

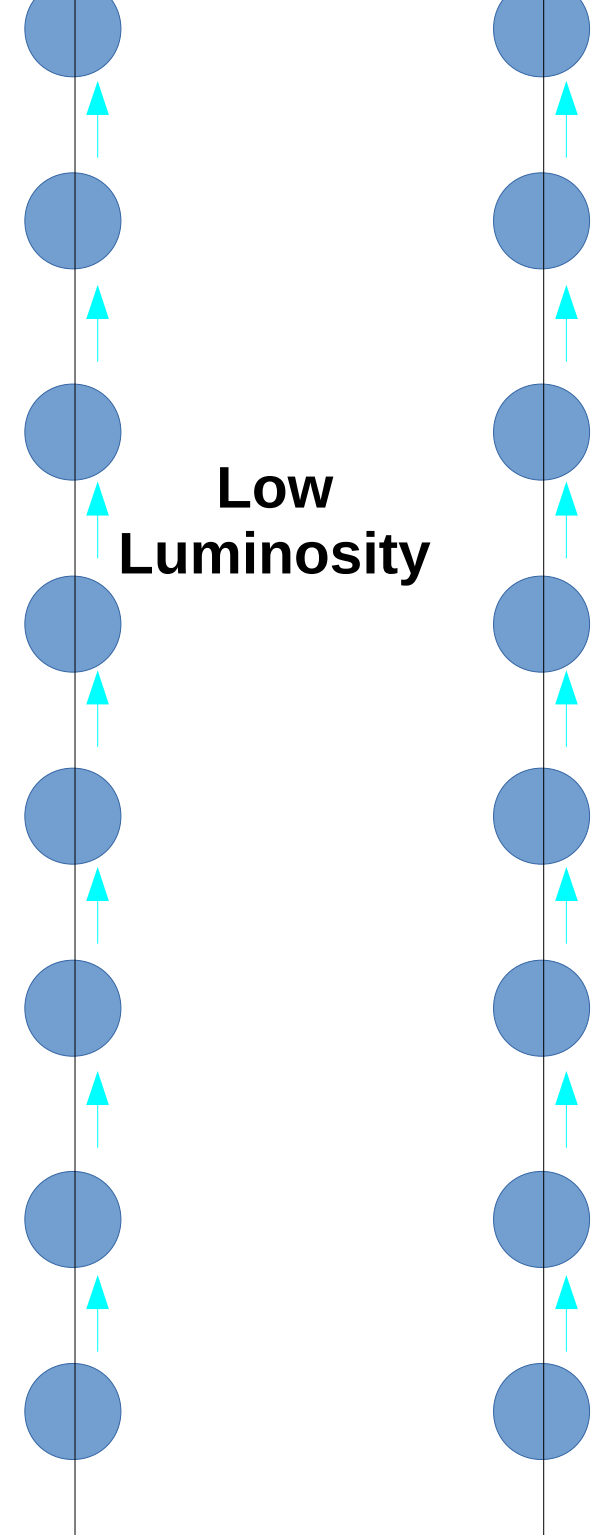
Change in NB light arrival times in March

Martijn Jongen
KM3NeT group meeting
9 May 2017

See

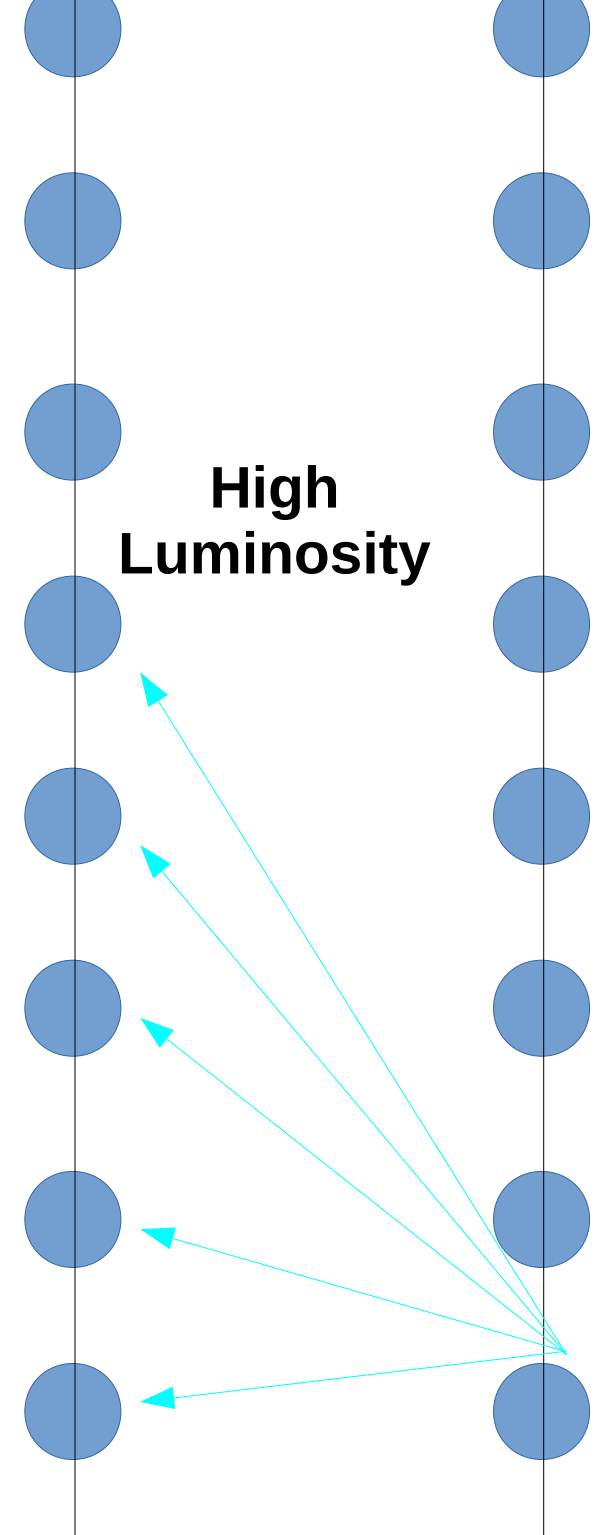
NB data

- One beacon on each DOM
- Flashes and is then seen by the PMTs
- Each run has all beacons on a given string flashing
 - “staggered”: each flashes in turn so that light from different beacons never arrives at a PMT at the same time
- Low-luminosity
 - light only seen on the DOM itself and the one directly above (not on the other string)
- High-luminosity
 - light seen by many DOMs, but DOMs on the flashing string are overilluminated (= no data)



NB data

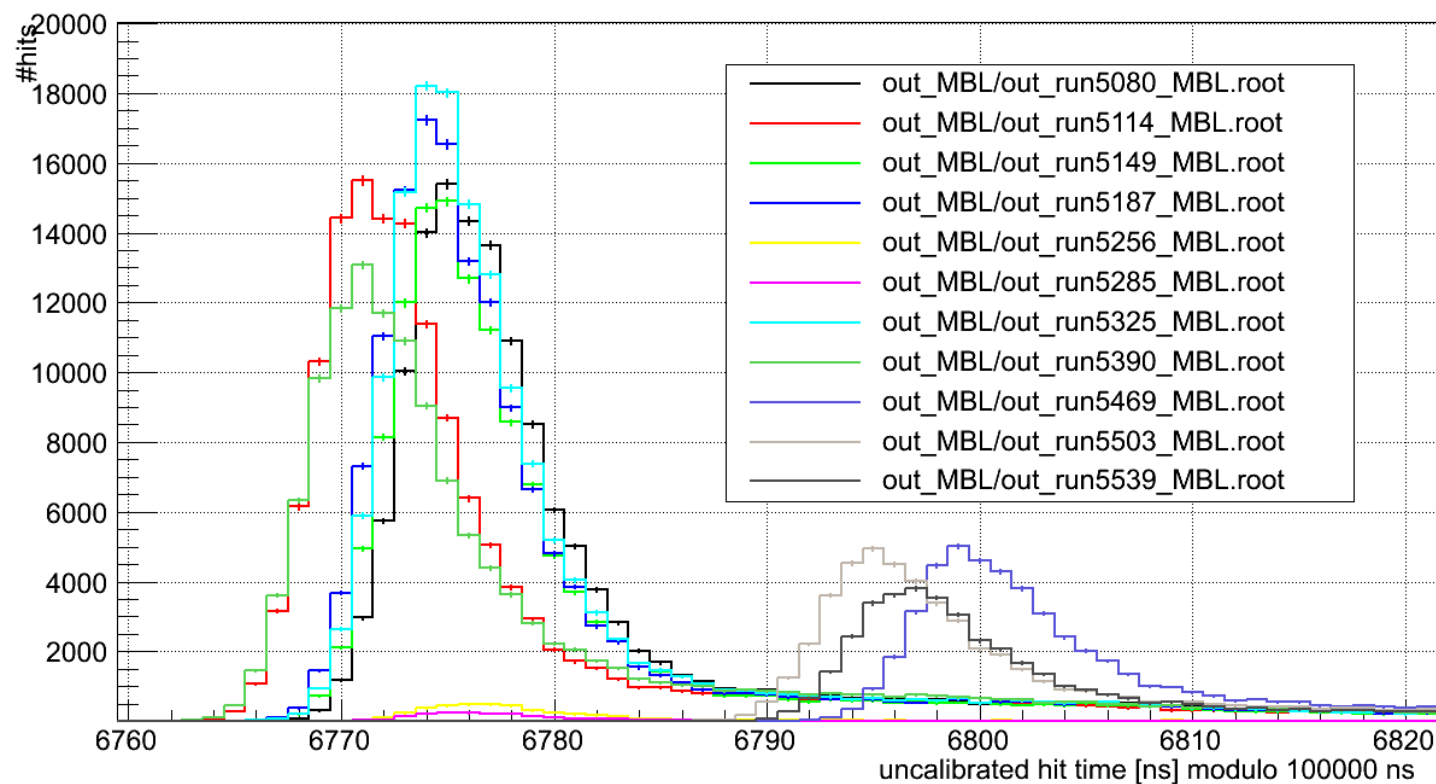
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Sudden change in data

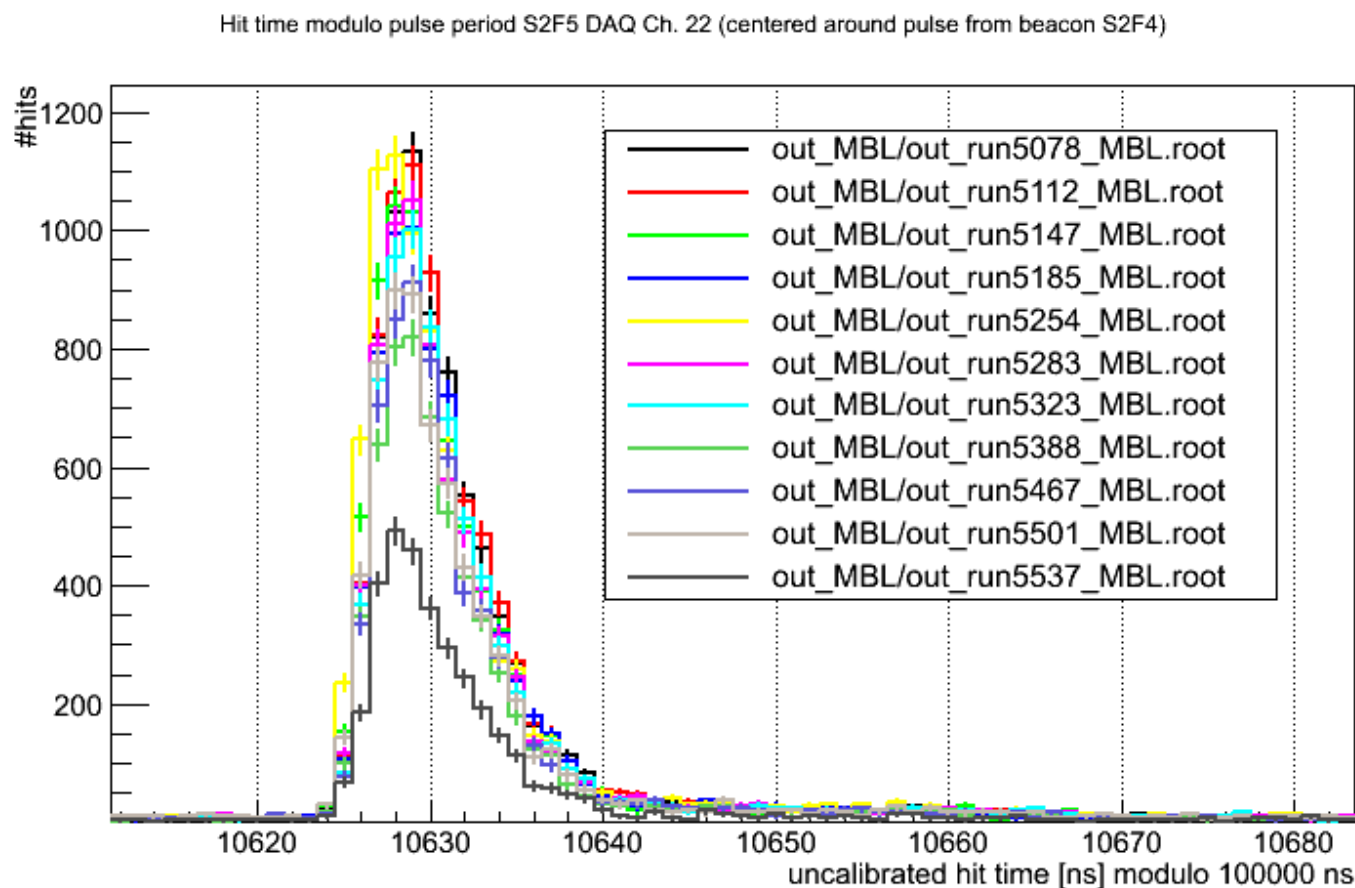
- Taken weekly (when possible)

Hit time modulo pulse period S1F5 DAQ Ch. 22 (centered around pulse from beacon S2F3)



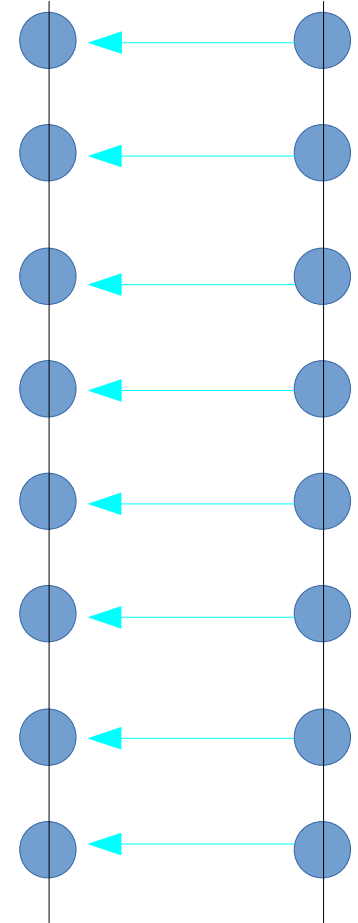
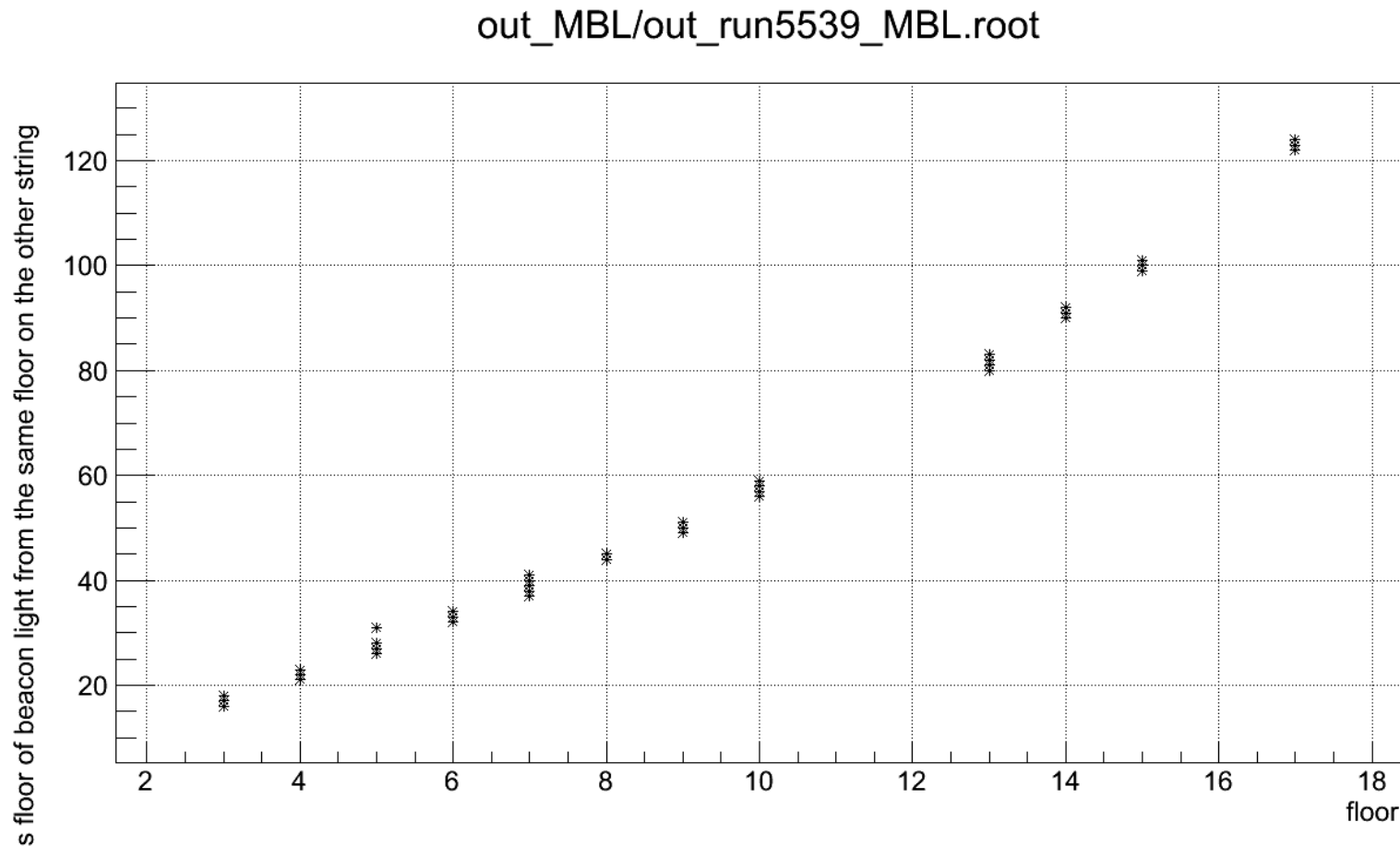
5077 9 Jan
5111 16 Jan
5146 23 Jan
5184 30 Jan
5253 8 Feb
5282 13 Feb
5322 20 Feb
5387 28 Feb
5466 13 Mar
5500 20 Mar
5536 27 Mar

Sudden change in data



No such change observed in low-luminosity data

Sudden change in data



Change in horizontal light arrival times between high-luminosity run 5539 (March) and run 5080 (Jan) as a function of floor number.
The beacons are activated on ARCA-DU2, light seen on ARCA-DU1

Data hints at the following situation

