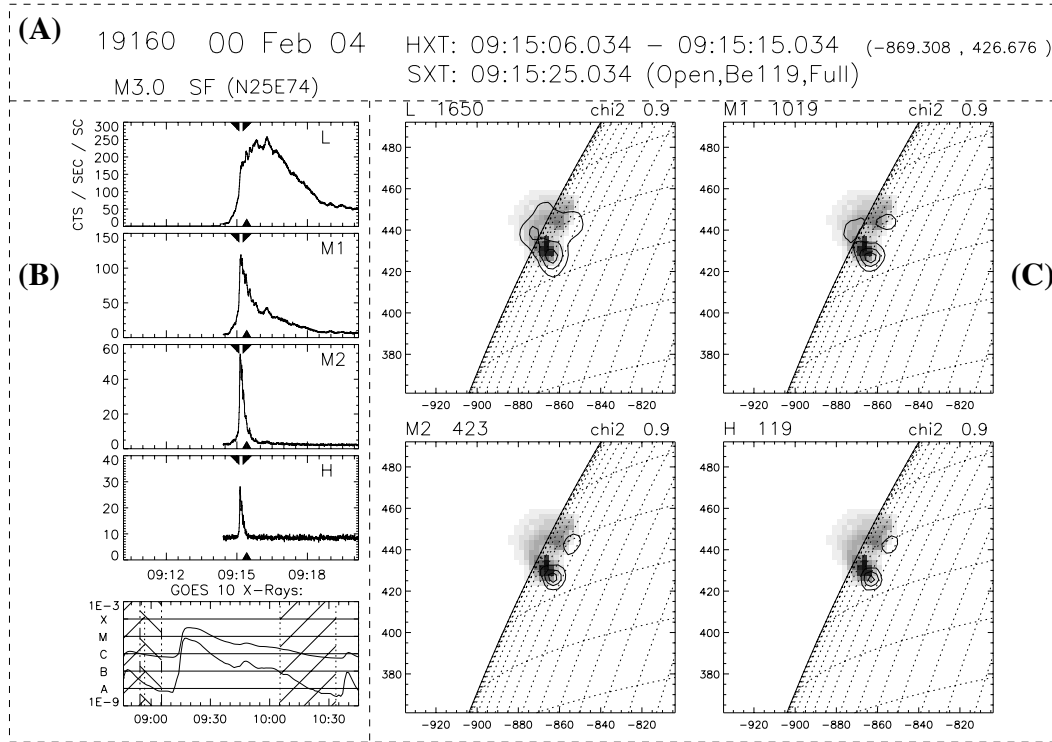


2. HXT/SXT FLARE IMAGES

Each figure consists of three panels (A), (B), and (C), as shown in the figure below.



(A) General Information:

At the top-left corner are shown the HXT event number (e.g., 19160 in this example) and date (00 FEB 04). Just below the event number, GOES X-ray class and H α flare importance and location (in parenthesis) are given. To the right, the interval during which photon counts are integrated for the HXT image synthesis is given in UT. This time interval was so selected as to cover the peak time in the HXT highest energy band of discernible hard X-ray flux increase, i.e., in this example the H-band. The integration interval is common for all of the HXT images in panel (C). At the top-right corner the center position of the field of view is given in parenthesis by X and Y coordinates from the solar disk center in arcseconds; here X and Y correspond to the east-west and north-west directions with west and north positive, respectively. Below the HXT integration interval is given for the observing time of the soft X-ray image shown in the panel (C), followed by the information on the SXT filters (i.e., a combination of [Open or NuDen] and [Be119, AlMg, Al12, or Al.1]; in this case the combination is Open/Be119) and image resolution (i.e., Full [$\approx 2''.5$], or Half [$\approx 5''$]).

(B) Time Profiles:

This panel shows the HXT time profiles in cts/s/subcollimator in the four energy bands for a time span of 10 minutes. The photon-integration time interval used for HXT image syntheses is graphically shown by the apexes of a pair of triangles along the top edge of the plot for each band. The observing time of the soft X-ray image is marked by the apex of a single triangle on the time axis in the plots for each band.

The corresponding GOES soft X-ray time plot is at the bottom. Note that the time scale differs from that for HXT time plots. Night periods of Yohkoh are denoted by

hatches from top-right to bottom-left, and radiation belts are denoted by hatches from top-left to bottom-right.

(C) HXT and SXT Images:

Up to four HXT images, each in a different energy band of HXT, are shown as contour maps, overlaid on a soft X-ray image taken with SXT and shown in grey scale. The same SXT image is used for all panels. Solar north is to the top and west is to the right. Each image has a fixed field-of-view size of $131'' \times 131''$. The contour levels are 12.5, 35, and 70 % of the maximum brightness in each image. The solar limb, whenever it appears in an image, is indicated in a thick solid line. Heliographic grids are shown by dashed lines in 2° increments.

A few remarks. The higher energy-band images are not shown when the photon counts are below the thresholds mentioned in the Preface. At the top of each image, the HXT energy band and the total integrated photon count (in units of counts/cm²/SC) are given, together with the reduced χ^2 value of the MEM image synthesis, which is a measure of imaging quality. For details of the MEM image synthesis, please refer to Reference [14].

The HXT and SXT images are coaligned, on the average, with accuracies better than one SXT pixel ($\approx 2''.5$). We have made our best efforts to locate the HXT and SXT images in the heliographic coordinates as accurately as possible.