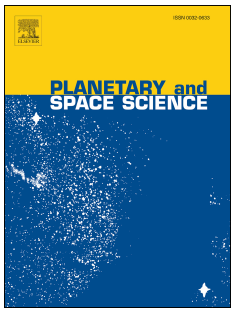
Accepted Manuscript



Availability and delta-v requirements for delivering water extracted from near-Earth objects to cis-lunar space

Robert Jedicke, Joel Sercel, Jeffrey Gillis-Davis, Karen J. Morenz, Leslie Gertsch

PII: S0032-0633(17)30497-X

DOI: 10.1016/j.pss.2018.04.005

Reference: PSS 4510

To appear in: *Planetary and Space Science*

Received Date: 4 January 2018

Revised Date: 5 April 2018

Accepted Date: 7 April 2018

Please cite this article as: Jedicke, R., Sercel, J., Gillis-Davis, J., Morenz, K.J., Gertsch, L., Availability and delta-v requirements for delivering water extracted from near-Earth objects to cis-lunar space, *Planetary and Space Science* (2018), doi: 10.1016/j.pss.2018.04.005.

Highlights:
* we have developed a synthetic population of asteroids with return delta-v to Earth of <3 km/s
* low delta-v asteroids have Earth-like orbits
* the fraction of near-Earth asteroids containing water-bearing minerals appears to increase for smaller asteroids
* there are <~ 1,000 low delta-v near-Earth asteroids containing water-bearing minerals
* the number of low delta-v asteroids increases as the cube of delta-v