Weekly Meeting

Feb 8th 2018

Trigger Burst Cuts

- Need to determine:
  - What is the best time to average over
  - What is the best method of making cut
- Are there metrics to use to determine this?

- Two methods:
  - Determine event rate, calculate standard deviation. Cut is 3 sigma
  - Event rate average precision method – remove bins until change in average is below some threshold
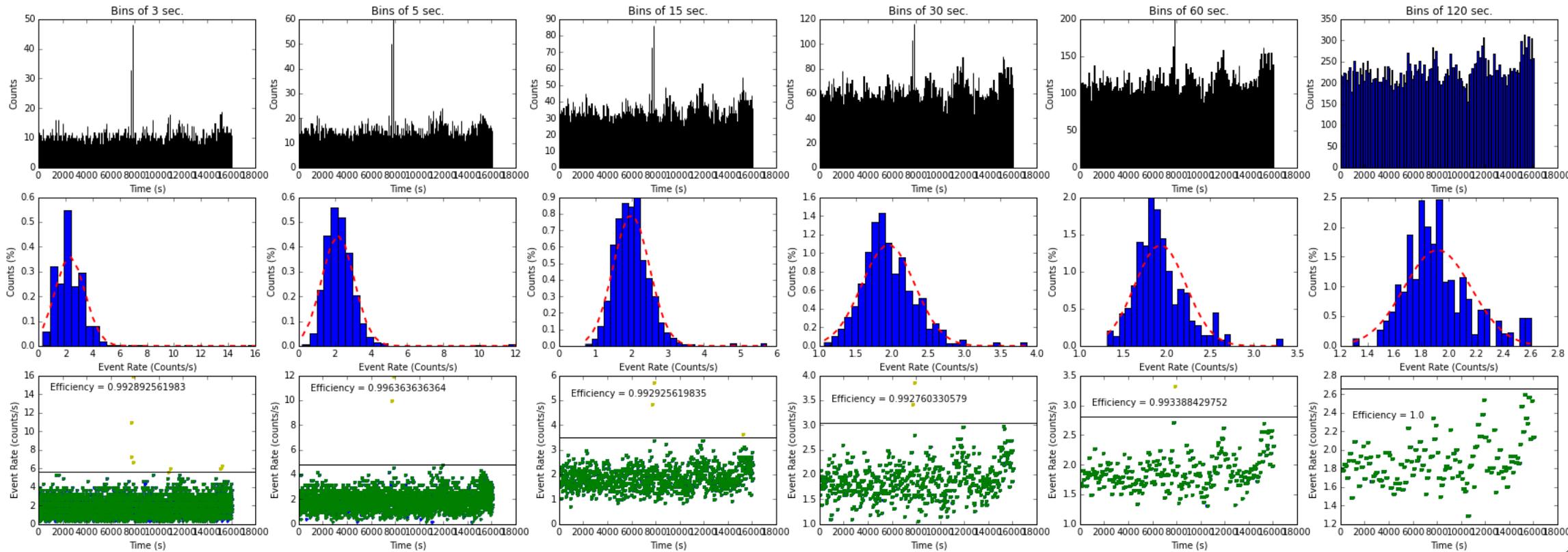
TriggerBurstCut – Mozilla Firefox

File   Edit   View   History   Bookmarks   Tools   Help

IPy Home | IPy Untitled0 | IPy TriggerBurstCut | IPy SiQuanDev

localhost:8876/notebooks/TriggerBurstCut.ipynb

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IP[y]: Notebook   TriggerBurstCut Last Checkpoint: Feb 07 17:42 (autosaved)

File   Edit   View   Insert   Cell   Kernel   Help

Code ▾   Cell Toolbar: None ▾   Notebook saved

30050 30250
30250 30250

Bins of 3 sec.   Bins of 5 sec.   Bins of 15 sec.   Bins of 30 sec.   Bins of 60 sec.   Bins of 120 sec.

Efficiency = 0.992892561983
Efficiency = 0.996363636364
Efficiency = 0.992925619835
Efficiency = 0.992760330579
Efficiency = 0.993388429752
Efficiency = 1.0

In [7]:

TriggerBurstCut – Mozilla Firefox

File Edit View History Bookmarks Tools Help

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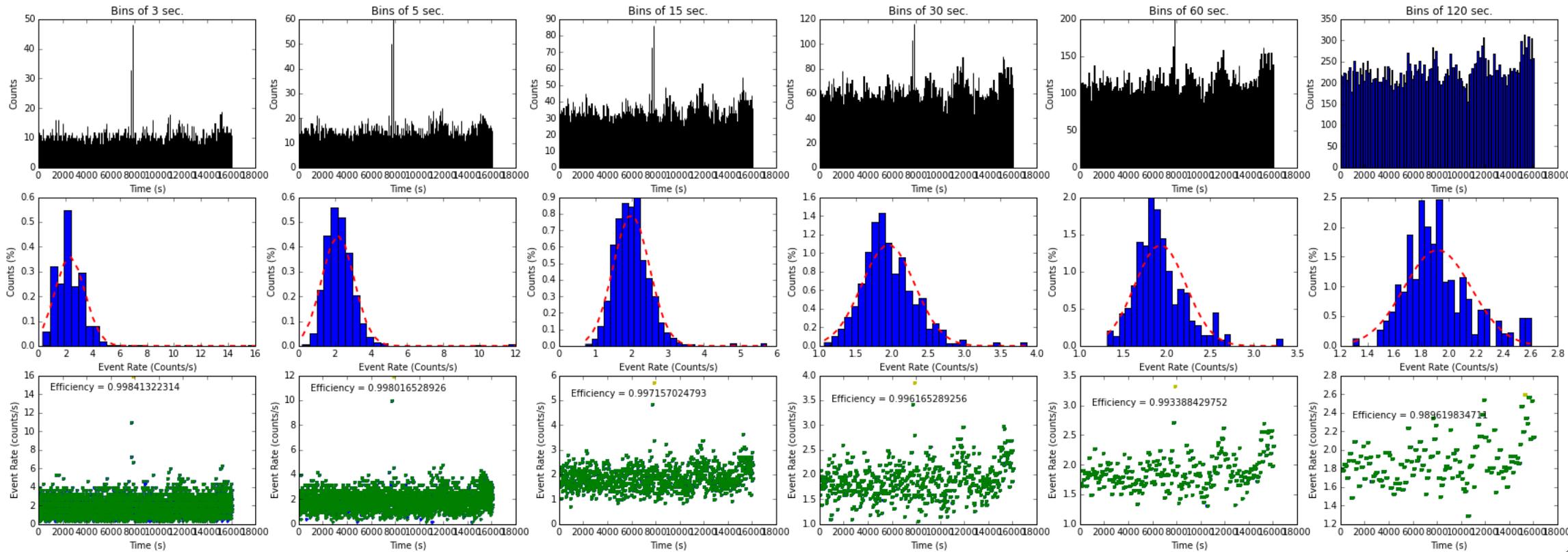
IP[y]: Notebook   TriggerBurstCut Last Checkpoint: Feb 07 17:42 (unsaved changes)

File   Edit   View   Insert   Cell   Kernel   Help

Code   Cell Toolbar: None

30050 30250
29936 30250

Bins of 3 sec.   Bins of 5 sec.   Bins of 15 sec.   Bins of 30 sec.   Bins of 60 sec.   Bins of 120 sec.

Efficiency = 0.99841322314
Efficiency = 0.998016528926
Efficiency = 0.997157024793
Efficiency = 0.996165289256
Efficiency = 0.993388429752
Efficiency = 0.989619834711

In [7]:

TriggerBurstCut – Mozilla Firefox

File   Edit   View   History   Bookmarks   Tools   Help

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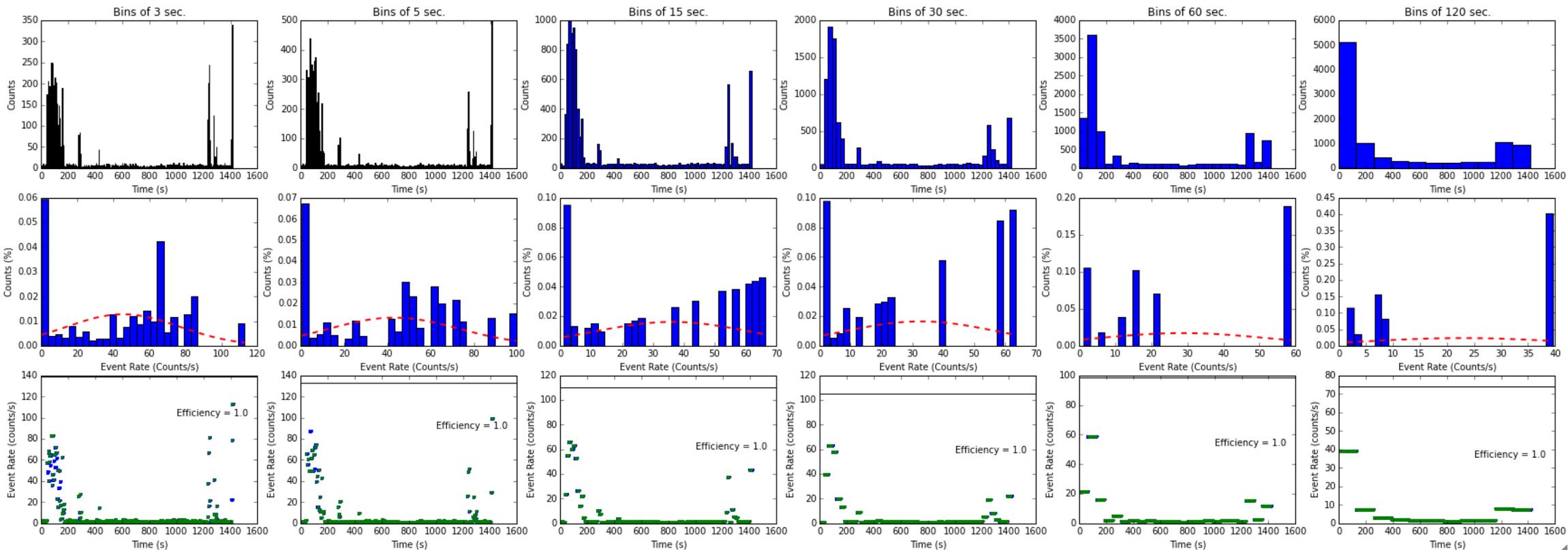
IP[y]: Notebook

TriggerBurstCut Last Checkpoint: Feb 07 17:42 (unsaved changes)

File   Edit   View   Insert   Cell   Kernel   Help

Code   Cell Toolbar: None

10000 10000
10000 10000

Bins of 3 sec.   Bins of 5 sec.   Bins of 15 sec.   Bins of 30 sec.   Bins of 60 sec.   Bins of 120 sec.

Efficiency = 1.0   Efficiency = 1.0   Efficiency = 1.0   Efficiency = 1.0   Efficiency = 1.0   Efficiency = 1.0

In [7]:

Applications   Places   Firefox Web Browser   Thu 12:00

File   Edit   View   History   Bookmarks   Tools   Help

IPy Home   IPy Untitled0   IPy TriggerBurstCut   IPy SiQuanDev

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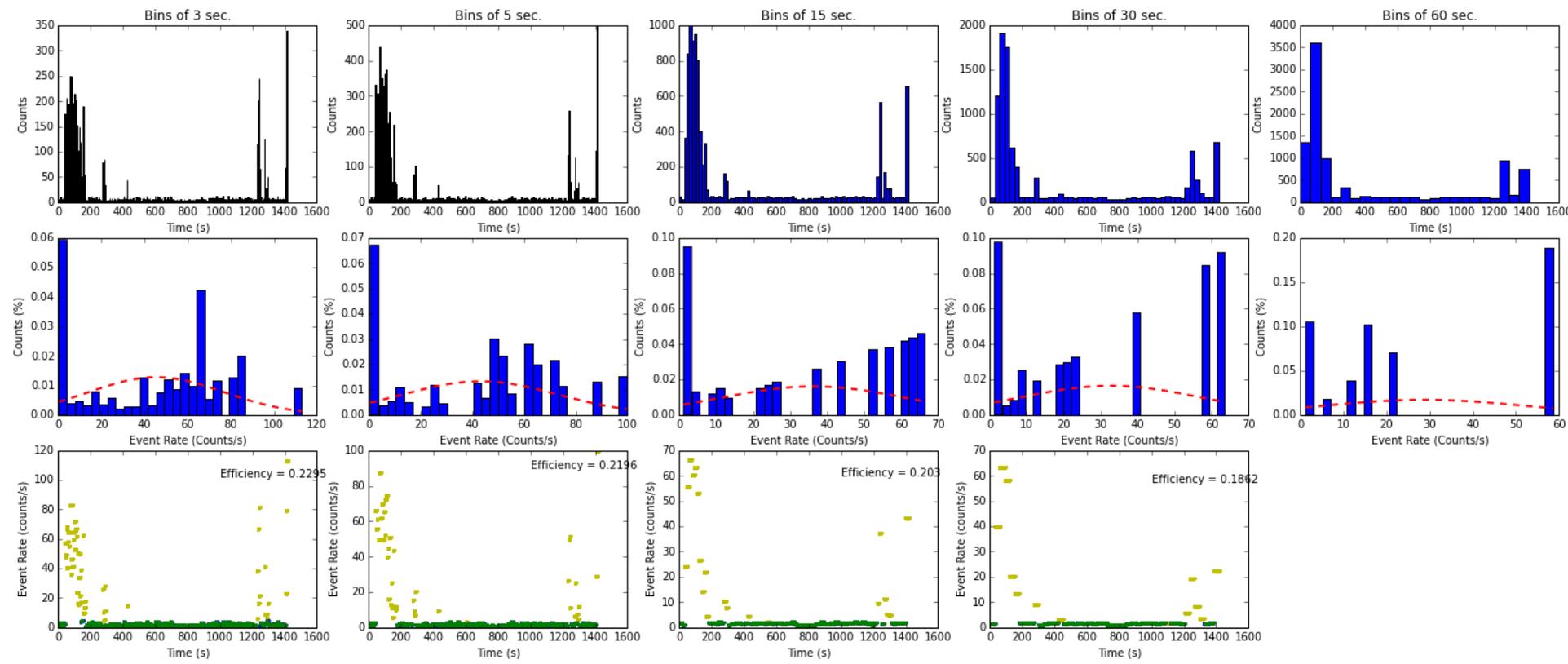
IP[y]: Notebook   TriggerBurstCut Last Checkpoint: Feb 07 17:42 (autosaved)

File   Edit   View   Insert   Cell   Kernel   Help

Code   Cell Toolbar: None

ValueError: max() arg is an empty sequence

Bins of 3 sec.   Bins of 5 sec.   Bins of 15 sec.   Bins of 30 sec.   Bins of 60 sec.

Efficiency = 0.2295   Efficiency = 0.2196   Efficiency = 0.203   Efficiency = 0.1862

In [7]:

mwilson@nero:~   TriggerBurstCut − Mozilla Firefox   [Power]   mwilson@nero:/neroscratch/mwils...   1 / 4