5526 W	Elev: 317m
Access:		

Cover Conditions		
2004 season – natural prairie		
2005 season -		





Data Log				
Dates	Notes			
5/12 to 12/31/04	Soil temp data looks good! Air temp range: 32 to –25 C			
5/12 to 11/21/04	Precip. data looks good! Major events: none > 20 mm			
5/12 to 11/21/04	Surface drying noticeable after 9/21. Profile stays relatively moist.			
5/25 to 5/31 to 7/21	Complete to regular gaps in SM and ST data due to data logger problem			
7/21/04	Data logger replaced			
7/21 to 9/19/04	SM@10cm and SM@30cm wires damaged by animal bite (reset to99)			



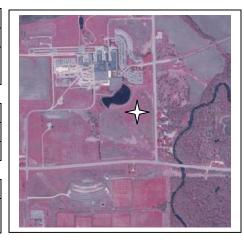
### Davis Weather Station Log ATM-10 John Deere Prairie

	Site Location	
Lat: 42.4727 N	Long: 92.4177 W	Elev: 308 m
Access: 2 I S on Hwy	7 63; 1 mi W on <mark>??</mark>	Rd; .25 mi N on ??
Rd; park in far SE co	rner of employee lo	ot and follow trail S

Cover Conditions		
2004 season - prairie		
2005 season -		

### **Soil Characteristics**

BD=1.6 +/- 0.30; Soil: 15 cm org loam grading to dark streaked y/o clay loam; SE facing slope



Data Log			
Dates	Notes		
5/9 to 12/31/04	Soil temp data looks good! Air temp range: 32 to –25 C		
5/9 to 11/2/04	Precip. data looks good! Major events: 5/21-5/23, 8/4		
5/9 to 11/2/04	Soil moisture data looks good! Surface drying noticeable after 6/17. Profile is driest SeptOct.		
<mark>9/??</mark> To 9/19	Data logger time code is 1 hr behind (uncorrected)		