Friday, May 22, 2015
WHAT HAPPENS WHEN GOOD CRATERS GO BAD
8:00 a.m. E200 Auditorium

Chairs: **Kelsi Singer**
Bob Craddock

8:00 a.m. Barlow N. G. *
Crater Morphology, Modification, and Production Populations: Some Cautions when Using Craters to Derive Age Estimates **[#9026]**
Crater size-frequency distribution analyses is a useful technique to estimate formation ages of planetary surfaces. However, users of the technique are not always aware of how morphology, modification, and production populations affect the results.

8:40 a.m. Fassett C. I. * Thomson B. J.
Resurfacing, Crater Degradation, and Crater Statistics **[#9025]**
Craters go away / Be wary of retention / Is the age an age?

9:05 a.m. Watters W. A. * Geiger L. Fendrock M. Gibson R. Radford A.
Statistical Morphometry of Small Martian Craters: New Methods and Results **[#9032]**
Methods for automatic morphometric characterization of craters for large statistical studies; measured dependence of shape on size, terrain, modification, and velocity (via primary-to-secondary distance); evaluation of Ames Stereo Pipeline DEMs.

9:30 a.m. Kite E. S. *
Unscrambling Noachian Crater Erosion on Mars **[#9010]**
Noachian crater modification records an uncertain combination of fluvio-lacustrine, volcanic and aeolian processes operating over uncertain timescales. Crater crosscutting statistics confirm that fluviolacustrine erosion spanned a >>10^6 yr interval.

9:55 a.m. BREAK

10:05 a.m. Kirchoff M. R. *
Crater Saturation of Solar System Surfaces: Insights from Spatial Statistics **[#9029]**
Results of using spatial statistics (quantitative measures of objects' distributions in space) to constrain whether cratered surfaces throughout the solar system are in saturation equilibrium will be discussed.

10:30 a.m. Minton D. A. * Richardson J. E. Jr. Fassett C. I.
Testing Crater Counting Assumptions with the Cratered Terrain Evolution Model **[#9042]**
Using CTEM to answer the questions; 1) How close to Poisson-distributed are crater count uncertainties? and 2) How does observed clustering in crater count densities of large craters relate to the changes in the impactor flux?

10:55 a.m. Riggs J. D. * Robbins S. J. Kirchoff M. R. Bierhaus E. B. Weaver B. P.
Understanding Spatial Statistics for Purposes of Identifying Non-Primary and Saturated Impact Crater Populations **[#9050]**
We discuss some traditional unidimensional summarization statistics and some newer spatial point statistical methods for understanding and identifying non-primary and saturated impact crater populations observed on a variety of solar system bodies.

11:25 a.m. DISCUSSION

12:25 p.m. Robbins *
Thanks & Special MAPS Issue