# ARA Station Operations

## ARA Collaboration Meeting - Madison WI 22 July 2015

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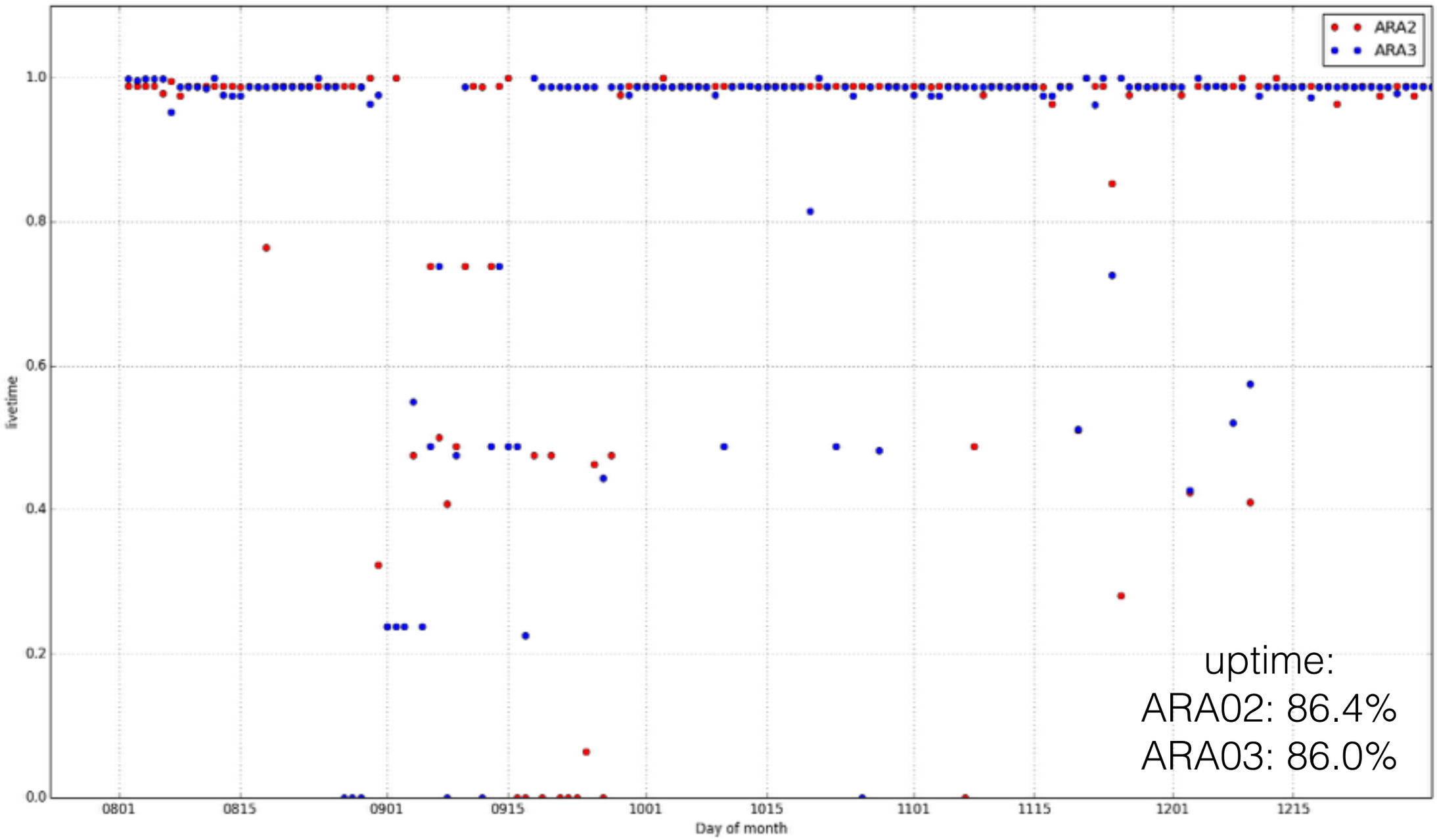
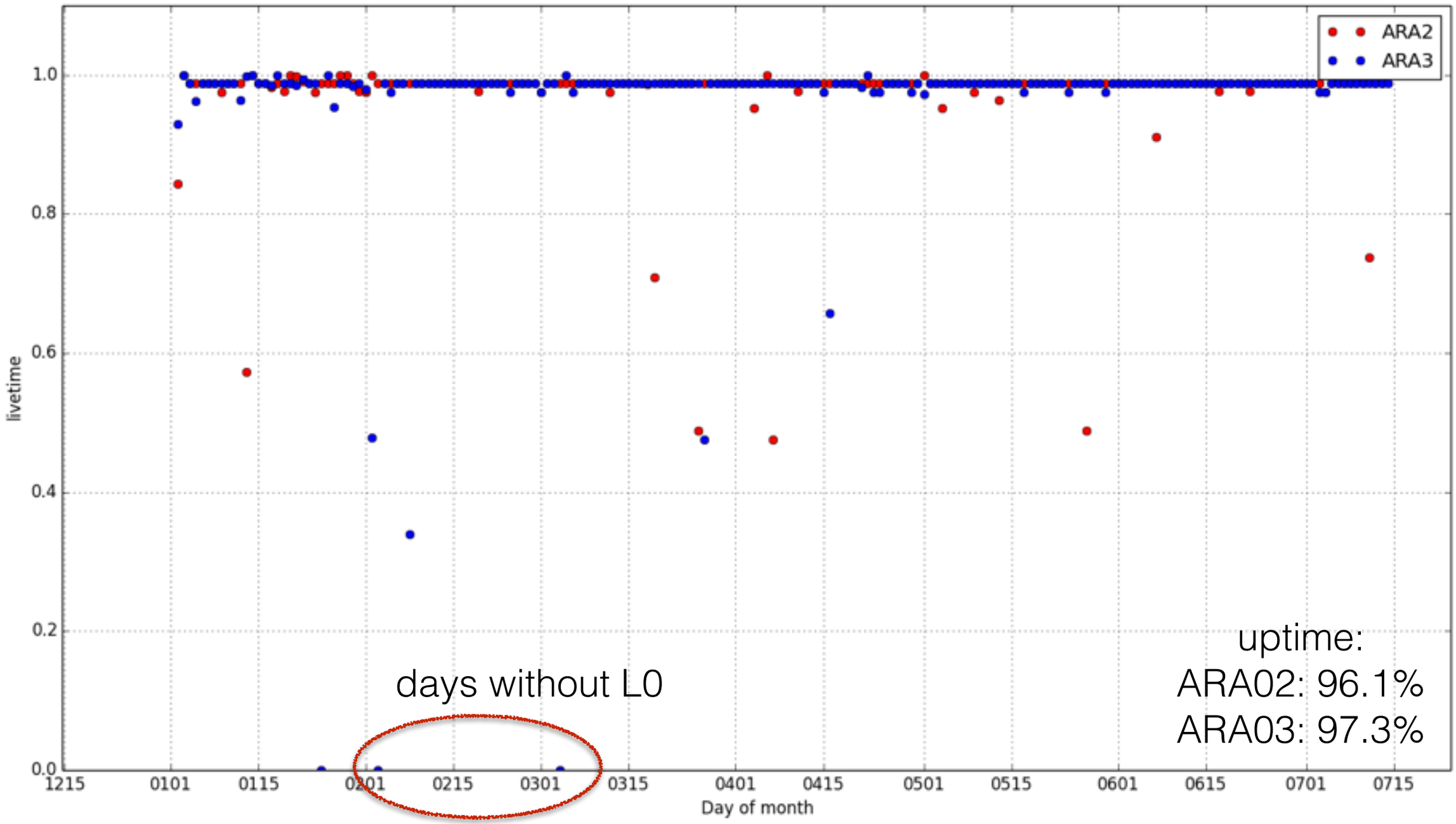
- Quick discussion since the detector is being well-behaved
- ARA Stations livetimes
- Data loss in Aug/Sept 2014
- The Current Mystery
- recap of monitoring resources

# Livetimes in 2014

(add up deadtime between event runs)

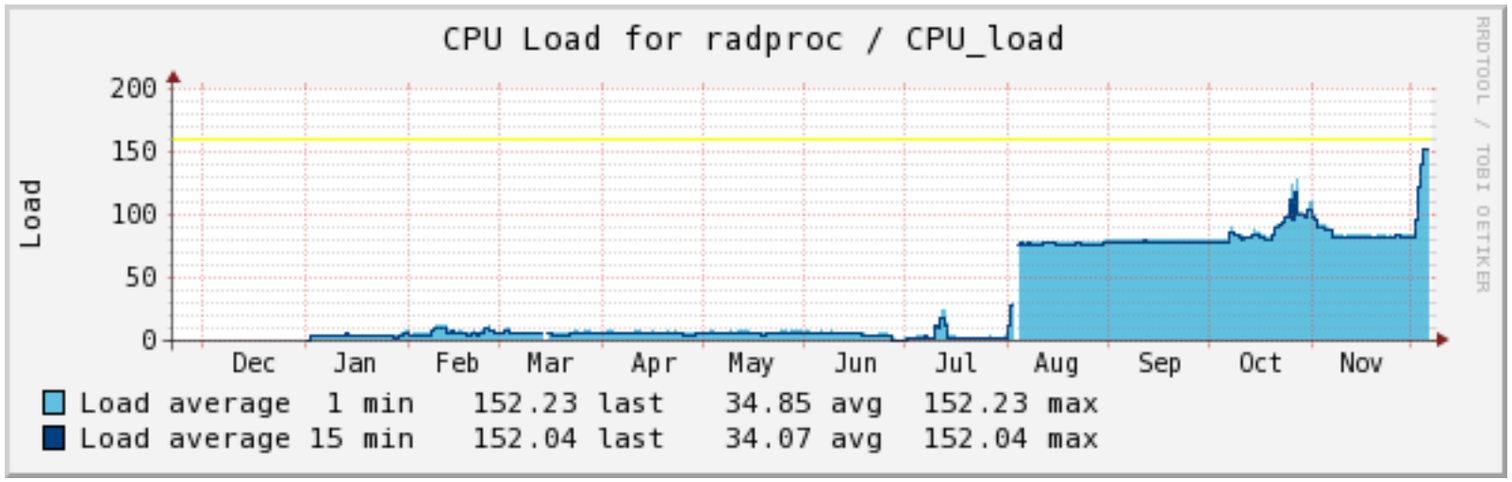


# Livetimes in 2015



# Data loss in 2014

- August 2014: Software managing the UPS (uninterruptible power supply) for radproc went ‘bananas,’ consuming most of radproc’s available CPU resources. (did not realise this until Dec.)




- Result: data came in faster than it could be processed and saved to tape. A large backlog developed through Aug/Sept, until a multi-threaded processing framework was installed in early Oct.

- However, in the interim, radproc’s disk had filled, and data had been lost - ~14 days per station total.

# Data loss 2

- Perfect storm - number of lessons learned.

- Organizational side: awareness that there has to be a point person; that data flow issues need to be handled quickly; better relationship with winter-overs.

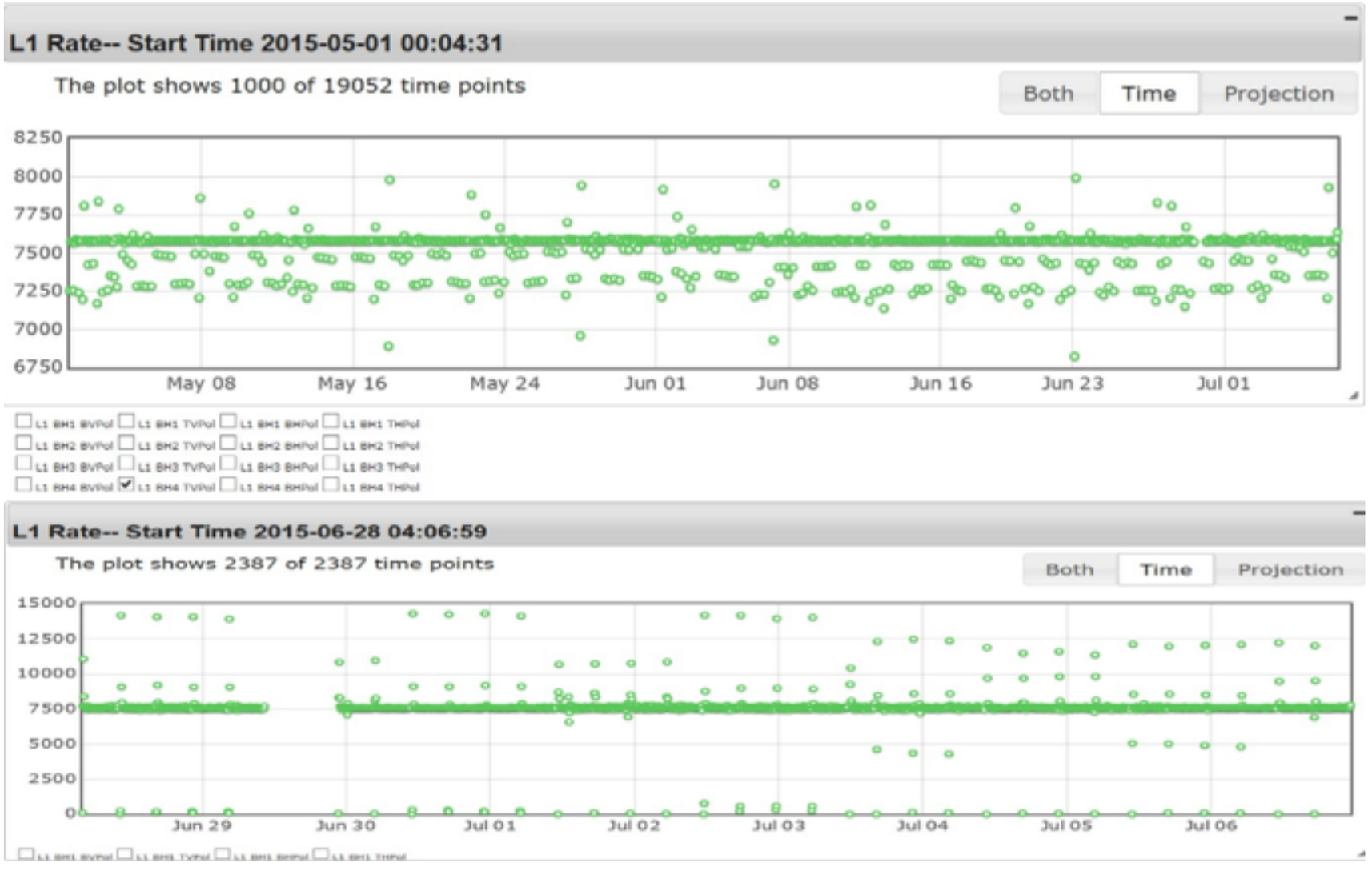
- Software side: multi-threaded processing framework (currently superfluous); automatic data deletion that checks backup logs.

# currently being discussed - sinusoidal variation in L1 rates

- sinusoidal structure due to phase drift of sampling run start?

- Possibility:
  slow clock -> waveforms overlap -> amplitude and pedestals go down

ARA2



# Monitoring reminder: Notifications from South

- All emails go to ara-detector list.
- Currently 2 status emails per day

| | **Run daemon** | **Well being alert** | **Well being status email.** |
|---|---|---|---|
| How often | Every hour. | Every hour | Once a day (currently twice) |
| How many | One per SBC | One | One |
| Main functionality | -Verify run completely transferred<br>- Identify run type<br>-Run monitoring, filtering, satellite, backup | -Ping sbcs<br>-Check storage quota<br>-Check radproc quota<br>- check for monitor alerts | -Radproc disks usage<br>- run tx log<br>-Data processing log<br>- |

# AWARE

- Currently two versions (Ryan will discuss?)

- http://aware.wipac.wisc.edu

- http://www.hep.ucl.ac.uk/~rjn/ara/aware/

that’s all, folks