



VIEW

New Desert Crater Found Using Google Maps and Free Software

The discovery of a new crater in the Bayuda Desert in Sudan suggests that the next generation of crater hunters could be amateurs based at home.

1 comment



KFC
Tuesday, August 10, 2010



Most of the rocky planets, moons and asteroids in the Solar System are pock-marked with impact craters of all sizes. On Earth, however, small craters are rare because they quickly get eroded by weather and water.

So the discovery of new small craters is a reason to celebrate. A couple of weeks ago, an Italian team [announced in the journal Science](#) that it had used Google Earth to identify an impact crater in the remote desert of southern Egypt. A quick trip to the region showed this crater to be 45 metres in diameter, but several hundred metres in the desert.

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CURRENTLY READING: [New Desert Crater Found Using Google Maps and Free Software](#)
evidence of another crater in the Bayuda Desert in Sudan using Google Maps. This one is a little bigger: about 10 kilometres in diameter.

What's interesting about this discovery is the technology used to make it. Sparavigna used Google Maps, an astronomical image-processing program called AstroFracTool which she and a colleague developed, and an open source image-processing package called GIMP.

All of this stuff is available for free on the web, making this kind of discovery open to all. That means the next generation of crater hunters could just as easily be amateurs working from home as professional geologists working on location.

How likely are these crater hunters to find anything? On other bodies in the Solar System, small impact craters are more common by far than large ones, a statistic that reflects the size distribution of rocks floating round up there.

However, the size distribution of craters on Earth is the opposite. The 170 or so known craters here have diameters up to 300 km but fewer than 15 of these are smaller than 300 metres across. The reason is that most small craters are quickly eroded away. However, those that have been preserved are likely to be in desert regions. They remain undiscovered because these areas have been poorly explored.

That suggests an opportunity. The recent successes of crater hunters in these vast, largely unexplored desert regions suggests that there are more to find out there for anybody with access to a computer and some spare time on their hands.

Let the crater rush begin.

Ref: arxiv.org/abs/1008.0500: Crater-Like Landform In Bayuda Desert (A Processing Of Satellite

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