

Crater-like landform in Bayuda desert (a processing of satellite images)

Original

Crater-like landform in Bayuda desert (a processing of satellite images) / Sparavigna, Amelia Carolina. -
ELETTRONICO. - (2010), pp. 1-7.

Availability:

This version is available at: 11583/2371778 since:

Publisher:

Published

DOI:

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)



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.

1			
---	--	--	--

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

Stay Connected

Twitter

Facebook

New sletters

Mobile Apps

RSS Feeds

Want *Technology Review* magazine delivered to your doorstep, desktop, or tablet?

[Order now »](#)

Technology Review Lists

Technologies Innovators Companies

TR10 Our list of the 10 most innovative technologies of 2012. [See list »](#)



Light-Field Photography

Lytro reinvented the camera so that it can evolve faster.

[Read more »](#)

Explore our TR10 List:

Images)

TRSF: Read the Best New Science Fiction inspired by today's emerging technologies.



KFC

See full bio »

1 comment

Sign in to comment

Empty text box for signing in to comment.

+ Follow conversation

Post to

Post comment as



smoker

GIMP

The *G*NU *I*mage *M*anipulation *P*rogram ---
If you didn't already know.

Cool.

<http://www.gimp.org/>

Not a ball gag in sight...

2 YEAR AGO

Like Reply



Privacy
Terms of Use
Sitemap

About Technology Review
Advertise with Us
Work for Us
Events
Contact Us

Get the Magazine
Manage Subscriptions
Reprints and Permissions
Customer Service
Feedback

Stay Connected

New sletters
Mobile Apps
RSS Feeds



Take a 2 or 5 Day Executive
Development Program or
earn a professional
certificate

VISIT EXECUTIVE.MIT.EDU