

# CACTUS Milano-Bicocca Status

CACTUS@MILANO-BICOCCA

DUNE Photosensor WG Meeting (DUNE-SP-PDS)

December 17th, 2024



- We finished the **sixth and last INFN box** (Italy)

Box INFN			
Delivery	Box	Tray	Status
1	3	49-72	Completed
2	4	1-24	Completed
3	9	49-72	Completed
5	14	25-48	Completed
5	13	1-24	Completed
7	23	49-72	Completed

- Room temperature results in agreement with Hamamatsu data.
- The results are compatible in both cycles.
- 1 noisy SiPM with high DCR and anomalous extended IV was found.



- We checked 3 Boards that were indicated by Praga in the spreadsheet:

Delivery	Box#	Trays	Boards/Box	TX Date	To	Rx Site	Tracking #
1	1	1-24	400	18/06/24	Prague	20/06/24	Fedex 776914202301
1	2	25-48	400	18/06/24	Prague	20/06/24	Fedex 776914202301

Prague

Milano

Tray 34, Board 11422- ONLY anomalous IV ext;



High DCR and Anomalous IV extended.

Tray 32, Board 12422 - high DCR - NOISY Cactus channel;



DCR less than 200 counts

Tray 33, Board 12459 - high DCR - NOISY Cactus channel



DCR less than 200 counts

- In Milan, the tables of the Spanish box #20 were uploaded to the database.
- With Granada we found that tables should not contain blank spaces, especially key values. Some data will be ignored by the script and not uploaded into the database.

Fwd	ROO	MT	Hamama	Rq		4	108,51	6,51	101,24
Fwd	ROO	MT	Hamama	Rq		5	100,89	6,05	101,24
Fwd	ROO	MT	Hamama	Rq		0	99,98	6	93,7967
Fwd	ROO	MT	Hamama	Rq		1			
Fwd	ROO	MT	Hamama	Rq		2			
Fwd	ROO	MT	Hamama	Rq		3			
Fwd	ROO	MT	Hamama	Rq		4			
Fwd	ROO	MT	Hamama	Rq		5			
Fwd	ROO	MT	Hamama	Rq		0	94,73	5,68	95,2167
Fwd	ROO	MT	Hamama	Rq		1	92,55	5,55	95,2167
Fwd	ROO	MT	Hamama	Rq		2	99,39	5,96	95,2167
Fwd	ROO	MT	Hamama	Rq		3	95,72	5,74	95,2167
Fwd	ROO	MT	Hamama	Rq		4	95,86	5,75	95,2167



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002395      3      2      26      88.44  5.31
002395      4      2      27      96.53  5.79
002395      5      2      28      93.93  5.64
002395      6      2      29      99.40  5.96
002396      1      3      0       NaN    NaN
002396      2      5      1       NaN    NaN
ARDU 0
MEAN = 93.34
ST. DEV = 2.08
ARDU 1
MEAN = 95.10
ST. DEV = 4.69
ARDU 2
MEAN = 97.90
ST. DEV = 7.33
ARDU 2
MEAN = NaN
ST. DEV = NaN
MEAN (Total) = NaN
ST. DEV (Total) = NaN

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- However, there are still other reasons that we are trying to understand.