



Water Stress

- W_1 = Well watered
- W_2 = Slight stress
- W_3 = Moderate Stress

Nitrogen Stress

- N_1 = 168 Kg/ha
- N_2 = 336 Kg/ha
- N_3 = 504 Kg/ha
- N_4 = 672 Kg/ha

Figure 81.1. Design and treatment descriptions of moisture and nitrogen stress experiments on Managed Soil Moisture System plots.

LARSPEC Identification Record Codes

1. Level of Factor Codes.

Factor		Level	
Code	Description	Code	Description
1:	Water Stress	1:	Well watered
		2:	Slight stress
		4:	Moderate stress
2:	Nitrogen fertilization	2:	336 kg/ha
		3:	504 kg/ha
		4:	672 kg/ha

2. Experimenter Parameters

Experimenter parameter 01: Grain yield in kilograms per hectare.

References

Reetz, H.F. Hodges, and R. F. Pale. 1978. Managed soil moisture system for studying plant water relations under soil field conditions. Crop Science 18:

Illumination Conditions for Spectral Data Collection

Date	Day of Year	Time Period		Solar Zenith Angle Range		Solar Azimuth Angle Range	Cloud Cover
		Start	Stop	max	min	max	
		GMT		degrees		degrees	%
6/13	164	18:15	20:22	18	- 37	200-254	0
6/14	165	18:44	19:09	21	- 24	219-231	?
6/22	173	19:22	20:02	26	- 33	236-249	?
6/24	175	19:08	19:32	24	- 27	230-239	?
6/28	179	16:36	16:55	23	- 21	132-141	10-20
¹ 7/5	186	15:57	16:20	30	- 26	117-125	0
² 7/5	186	19:26	19:57	26	- 32	235-246	20
7/6	187	19:54	20:25	31	- 37	244-253	2
¹ 7/11	192	14:51	22:35	42	- 18 - 61	101-276	0-5
² 7/11	192	17:59	18:31	18	- 20	184-206	5
7/20	201	15:24	15:43	37	- 34	110-115	10-20
8/3	215	15:55	16:12	34	- 32	123-129	2
8/8	220	14:53	17:12	46	- 26	108-157	0
8/21	233	15:33	16:03	41	- 37	123-132	3
8/22	234	16:52	16:59	31	- 31	151-155	?
8/31	243	18:37	18:43	33	- 34	202-205	15

¹78100801

²78105801

Dates Spectral Data Collected (Exotech 20C):

Plot Number	6/13	6/14	6/28	7/5	7/11	7/20	8/3	8/8	8/21	8/31
	Number of Observations Collected									
101	2	2	2	2	48	2	2	20	2	2
102	2	2	-	-	-	-	-	-	-	-
103	2	2	-	-	-	-	-	-	-	-
104	2	2	-	-	-	-	-	-	-	-
105	2	-	1	1	48	2	2	21	2	3
106	-	-	-	-	-	-	-	-	-	-
107	-	-	-	-	-	-	-	-	-	-
108	-	-	-	-	-	-	-	-	-	-
109	2	-	2	2	-	2	2	-	-	-
110	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-
113	2	-	1	1	-	2	2	-	2	-
114	2	-	-	-	-	-	-	-	-	-
115	2	-	-	-	-	-	-	-	-	-
116	2	-	-	-	-	-	-	-	-	-

Dates Spectral Data Collected (Exotech 100):

<u>Plot Number</u>	<u>6/22</u>	<u>6/24</u>	<u>7/5</u>	<u>7/6</u>	<u>7/11</u>	<u>8/22</u>
	Number of Observations Collected					
101	4	4	4	4	4	4
102	4	2	4	4	4	-
103	4	2	4	4	4	-
104	4	4	-	4	4	-
105	4	4	4	4	4	4
106	-	-	-	-	-	-
107	-	-	-	-	-	-
108	4	4	-	4	4	-
109	4	4	4	4	4	4
110	-	-	-	-	-	-
111	-	-	-	-	-	-
112	4	4	-	4	4	-
113	4	4	4	4	4	4
114	4	2	4	4	4	-
115	4	2	4	4	4	-
116	4	4	4	4	4	-