

Trillion-tonne iceberg breaks off Antarctica

PTI ■ LONDON

A trillion-tonne iceberg – one of the largest ever recorded – has broken away from Antarctica after many months of anticipation and may now pose a serious hazard to ships around the South Pole, scientists said on Wednesday.

The calving of the 5,800 square kilometre iceberg leaves the Larsen C Ice Shelf reduced in area by more than 12 per cent, and the landscape of the Antarctic Peninsula changed forever.

Icebergs calve from Antarctica all the time, but because this one is particularly large, its path across the ocean needs to be monitored as it could pose a hazard to maritime traffic.

The event occurred sometime between July 10 and on Wednesday, said researchers who had been monitoring the growing rift in the West Antarctic ice shelf for years. The iceberg, which is likely to be named A68, weighs more than a trillion tonne. Its volume is twice that of Lake Erie, one of the Great Lakes.

The final breakthrough of the rift was detected in data from NASA's Aqua MODIS satellite instrument, which images in the thermal infrared at a resolution of one kilometre and confirmed by NASA's Suomi VIIRS instru-



This is a Feb. 2017 image of the Larsen C ice shelf in Antarctica made available by the Antarctic Survey on Wednesday July 12, 2017. A vast iceberg with twice the volume of Lake Erie has broken off from a key floating ice shelf in Antarctica, scientists said Wednesday. The iceberg broke off from the Larsen C ice shelf, scientists at the University of Swansea in Britain said. The iceberg, which is likely to be named A68, is described as weighing 1 trillion tons (1.12 trillion U.S. tons).

ment. The development of the rift over the last year was monitored using data from the European Space Agency Sentinel-1 satellites – part of the European Copernicus Space Component.

Sentinel-1 is a radar imaging system capable of acquiring images regardless of cloud cover, and throughout the current winter period of polar darkness.

The iceberg weighs more than a trillion tonnes but it was already floating before it

calved away so has no immediate impact on sea level. Although the remaining ice shelf will continue naturally to regrow, researchers have previously shown that the new configuration is potentially less stable than it was prior to the rift.

There is a risk that Larsen C may eventually follow the example of its neighbour, Larsen B, which disintegrated in 2002 following a similar rift-induced calving event in 1995.

“We have been anticipating this event for months, and have been surprised how long it took for the rift to break through the final few kilometres of ice,” said Professor Adrian Luckman of Swansea University in the UK.

“We will continue to monitor both the impact of this calving event on the Larsen C Ice Shelf, and the fate of this huge iceberg,” said Luckman, lead investigator of Project MIDAS that has been monitoring the crack. The iceberg is one of the largest recorded and its future progress is difficult to predict.

It may remain in one piece but is more likely to break into fragments. Some of the ice may remain in the area for decades, while parts of the iceberg may drift north into warmer waters.

The Larsen C Ice Shelf, which has a thickness of between 200 and 600 metres, floats on the ocean at the edge of The Antarctic Peninsula, holding back the flow of glaciers that feed into it.

While the new iceberg will not immediately raise sea levels, if the shelf loses much more of its area, it could result in glaciers that flow off the land behind speeding up their passage towards the ocean.