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NASA PUTS LASER SATELLITE IN SPACE TO TRACK ICE LOSS

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NASA's most advanced space laser satellite blasted off on Saturday on a mission to track ice loss around the world and improve forecasts of sea level rise as the climate warms.

The \$1 billion ICESat-2 mission was launched aboard a Delta II rocket from Vandenberg Air Force base in California at 1302 GMT.

The launch marks the first time in nearly a decade that NASA has had a tool in orbit to measure ice sheet surface elevation across the globe.

The preceding mission, ICESat, launched in 2003 and ended in 2009.

The first ICESat revealed that sea ice was thinning, and ice cover was disappearing from coastal areas in Greenland and Antarctica.

The new laser will fire 10,000 times in one second, compared to the original ICESat which fired 40 times a second.

"The mission will gather enough data to estimate the annual elevation change in the Greenland and Antarctic ice sheets even if it's as slight as four mm - the width of a No. 2 pencil," NASA said in a statement.

Importantly, the laser will measure the slope and height of the ice, not just the area it covers.

"One of the things that we are trying to do is, one, characterise the change that is taking place within the ice, and this is going to greatly improve our understanding of that, especially over areas where we don't know how well it is changing right now," said Tom Wagner, cryosphere program scientist at NASA, mentioning the deep interior of Antarctica as one such area of mystery.

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