Originally named Mount Carstenz, after the Dutch explorer who first sighted it, Jaya represents the uppermost point between the Himalayas and the Andes.

Climbing to the top requires a permit and the ability to endure an arduous trek that will take some days to complete.

But adventurers keen to see these rare equatorial glaciers had better hurry, because they are retreating at such speed that observers believe they could disappear within as little as the next five years.

Glaciologists recently trekked to these remote Papuan glaciers on one of Indonesia’s most isolated corners to carry out the first study there since the early 1970s.

They found that while the ice has been shrinking throughout the last century, its speed has increased dramatically since the last scientific expedition.

Glaciers worldwide are in retreat, with major losses already seen across much of Alaska, the Alps, the Andes and numerous other ranges.

But the Papuan glaciers are melting faster than others because they are unique position, located along the fringe of the world’s warmest ocean.

Disturbingly, the researchers found that the mountain had lost about 80 percent of its ice since the 1930s, with two-thirds of that having been lost since the 1970s.

The glaciologists spent two grueling weeks drilling for the ice cores, working in violent winds and torrential rain in temperatures of around 14 degrees Celsius.

Ice cores are like climate time capsules buried thousands of years ago that show successive layers of ice and snow that have been laid down on glaciers. They enclose minute bubbles that contain samples of the atmosphere trapped when each layer of ice first formed.

Analysis of these bubbles shows a significant increase in CO2 levels in the past 30 years, providing further evidence that human activity is contributing to global warming.

The team also collected rainwater samples from locations ranging in elevation from sea level up to the site of the glacier, as well as weather data obtained from weather stations belonging to Freeport-McMoRan, operators of the nearby Grasberg gold and copper mine, who provided a range of technical support for the expedition.

Puncak Jaya is one of the few tropical glaciers remaining in the world, and it’s especially vulnerable to climate change, making it all the more valuable to researchers.

Although the disappearance of these particular glaciers may not have much impact on the local environment, it will be hugely significant for the tribes in the area whose people see them sacred and will believe their retreat represent losing part of their soles.

And the demise of these magnificent glaciers is another clear indicator of worrying changes in the planet’s warming trends.

Ice cover is generally tracked by satellites and aerial photography, which doesn’t provide any indication of vertical thinning. This makes it difficult to predict the speed at which ice is actually melting.

What looks like a healthy glacier from the air today, could be completely gone by next year.

The intensely sobering outcome of the latest Puncak Jaya expedition shows that its glaciers will be just a memory by the end of this decade.

This begs the question as to what other such glaciers are close to death as a consequence of climate change.

With less than 15 weeks to go until the United Nations climate change summit in Cancun, we can but hope that our politicians will take head of yet another grim warning.

This time it’s not the endangerment of Indonesia’s orangutans, but the evaporation of its glaciers.
Only seeing their beauty is truly believing.

A month ago I became a proud grandfather.  By the time my granddaughter reaches my age, I hope and pray that she will still have the opportunity to see a glacier with her own eyes.