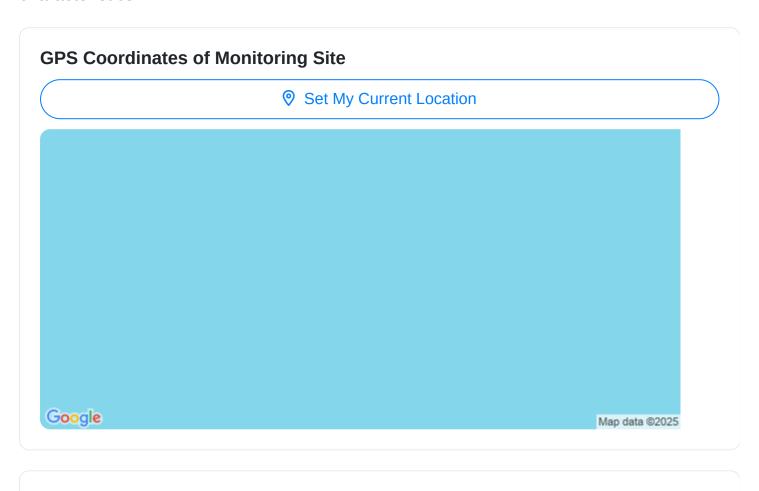


Soil Moisture Monitoring (Location-Specific) Checklist

Site Selection & Characterization

Defining the specific location(s) for soil moisture monitoring and understanding their characteristics.



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Write something...

Elevation (meters)	
Enter a number	
Soil Type (Dominant)	
Sandy	
Loamy	
Clay	
Silty	
Peaty	
Other	
Slope (%)	
0-2%	
2-5%	
5-10%	
10%+	
☐ 10 ₄₀ +	
Description of Landscape Costures (o.g. drainage netterns, presence of	
Description of Landscape Features (e.g., drainage patterns, presence of vegetation)	
Write something	
	<i>).</i>
Depth to Water Table (if known, meters)	
Enter a number	

Aspect (Direction Slope Faces) North South East West	
Sensor Selection & Calibration Choosing appropriate soil moisture sensors and ensuring their accuracy through	
Sensor Technology Selected: Capacitance Tensiometer Time Domain Reflectometry (TDR) Frequency Domain Reflectometry (FDR) Neutron Probe	
Manufacturer Recommended Calibration Range (kPa): Enter a number	
Calibration Procedure Description: Write something	
Calibration Value at Field Capacity (Vol % or kPa): Enter a number)

Calibration Value at Wilting Point (Vol % or kPa):	
Enter a number	
Date of Initial Calibration:	
Enter date	
Upload Calibration Data Sheet/Report:	
♣ Upload File Notes/Observations During Calibration:	
Write something	

Installation & Deployment

Properly installing and positioning sensors in the field.

Precise GPS Coordinates of Sensor Location	
Set My Current Location	
Depth of Sensor Installation (cm)	
Enter a number	
Distance from Plant Stem (cm)	
Enter a number	
Soil Type at Installation Point	
Sandy	
Loamy	
Clay	
☐ Silty ☐ Organic	
Unknown	

Orientation of Sensor (relative to slope) Horizontal	
Vertical	
Angled (Specify Angle)	
Notes on Installation Conditions (e.g., rocks, obstacles)	
Write something	
Date of Sensor Installation	
Enter date	
ata Acquisition & Transmission	
Data Acquisition & Transmission etting up the system for collecting and transmitting soil moisture data.	
Data Acquisition & Transmission etting up the system for collecting and transmitting soil moisture data.	
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etting up the system for collecting and transmitting soil moisture data.	
etting up the system for collecting and transmitting soil moisture data. Sensor Sampling Frequency (minutes)	
Sensor Sampling Frequency (minutes) Enter a number	
Sensor Sampling Frequency (minutes) Enter a number Data Transmission Protocol	
Sensor Sampling Frequency (minutes) Enter a number	
Sensor Sampling Frequency (minutes) Enter a number Data Transmission Protocol Wi-Fi	
etting up the system for collecting and transmitting soil moisture data. Sensor Sampling Frequency (minutes) Enter a number Data Transmission Protocol Wi-Fi Cellular (LTE/5G)	
Enter a number Data Transmission Protocol Wi-Fi Cellular (LTE/5G) LoRaWAN	

Data Logging Method On-device logging Cloud-based logging Local Server Logging
Signal Strength (dBm) - Initial Measurement
Enter a number
Notes on Initial Data Acquisition Setup
Write something
Date of Initial Data Acquisition
Enter date
Time of Initial Data Acquisition
Data Management & Analysis
Organizing, storing, and interpreting the collected soil moisture data.
Sensor ID(s) Associated with Data
Enter a number

Data Import Date Enter date	
Litter date	
Average Soil Moisture (%)	
Enter a number	
Soil Temperature (°C)	
Enter a number	
Data Quality Flag	
Data Quality Flag Good	
Questionable	
Bad	
Notes/Comments on Data	
Write something	
Soil Bulk Density (g/cm³)	
Enter a number	
Supporting Data Files (e.g., rainfall data)	
4 Upload File	

Maintenance & Troubleshooting

Regularly maintaining equipment and addressing any issues that arise.

Last Sensor Battery Repla	cement Date	
Enter date		
Sensor Power Level (%), i	applicable	
Enter a number		
Sensor Communication S	atus	
Connected		
☐ Disconnected ☐ Intermittent		
Describe any observed se	nsor issues (e.g., erratic reading	gs, physical damage)
Describe any observed se	nsor issues (e.g., erratic reading	gs, physical damage)
	nsor issues (e.g., erratic reading	gs, physical damage)
	nsor issues (e.g., erratic reading	gs, physical damage)
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Write something Data Logging Status Logging Not Logging	nsor issues (e.g., erratic reading	gs, physical damage)
Write something Data Logging Status Logging	nsor issues (e.g., erratic reading	gs, physical damage)
Write something Data Logging Status Logging Not Logging		gs, physical damage)

Write something	
Sensor Physical Conditi	on
Excellent	
Good	
☐ Fair	
Poor	
-	ionable Insights using data to inform irrigation and other agricultural practices
-	using data to inform irrigation and other agricultural practices
Average Soil Moisture (9	using data to inform irrigation and other agricultural practices (6):
Average Soil Moisture (9 Enter a number	using data to inform irrigation and other agricultural practices (6):
Average Soil Moisture (9 Enter a number Soil Moisture Deficit (mr	using data to inform irrigation and other agricultural practices (6): m):
Average Soil Moisture (9 Enter a number Soil Moisture Deficit (mr	using data to inform irrigation and other agricultural practices (6): m):

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