

# Database tags June18

- status on 07.08.2020 (software release v4.14-01)

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 E4DOccupancyBxidOddHighGain /cd\_calice\_Ahc2/TestbeamJune2018/Occupancy\_ConstantsOddHigh ahc2\_occupancyConstantsOddHigh\_200416\_1  
 E4DOccupancyBxidOddLowGain /cd\_calice\_Ahc2/TestbeamJune2018/Occupancy\_ConstantsOddLow ahc2\_occupancyConstantsOddLow\_200416\_1

 Naming convention for DB tags: **ahc2\_<collection>\_<yymmdd>[-<i>]**

## Ahc2ModuleDescription

Tag	recommend	CalSoft	Remark	Date

## Ahc2ModuleConnection

Tag	recommend	CalSoft	Remark	Date

## Ahc2ModuleLocationReference

Tag	recommend	CalSoft	Remark	Date

## Ahc2HardwareConnection

Tag	recommend	CalSoft	Remark	Date

## Ahc2DetectorTransformation

Tag	recommend	CalSoft	Remark	Date

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#### E4DPedestal

Tag	recommend	CalSoft	Remark	Date
dummy_002			module1-39: values from commissioning module41,42: roughly average of each chip module43-54: values from TB July 2016	18-06-29
ahc2_pedestal_180914	to be tested		Main HCAL (module1-40): Values from TB may muon data Tokyo/PreShower (module41,42): Average of each chip Tail-Catcher (module43-54): Values from TB July 2016	18-09-14
ahc2_pedestal_180926	x		Pedestals from SPS Cern testbeam June 2018 extracted from all muon runs with PP for main HCAL layers, Tokyo, PS, TC. Pedestal calculated for Cell 0-8.	18-09-26

#### E4DLowGainPedestal (Low-Gain Pedestal)

Tag	recommend	CalSoft	Remark	Date
ahc2_lg_pedestal_190118	x		Low-Gain Pedestals from SPS Cern testbeam May 2018 extracted from HG/LG IC muon runs, noPP, for main HCAL layers 21888/21888, calculated for memcell 0-8 via MIP position LG spectrum, IC factor and MIP position HG spectrum, dummies of 515 ADC, PS,Tokyo and TC HG Pedestals	19-01-18

#### E4DPedestalMemoryCellOffset

Tag	recommend	CalSoft	Remark	Date
ahc2_pedestalmemorycelloffset_180927			Pedestal Offsets for MemoryCells from SPS Cern testbeam June 2018 extracted from all muon runs with PP for main HCAL layers, Tokyo, PS, TC. Pedestal Offsets calculated for Cell 0-8, others 0.0. MemoryCell 0 of TC also 0.0	18-09-27
ahc2_pedestalmemorycelloffset_181216	x		Pedestal Offsets for MemoryCells from SPS Cern testbeam June 2018 extracted from all muon runs with PP for main HCAL layers, Tokyo, PS, TC. Pedestal Offsets calculated for Cell 0-8, others 0.0. MemoryCell 0 of TC also 0.0.  Corrected Module 23, Chip 12, Channel 31, Memcell 4	18-12-16

#### E4DLowGainPedestalMemoryCellOffset (Low-Gain Pedestal)

Tag	recommend	CalSoft	Remark	Date
ahc2_lg_pedestalmemorycelloffset_190118			Low-Gain Pedestal Offsets from SPS Cern testbeam May 2018 extracted from HG/LG IC muon runs, noPP, for main HCAL layers 21888/21888, calculated for memcell 0-8 via MIP position LG spectrum, IC factor and MIP position HG spectrum, dummies of 0 ADC, PS,Tokyo and TC HG pedestal offsets	19-01-18
ahc2_lg_pedestalmemorycelloffset_190227	x		Low-Gain Pedestal Offsets from SPS Cern testbeam May 2018 extracted from HG/LG IC muon runs, noPP, for main HCAL layers 21888/21888, calculated for memcell 0-8 via MIP position LG spectrum, IC factor and MIP position HG spectrum, dummies of 0 ADC, PS,Tokyo and TC HG pedestal offsets, dummies set manually to 0.0 ADC	19-02-27

#### E4DGainConstants

Tag	recommend	CalSoft	Remark	Date
dummy_001			module1-39: values from commissioning module41,42: dummy value module43-54: values from TB July 2016	18-06-29
ahc2_gainconstant_181212	x		Dummy values for Tail Catcher: module: 49, chip: 4 module: 50, chip: 2 and 3 module: 51, chip: 1 module: 52, chip: 3 module: 53, chip 2 and 3	18-09-26

ahc2_gain_constants_192709			Same as ahc2_gainconstant_181212 but randomly smeared by 1.5 % (systematic uncertainty)	19-09-27
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#### E4DGainSlopes

Tag	recommend	CalSoft	Remark	Date

#### E4DMipConstants

Tag	recommend	CalSoft	Remark	Date
dummy_001			module1-39: values from commissioning module41,42: dummy value module43-54: values from TB July 2016	18-06-29
ahc2_mip_constants_180914			Main HCAL (module1-40): Values from TB may muon data Tokyo/PreShower (module41,42): Dummy values Tail-Catcher (module43-54): Values from TB July 2016	18-09-14
ahc2_mip_constants_181001	x		Main HCAL, Tokyo, PS and TC values extracted from June Muon Power-Pulsing runs. 23774/23904 channels fitted. 112 bad/dead/noisy channels in TC, 18 in HCAL, 0 in PS For bad HCAL channels: Same as in TB May 2018 <b>USE WITH PEDESTAL MEMCELL OFFSET CORRECTION</b>	18-10-01
ahc2_mip_constants_181205			Same as ahc2_mip_constants_181001, but module 27 corrected by 3% due to MPOD problems. <b>Correction in wrong direction!</b>	18-12-05
ahc2_mip_constants_181205_001			Same as ahc2_mip_constants_181001, but module 27 corrected by 3% due to MPOD problems. <b>USE WITHOUT PEDESTAL MEMCELL OFFSET CORRECTION</b>	18-12-05
ahc2_mip_constants_192709			Same as ahc2_mip_constants_181001 but randomly smeared by 1.5 % (systematic uncertainty)	19-09-27

#### E4DMipSlopes

Tag	recommend	CalSoft	Remark	Date

#### E4DDeadCellMap

Tag	recommend	CalSoft	Remark	Date

#### E4DSaturationParameters

Tag	recommend	CalSoft	Remark	Date
ahc2_SaturationParameters_181212			MPPC 1.3x1.3 mm <sup>2</sup> : 2533 (current value) with 5% lower than the nominal value MPPC 2.0x2.0mm <sup>2</sup> : 6076 (current value) for Tokyo Layer with 5% lower than the nominal value SensL : 1300 ===== MPPC: # of pixels times 1.1 SensL: same as Aug. 2015 SPS	14-12-2018
ahc2_SaturationParameters_190628	x		Pixel value 2668	28-06-2019
ahc2_SaturationParameters_191203			Smeared values for 2668 with (+-100 pixels)	03-12-2019

#### E4DIntercalibration

Tag	recommend	CalSoft	Remark	Date

(DBlayer1)			module1-39: values from TB May 2018 module41-54: default value	28-06-18
ahc2_Intercalibration_180823			first IC factor w/o correction module1-41:values from TB June 2018 module42: default value will be applied module43-54: tail-catcher, values from TB July 2016 ===== default value: 19.22	23-08-18
ahc2_Intercalibration_190109	x		second iteration: IC factor with higher order correction for slope method module1-41:values from TB June 2018 module42: default value will be applied module43-54: tail-catcher, values from TB July 2016 ===== default value: 19.41	09-01-19

**E4DPhysicsCalibIntercalibration**

Tag	recommend	CalSoft	Remark	Date

---- Timing Section be updated by expert (Lorenz) - August 2020 ----

**E4DTimeSlopes\_Timeout**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeSlopesTimeout_190806	x	> 04-011		2019-08

**E4DTimeOffset\_Timeout**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeOffsetsTimeout_190806	x	> 04-011		2019-08

**E4DTimeOffsetMemCell\_EventTimeout**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeOffsetsTimeout_Event_190806	x	> 04-011		2019-08

**E4DTimeOffsetMemCell\_OddTimeout**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeOffsetsTimeout_Odd_190806	x	> 04-011		2019-08

**E4DTimeOffsetMemCell\_BufferEvenEventEven**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeOffsetsBufferEven_EventEven_190806	x	> 04-011		2019-08

**E4DTimeOffsetMemCell\_BufferEvenEventOdd**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeOffsetsBufferEven_EventOdd_190806	x	> 04-011		2019-08

**E4DTimeOffsetMemCell\_BufferOddEventEven**

Tag	recommend	CalSoft	Remark	Date

ahc2_timeOffsetsBufferOdd_EventEven_190806	x	> 04-011		2019-08
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**E4DTimeOffsetMemCell\_BufferOddEventOdd**

Tag	recommend	CalSoft	Remark	Date
ahc2_timeOffsetsBufferOdd_EventOdd_190806	x	> 04-011		2019-08

**E4DOccupancyBxidEvenHighGain**

Tag	recommend	CalSoft	Remark	Date
ahc2_occupancyConstantsEvenHigh_200604	x	> 04-011		2020-06

**E4DOccupancyBxidEvenLowGain**

Tag	recommend	CalSoft	Remark	Date
ahc2_occupancyConstantsEvenLow_200604	x	> 04-011		2020-06

**E4DOccupancyBxidOddHighGain**

Tag	recommend	CalSoft	Remark	Date
ahc2_occupancyConstantsOddHigh_200604	x	> 04-011		2020-06

**E4DOccupancyBxidOddLowGain**

Tag	recommend	CalSoft	Remark	Date
ahc2_occupancyConstantsOddLow_200604	x	> 04-011		2020-06

---- To be updated by expert (Lorenz) - August 2020 ----