The Ultimate Chase Into the Stratosphere

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The hybrid solar eclipse of 2013 was a unique opportunity to observe the circumsolar chromosphere and Baily's beads, and at the same time try to determine the real shape of the Moon's umbral shadow. To achieve the latest it was necessary to fly high above the Western Atlantic Ocean and into the tropopause, about a thousand kilometers east of Bermuda and near the transition point, to see the Moon casting its shadow onto the high cloud tops for a near-zero second eclipse. Planning and execution of such a demanding flight will be discussed during this presentation and we will then see what's going to be done in 2015 at an even higher altitude in the lower stratosphere.