

Boeing 737 Max grounded

Sentinel-3 OLCI FR acquired on 27 May 2017 at 18:37:48 UTC
Sentinel-2 MSI acquired on 26 August 2019 at 18:59:19 UTC
Sentinel-2 MSI acquired on 27 October 2019 at 17:14:21 UTC
Sentinel-2 MSI acquired on 02 November 2019 at 19:15:41 UTC
Sentinel-2 MSI acquired on 06 November 2019 at 18:56:01 UTC

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[2D Layerstack](#)

Fig. 1 - S3 OLCI (27.05.2017) - 10,6,3 natural colour - Most Boeing infrastructures are located in Washington state, North-West USA.

[2D view](#)

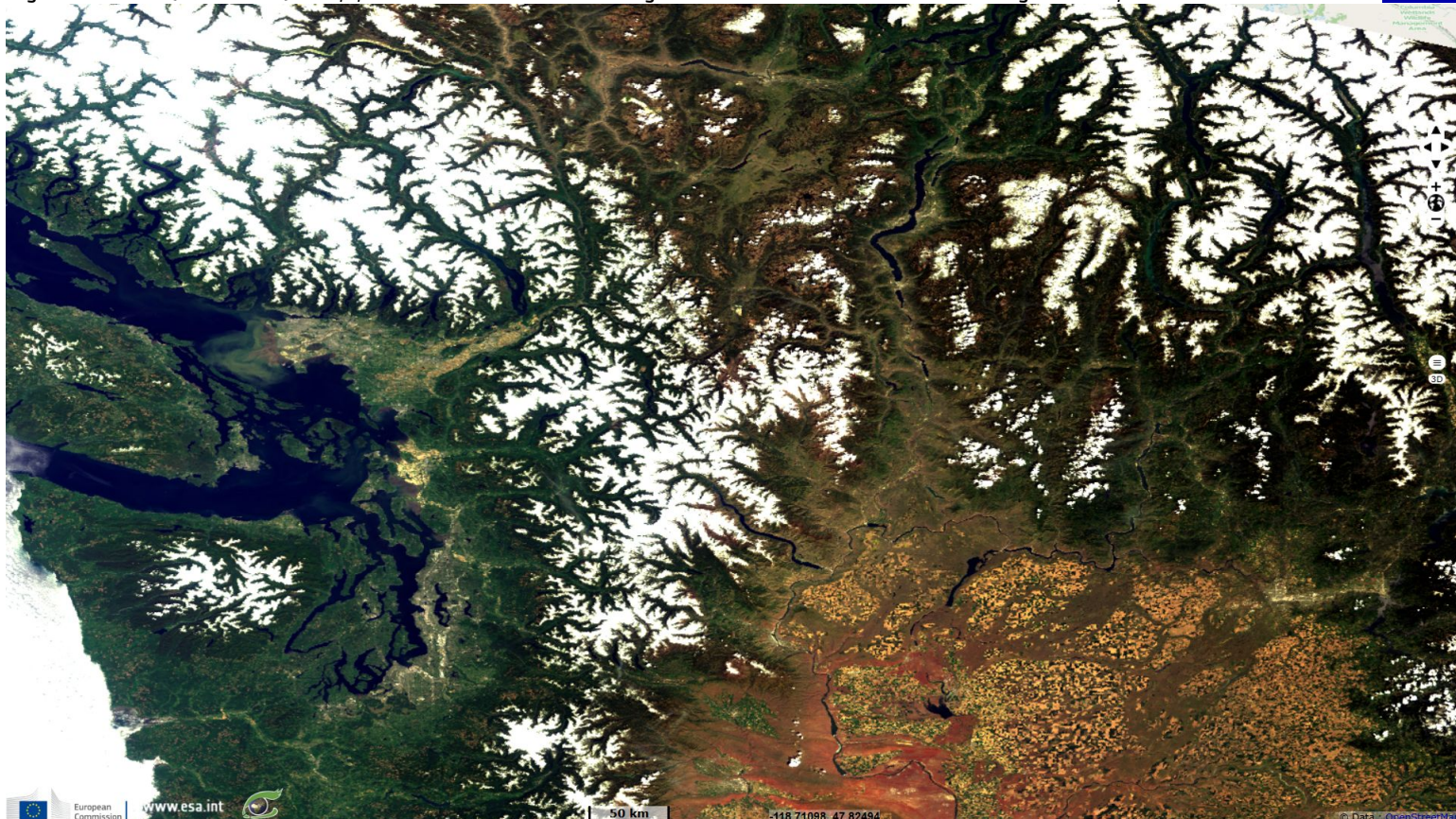


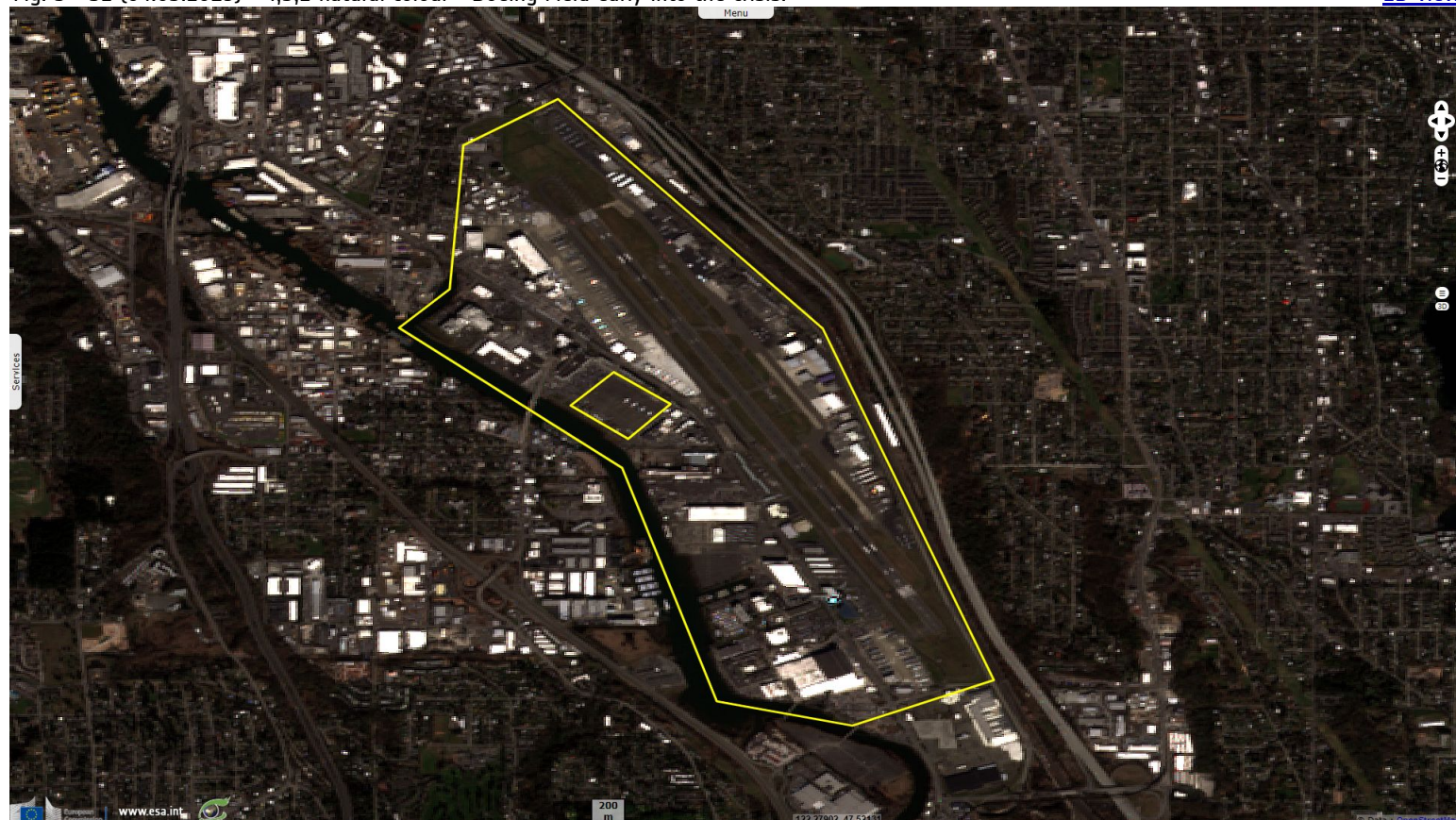
Fig. 2 - S2 (02.11.2019) - 4,3,2 natural colour - Three of them lie in Puget Sound near Seattle.

[2D view](#)



Fig. 3 - S2 (04.03.2019) - 4,3,2 natural colour - Boeing Field early into the crisis.

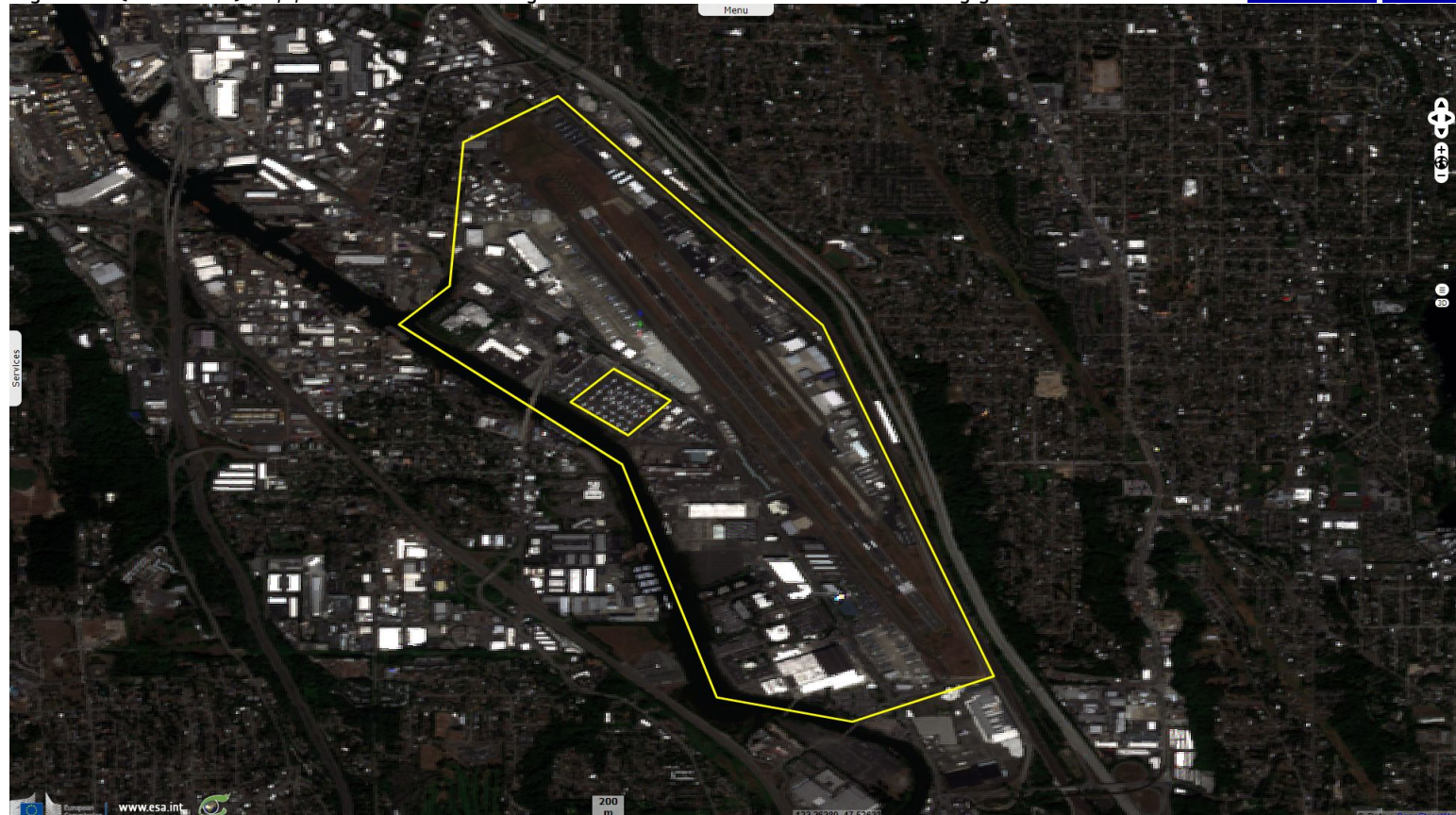
[2D view](#)



On 13.03.2019, Thomas Kaplan [related](#) for the New-York Times: "After days of mounting pressure, the United States grounded Boeing's 737 Max aircraft on [13.03.2019], reversing an earlier decision in which American regulators said the planes could keep flying after a deadly crash in Ethiopia".

Fig. 4 - S2 (26.08.2019) - 4,3,2 natural colour - Boeing Field after several months of 737 Max being grounded.

[2D animation](#) [2D view](#)



"The decision, announced by President Trump, followed determinations by safety regulators in some 42 countries to ban flights by the jets, which are now grounded worldwide. Pilots, flight attendants, consumers and politicians from both major parties had been agitating for the planes to be grounded in the United States. Despite the clamor, the Federal Aviation Administration had been resolute, saying on [12.03.2019] that it had seen "no systemic performance issues" that would prompt it to halt flights of the jet."

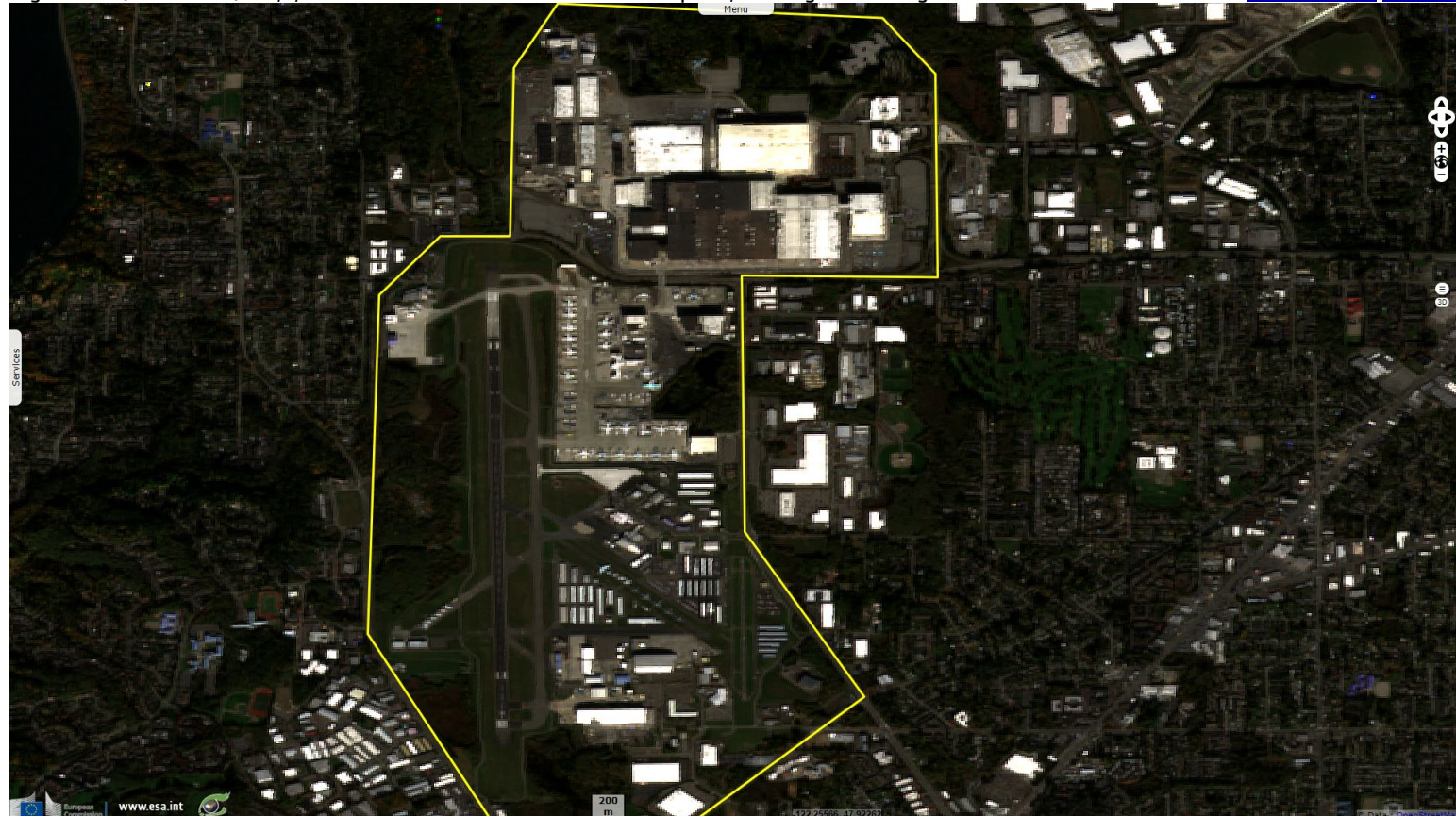
Fig. 5 - S2 (04.03.2019) - 4,3,2 natural colour - Paine Field & Everett plant were already quite filled up before the flying ban.

[2D view](#)



"That changed [on 13.03.2019] when, in relatively quick succession, Canadian and American aviation authorities said they were grounding the planes after newly available satellite-tracking data suggested similarities between Sunday's crash in Ethiopia and one involving a Boeing 737 Max 8 in Indonesia in October. The crash of Ethiopian Airlines Flight 302 took place just minutes after takeoff and killed all 157 people on board the jetliner, a 737 Max 8. The circumstances echoed an October [2018] accident in which a 737 Max 8 operated by Lion Air, an Indonesian carrier, crashed and killed 189 people."

Fig. 6 - S2 (02.11.2019) - 4,3,2 natural colour - Paine Field & Everett plant, the largest building in the world at 13 385 378 m3. [2D animation](#) [2D view](#)



On 15.11.2019, David Shepardson [reported](#) for Reuters: "The head of the U.S. Federal Aviation Administration has told his team to 'take whatever time is needed' in their review of Boeing Co's 737 MAX, according to a Nov. 14 memo and video message reviewed by Reuters. The comments came days after Boeing said it expected the FAA to certify the 737 MAX, issue an airworthiness directive and unground the plane in mid-December. That timetable sent the planemaker's stock price soaring on Monday, even as it acknowledged that it would not win approval for changes to pilot training until January. U.S. officials have privately said this week that Boeing's timetable was aggressive - if not unrealistic - and was not cleared in advance by regulators."

Fig. 7 - S2 (19.11.2018) - 4,3,2 natural colour - Grant county, Moses Lake.

[2D view](#)



"On [15.11.2019], FAA Administrator Steve Dickson sent a clear message that the agency would make the decision on its own timetable on whether to unground the plane that was involved in two fatal crashes in five months, killing 346 people in Indonesia and Ethiopia. 'This effort is not guided by a calendar or schedule,' Dickson wrote in the memo sent to Ali Bahrami, a top FAA safety official. Dickson offered his unequivocal support for a 'data-driven methodical analysis, review and validation of the modified flight control systems and pilot training required to safely return the MAX to commercial service.'"

Fig. 8 - S2 (06.11.2019) - 4,3,2 natural colour - Grant county, Moses Lake.

[2D animation](#) [2D view](#)



"Boeing still must complete an audit of its software documentation before it can schedule a key certification test flight and faces other hurdles. The three U.S. airlines that operate the 737 MAX - Southwest Airlines Co, American Airlines Group Inc and United Airlines Holdings Inc - are scheduling flights without the aircraft until early March 2020, nearly a year since the grounding."



"An aerial photo shows Boeing 737 MAX aircraft at Boeing facilities at the Grant County International Airport in Moses Lake, Washington, September 16, 2019" - source: [REUTERS/Lindsey Wasson](#).

Fig. 9 - S2 (24.02.2019) - 4,3,2 natural colour - Kelly Field, San Antonio.

[2D view](#)















Fig. 10 - S2 (27.10.2019) - 4,3,2 natural colour - Kelly Field, San Antonio.

[2D animation](#) [2D view](#)



*The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union.
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