

LARSPEC Identification Record Codes:

1. Plot Number

Plot Number	Description
841	Soybeans - 100% soil cover
842	Russell soil - 0% soil cover
843	3M flat black - 0% 'soil' cover
844	3M flat white - 0% 'soil' cover
851	Soybeans in rows with soil background
901	Soybeans in rows with 3M flat black background
951	Soybeans in rows with 3M flat white background

2. Experimenter Parameters

Experimenter parameter 01: Row direction in degrees clockwise from North.

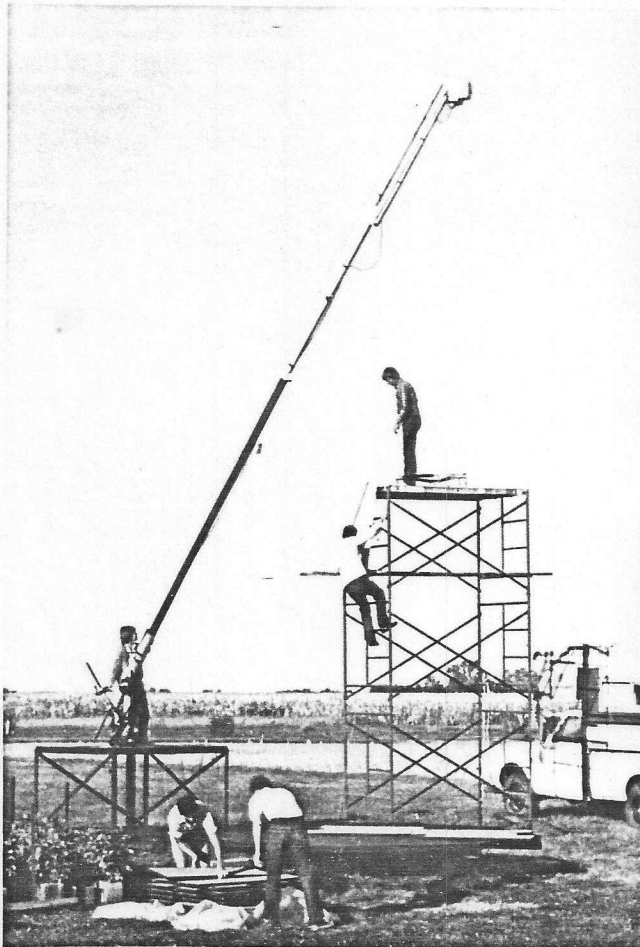
Experimenter parameter 02: Unique observation code for each scene (soil, 3M flat black, soybean/soil background, etc.) and row direction.

Experimenter Parameter 2	Description
841	Soybean - 100% soil cover
842	Russell soil
843	3M flat black
844	3M flat white
851-887	37 row directions of soybeans/soil, 270, 265, 260, ...90 degrees, respectively
901-937	37 row directions of soybeans/black 270, 265, 260,... 90 degrees, respectively
951-987	37 row directions of soybeans/white, 270, 265, 260,...90 degrees, respectively

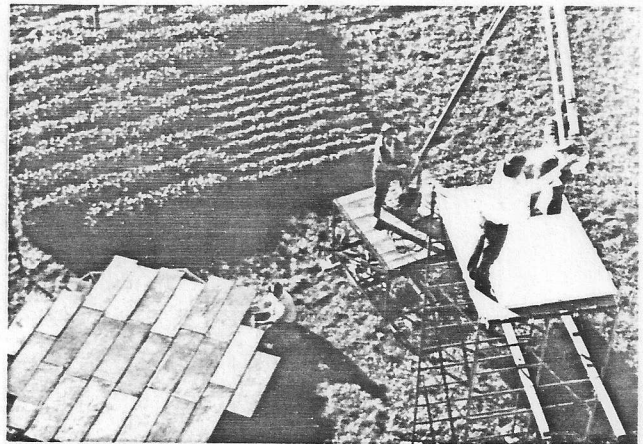
This experimenter parameter is envisioned to be used when updating the identification records.

3. Scene Type

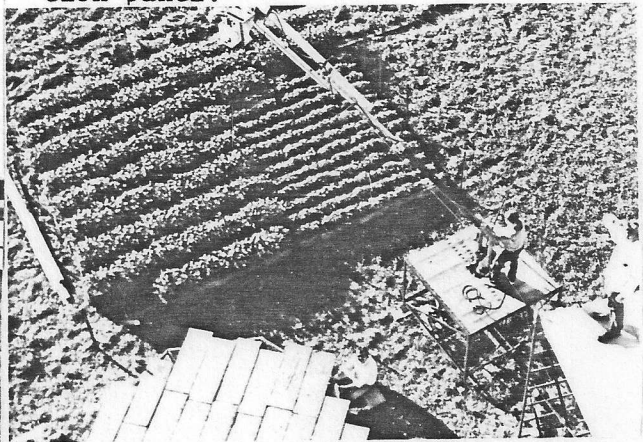
The number after the scene description, eg. SOY/SOIL 0, represents the angular position of the turn table per predefined marks. The angular position given in the scene type is related to the row direction by: row direction = 270 - angular position of turn table.



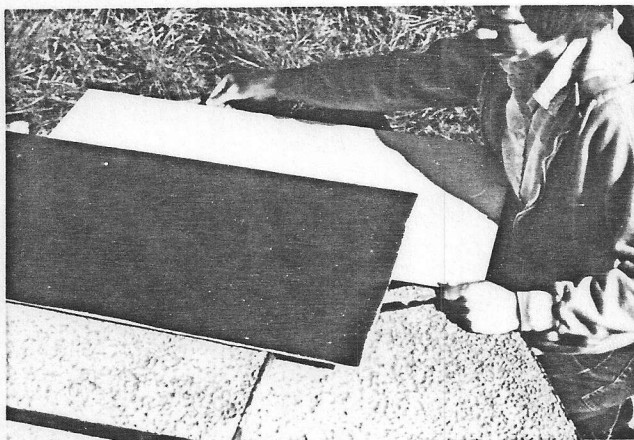
Instrument boom, turntable, and calibration tower.



Instrument positioned over calibration panel.



Instrument positioned over soil trays.



Three backgrounds used for experiment.



Soybeans on turntable with white background.

Figure 122.1 Illustration of apparatus used for soybean row direction experiment including turntable, boom for Landsat band radiometer, and reflectance calibration tower. Boxes of soybeans used on turntable are shown in upper right photos.

Illumination Conditions for Spectral Data Collection

Date: 9/24/80
Day of Year: 268

Plot Number	Replication Number	Time Start	Period Stop	Solar Zenith Angle Range	Solar Azimuth Angle Range	Cloud Cover
				max - min - max		
		GMT		degrees	degrees	%
844	1	17:15	17:15	41	170	5
843	1	17:17	17:17	41	171	5
842	1	17:21	17:21	41	173	5
841	1	17:31	17:33	41	177	5
851	1	17:49	17:57	41	184-187	5
951	1	18:09	18:16	41	191-194	1
901	1	18:28	18:38	42 - 43	198-202	1
851	2	18:50	18:58	43 - 44	206-209	1
951	2	19:09	19:17	45 - 46	212-215	1
901	2	19:28	19:35	47 - 48	218-220	1
851	3	19:48	19:56	50 - 51	224-226	1
951	3	20:11	20:20	53 - 54	230-232	1
901	3	20:46	20:53	58 - 60	238-240	1
851	4	21:08	21:14	62 - 63	243-244	1
951	4	21:26	21:32	65 - 66	247-248	1
901	4	21:45	21:51	69 - 70	250-252	1
841	2	22:21	22:22	75	257	1

Illumination Conditions for Spectral Data Collection (con't.)

Date: 9/29
 Day of Year: 273

Plot Number	Replication Number	Time Start	Period Stop	Solar Zenith	Solar Azimuth	Cloud Cover
				Angle Range	Angle Range	
				max - min - max		
GMT				degrees	degrees	%
844	1	16:09	16:09	47	149	0
843	1	16:11	16:12	47	149-150	0
842	1	16:15	16:15	47	151	0
841	1	16:29	16:32	45	155-156	0
851	1	16:55	17:00	44 - 43	164-166	0
951	1	17:18	17:24	43	173-175	0
901	1	17:36	17:44	42	179-182	0
851	2	17:54	18:00	43	186-188	0
951	2	18:11	18:16	43	192-194	0
901	2	18:27	18:32	44	198-199	0
851	3	18:41	18:45	45	203-204	0
951	3	18:57	19:02	46 - 47	208-209	0
901	3	19:15	19:21	48 - 49	214-215	0
851	4	19:32	19:38	50	219-220	0
951	4	19:50	19:55	52 - 53	224-225	0
901	4	20:06	20:11	54 - 55	228-229	0
851	5	20:27	20:32	57 - 58	233-234	0
951	5	20:42	20:46	60	236-237	0
901	5	20:55	21:03	62 - 63	239-240	0
841	2	21:11	21:14	64 - 65	243	0
842	2	21:23	21:24	66 - 67	245	0
844	2	21:30	21:31	68	246-247	0
843	2	21:34	21:35	68	247	0

Illumination Conditions for Spectral Data Collection (con't.)

Date: 9/30/80
 Day of Year: 274

Plot Number	Replication Number	Time Period		Solar Zenith Angle Range	Solar Azimuth Angle Range	Cloud Cover
		Start	Stop	max - min - max		
		GMT		degrees	degrees	%
844	1	16:04	16:05	48 - 47	147-148	0
843	1	16:08	16:09	47	149	0
842	1	16:14	16:14	47	151	0
851	1	16:59	17:04	43	166-168	0
951	1	17:18	17:25	43	173-175	0
901	1	17:40	17:44	42	181-182	5
851	2	17:55	18:01	43	186-189	5
951	2	18:13	18:19	43	193-195	5
901	2	18:32	18:36	44	200-201	5
851	3	18:49	18:54	45 - 46	205-207	5
951	3	19:08	19:14	47 - 48	211-213	5
901	3	19:25	19:31	49 - 50	217-218	5
851	4	19:42	19:46	51 - 52	221-223	5
951	4	19:59	20:04	53 - 54	226-227	10
901	4	20:15	20:21	56	230-232	10
851	5	20:37	20:41	59	235-236	10
951	5	20:51	20:57	61 - 62	238-240	10
901	5	21:10	21:15	64 - 65	242-243	10
842	2	21:32	21:33	68	247	1
844	2	21:36	21:37	69	248	1
843	2	21:40	21:40	69	248	1

Dates Spectral Data Collected

Row	Plot Number						
Direction	841	842	843	844	851	901	951
degrees	number of observations						
Date data collected	9/24/80 <i>65% Soil Cover</i>						
90	-	-	-	-	4	4	4
95	-	-	-	-	4	4	4
100	-	-	-	-	4	4	4
<	<	<	<	<	<	<	<
270	-	-	-	-	4	4	4
-	15	3	3	3	-	-	-
Date data collected	9/29/80 <i>80% Soil Cover</i>						
90	-	-	-	-	5	5	5
95	-	-	-	-	5	5	5
100	-	-	-	-	5	5	5
<	<	<	<	<	<	<	<
270	-	-	-	-	5	5	5
-	39	7	6	6	-	-	-
Date data collected	9/30/80 <i>39% Soil Cover</i>						
90	-	-	-	-	5	5	5
95	-	-	-	-	5	5	5
100	-	-	-	-	5	5	5
<	<	<	<	<	<	<	<
270	-	-	-	-	5	5	5
-	-	8	9	8	-	-	-

