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The thickest loess deposit in China. See related article by Huayu Lu et al., http://dx.doi.org/10.1130/G34488.1 .

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125th Anniversary About GSA Divisions & Associated Societies Education & Outreach GSA Foundation Meetings Membership Newsroom Backgrounder News Releases Current Releases Press Release Archive Journal Highlights Archive News About GSA Members Public Policy Publications Resources & Jobs Sections	Geology Tracks Eruptions, Earthquakes, Erosion, Extinctions & More New Geology articles posted online ahead of print 28 June through 11 July 2013 Boulder, Colorado, USA – Twenty-five new articles have been posted online ahead of print on <i>Geology's</i> website since 28 June. The science covers a gamut of topics, from microbial mats to super-eruptions; sand to monsoons; glaciers to sinkholes. All <i>Geology</i> articles go through a rigorous peer-review process prior to print. <i>Geology</i> is the highest rated journal for geoscience for the seventh year in a row, according to a 2012 Thomson Reuters survey. GEOLOGY articles published ahead of print can be accessed online at http://geology.gsapubs.org/content/early/recent . All abstracts are open-access at http://geology.gsapubs.org . Representatives of the media may obtain complimentary GEOLOGY articles by contacting Kea Giles at the address above. Please discuss articles of interest with the authors before publishing stories on their work, and please make reference to GEOLOGY in articles published. Contact Kea Giles for additional information or assistance. Detailed highlights are provided below. Non-media requests for articles may be directed to GSA Sales and Service, gsaservice@geosociety.org . ***** 28 JUNE 2013 ***** Tracking the evolution of large-volume silicic magma reservoirs from assembly to supereruption Jörn-Frederik Wotzlaw et al., Earth and Environmental Sciences Department, University of Geneva, 1205 Geneva, Switzerland. First published on 28 June 2013, doi: 10.1130/G34366.1 The most voluminous silicic volcanic eruptions in the geological past were associated with caldera collapses above giant silicic magma reservoirs. The thermal evolution of these sub-caldera magma reservoirs controls the volume of eruptible magma and eruptive style. Here we combine high-precision zircon U-Pb geochronology, trace element analyses of the same mineral grains, and mass balance modeling of zircon trace element compositions allowing us to track the thermal and chemical evolution of the Oligocene Fish Canyon Tuff magma reservoir (Colorado, United States) as a function of absolute time. Systematic compositional variations in U-Pb dated zircons record ~440 thousand years of magma evolution. An early phase of volumetric growth was followed by a period of cooling and crystallization, during which the Fish Canyon magma approached complete solidification. Subsequent remelting, due to underplated andesitic recharge magmas, began 171 plus or minus 58 thousand years prior to eruption, and led to the generation of ~5000 cubic kilometers of eruptible crystal-rich (~45 vol%) dacite. Age-equivalent, but compositionally different, zircons in an andesite enclave from late-erupted Fish Canyon Tuff tie the growth and thermal evolution of the upper-crustal reservoir to a lower-crustal magma processing zone. Our results demonstrate that the combination of high-precision dating and trace element analyses of accessory zircons can reveal invaluable information about the chemical and thermal histories of silicic magmatic systems and provides critical input parameters for fluid dynamic modeling.	12 July 2013 GSA Release No. 13-42 Contact: Kea Giles Managing Editor, GSA Communications +1-303-357-1057 kgiles@geosociety.org  The thickest loess deposit in China. See related article by Huayu Lu et al., http://dx.doi.org/10.1130/G34488.1 SHARE



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