Subject: Event size + 2track skim rates **From:** David Lawrence <davidl@jlab.org>

Date: 02/03/2015 10:31 AM

To: "Mark M. Ito" <marki@jlab.org>

CC: "Curtis A. Meyer" <cmeyer@cmu.edu>, Graham Heyes <heyes@jlab.org>

Hi Mark,

Here are some numbers we talked about in e-mail form for archival purposes:

Event size from simulated events converted into EVIO is 18kB.

Event size from commissioning run 2409 (mode 7) after adjustments for firmware upgrades is 24kB

As we discussed, I think we should update the spreadsheet to use the $18 \, \mathrm{kB}$ number. There will be

additional gains we can achieve on the 24kB data when we reformat after L3 that should bring us

closer to the 18kB number.

I did a few single thread tests on the Haswell farm node (ifarm1401) using 2-track skim files.

The tests included REST file generation. I did this for both mode7 and mode 8 data, but the

rates were the same as shown below.

Run 2179 (mode 7) 11.5 Hz Run 2180 (mode 8) 11.5 Hz

As we discussed, the rate for processing non-skim data was consistent with what Kei reported at

around 45 Hz. Processing simulated data was slightly higher on the Haswell than the 22 Hz reported

earlier. I think given all of this, we should stick with 22 Hz as our reconstruction rate.

Regards,

-David