**Fault detection**

| **Fault Description** | **Fault\_name** | **Devices** |
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| Temperature and Humidity sensors showing wrong reading till a particular date(Wrong data) and other sensor readings are all within the range.  Battery and Light intensity : **2 null values** | Fault 1 | 869170034808700 |
| Temperature and Humidity sensors showing wrong readings at several data points(Wrong data) and other sensors are within the range | Fault 2 | 869170034808684 |
| Soil temperature gives no reading after a particular date **275 null values**(no data at all) while other sensors give good reading.  Signal strength : **9 Null values** | Fault 3 | 8691700352619740 |
| No data at all for soil temperature reading after a particular date( **136 Null values**) and no data till a particular date for signal strength sensor(**41 null values)** | Fault 4 | 8691700348085280 |
| Sudden drops / increase in soil conductivity and moisture at same time.(But within the range) |  | 869170034808544 **(Battery : 7 Null values)**  869170034808684**(Battery : 20 Null values)**  **(Light intensity : 17 null values)**  869170033894388 **(Battery : 25 Null values)**  865067027394900 **(Battery : 5 Null values)** |
| Soil conductivity and Humidity wrong data while Temp, Battery and Moisture are within the range. | Soil conductivity and humidity sensor failure(Fault 5) | 869170033894537 |
| Light intensity sensor wrong value. | Light intensity sensor failure(Fault 6) | 869170034778101 |
| **Battery : 12 Null values.**  **Light Intensity : 10 Null values**  Other sensors are within the range | Fault 7 | 869170034809062 |
| Only ,  **Battery : 11 Null values**  Other sensors are within the range | Fault 8 | 865067027395592  869170034808742 |
| Moisture and soil conductivity showing a sudden increase and battery shows data drop at a particular time.  (**Battery : 83 Null values)** | Fault 9 | 865067027394801 |
| **Soil temperature : 166 null values and signal strength : 24 null values**  All sensors are within the range | Fault 10( ~ Fault 3) | 8691700348087260 |
| Soil conductivity and moisture read 4 showing no data at all till a particular date and behaves normal afterwards.  Soil conductivity and moisture read 3 showing normal behaviour till that same particular date and shows no data at all afterwards.  **Moisture 4 : 356 Null values**  **Soil conductivity 4 : 356 Null values**  **Moisture 3 : 187 Null values**  **Soil conductivity : 187 Null values**  **Battery : 24** | Fault 11 | 869170033915506 |