

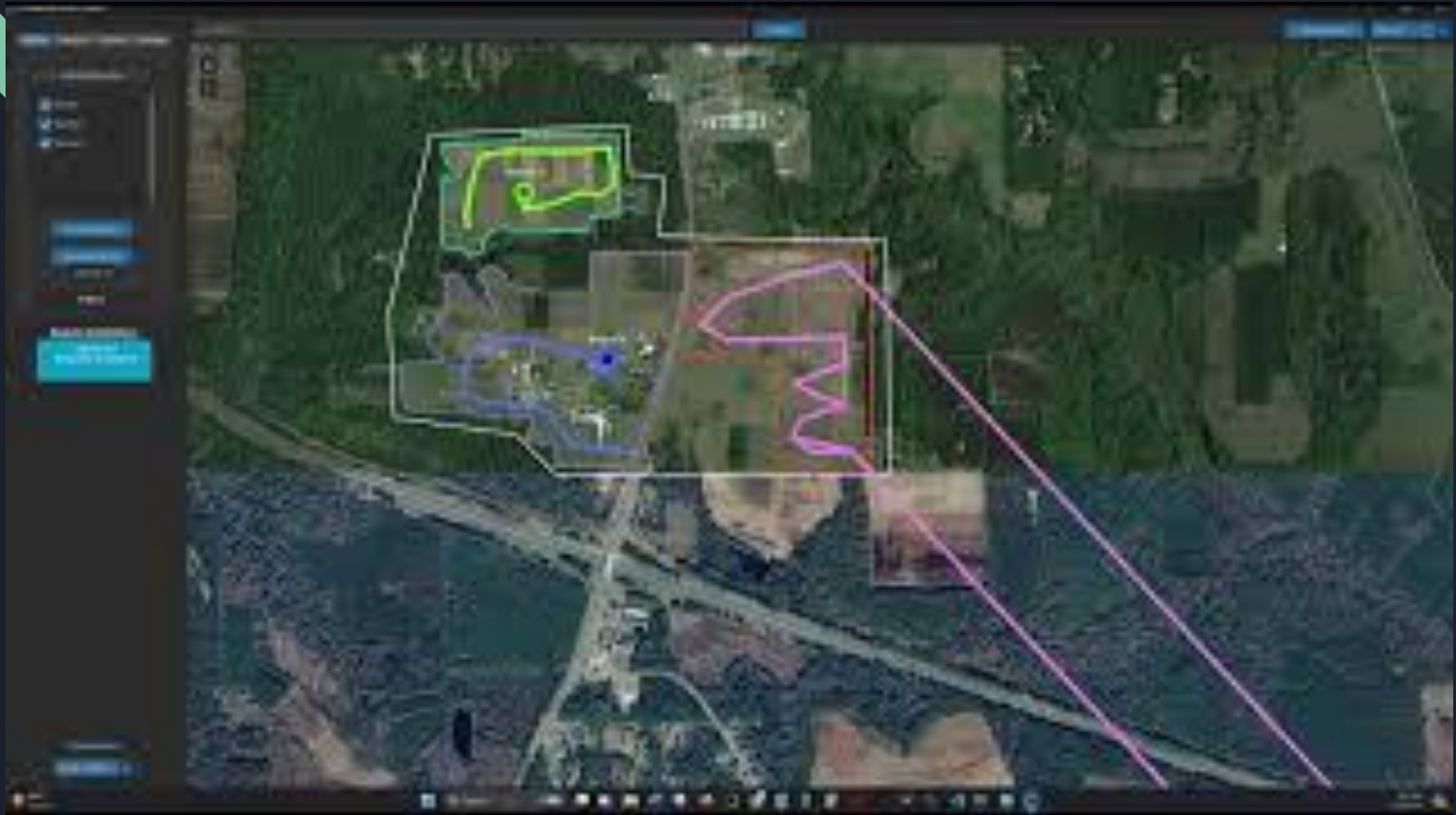
LoRaWAN Asset Tracker and Emergency Button

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Interfacing with Device



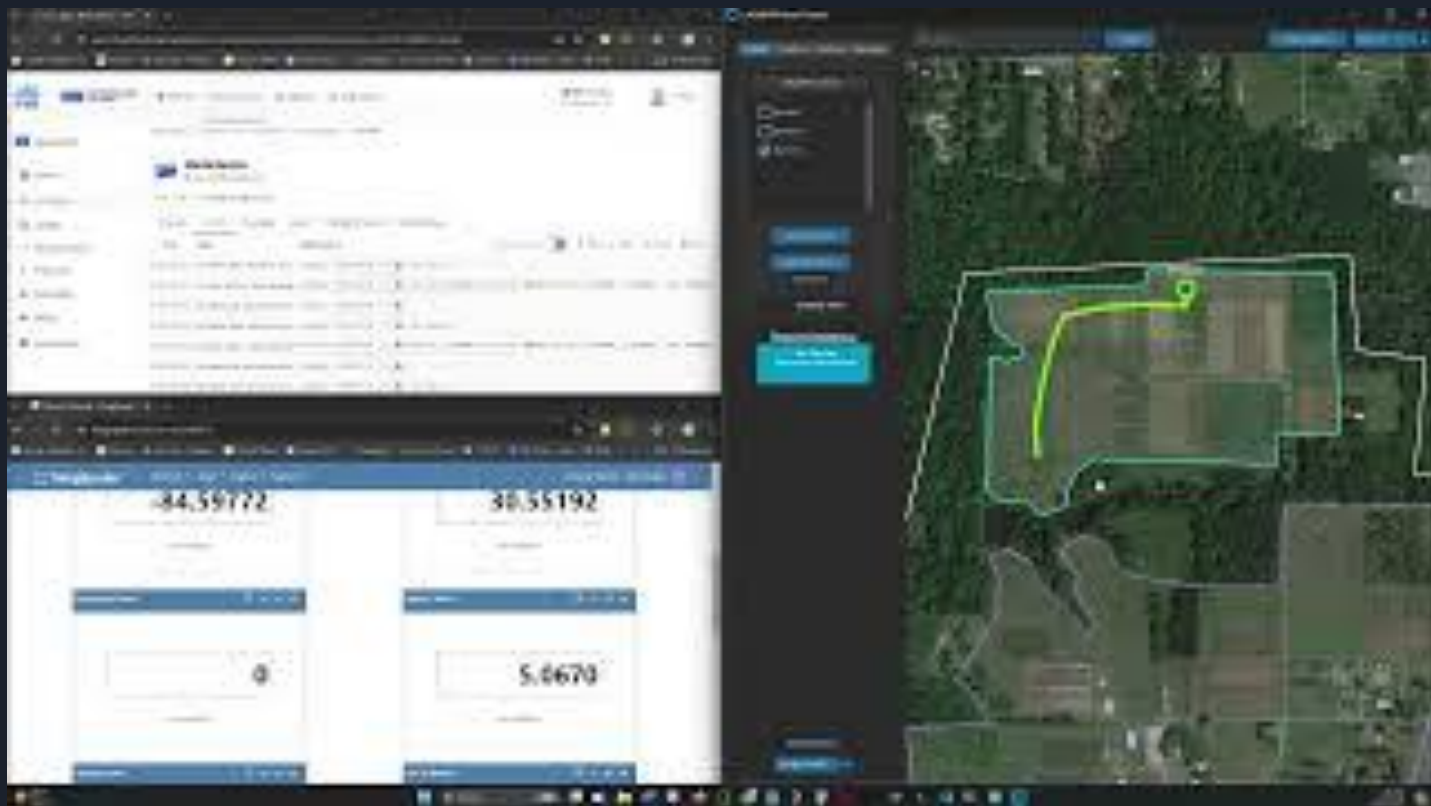
Python GUI



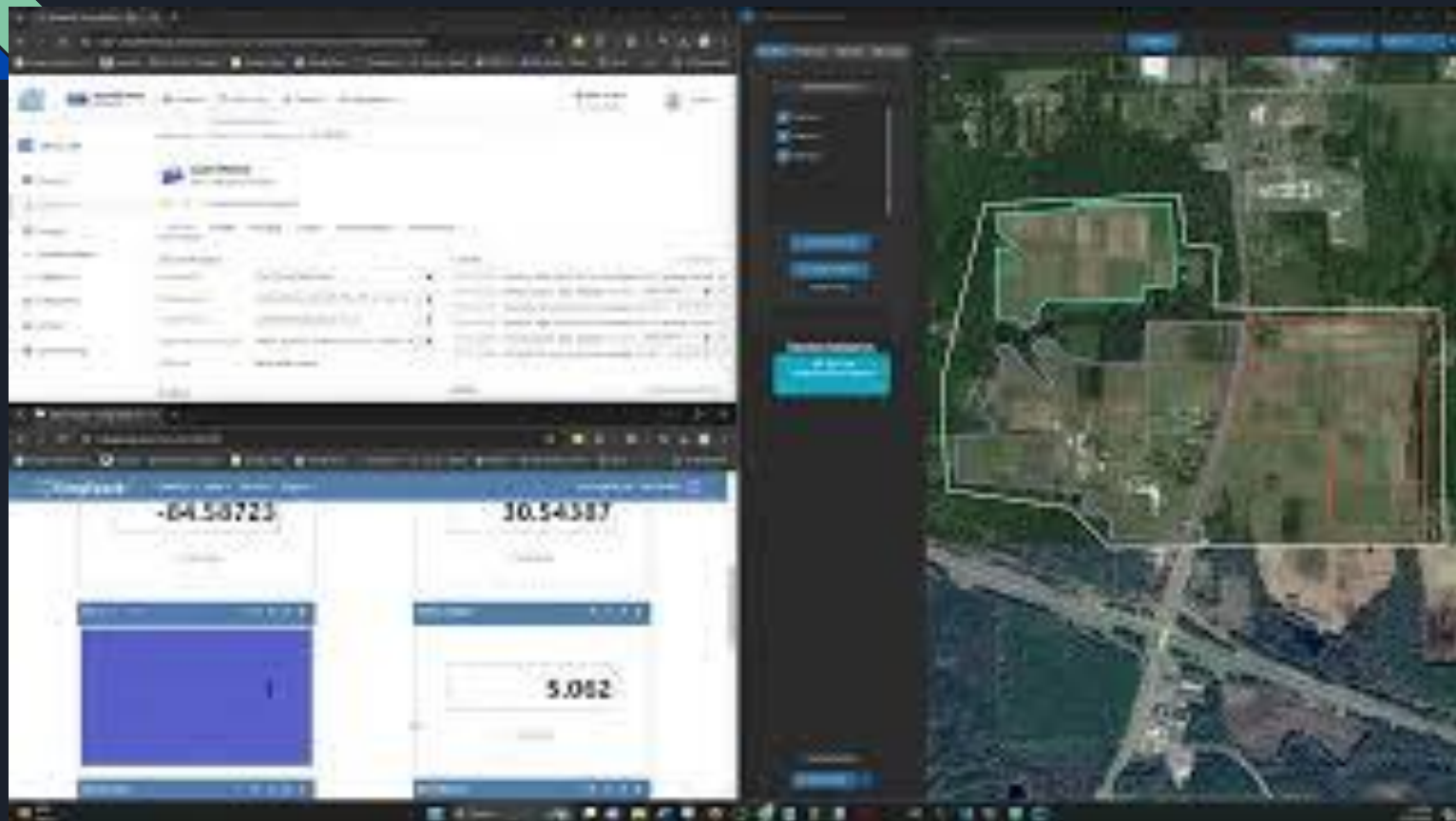
GPS Fixing and Real Time Data



Sending Data



Emergency Button



BLE Uplink Communication



Downlink Communication



Scalability

GeoMap Properties **Statuses** Messages

Emergency Statuses

Device 1	✓
Device 2	✓
Device 3	⚠
Device 4	⚠
Device 5	⚠

Boundary Status

Device 1	✓
Device 2	✓
Device 3	✓
Device 4	✓
Device 5	✓

No Action Needed: ✓

Assistance Required: ⚠

GeoMap Properties Statuses **Messages**

LoRaWAN Devices

- ☐ Device 1
- ☐ Device 2
- ☐ Device 3
- ☐ Device 4
- ☐ Device 5
- ☐ Device 6

Generate Latest

Generate Path For

2024-04-15

GeoMap Properties Statuses **Messages**

Received Messages

Device 4:

Device 5:

Device 6:

Get Latest

GeoMap **Properties** Statuses Messages

Device Charge

Device 1	80.0% Charge
Device 2	72.8% Charge
Device 3	81.4% Charge
Device 4	81.4% Charge
Device 5	81.4% Charge
Device 6	81.4% Charge

Time Since Receive

Device 1:	35.0h 53.0m 27.0s
Device 2:	85.0h 18.0m 56.0s
Device 3:	65.0h 20.0m 7.0s
Device 4:	65.0h 20.0m 7.0s
Device 5:	65.0h 20.0m 8.0s

Get Latest