U.S. Department of Transportation

National Highway Traffic Safety Administration

OFFICE OF DEFECTS INVESTIGATION

ODI RESUME

Investigation: PE24031
Prompted By: Standing General Order (SGO) Incident Reports
Date Opened: 10/17/2024
Investigator: Dylan Copestick **Reviewer:** Gregory Magno
Approver: Tanya Topka
Subject: FSD Collisions in Reduced Roadway Visibility Conditions

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Tesla, Inc.
Products: 2016-2024 Model S, X, 2017-2024 Model 3, 2020-2024 Model Y, 2023-2024 Cybertruck equipped with FSD
Population: 2,410,002 (Estimated)

Problem Description: Failure of the system engineering controls to react appropriately to reduced roadway visibility conditions.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	0	0	0	4	4	0
Crashes/Fires:	0	0	0	4	4	0
Injury Incidents:	0	0	0	1	1	0
Number of Injuries:	0	0	0	1	1	0
Fatality Incidents:	0	0	0	1	1	0
Number of Fatalities:	0	0	0	1	1	0

Description of Other:
Crashes reported under the Standing General Order (SGO) or media reports.

ACTION/SUMMARY INFORMATION

Action: ODI has opened a Preliminary Evaluation

Summary:

The Office of Defects Investigation (ODI) has identified four Standing General Order (SGO) reports in which a Tesla vehicle experienced a crash after entering an area of reduced roadway visibility conditions with FSD -Beta or FSD -Supervised (collectively, FSD) engaged. In these crashes, the reduced roadway visibility arose from conditions such as sun glare, fog, or airborne dust. In one of the crashes, the Tesla vehicle fatally struck a pedestrian. One additional crash in these conditions involved a reported injury. The four SGO crash reports are listed at the end of this summary by SGO number.

ODI has opened a Preliminary Evaluation of FSD (a system labeled by Tesla as a partial driving automation system),which is optionally available in the Model Year (MY) 2016-2024 Models S and X, 2017-2024 Model 3, 2020-2024 Model Y, and 2023-2024 Cybertruck. This Preliminary Evaluation is opened to assess:

- The ability of FSD’s engineering controls to detect and respond appropriately to reduced roadway visibility conditions;
- Whether any other similar FSD crashes have occurred in reduced roadway visibility conditions and, if so, the contributing circumstances for those crashes; and
- Any updates or modifications from Tesla to the FSD system that may affect the performance of FSD in reduced roadway visibility conditions. In particular, this review will assess the timing, purpose, and capabilities of any such updates, as well as Tesla’s assessment of their safety impact.

SGO Report numbers: 13781-8004, 13781-7181, 13781-7381, 13781-7767. To review the SGO Reports prompting this investigation, go to NHTSA.gov.