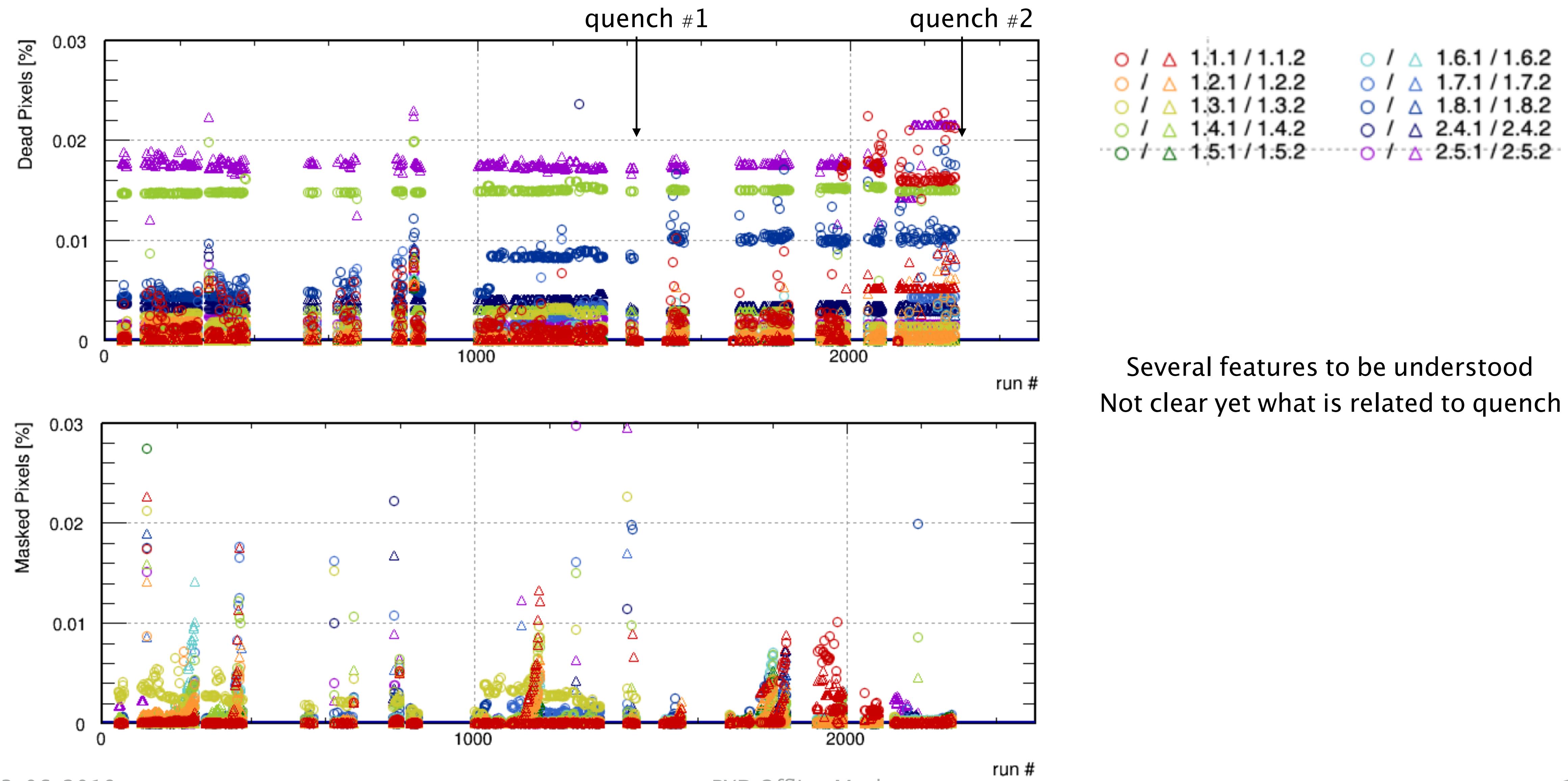


# Offline Dead & Masked (Hot) Pixels during Exp8



# Increase in Dead Pixel Counts - Quench?

- ▶ Dead & hot pixel map before (run 1419)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1419](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1419)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1419](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1419)

- ▶ Dead & hot pixel map after (run 1518)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1518](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1518)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1518](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1518)

(drain row single)	
run 1419 1.1.1	176 (0 0 176)
run 1419 1.1.2	0 (0 0 0)
run 1419 1.2.1	84 (0 0 84)
run 1419 1.2.2	2 (0 0 2)
run 1419 1.3.1	270 (0 0 270)
run 1419 1.3.2	N/A (0 0 0)
run 1419 1.4.1	2873 (1 0 2681)
run 1419 1.4.2	572 (0 0 572)
run 1419 1.5.1	0 (0 0 0)
run 1419 1.5.2	9 (0 0 9)
run 1419 1.6.1	83 (0 0 83)
run 1419 1.6.2	165 (0 0 165)
run 1419 1.7.1	462 (0 0 462)
run 1419 1.7.2	0 (0 0 0)
run 1419 1.8.1	1594 (0 0 1594)
run 1419 1.8.2	2 (0 0 2)
run 1419 2.4.1	572 (2 0 188)
run 1419 2.4.2	607 (0 0 607)
run 1419 2.5.1	315 (0 0 315)
run 1419 2.5.2	3323 (3 0 2747)

(drain row single)	
run 1518 1.1.1	764 (0 0 764)
run 1518 1.1.2	36 (0 0 36)
run 1518 1.2.1	150 (0 0 150)
run 1518 1.2.2	249 (0 0 249)
run 1518 1.3.1	270 (0 0 270)
run 1518 1.3.2	N/A (0 0 0)
run 1518 1.4.1	2894 (1 0 2702)
run 1518 1.4.2	573 (0 0 573)
run 1518 1.5.1	0 (0 0 0)
run 1518 1.5.2	9 (0 0 9)
run 1518 1.6.1	158 (0 0 158)
run 1518 1.6.2	163 (0 0 163)
run 1518 1.7.1	0 (0 0 0)
run 1518 1.7.2	10 (0 0 10)
run 1518 1.8.1	2215 (0 0 2215)
run 1518 1.8.2	47 (0 0 47)
run 1518 2.4.1	573 (2 0 189)
run 1518 2.4.2	593 (0 0 593)
run 1518 2.5.1	315 (0 0 315)
run 1518 2.5.2	3369 (3 0 2793)

# Increase in Dead Pixel Counts – Some other examples

- ▶ Module 1.8.1 (actually, probably the increase of hot pixels masked on detector, all before quench)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r0120\\*1.8.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r0120*1.8.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r0120\\*1.8.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r0120*1.8.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1031\\*1.8.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1031*1.8.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1031\\*1.8.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1031*1.8.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1036\\*1.8.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1036*1.8.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1036\\*1.8.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1036*1.8.1)

- ▶ Module 1.1.1 (this too is hot pixels masked on detector, perhaps overdone?)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1419\\*1.1.1 \(before quench, ok\)](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1419*1.1.1 (before quench, ok))

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1419\\*1.1.1 \(before quench, ok\)](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1419*1.1.1 (before quench, ok))

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1971\\*1.1.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1971*1.1.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1971\\*1.1.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1971*1.1.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1976\\*1.1.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1976*1.1.1)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1976\\*1.1.1](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1976*1.1.1)

- ▶ Module 1.1.2 (this too)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1419\\*1.1.2 \(before quench, ok\)](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1419*1.1.2 (before quench, ok))

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1419\\*1.1.2 \(before quench, ok\)](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1419*1.1.2 (before quench, ok))

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r1987\\*1.1.2](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r1987*1.1.2)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r1987\\*1.1.2](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r1987*1.1.2)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/DeadPixelMap/?match=r2131\\*1.1.2](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/DeadPixelMap/?match=r2131*1.1.2)

[https://pxd.belle2.org/OfflineCalibration/2019\\_Phase3\\_Exp0008/MaskedPixelMap/?match=r2131\\*1.1.2](https://pxd.belle2.org/OfflineCalibration/2019_Phase3_Exp0008/MaskedPixelMap/?match=r2131*1.1.2)

# Comments

## Increase of hot pixels after quench?

- ▶ Didn't necessarily happen just after

## Still to do

- ▶ Look at runs after 2nd quench
- ▶ Compare with the on-detector masks
- ▶ Cross check the run details with e-log