# Ocean scientists pore over path of possible MH370 wing flap

**French aviation specialists hurry to confirm clue to last year's mysterious Malaysian airliner crash.**

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*Yannick Pitou/AFP/Getty*

Police carry a piece of debris from an unidentified aircraft in Réunion island, on 29 July.

It is plausible that a piece of aircraft debris found on the shores of the French island of Réunion, in the western Indian Ocean, could be from Malaysia Airlines flight MH370, oceanographers say. The Boeing 777 plane disappeared — along with its 239 passengers and crew — en route from Kuala Lumpur to Beijing in March 2014.

The 3-by-1-metre piece of wreckage, which beachgoers discovered on 29 July, is now being shipped to Toulouse, France, for examination by specialists from the French aviation-safety bureau and a Malaysian investigation team. Media reports say that the debris resembles an aeroplane wing flap — also called a flaperon — and is encrusted with shells, which suggests that it has been in the water for many months. Air-safety investigators are also confident that the piece is from a Boeing 777 wing, according to an anonymous US official quoted by the Associated Press.

Ocean currents could have carried the wing remnant to Réunion, says Erik van Sebille, an oceanographer at Imperial College London's Grantham Institute for Climate Change, UK, in a statement sent to journalists by the Science Media Centre in London. The island is 5,000 kilometres west of the area that specialists deemed the most-probable location — a region off the coast of northwestern Australia — where the erratic aeroplane may have crashed 17 months ago.

**Drift determination**

Oceanographer Charitha Pattiaratchi, at the University of Western Australia in Perth, told *The Telegraph* newspaper that the debris could only have come from the ocean near northwestern Australia. And the location is consistent with drift analysis that scientists have provided to Malaysian investigators, Malaysia's Prime Minister, Najib Razak, said in a statement on 30 July.

If the wreckage does turn out to be from MH370, a single piece will not be enough to help work out its origin, notes oceanographer David Ferreira, from the University of Reading, UK. Ferreira has done several simulations of the trajectory of debris dumped in the ocean west of Australia. In his models, the trajectory is highly sensitive to the variable state of ocean currents. "We know these currents from satellite measurements, but that knowledge is not perfect, and we also need to take into account the effects of winds and waves," he says. "At best, simulations may show us what are the most likely areas of the crash – but these areas are still hundreds of

kilometres wide."

The flap is "very likely" to be from a Boeing 777, Razak said — but he added that it was "too early to speculate" whether it is from flight MH370. And relatives of passengers who were killed in the crash have begged for speculation to stop until the origin of the debris is certain. "As soon as we have more information or any verification, we will make it public," Razak said. "We have had many false alarms before, but for the sake of the families who have lost loved ones, and suffered such heartbreaking uncertainty, I pray that we will find out the truth so that they may have closure and peace."

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## Updates

**Updated:** This article was updated on 31 July to add comments from David Ferreira.