

ABSTRACT:

NASA's Chandra X-ray Observatory includes a Flight Contamination Monitor (FCM), a system of 16 radioactive calibration sources mounted to the inside of the Observatory's forward contamination cover. The purpose of the FCM is to verify the ground-to-orbit transfer of the Chandra flux scale, through comparison of data acquired during the ground calibration with those obtained in orbit, immediately prior to opening the Observatory's sun-shade door. Here we report results of these measurements, which place limits on the change in the mirror--detector system response and, hence, on any accumulation of molecular contamination on the mirrors' iridium-coated surfaces between the two sets of measurements.