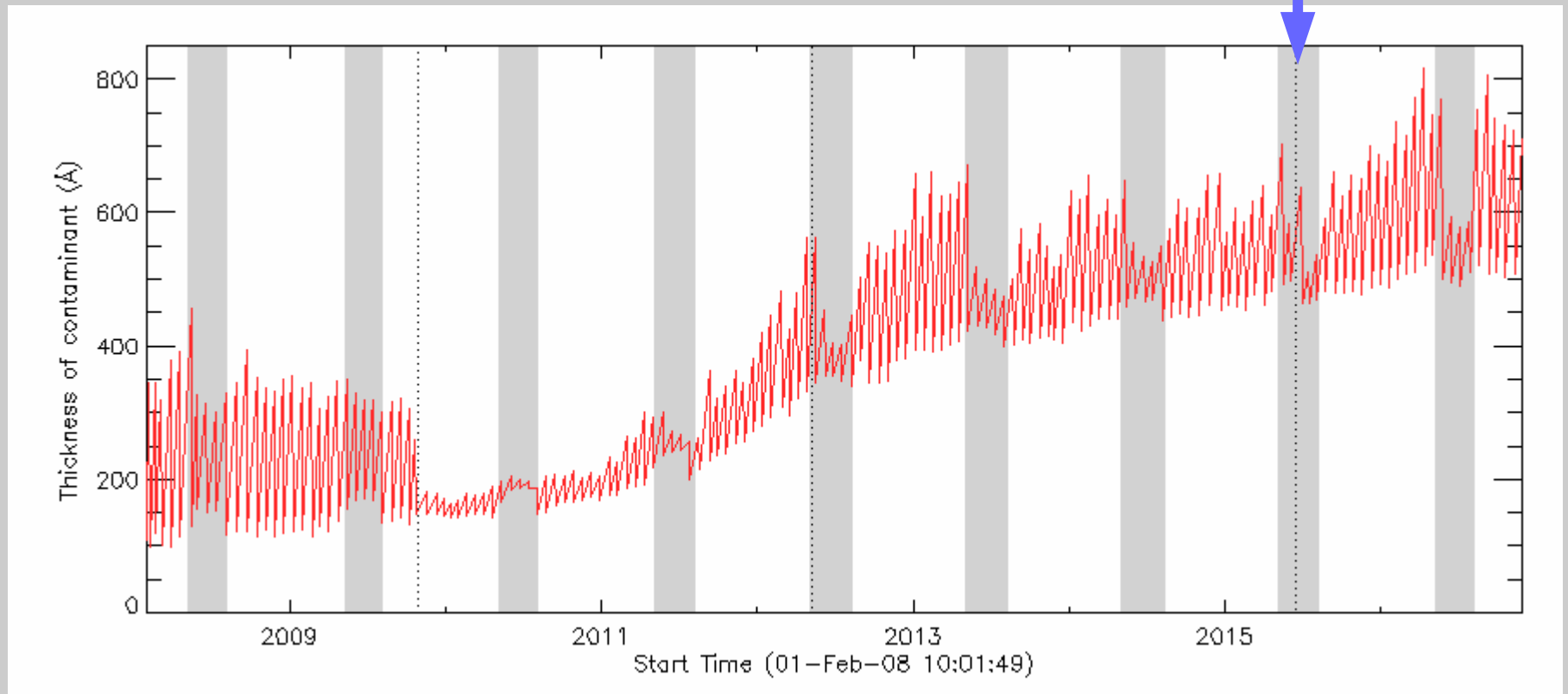
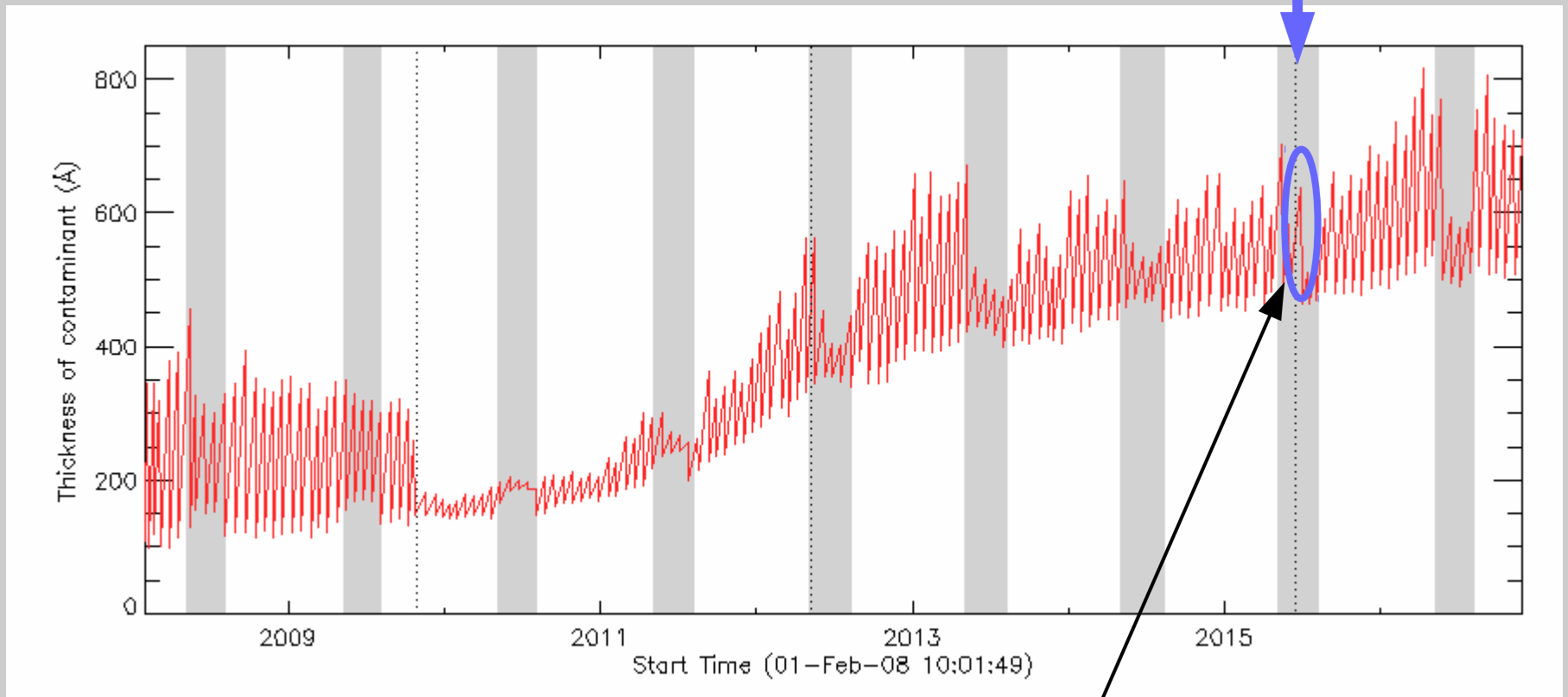


2nd Stray Light Increase



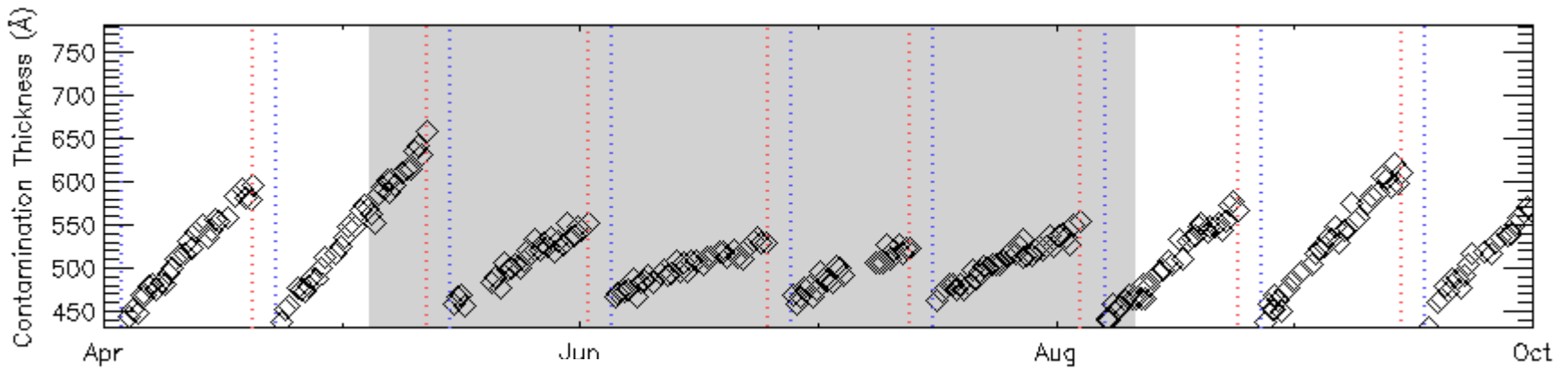
This is the plot of the new thickness database contents.

2nd Stray Light Increase

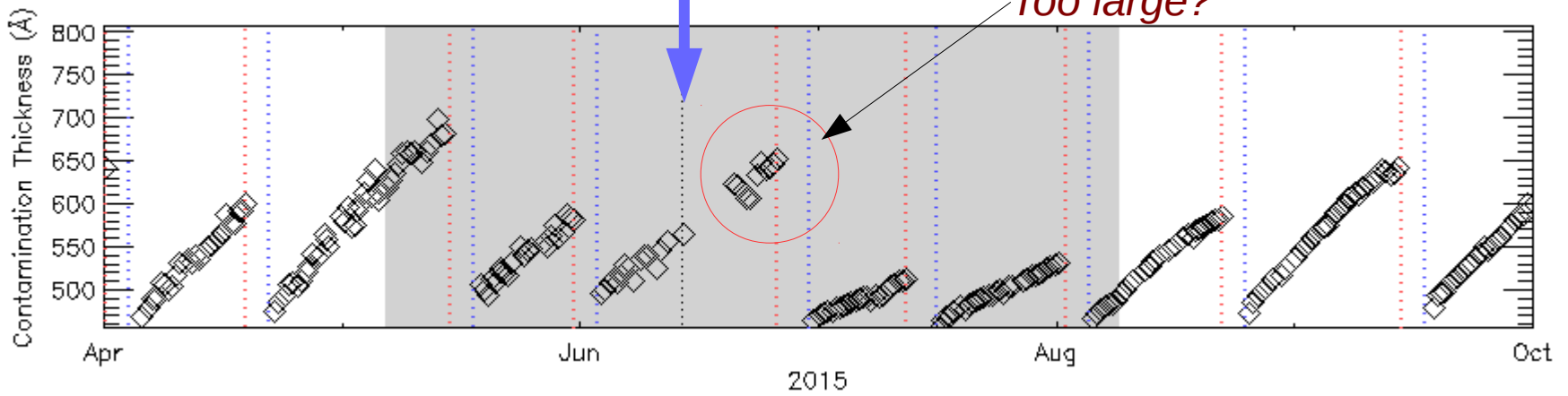


Increase of the thickness around the “2nd stray light increase event” looks (a little bit) too large, considering it happened during deep in the eclipse season.

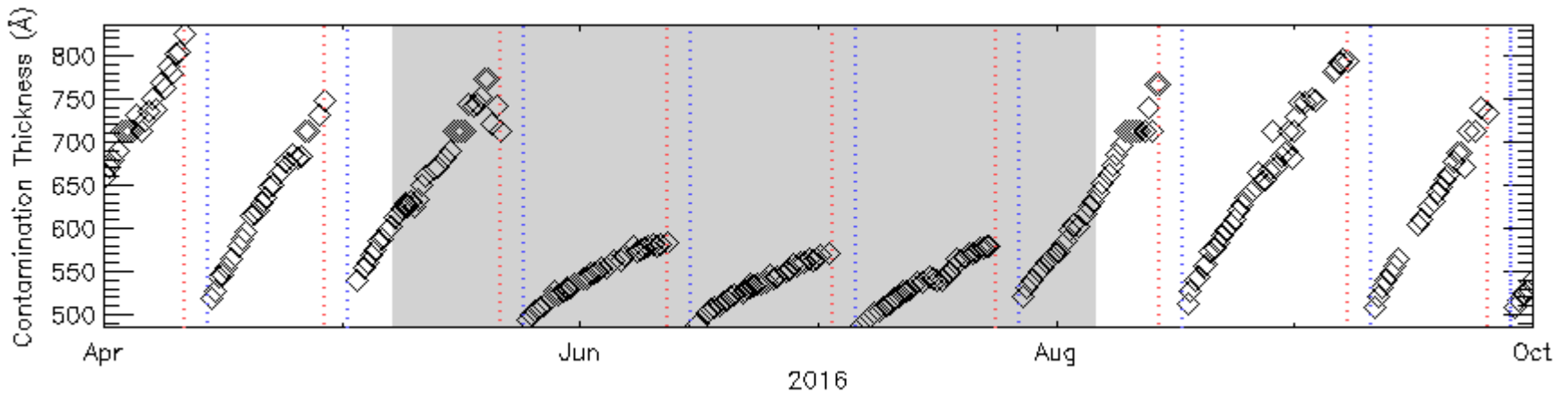
2014



2015



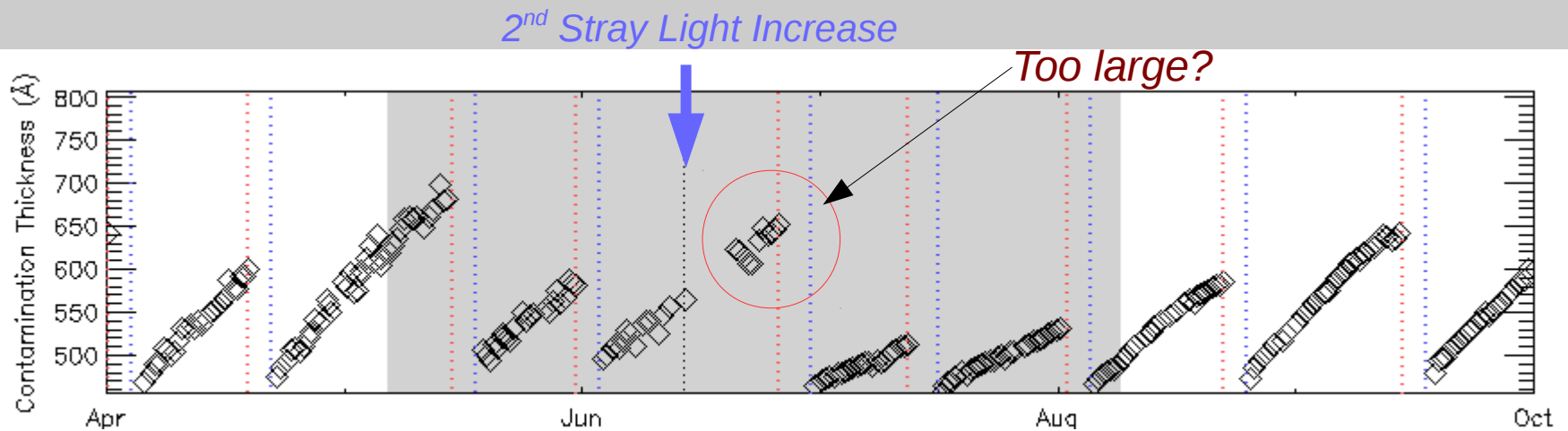
2016



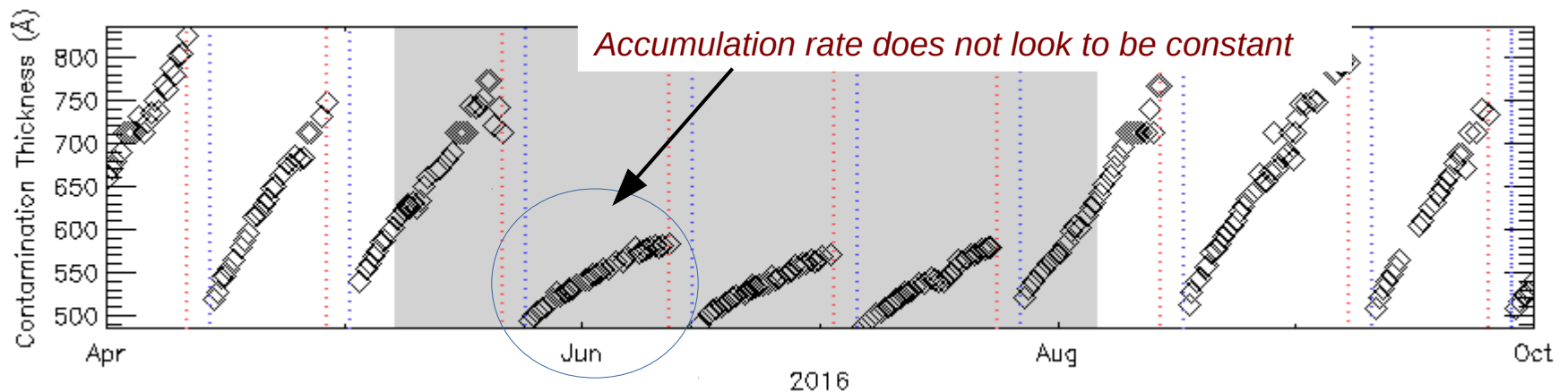
Contamination thickness plots around eclipse seasons for 2014, 2015, and 2016. Please note that we used the different method to derive thickness after the 2nd stray light increase event.

Vertical red dotted lines : time of CCD heater On
Vertical blue dotted lines : time of CCD heater Off

2015



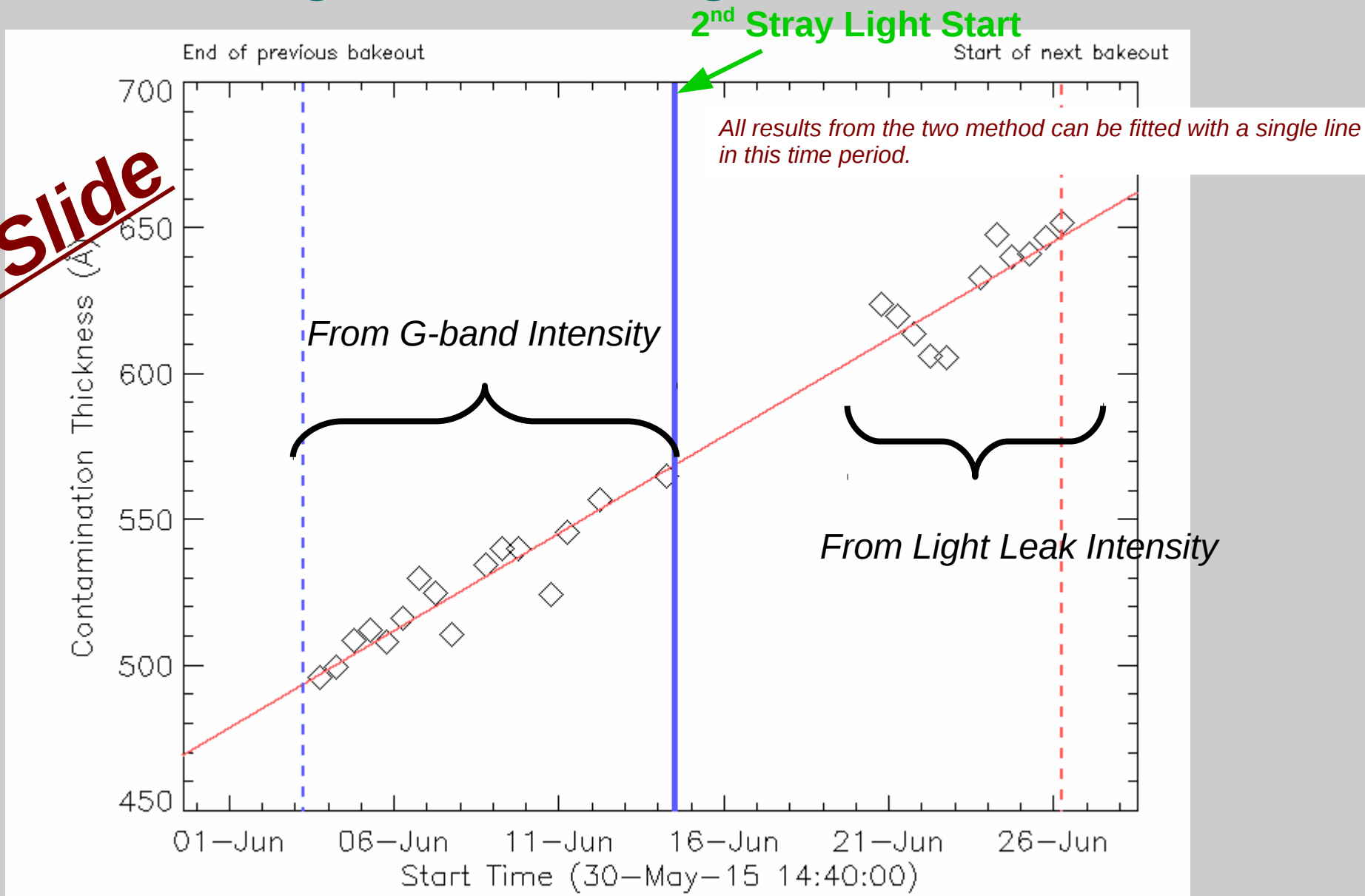
2016



- I used the data in the time period (2015/6/3 – 2015/6/26) to discuss the consistency of the two different methods (from G-band intensity and light leak intensity) with assumption of constant accumulation rate. While the assumption is valid for the data in non-eclipse season, the accumulation rate may change in the eclipse season (see the plots in the period 2016/5/24 – 2016/6/12) .
- Using the thickness data from the same season in different years (2014 and 2015), I calculated a possible range of thickness from the 1st half results (from G-band method) and re-discussed the consistency of the two methods.
- The method using light leak images may overestimate the thickness, but still provides acceptable values.

Can we use “light leak” image instead of G-band?

Old Slide

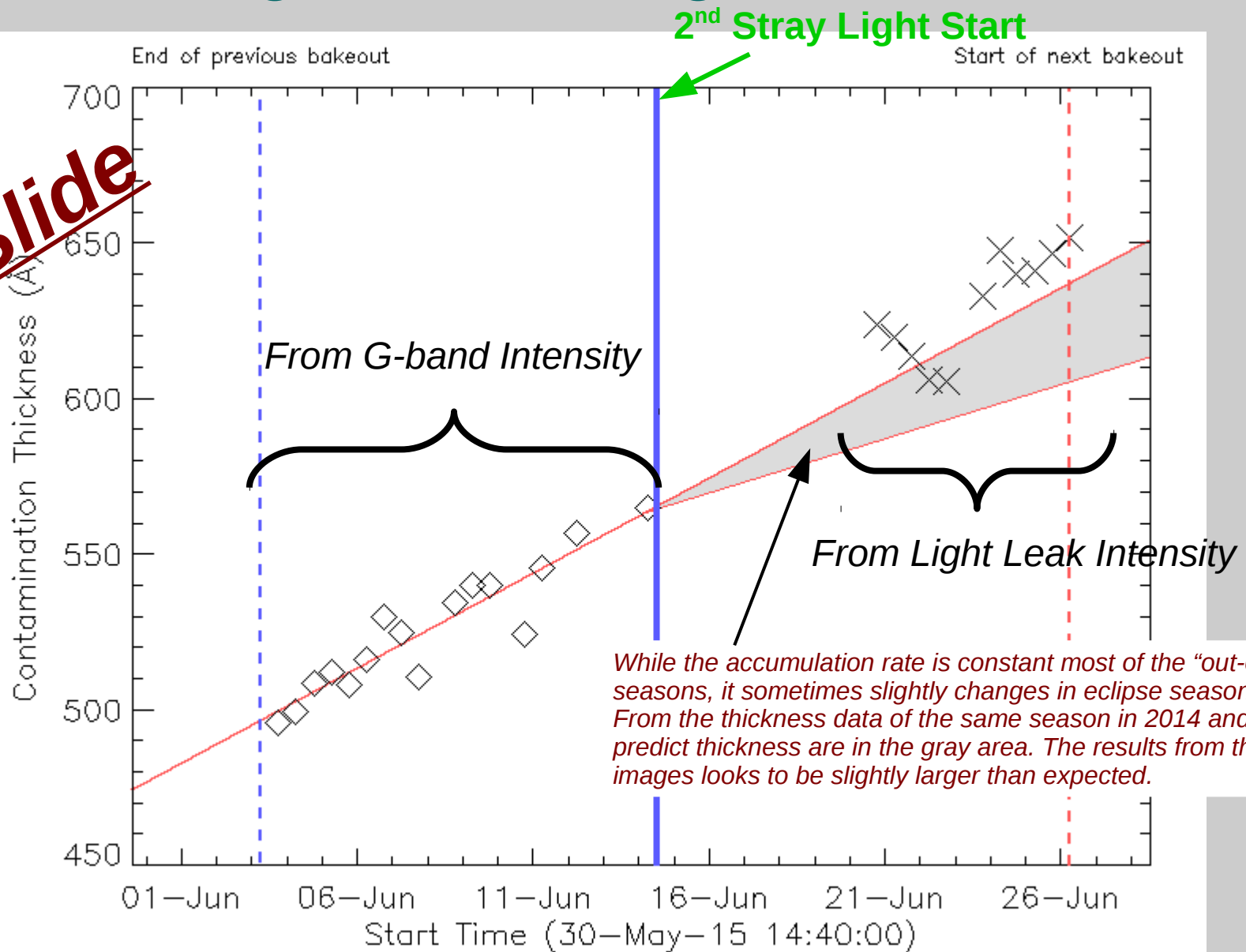


Thickness in the plot were derived from G-band intensity enhancement (before 2nd stray light increase) and from light leak intensity enhancement (after 2nd stray light increase)

The results from the two methods are consistent

Can we use “light leak” image instead of G-band?

New Slide



Thickness in the plot were derived from G-band intensity enhancement (before 2nd stray light increase) and from light leak intensity enhancement (after 2nd stray light increase)

The “light leak method” may overestimate the thickness.
But they are still in acceptable range.