



User Manual of Sensor Quality Detection Program for Eastern Shore Area



Step 1: Download the data file from a selected traffic detector

Free RITIS 101 training webinar 10am EDT Friday, September 23. Click for info & register: <http://bit.ly/2aP2BZb>

Welcome Yi-Ting Lin

Transportation System Status | **Data Archive** | Personal Traffic Alerts

Event Query Tool | **Detector Tools** | Congestion Causes | Probe Data Analytics

Detector Data Downloader

Showing 65,612 of 65,612 detectors

Detector	Count	Heart
MD-32	8	♥
MD-322	4	♥
MD-404	9	♥
East	5	♥
MD-404 @ Holly Road		♥
MD-404 @ Owens Rd		♥
MD-404 @ US-50		♥
MD-404 between Jump Farm Ln and Sylveste...		♥
S217002		♥
West	4	♥
MD-528	2	♥
MD-90	25	♥
Unknown	865	♥
US-113	8	♥

Export Options

- Volume
- Occupancy
- Quality

6. Aggregation

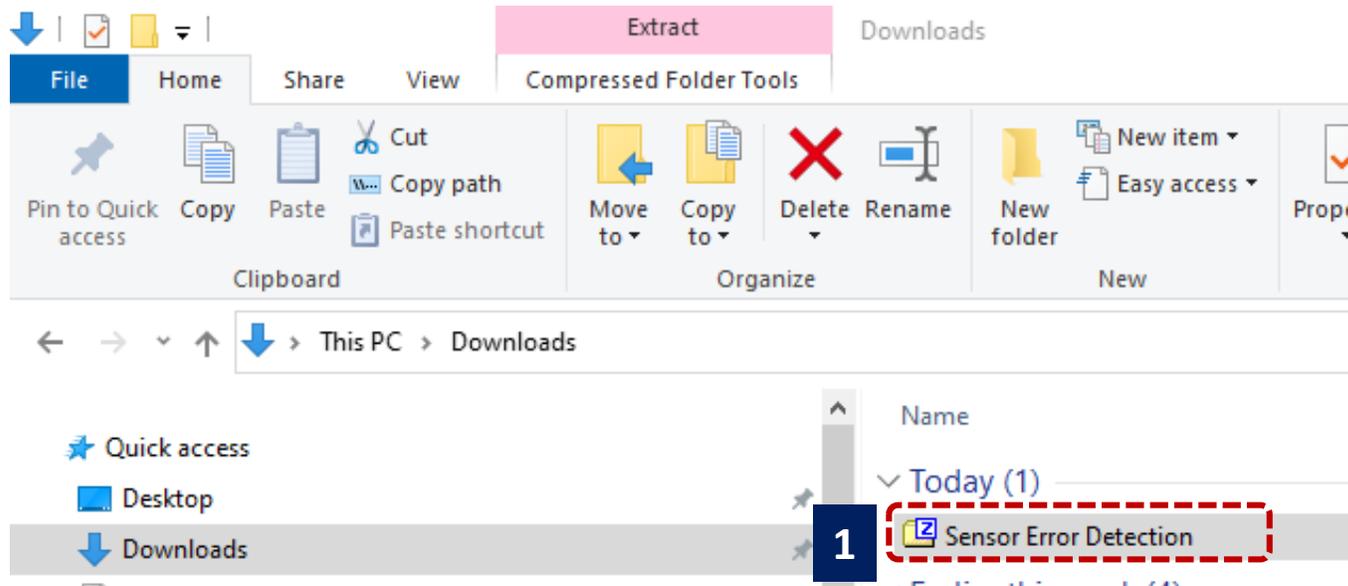
- Raw Data
- 5 minutes
- 15 minutes
- 30 minutes
- 1 hour

7. Name your export (optional)

Submit



Step 2: Double click zipped file and click the “Extract” button to unzip the program





Step 3: Click “**Click to Start**” to launch the program and click the “**Start**” button to start the program

1	untitled	6/7/2022 1:33 PM	File	0 KB
	Click to Start	6/5/2022 6:05 PM	Microsoft Edge H...	1 KB

 **Sensor Quality Detection Program**
for
Eastern Shore Area



2 





Step 4: Upload the sensor data downloaded from RITIS, and then click “**Save**” button and “**Next**”. (Users can also specify the analysis period of interest at the optional section).

Data Source Selection Basic Data Characteristics Analysis Results

Data Source Selection

Select a sensor data CSV file to begin analysis

(Please select a Lane Reading file)

1 S217002_1.csv

Optional

Select a start time:

Select an end time:

2 **3**



Step 5: Press “**Next**” to see the analysis results, otherwise, press “**Back**” to revise the upload file.

Data Source Selection **Basic Data Characteristics** Analysis Results

Data Intervals by Congestion Levels and Peak Hours

- **Sensor:** S217002_1.csv
- **Zone ID:** 192004
- **Lane:** 1
- **Start time:** Sat Jan 01 2022 00:00:00 (Eastern Standard Time)
- **End time:** Mon Jan 31 2022 23:58:00 (Eastern Standard Time)
- **Total number of intervals in the entire period:** 44639

Note:

- **Peak hours:** 9am to 6pm
- **Congested days:** Friday, Saturday, Sunday

	Peak hours	Off-peak hours	Total
Congested days	9240 intervals	10920 intervals	14 days
Non-congested days	11220 intervals	13259 intervals	17 days
Total	341 hours	403 hours	

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Step 6: Display the analysis results and (1) press “**Download results**” button to output detailed information regarding the faulty and missing data (step-7); or (2) press “**Home**” to analyze the other sensor’s data (back to step-3); or (3) press “**Back**” to read the basic data characteristics (back to step-5)



Data Source Selection Basic Data Characteristics **Analysis Results**

Total Missing/Faulty Rate: 19.78% (8829 / 44639 intervals)

Recommendation: Sensor should be replaced/maintained
 Sensor should be calibrated
 Sensor is in a good condition

	Peak hours	Off-peak hours	Total
Congested days	31.93% (2950 / 9240 intervals)	6.04% (660 / 10920 intervals)	17.91% (3610 / 20160 intervals)
Non-congested days	36.71% (4119 / 11220 intervals)	8.3% (1100 / 13259 intervals)	21.32% (5219 / 24479 intervals)
Total	34.55% (7069 / 20460 intervals)	7.28% (1760 / 24179 intervals)	19.78% (8829 / 44639 intervals)

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Step 7: Select the details of interest by clicking on the different options. Then press “**Download Results**” button.

Data Source Selection Basic Data Characteristics Analysis Results

Analysis Detail Download

<input type="radio"/> Missing Data	<input type="radio"/> Congested Days	<input type="radio"/> Peak Hours
<input type="radio"/> Faulty Data	<input type="radio"/> Non-congested Days	<input type="radio"/> Off-Peak Hours
<input checked="" type="radio"/> Missing and Faulty Data	<input checked="" type="radio"/> All Days	<input type="radio"/> All Hours

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