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Detection of Craters as Concentric Contours on DTM

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We propose new algorithm to detect lunar craters on DTM.
When we drew contours on DTM, crater appears as concentric circles
because a crater is a circular depression on planetary surface.
This algorithm extracts ellipses from contour lines and extracts
a crater by searching a concentric circle.
The current version of the algorithm achieves a detection rate of 80 %
for craters > 200 m on a lunar DTM from TC of Kaguya.

Keywords: crater, contour