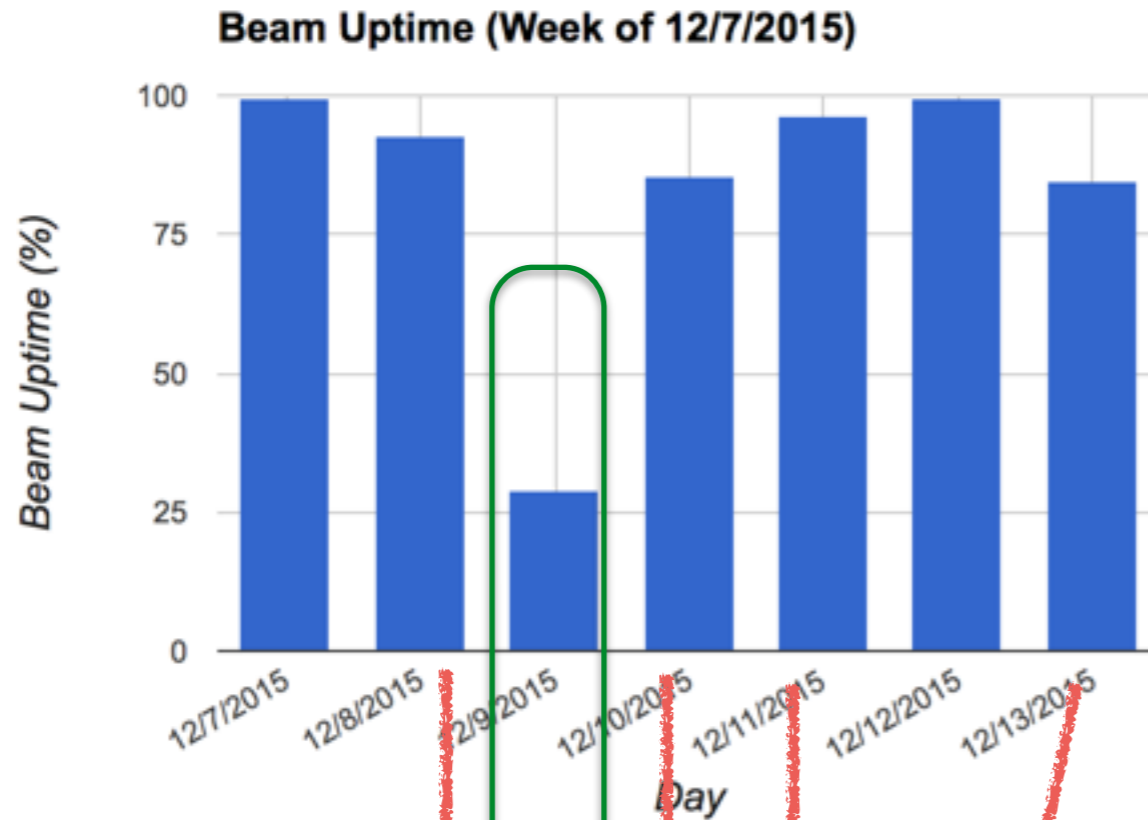


# MicroBooNE Status Report

**All Experimenters' Meeting**  
Raquel Castillo Fernandez  
12/14/2015 FNAL

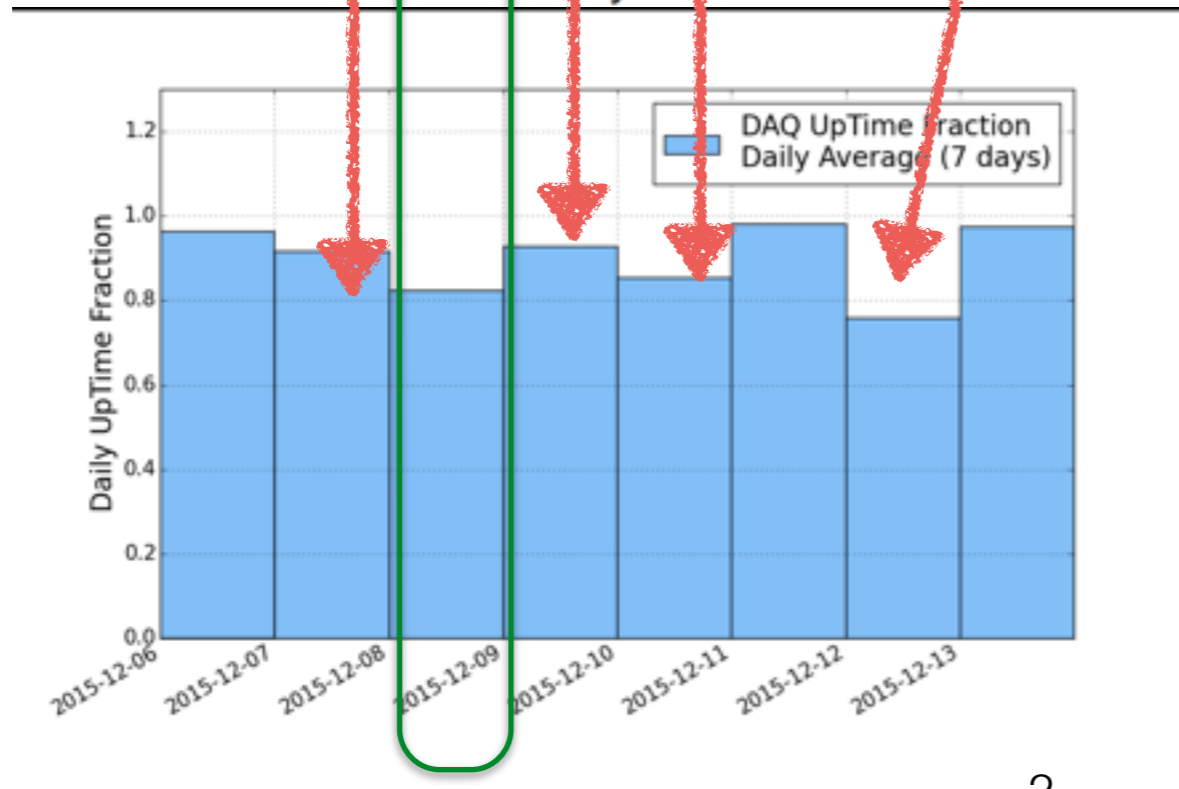
# Beam vs DAQ Uptime



BNB/NuMI beams were down part of the day **12/09/2015**

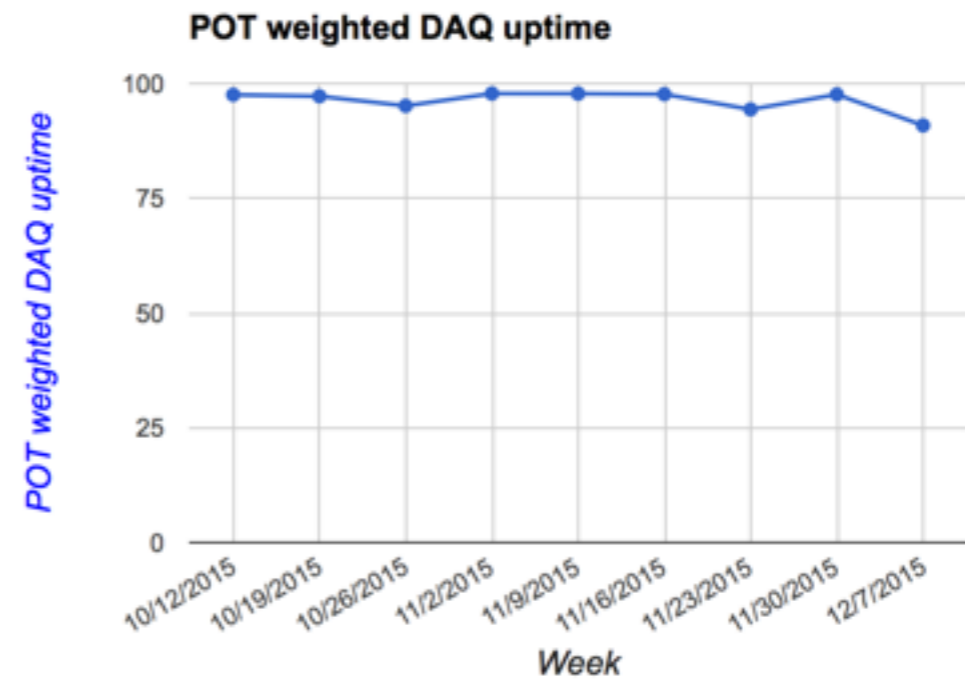
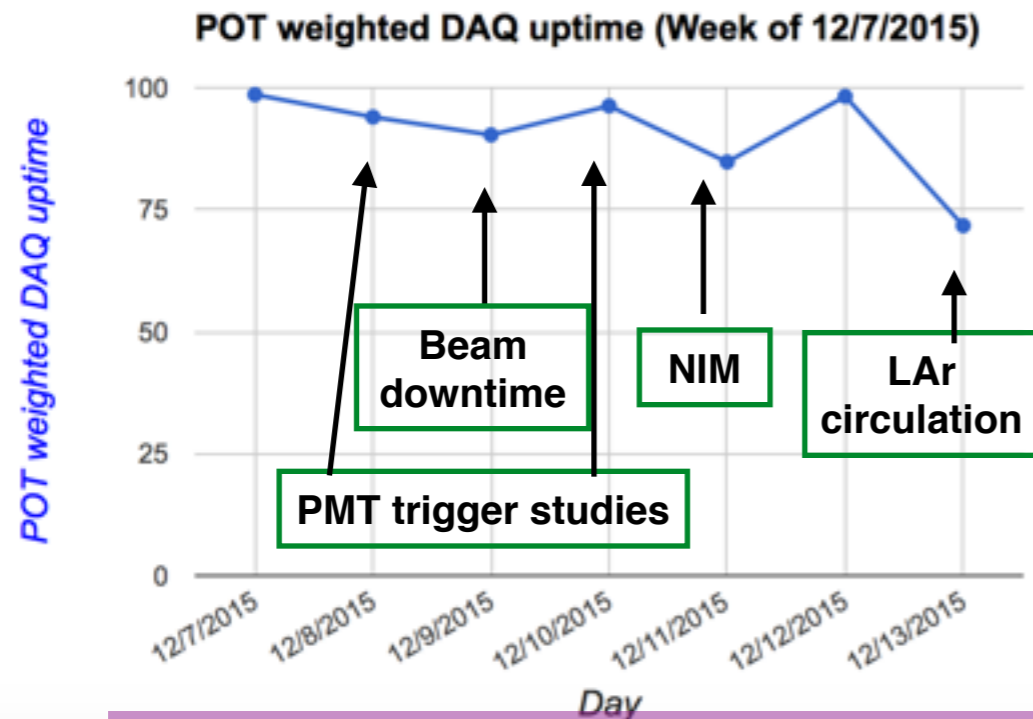
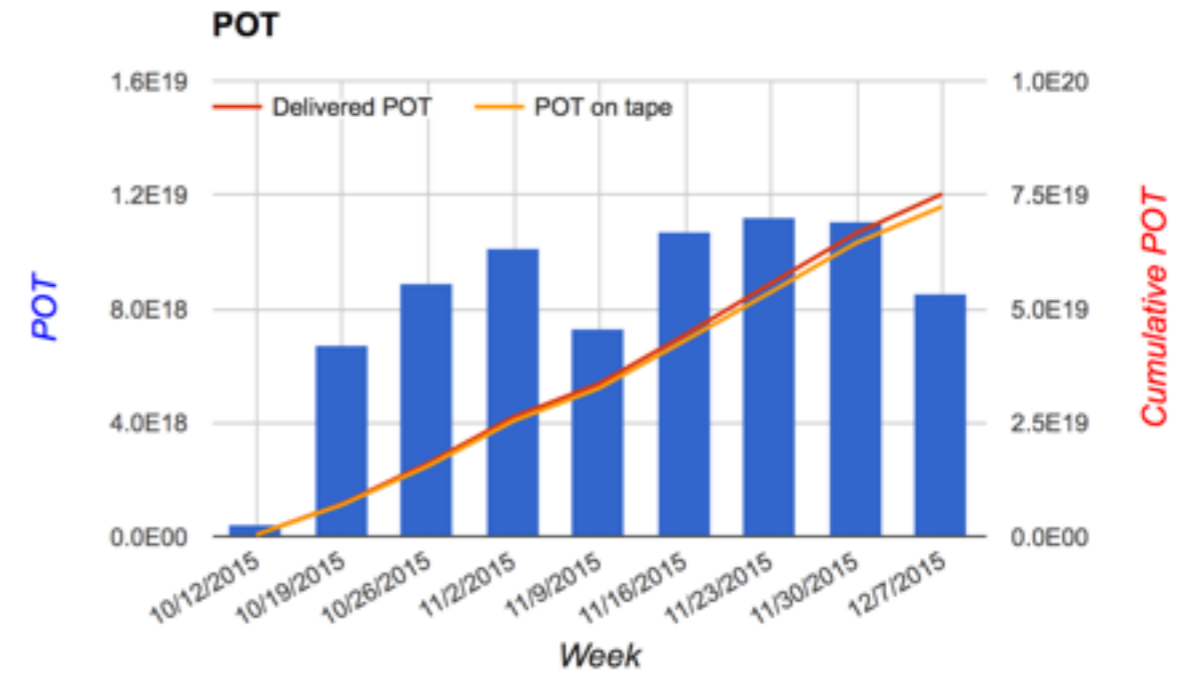
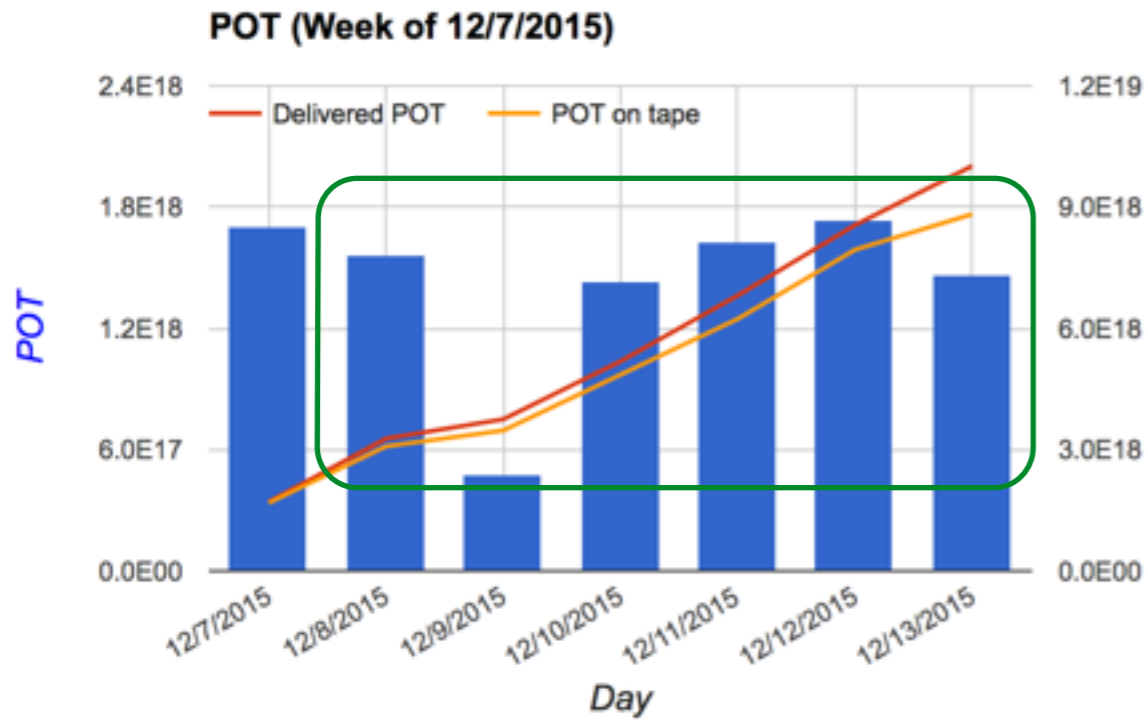
Some other issues:

- PMT trigger studies (**Tuesday & Thursday**)
- NIM failure (**Friday**)
- LAr circulation pump tripping (**Sunday**)



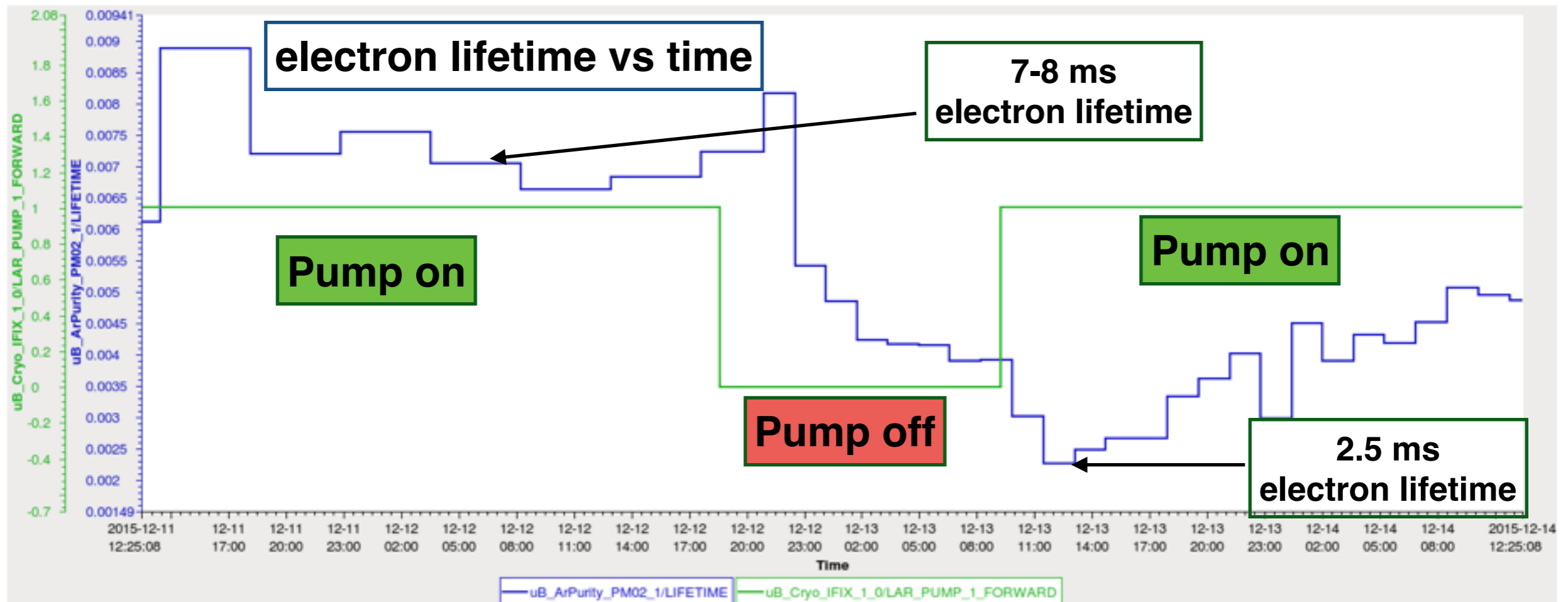
DAQ Uptime

# PoT on Tape



For last week (left) and all time (right) PoT summary and PoT- weighted DAQ uptime

# Pump trip & electron lifetime



- Last Saturday night the LAr circulation pump tripped off
- Cryo experts came in early Sunday morning to bring pump back up
  - Same problem as October pump trip, now understood by experts
- Cathode HV had to be ramped down for pump work (detector downtime)

# PoT on Tape

| Week of   | POT delivered (1e16) | POT on tape (1e16) |
|-----------|----------------------|--------------------|
| 12/7/2015 | 1001.82              | 910.68             |

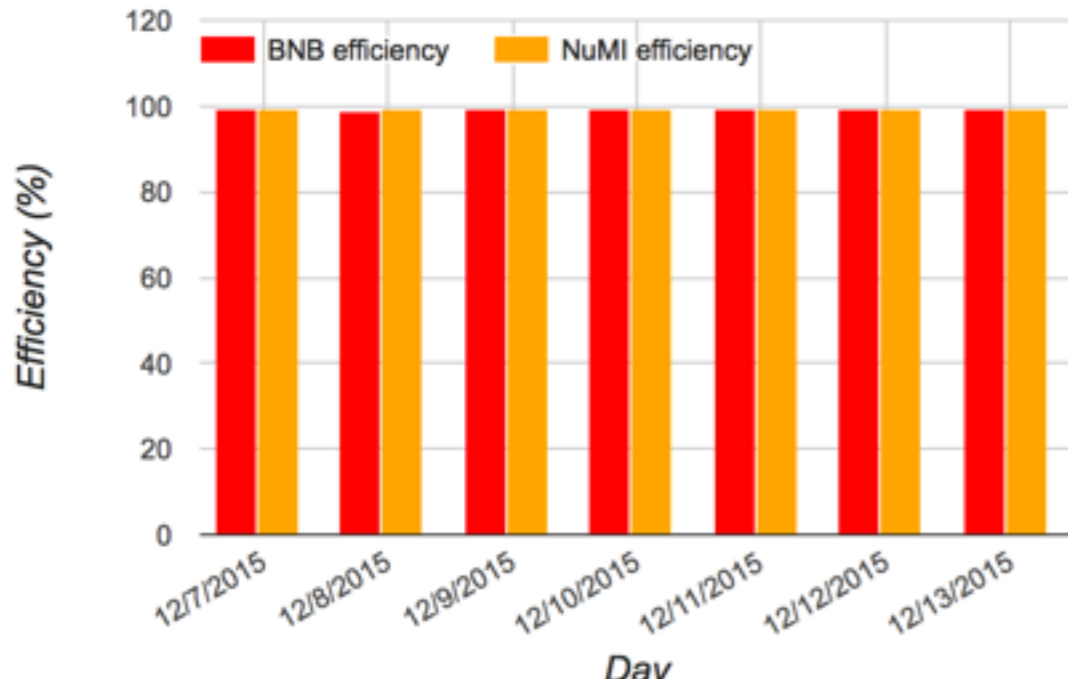


91% efficiency

- Lower efficiency due to:
  - PMT trigger work
  - Pump trip (with cathode off much of the time)
  - NIM failure

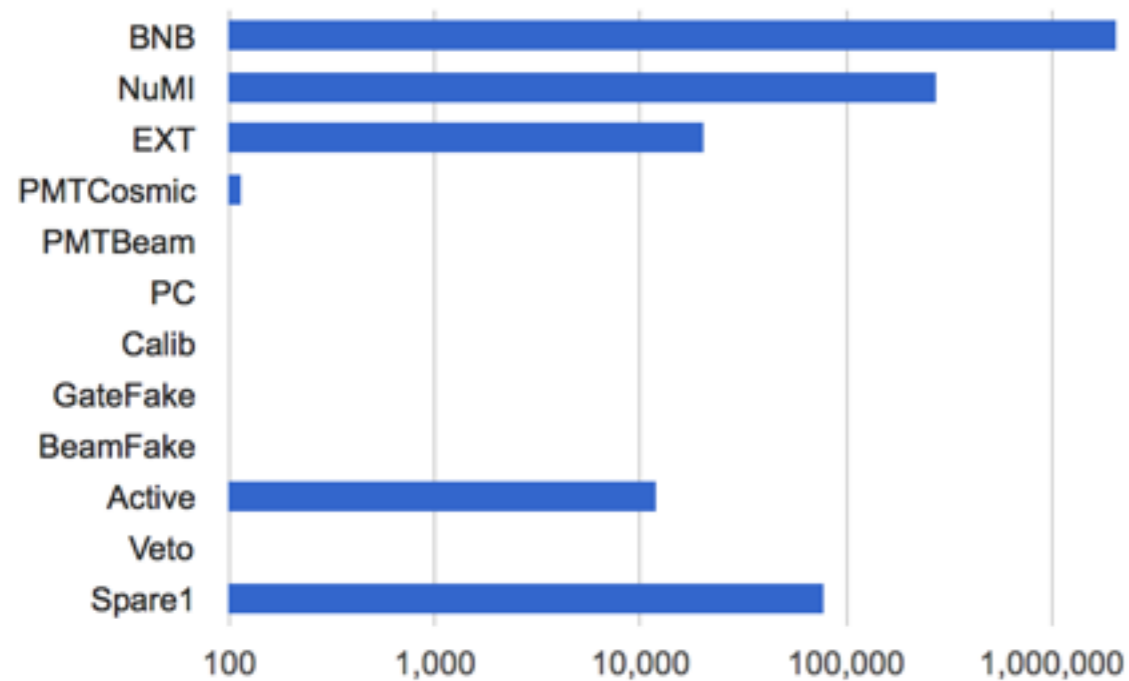
# Trigger Counts

Trigger efficiency (Week of 12/7/2015)



Trigger veto window increased on Wednesday, efficiency a bit increased: **99.1% → 99.5%**  
**Ongoing studies to reach our previous 99.8%**

Recorded triggers (Week of 12/7/2015)



| Day        | BNB triggers | NuMI triggers | BNB spills | NuMI spills |
|------------|--------------|---------------|------------|-------------|
| 12/7/2015  | 422850       | 57262         | 425887     | 57697       |
| 12/8/2015  | 360966       | 47958         | 364402     | 48361       |
| 12/9/2015  | 114007       | 15638         | 114729     | 15709       |
| 12/10/2015 | 395911       | 55050         | 398217     | 55380       |
| 12/11/2015 | 341078       | 48514         | 342636     | 48721       |
| 12/12/2015 | 422333       | 53528         | 424226     | 53766       |

# Summary

Stable beam from BNB:  $4.1 \times 10^{12}$  protons/spill at 5 Hz

Beam downtime past Wednesday (12/09/2015)

Some issues affected our DAQ uptime past week:

- PMT trigger studies (Tuesday & Thursday)
- NIM failure (Friday)
- LAr circulation pump failure (Saturday/Sunday)