

Remote Sensing for Forest Fires

Database Schema



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1. Satellite Data Table

This table in the database contains the satellite data for the Fire Weather Index (FWI) that is retrieved from the OpenWeather API.

satelliteData
sensorID (String) (Partition Key)
timestamp (Number) (Sort Key)
danger_description (String)
danger_value (Number)
FWI (Number)
update_time (Number)

2. Sensor Data Table

This table stores all the data being transmitted by the device. It includes data from two BME688 sensors.

sensorData
sensorID (String) (Partition Key)
timestamp (Number) (Sort Key)
co_2 (Number)
co_2_2 (Number)
humidity (Number)
humidity_2 (Number)
temperature (Number)
temperature_2 (Number)
pressure (Number)
pressure_2 (Number)
voc (Number)
voc_2 (Number)
isFire (Bool)

3. Sensors Table

This table contains the list of all registered devices.

sensors
sensorID (String) (Partition Key)
lat (Number)
lon (Number)
locationName (String)
user (String)
publicLocation (Bool)

4. User Subscription Locations Table

This table contains the all locations that users are subscribed to for fire notifications.

userSubLocations
username (String) (Partition Key)
createTime (Number) (Sort Key)
lat (Number)
lon (Number)