

Not-so-empty space.

As recounted in the report on page 29, China's destruction of its Feng Yun-1C weather satellite on 11 January tossed into orbit more than 2500 pieces of debris larger than 5 cm. The debris cloud stretches from an altitude of 250 km up to 3650 km in a polar orbit, as plotted in red in this 29 January analysis by the Center for Space Standards and Innovation. Shown in green are satellite payloads—sensors, transmitters and receivers, experiment apparatus, and the like—in low-Earth orbit; the white line depicts the orbit of the International Space Station. Calculations by CSSI in early February predicted that over a seven-day period, there would be 800–900 occasions in which a payload would pass within 5 km of a piece of Feng Yun-1C debris. (Analysis and images, generated with the STK software package, courtesy of CSSI, www.centerforspace.com. Object sizes magnified for visibility.)

To submit candidate images for Back Scatter, visit http://www.physicstoday.org/backscatter.html.