

Farm:  Field:  Crop:

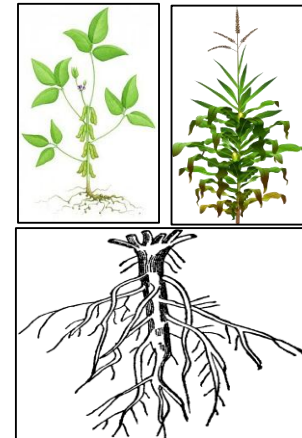
Sensor ID	Sensor Depth	Sensor Zone	Active Rooting Zone* (6", 12", 24", 36")		%Rooting Zone (=Sensor Zone/Active Rooting Zone)		Centibar Reading (From Data Logger)		Weighted Centibar Reading (=Centibar Reading x %Rooting Zone)	
			(Ex.1)	(Ex.2)	(Ex.1)	(Ex.2)	(Ex.1)	(Ex.2)	(Ex.1)	(Ex.2)
A1	6	0-6" = 6	36	24	6/36 = 0.17	6/24 = 0.25	100	100	100x.17 = 17	100x.25 = 25
A2	12	6-12" = 6	36	24	6/36 = 0.17	6/24 = 0.25	70	70	70x.17 = 12	70x.25 = 18
A3	24	12-24" = 12	36	24	12/36 = 0.33	12/24 = 0.50	50	50	50x.33 = 17	50x.50 = 25
A4	36	24-36" = 12	36		12/36 = 0.33		30	<5	30x.33 = 10	
<b>Weighted Centibar Average =</b>									<b>55</b>	<b>68</b>

**\*Active Rooting Zone:**

- Area where plant roots are actively using water
- If centibar readings are noticeably drying out (increase in centibar readings) roots are actively using water in that zone
- If centibar readings are not noticeably changing (centibar readings remain low, ex.<5) roots are not actively using water in that zone
- Example 1 has a 36" rooting zone. Example 2 has a 24" rooting zone (as shown in Table above)

**Weighted Centibar Average Reading:**

- Sum of weighted centibar (cB) readings
- Use this number as final centibar reading to determine irrigations
- Example 1 has a weighted centibar reading of 55cB. Example 2 has a weighted centibar reading of 68cB



Soybeans	
Growth Stage	Centibar Threshold Reading
V1-R3	80-90
R3-R6.5	60-70
R6.5	Terminate Irrigation
R6	Can apply last irrigation to maintain moisture to R6.5

Corn	
Growth Stage	Centibar Threshold Reading
Emergence-Tasseling	80-90
Tasseling-Dent	60-70
Dent-Black Layer	90

\*Based on research and methods performed by Jason Krutz (MSU)

