Accepted Manuscript

The Apollo Peak-Ring Impact Basin: Insights into the Structure and Evolution of the South Pole-Aitken Basin

Ross W.K. Potter , James W. Head , Dijun Guo , Jianzhong Liu , Long Xiao

 PII:
 S0019-1035(17)30423-2

 DOI:
 10.1016/j.icarus.2018.02.007

 Reference:
 YICAR 12798

To appear in: Icarus

Received date:4 June 2017Revised date:27 January 2018Accepted date:2 February 2018

Please cite this article as: Ross W.K. Potter, James W. Head, Dijun Guo, Jianzhong Liu, Long Xiao, The Apollo Peak-Ring Impact Basin: Insights into the Structure and Evolution of the South Pole-Aitken Basin, *Icarus* (2018), doi: 10.1016/j.icarus.2018.02.007

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



1

Highlights

- Numerical modeling of the formation of Apollo basin undertaken
- Apollo likely formed by 40 km diameter object striking at 15 km/s into 20-40 km crust
- Models suggest target site was SPA ejecta deposits and collapsed crustal material
- Target plagioclase was highly shocked, matching remote sensing observations
- Comparisons to Schrödinger basin demonstrate SPA subsurface structure heterogeneity

A CERTIN

Download English Version:

https://daneshyari.com/en/article/8134276

Download Persian Version:

https://daneshyari.com/article/8134276

Daneshyari.com