The new minxss IDL procedure (minxss\_make\_level1\_xminute.pro) gives the option to

1. choose the timeframe to average over in unites of minutes, with the keyword, x\_minute\_average=x\_minute\_average.
2. choose the start time to consider the data to be averaged over with the keyword, start\_time\_cd\_array=start\_time\_cd\_array.
3. choose the end time to consider the data to be averaged over with the keyword, end\_time\_cd\_array=end\_time\_cd\_array.

The procedure also returns background (dark diode subtracted) XP data and dark data (valid eclipse time data) for both X123 and XP. Thus averages can be computed over timeframes such as 1, 5, 60 (hour), 1440 (day) minute averages for examples.

The older function (minxss\_make\_level1.pro) has been modified to simply filter, reduce, calculate uncertainties on X123 and XP data for the individual science packets (no longer performs averages).

To compile and run both functions (minxss\_make\_level1\_xminute.pro and minxss\_make\_level1.pro) the following functions below need to be compiled and the updated version of the instrument calibration file (MINXSS\_FM1\_RESPONSE\_STRUCTURE.SAV).

1. minxss\_x123\_correct\_deadtime.pro,
2. minxss\_X123\_mean\_count\_rate\_uncertainty.pro,
3. minxss\_XP\_mean\_count\_rate\_uncertainty.pro,
4. minxss\_XP\_signal\_from\_X123\_signal.pro
5. minxss\_x123\_invert\_count\_to\_photon\_estimate.pro
6. minxss\_X123\_be\_photoelectron\_si\_escape\_count\_correction.pro