A Few HCal Tile Mapper Results

Ron B
on behalf of The HCAL Tile Mapper Team
(John H, Sebastian VC, and others)

May 17th, 2016

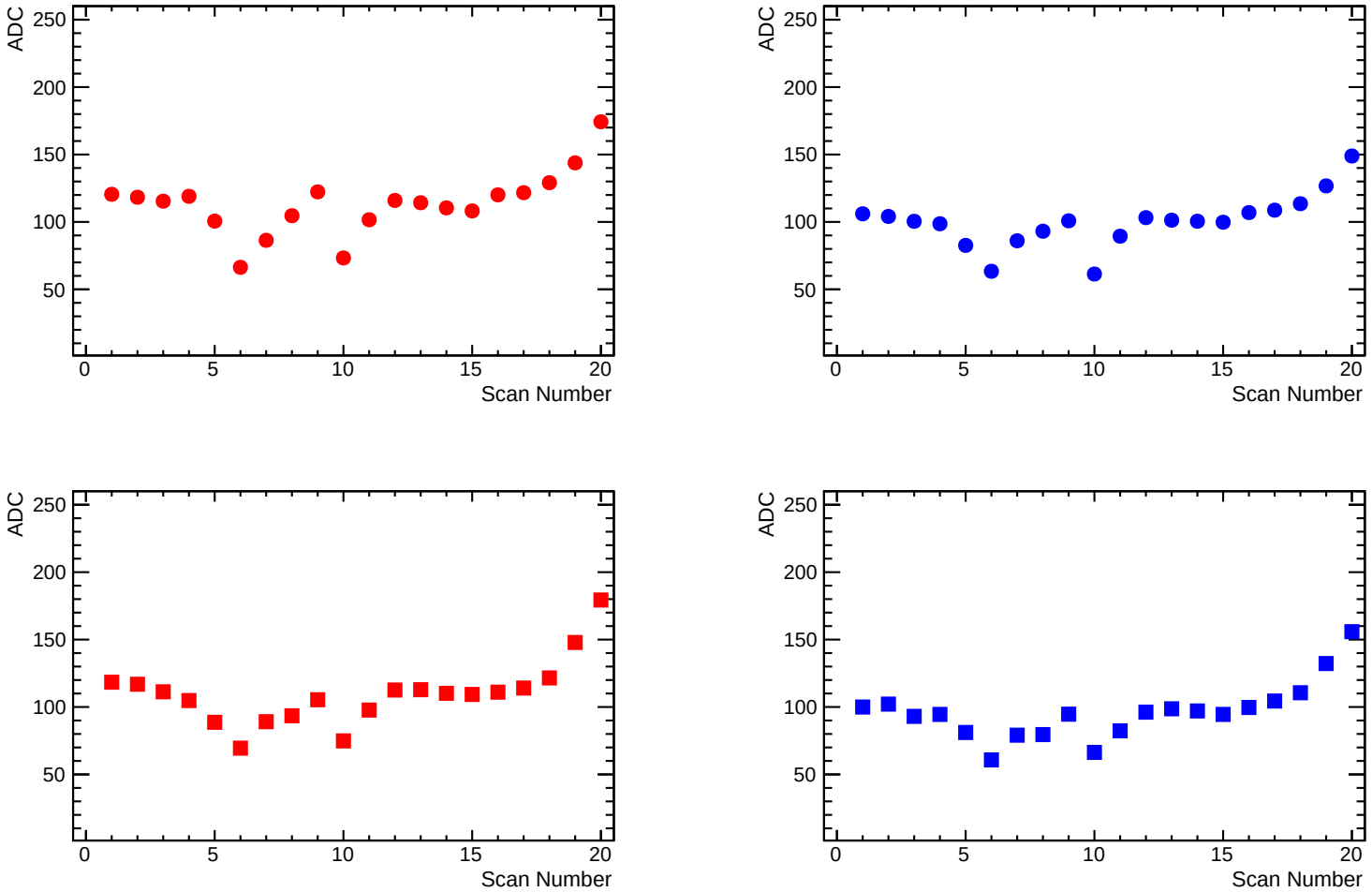
The most important thing: the wiki page!

Everything is on the wiki page! https://wiki.bnl.gov/sPHENIX/index.php/Tile_Mapper

Okay, I confess a few things are slightly out of date, but several major updates are coming soon

MPV vs scan number (not terribly meaningful, but possibly useful anyway)

Outer HCal tiles



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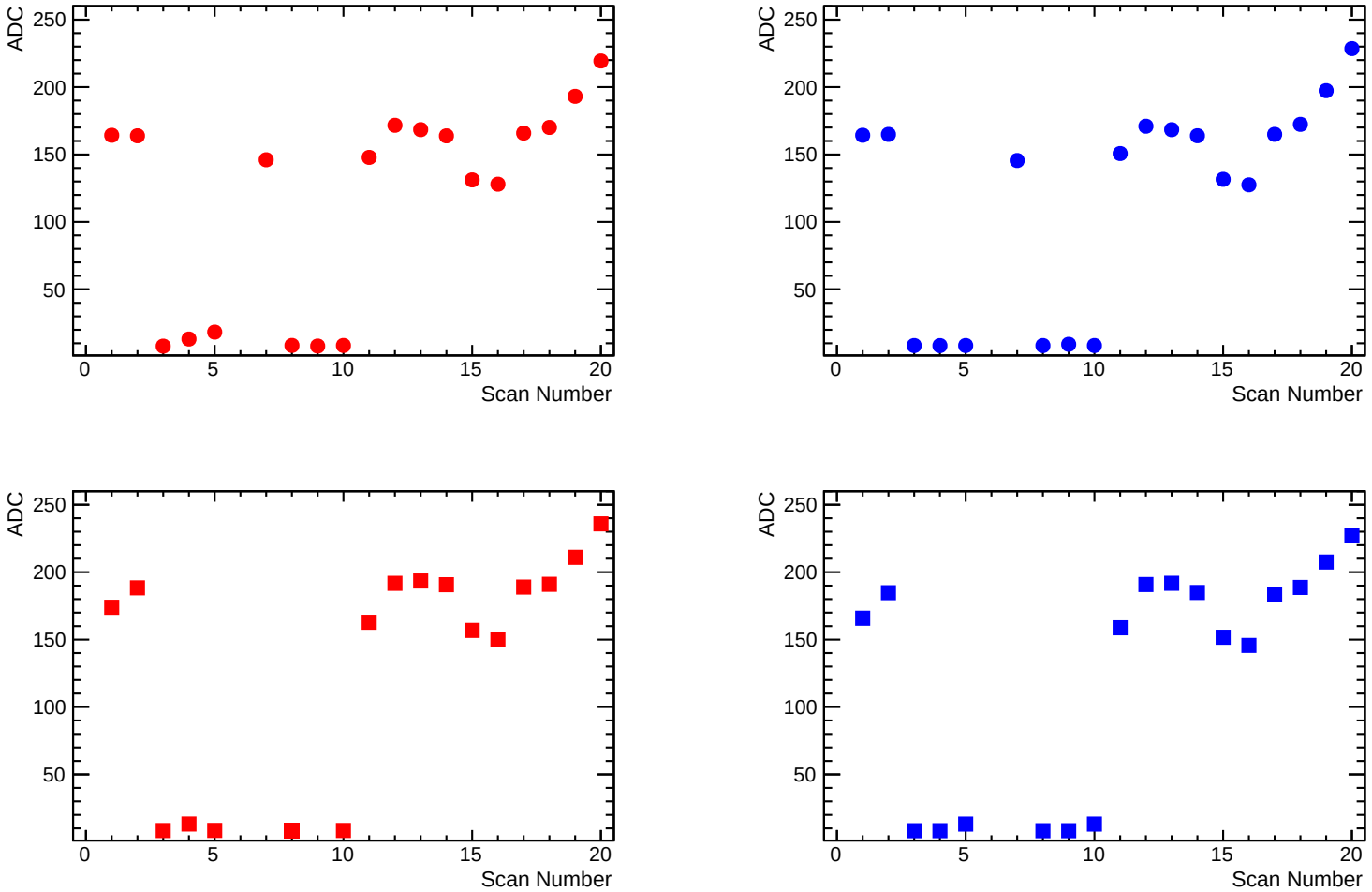
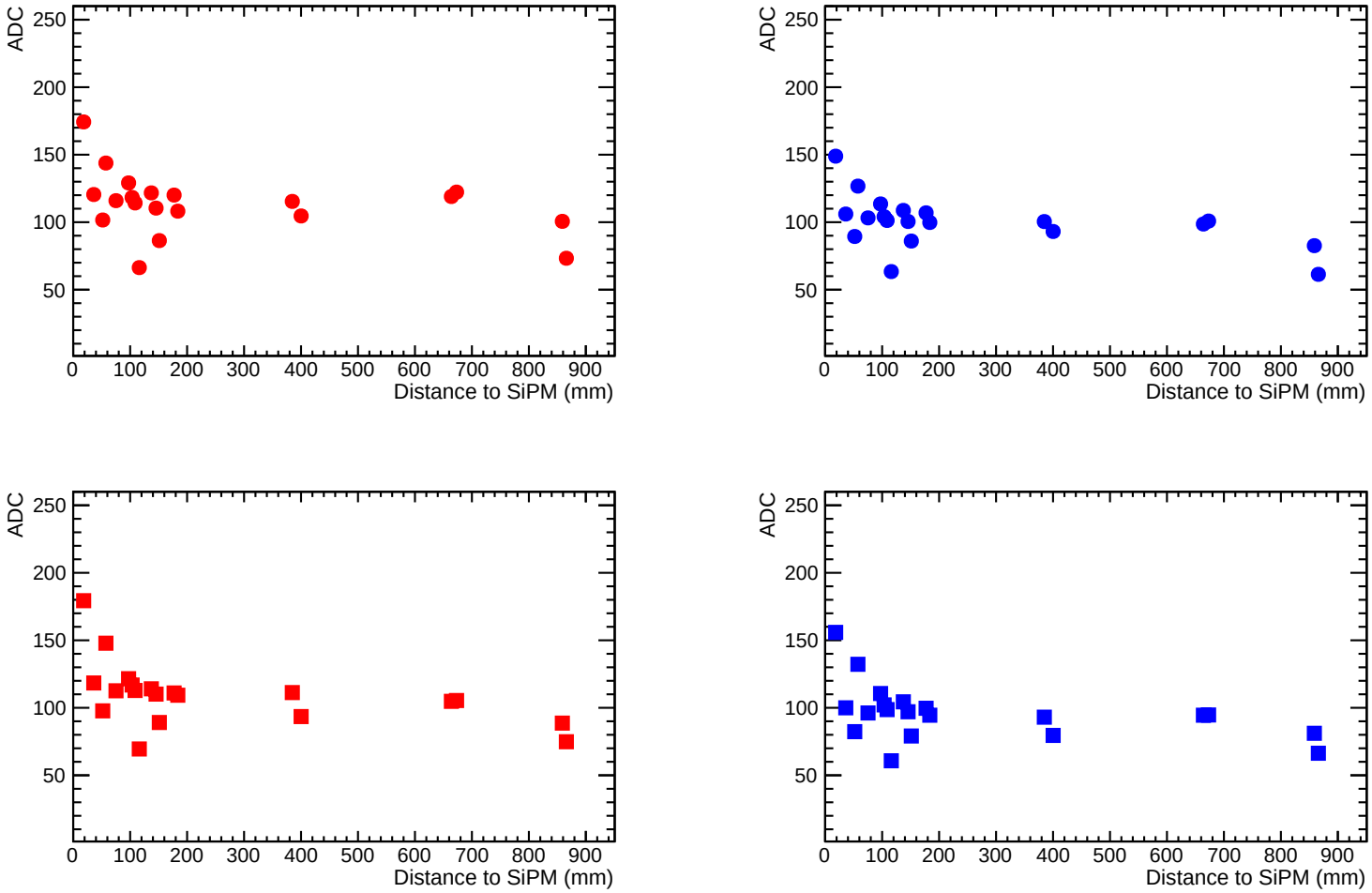
Inner HCal tiles



Intermission

MPV vs scan position distance to SiPM

Outer HCal tiles



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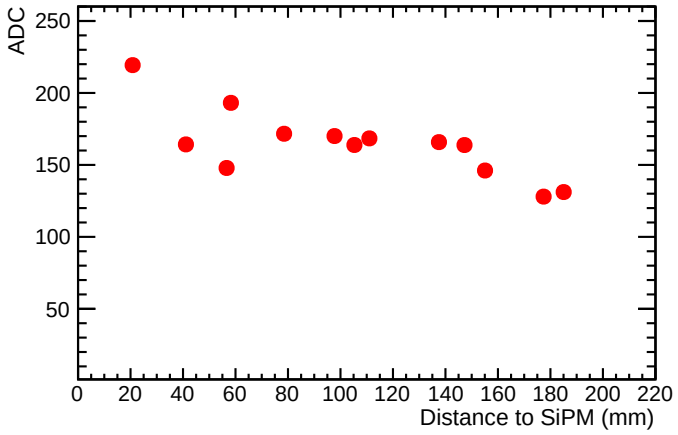
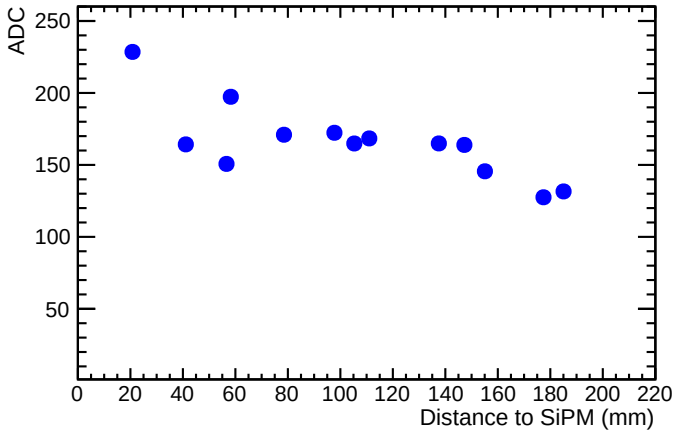
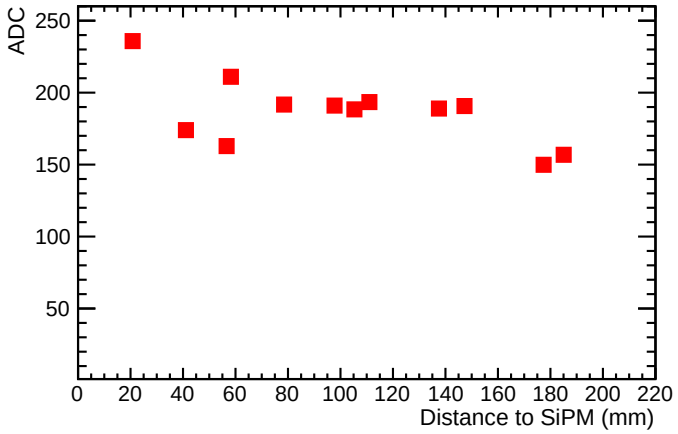
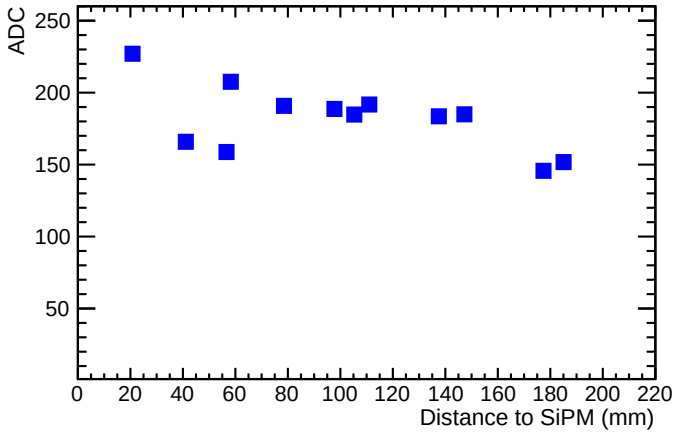


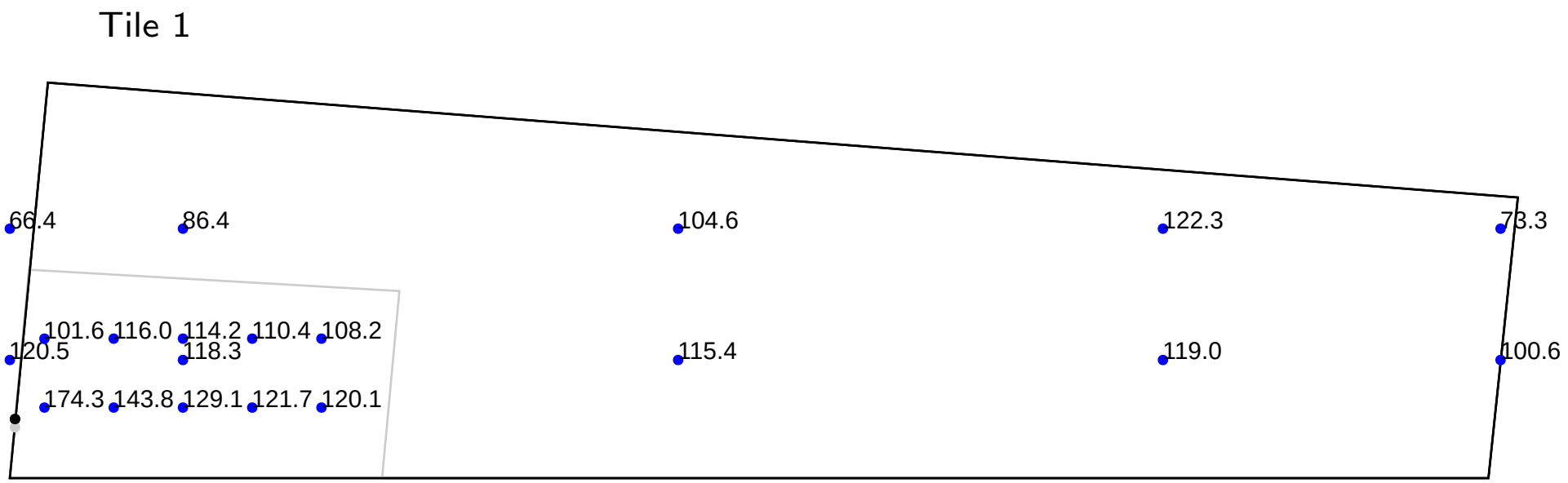






Intermission

Schematic of Tile Mapper layout



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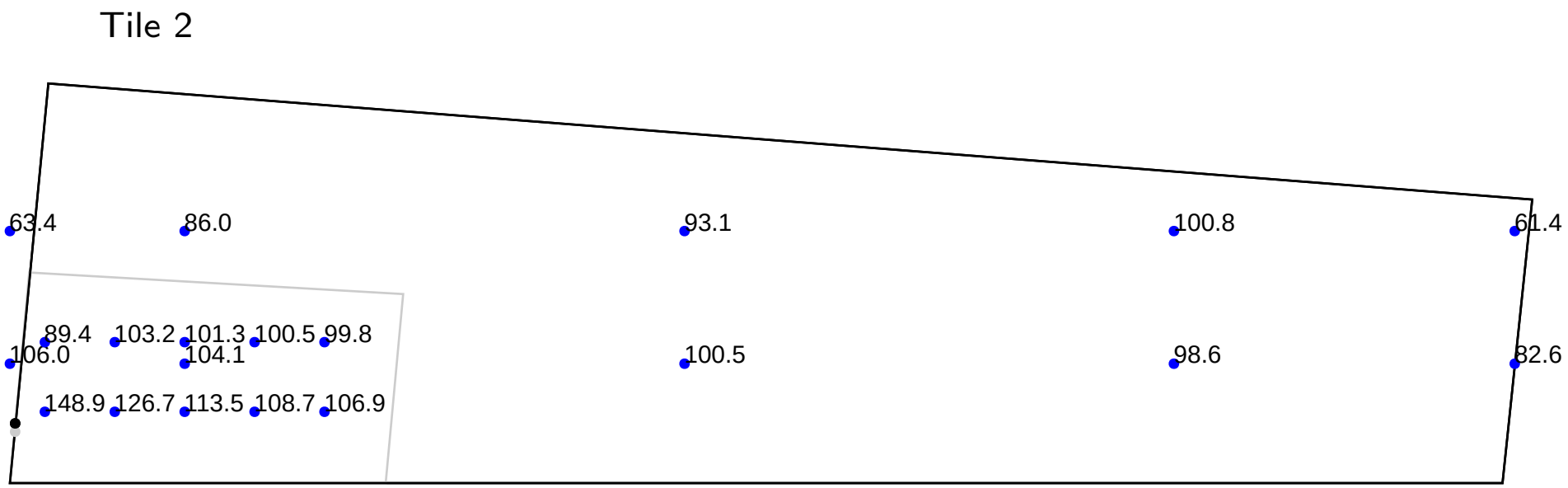

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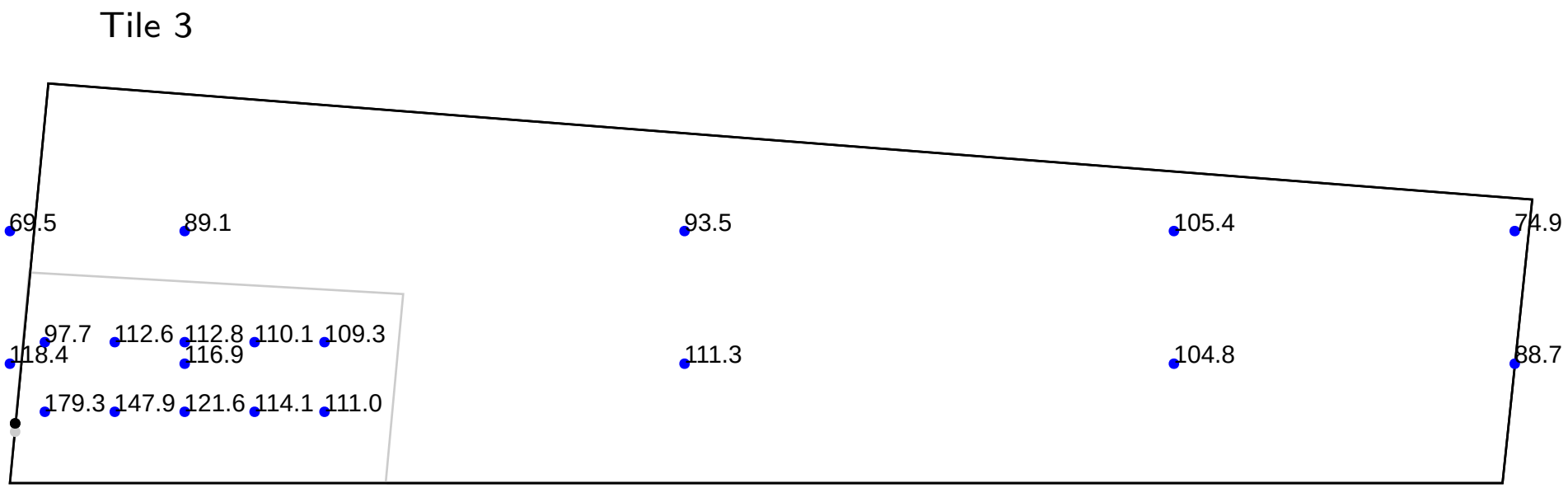

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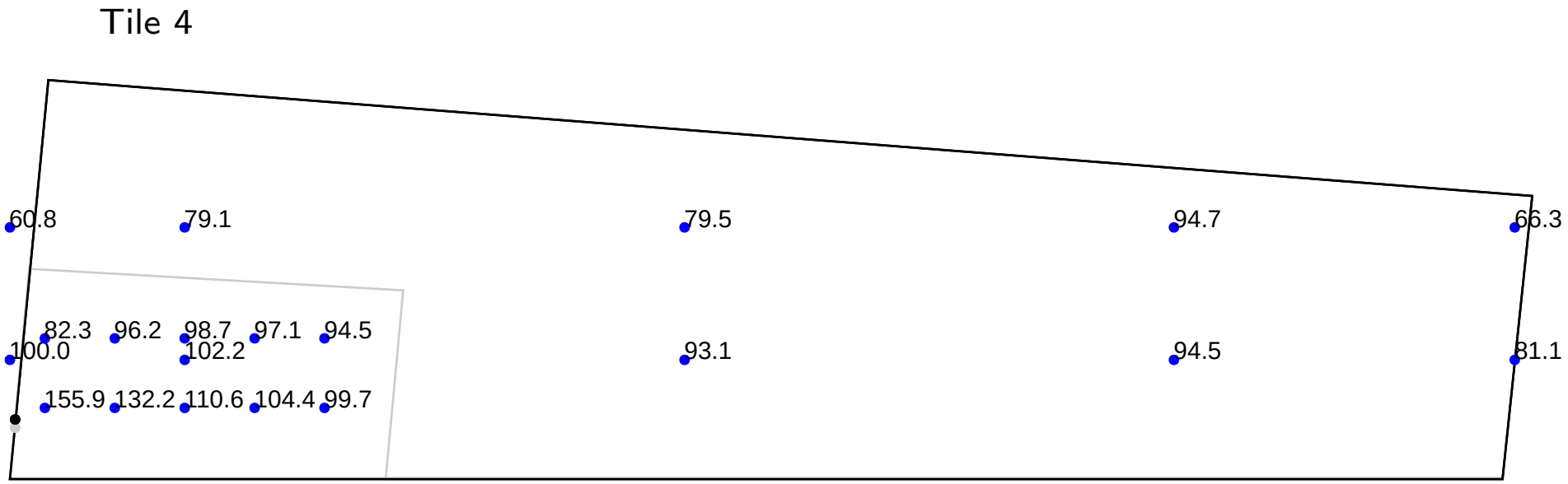

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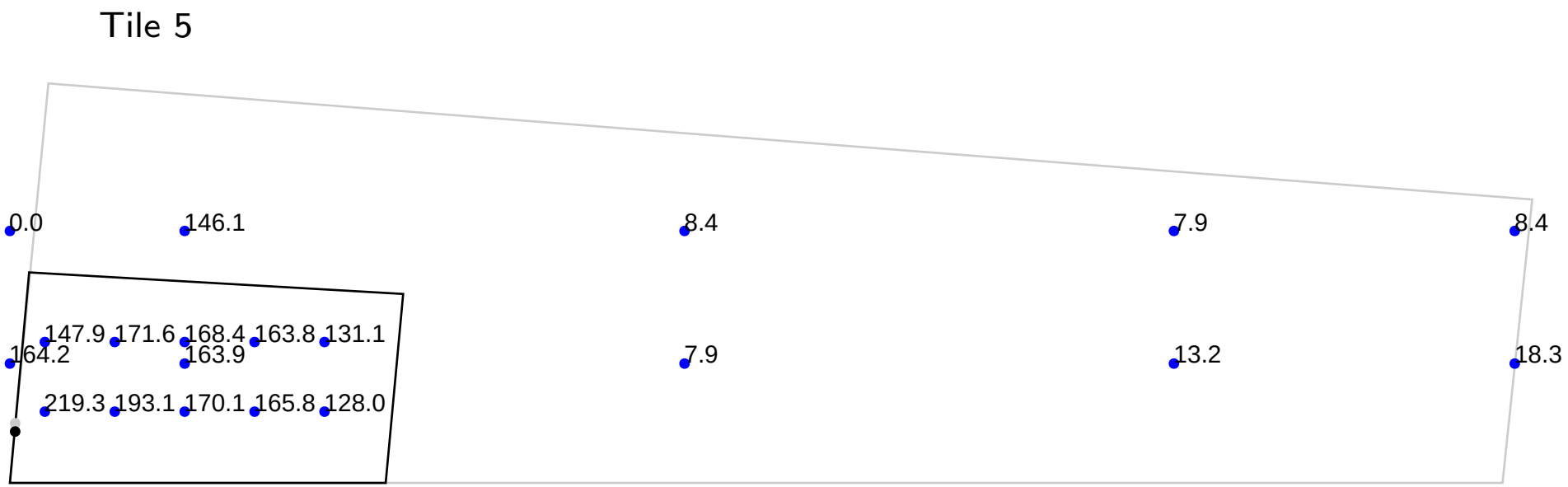

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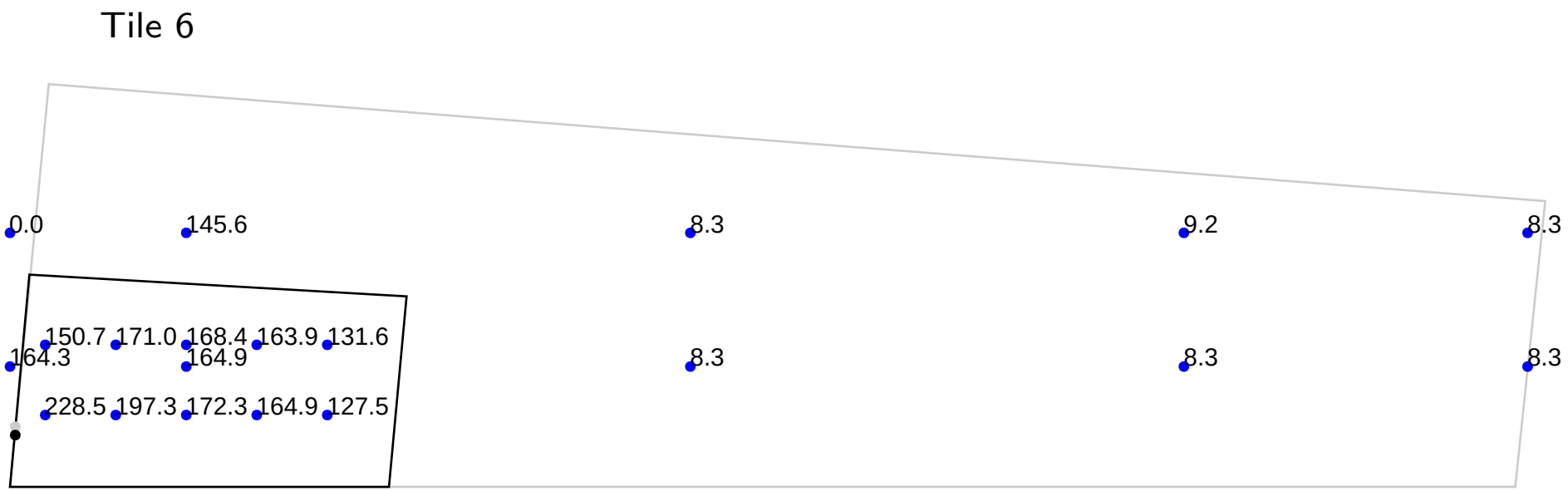

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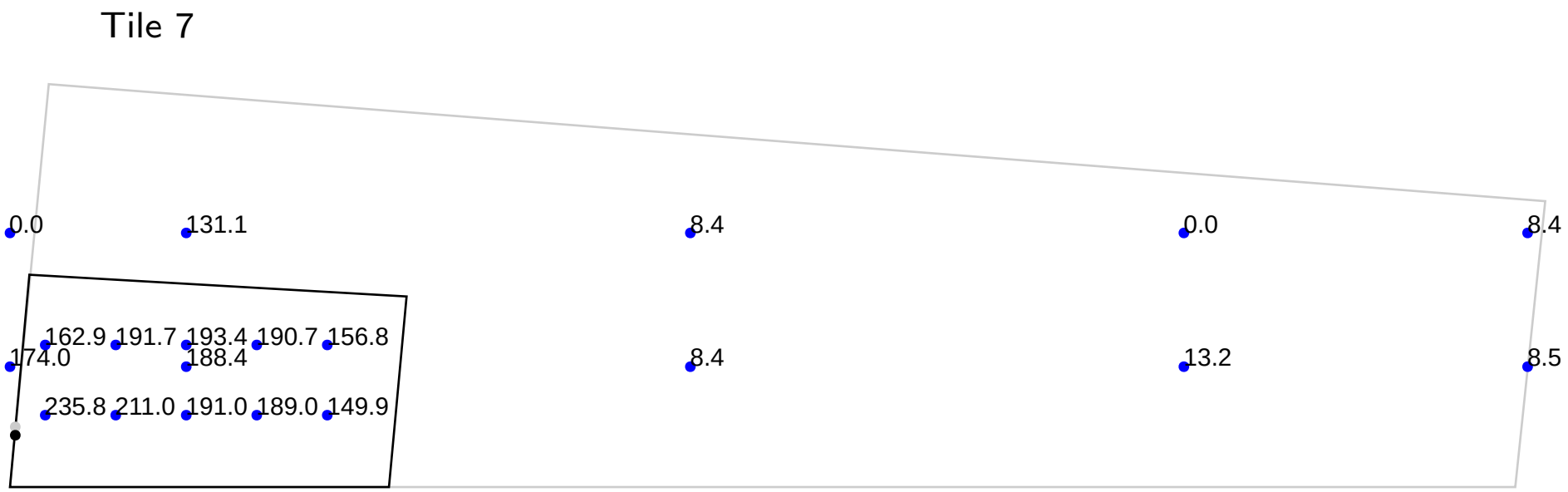

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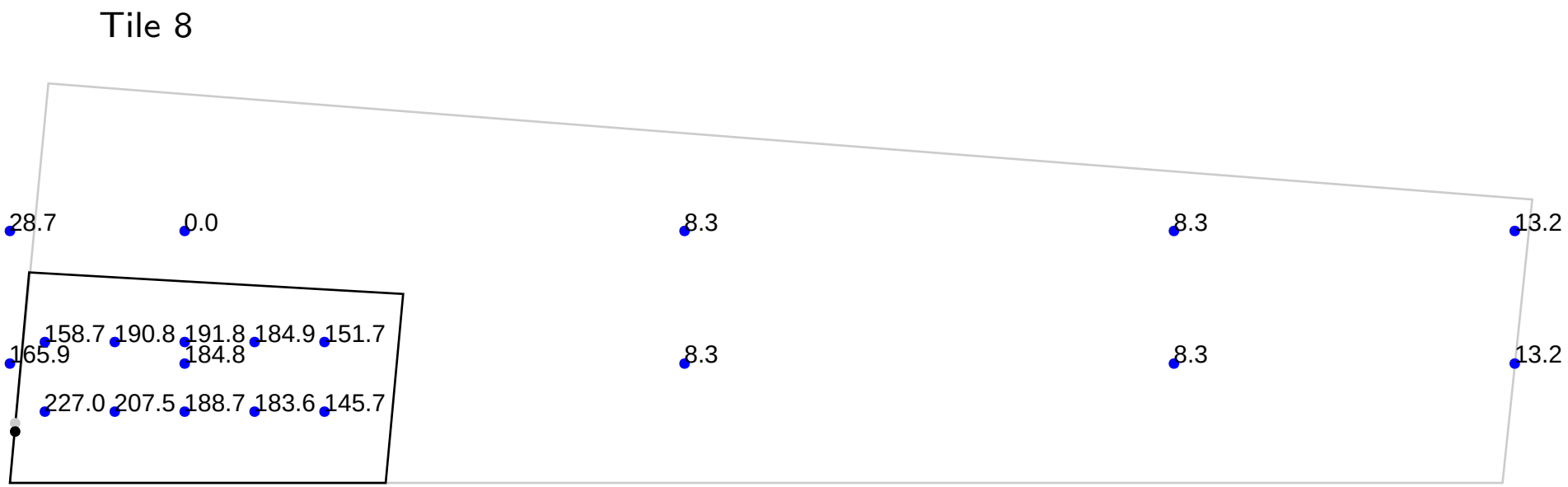
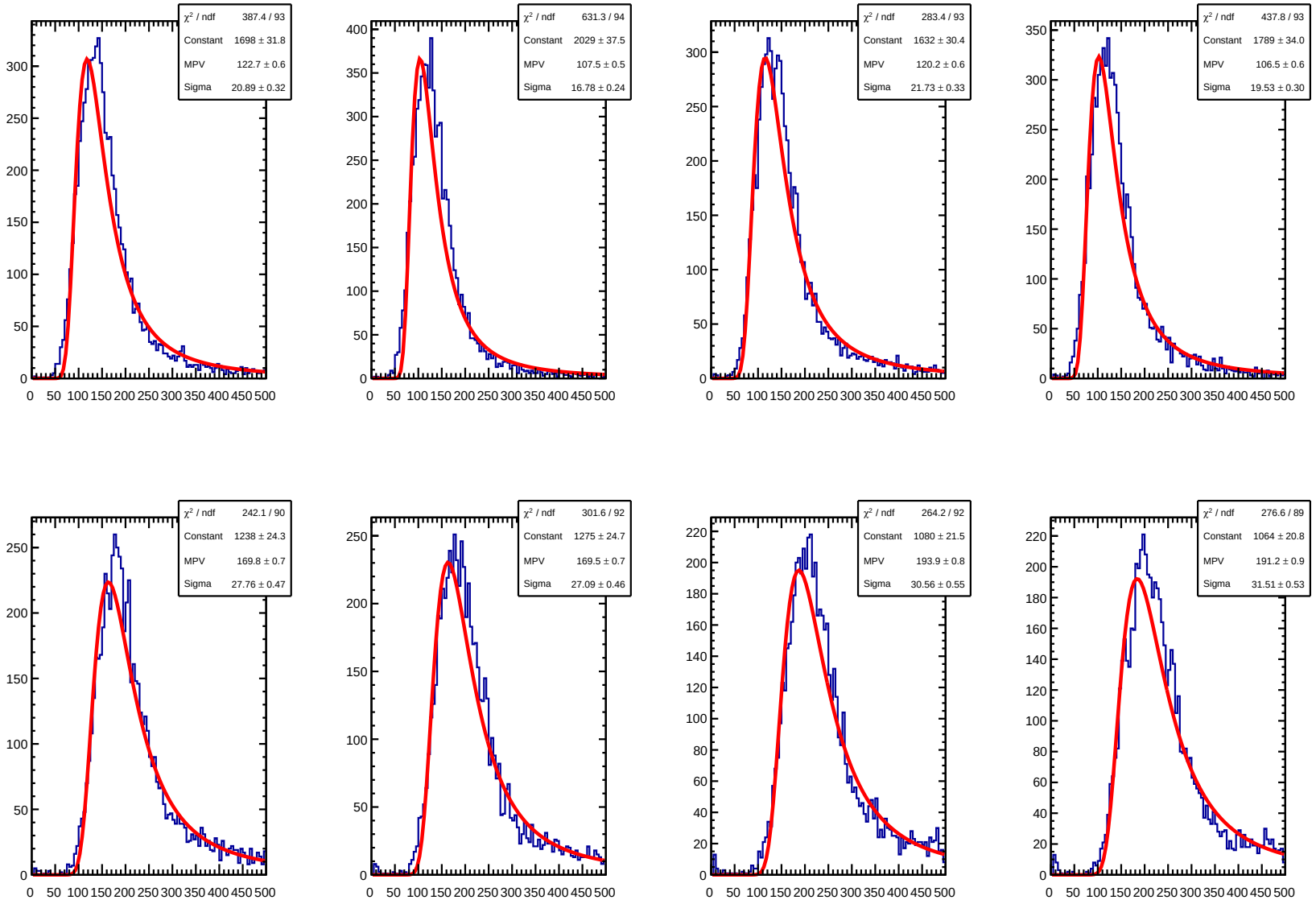


Brief Sumamry

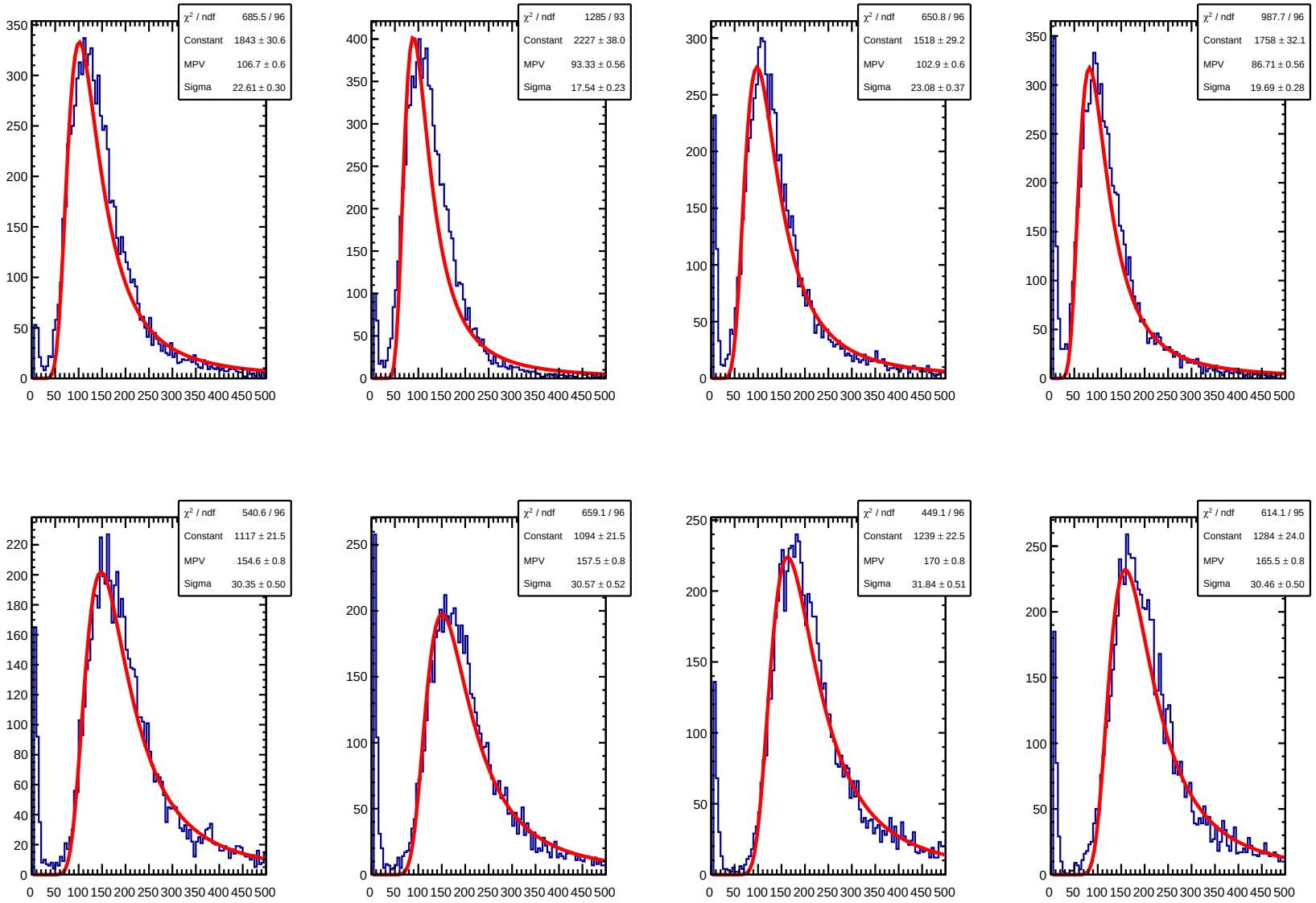
- Light response seems reasonably uniform (?)
- Definitely observe significant increase in light yield close to SiPM
- Definitely want to do coordinate transform to LED scans, compare results
- Possible to improve analysis, e.g.
  —attempt to improve fit function (built in Landau works reasonaby well...)
  —run by run QA
  —hodoscope cuts
  —temperature check
- Edward is doing his own analysis of his prototype tiles,
  but I'll have a look at them as well

Additional material

ADC distributions



ADC distributions



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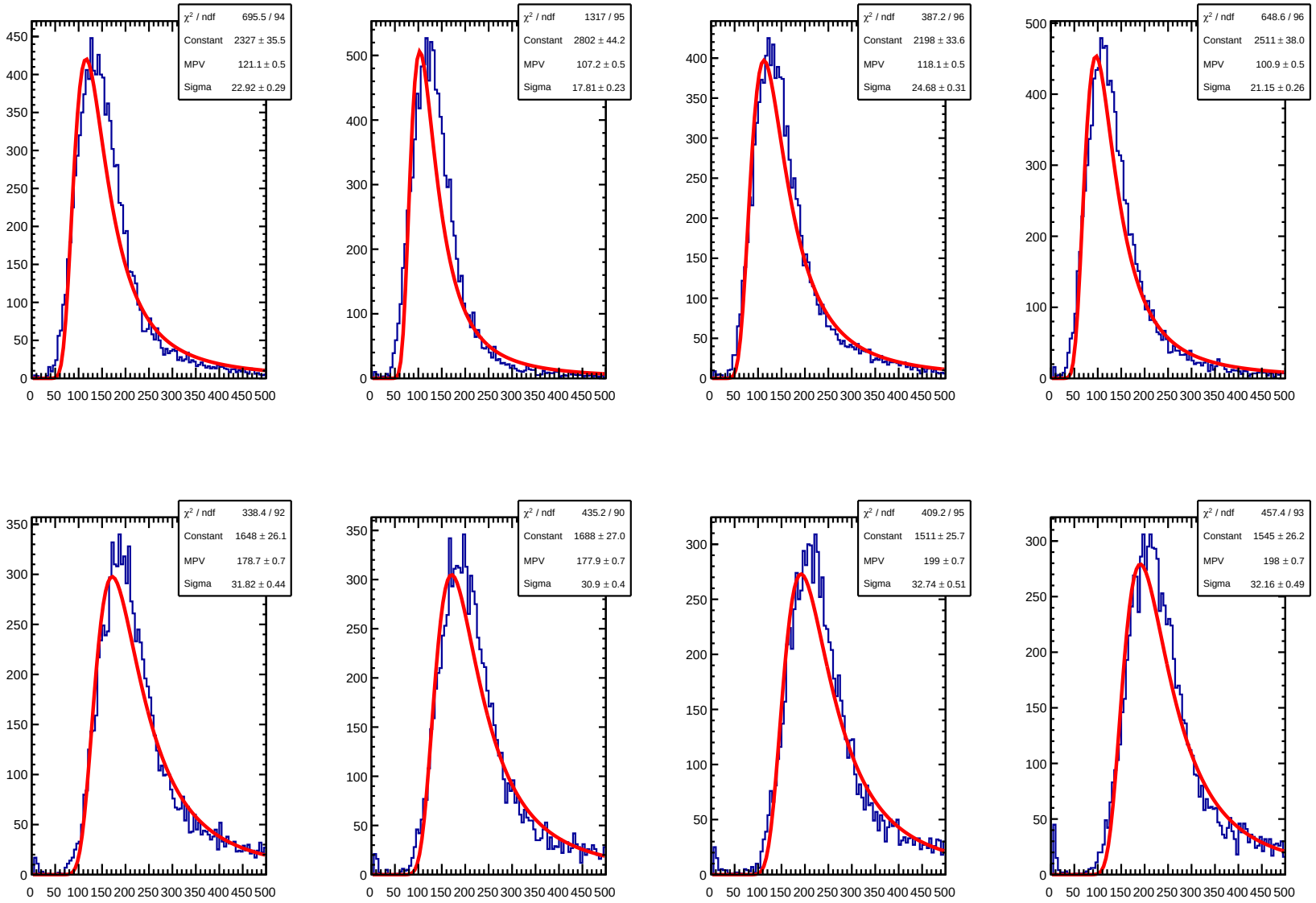

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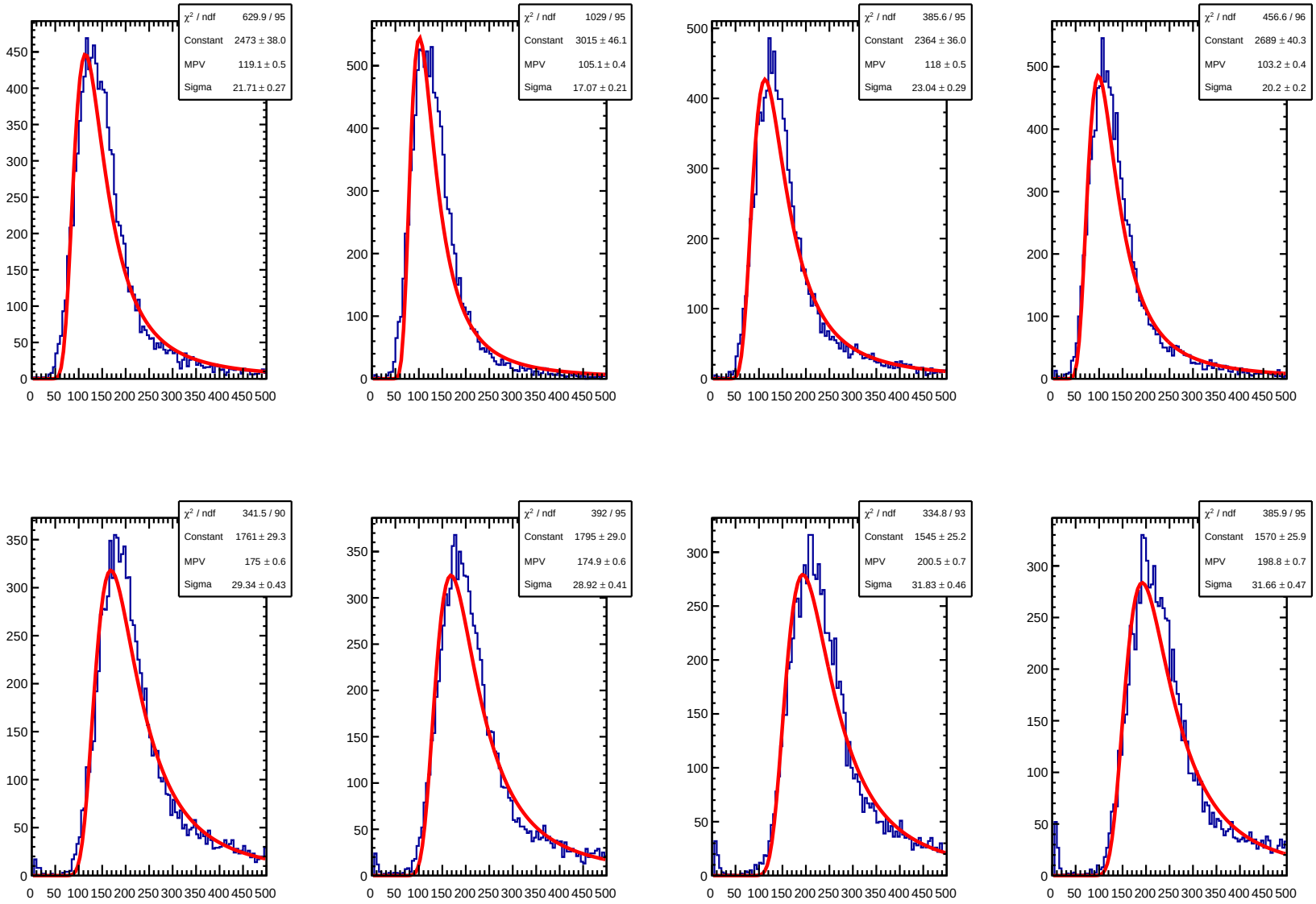

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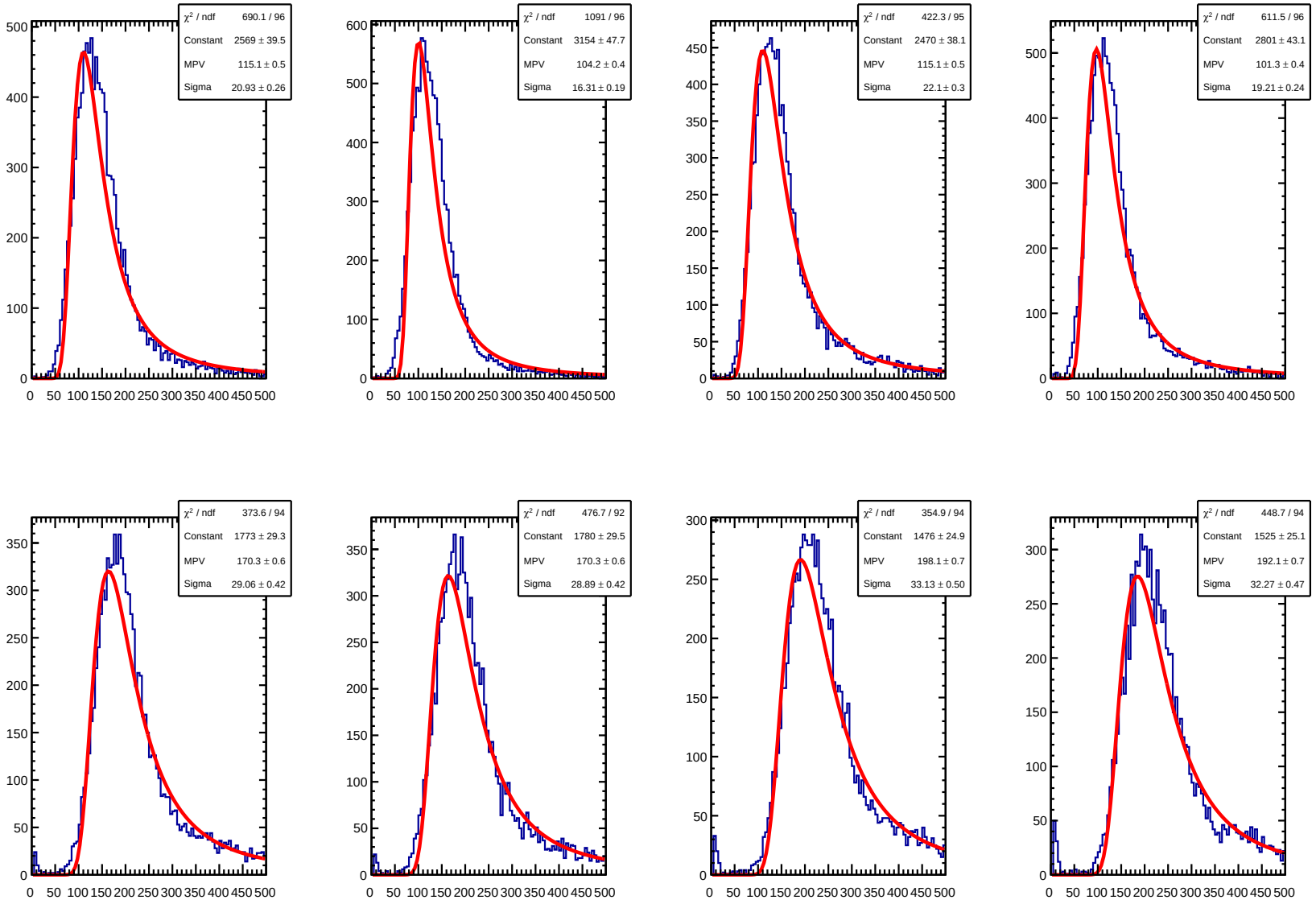

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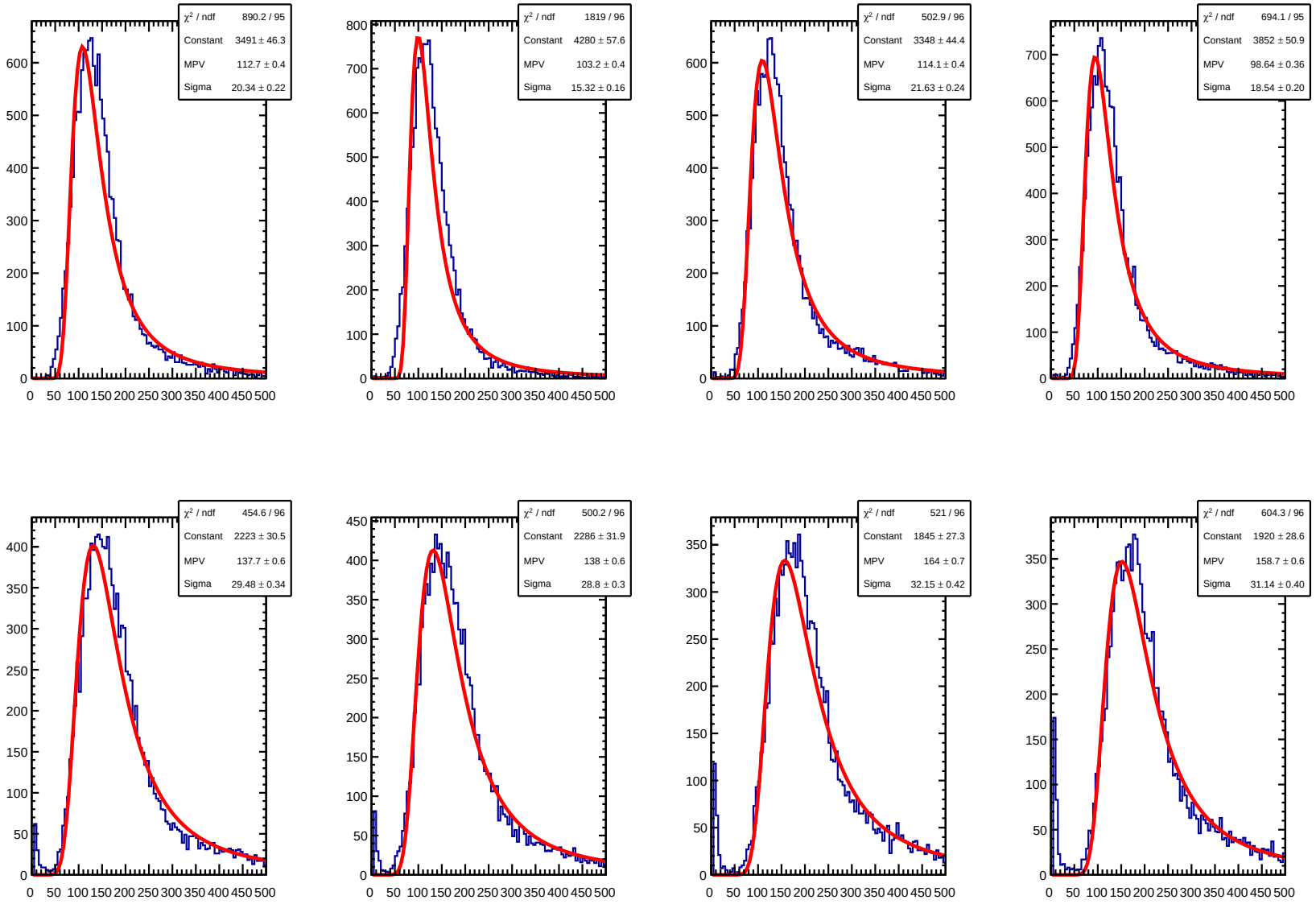

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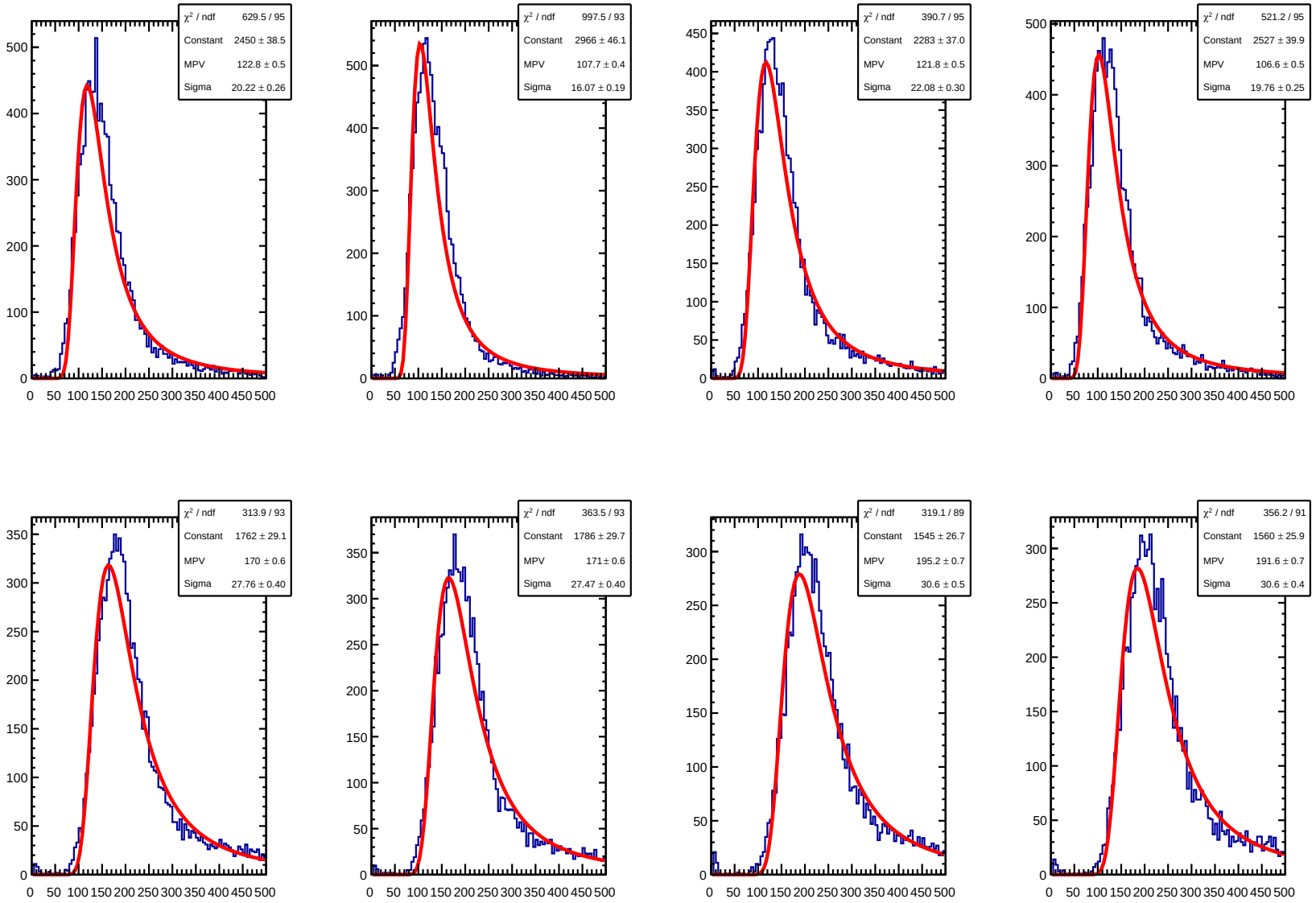

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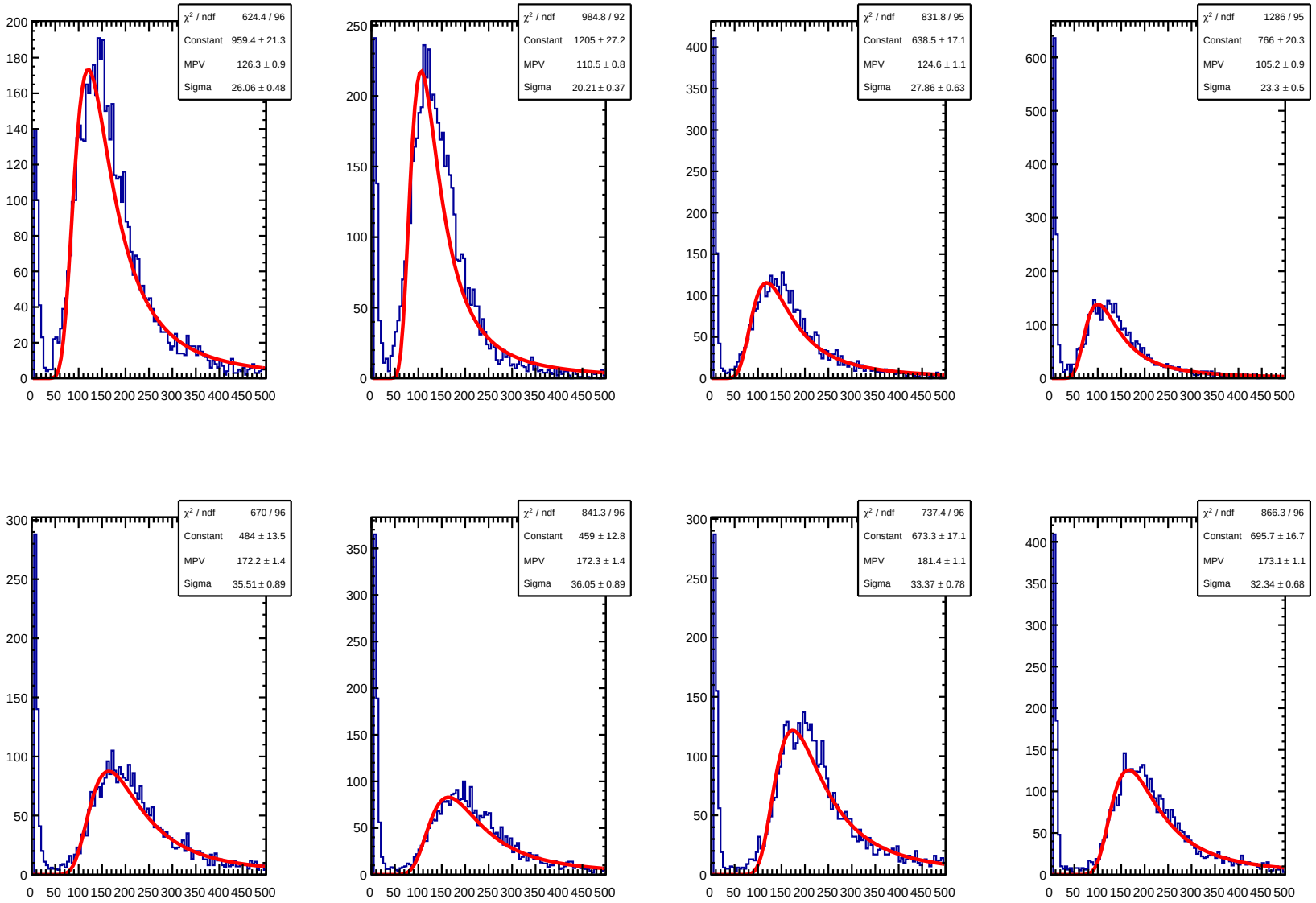

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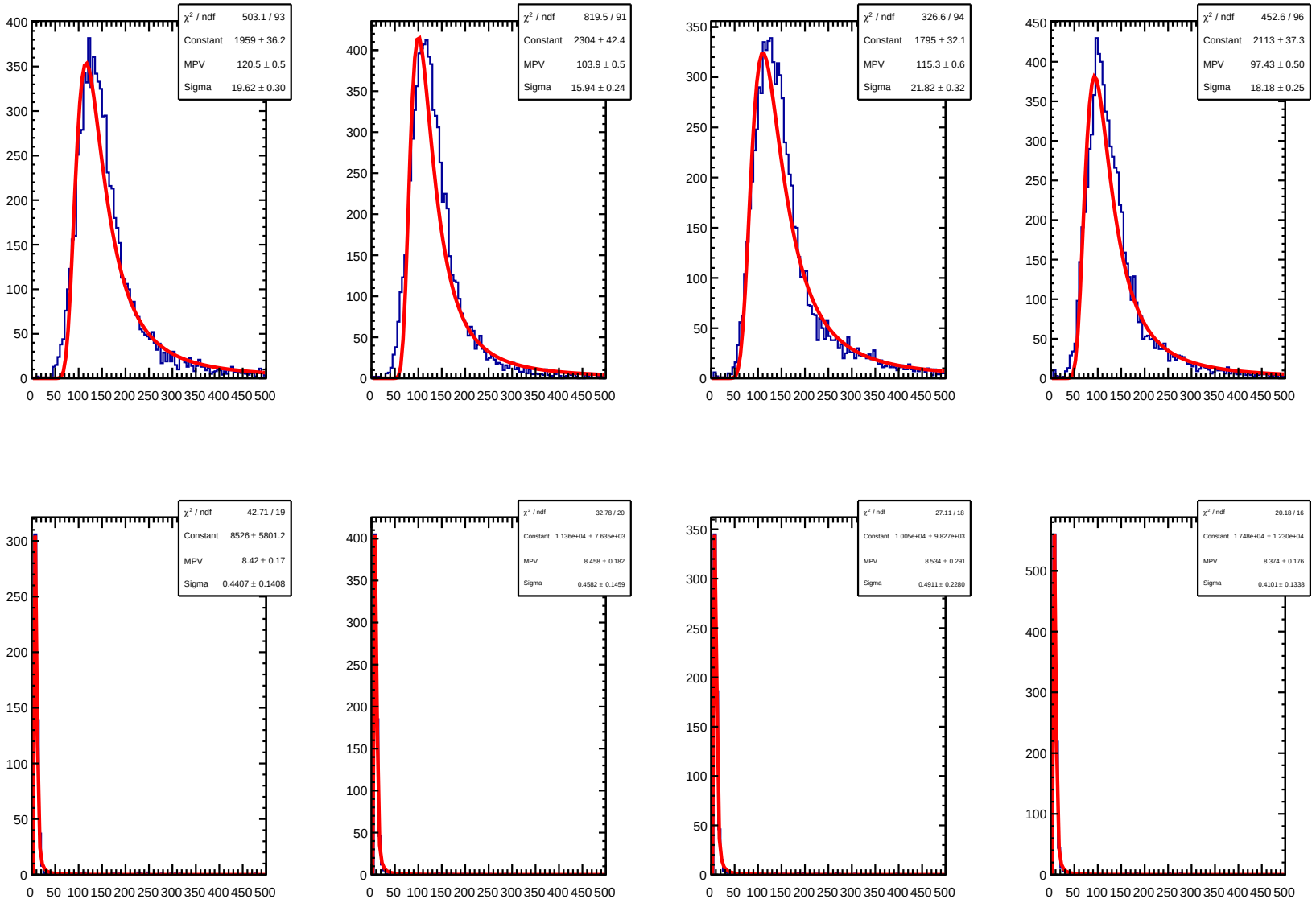

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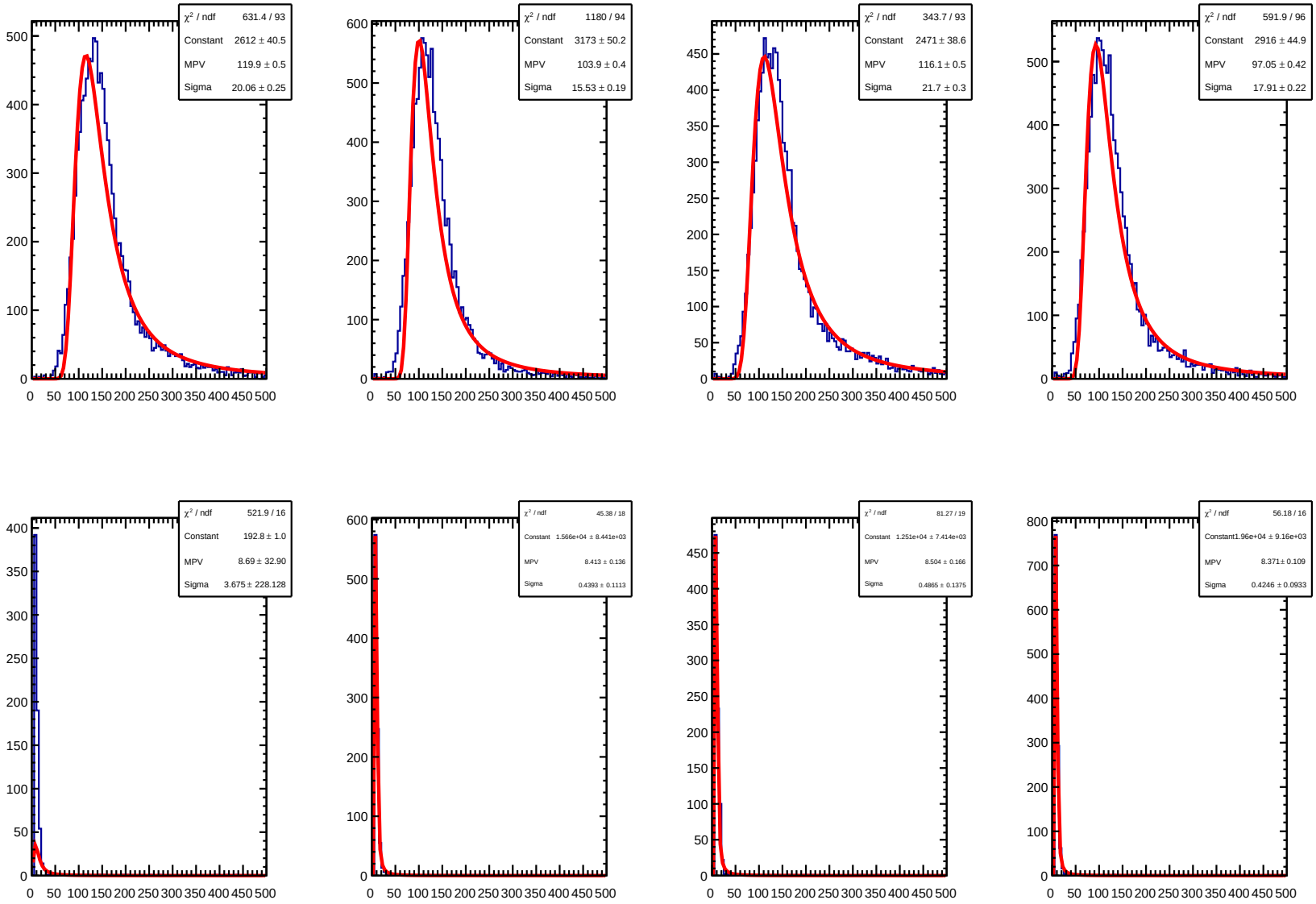

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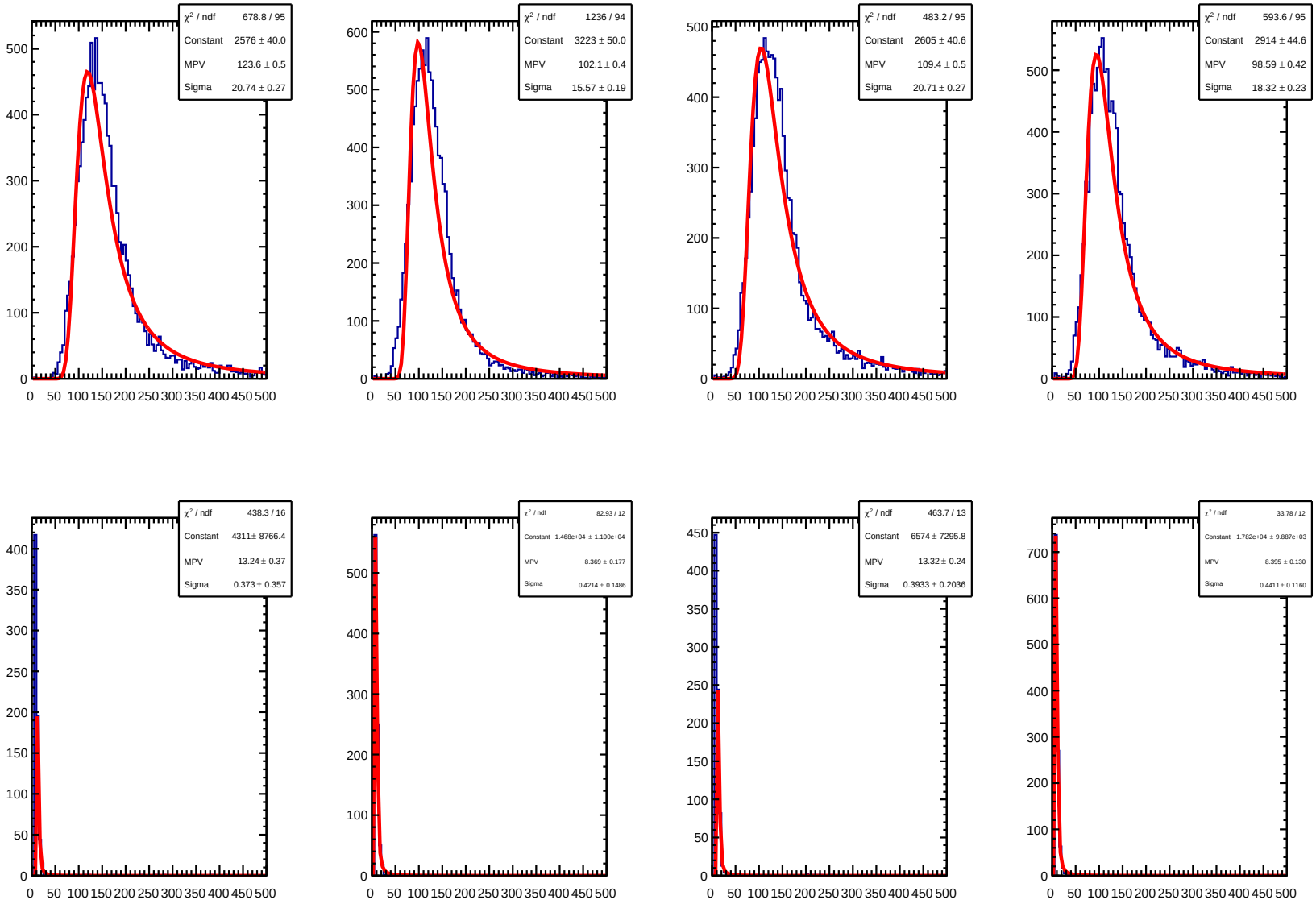

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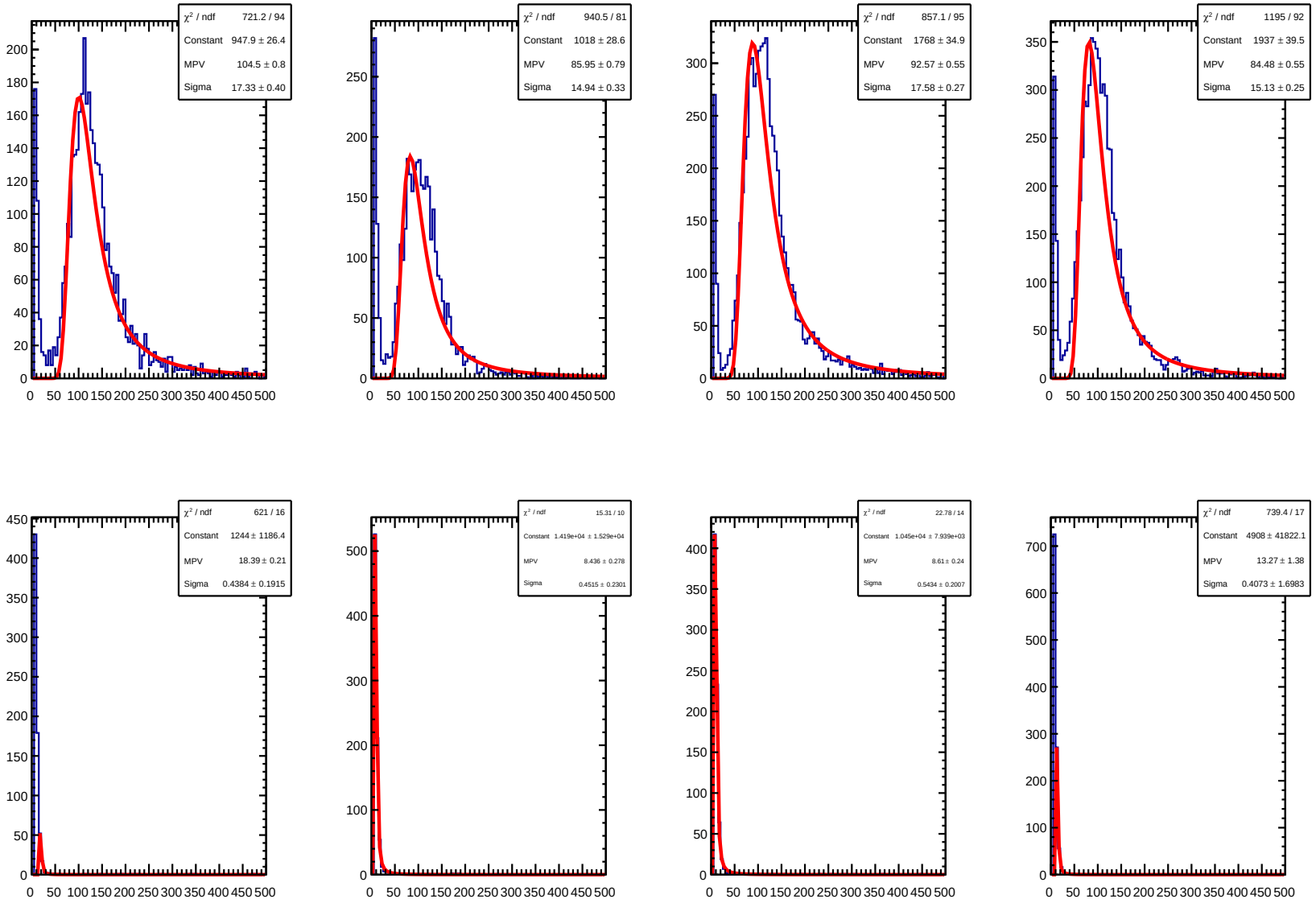

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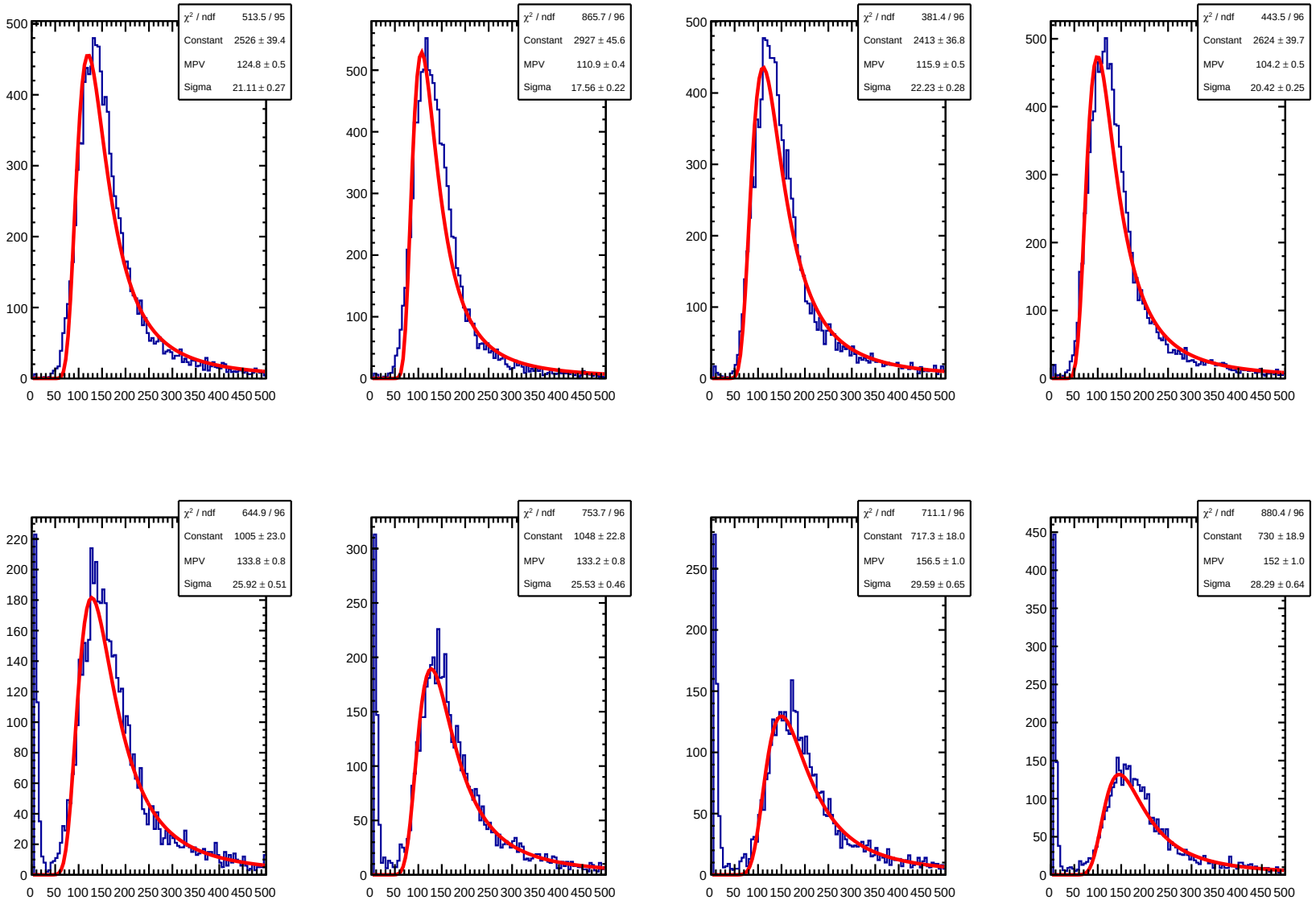

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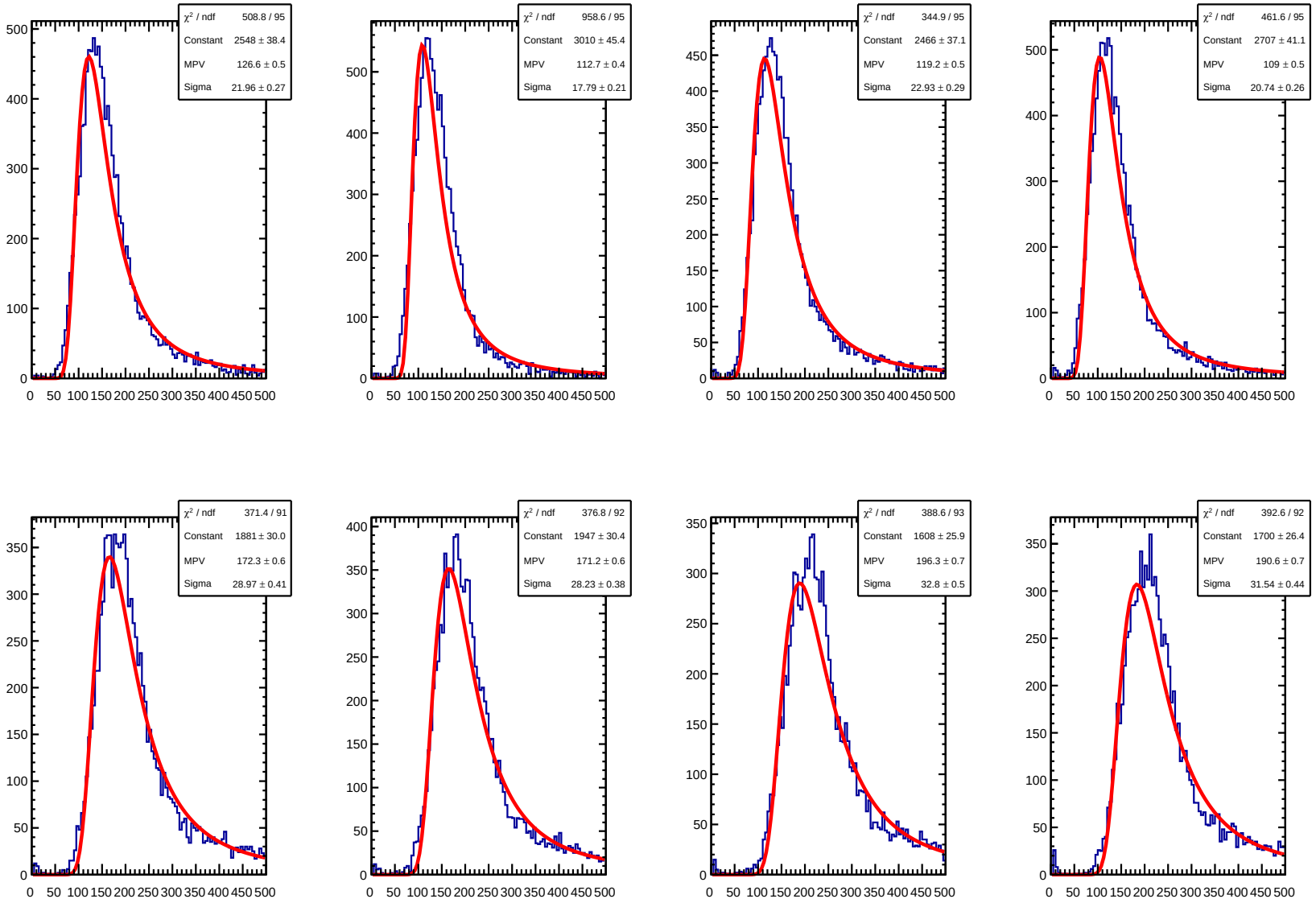

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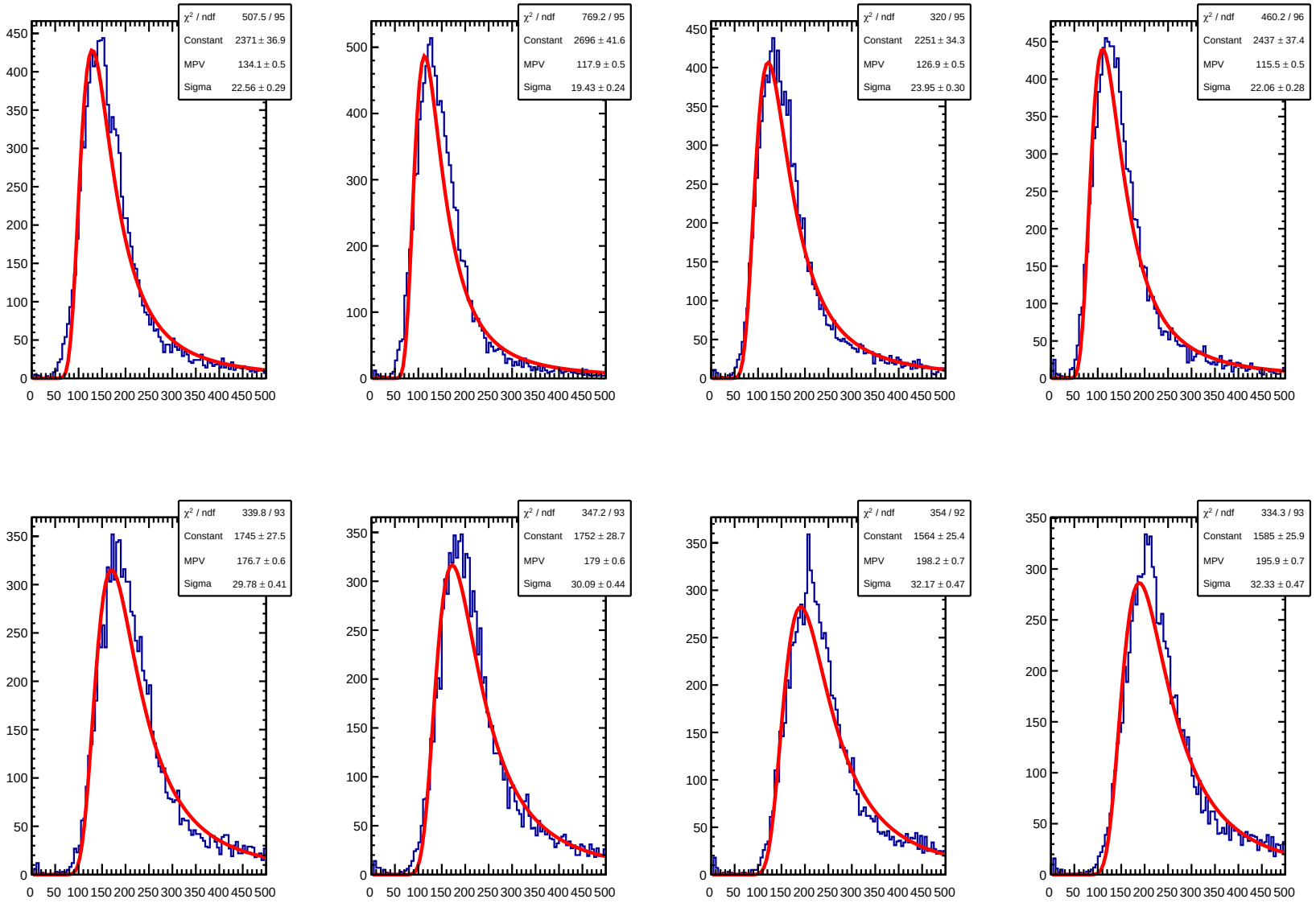

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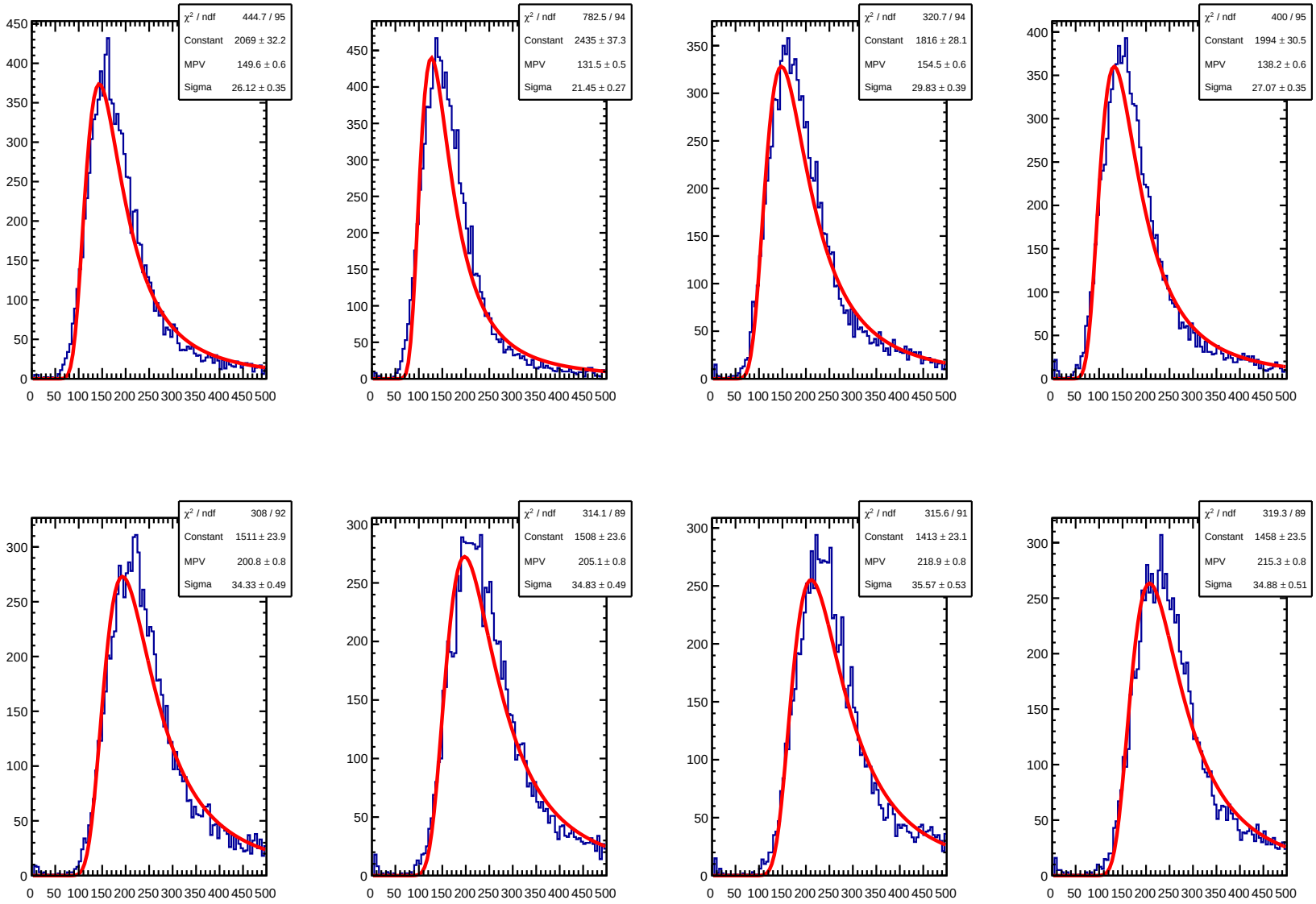

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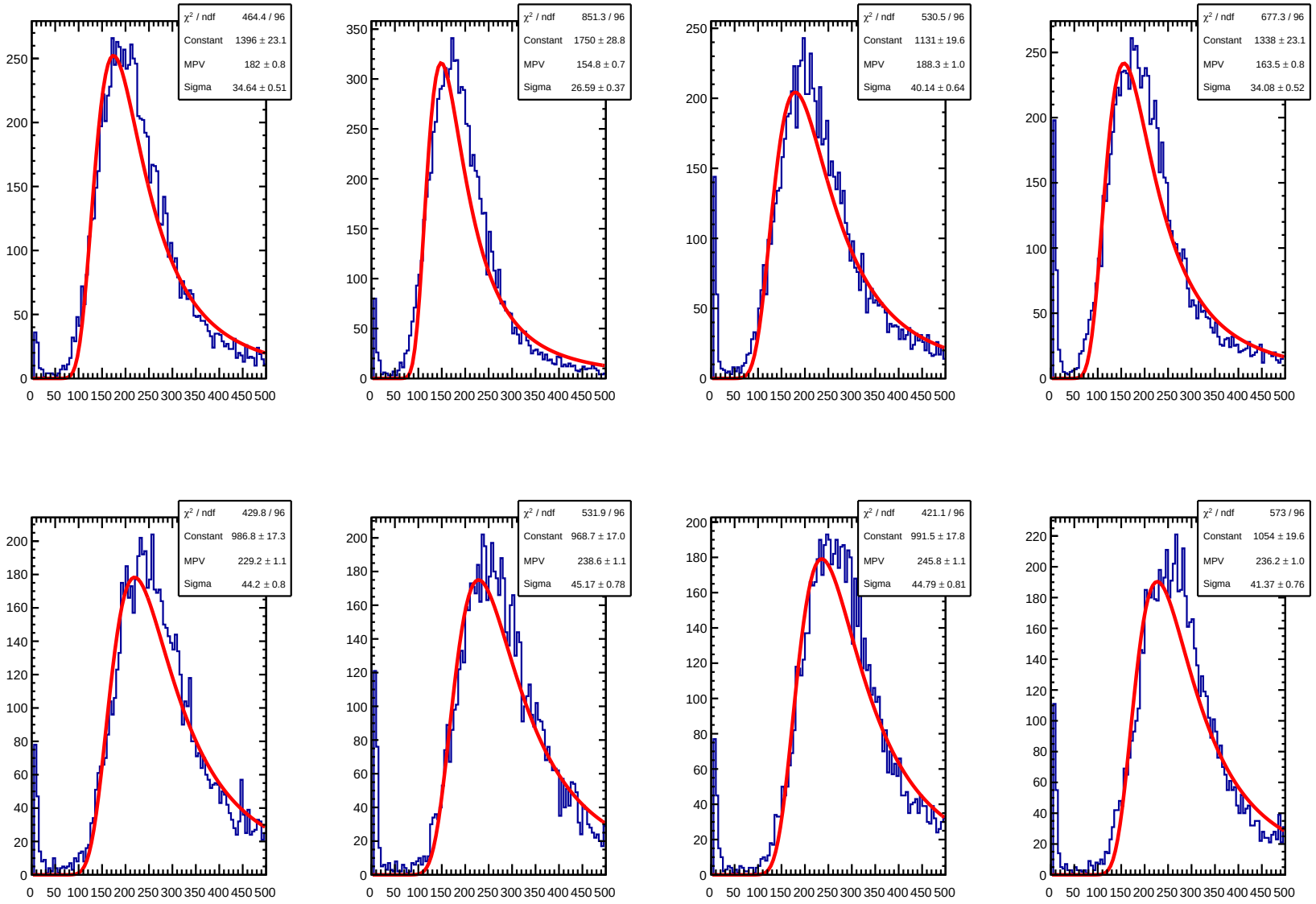

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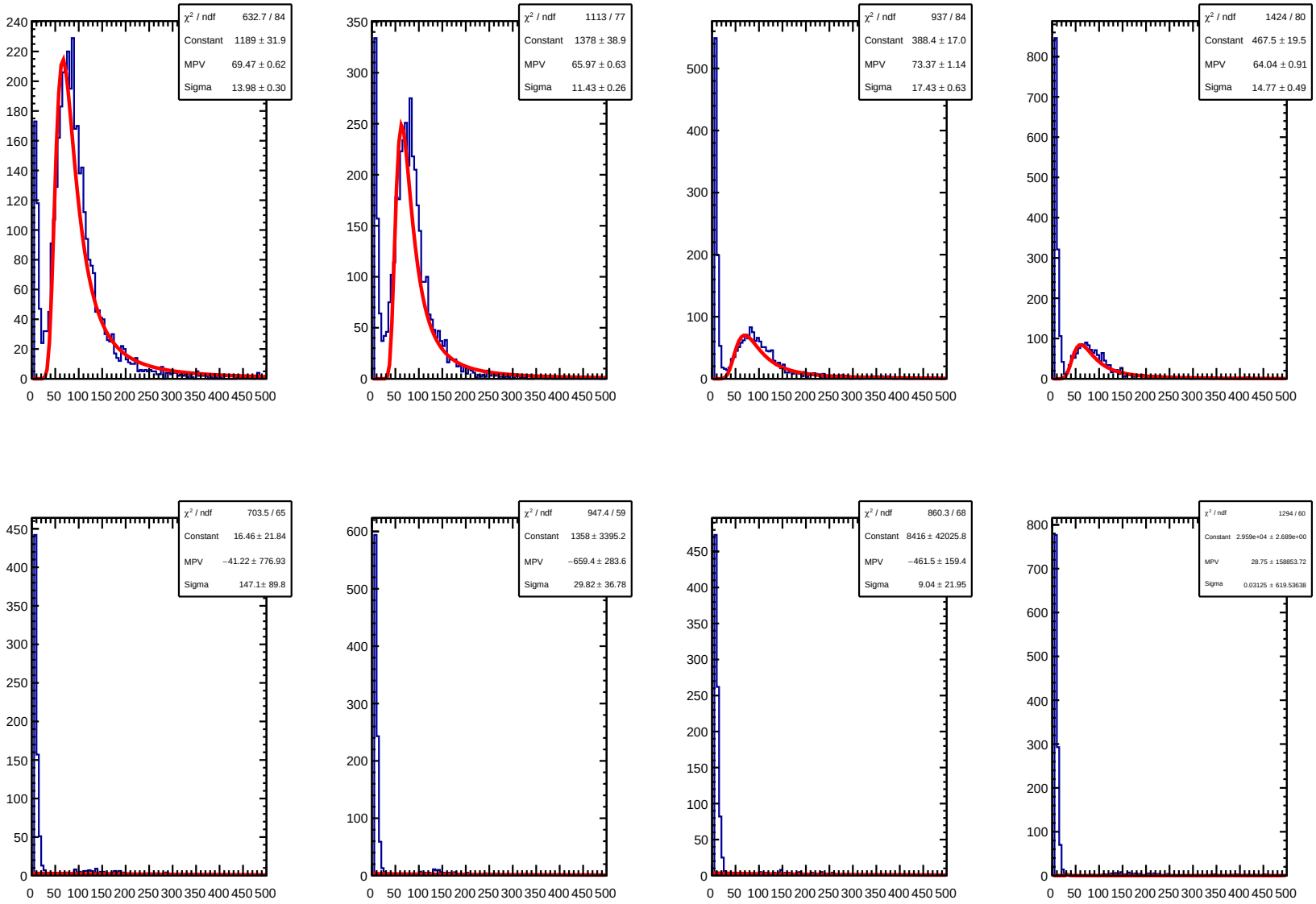

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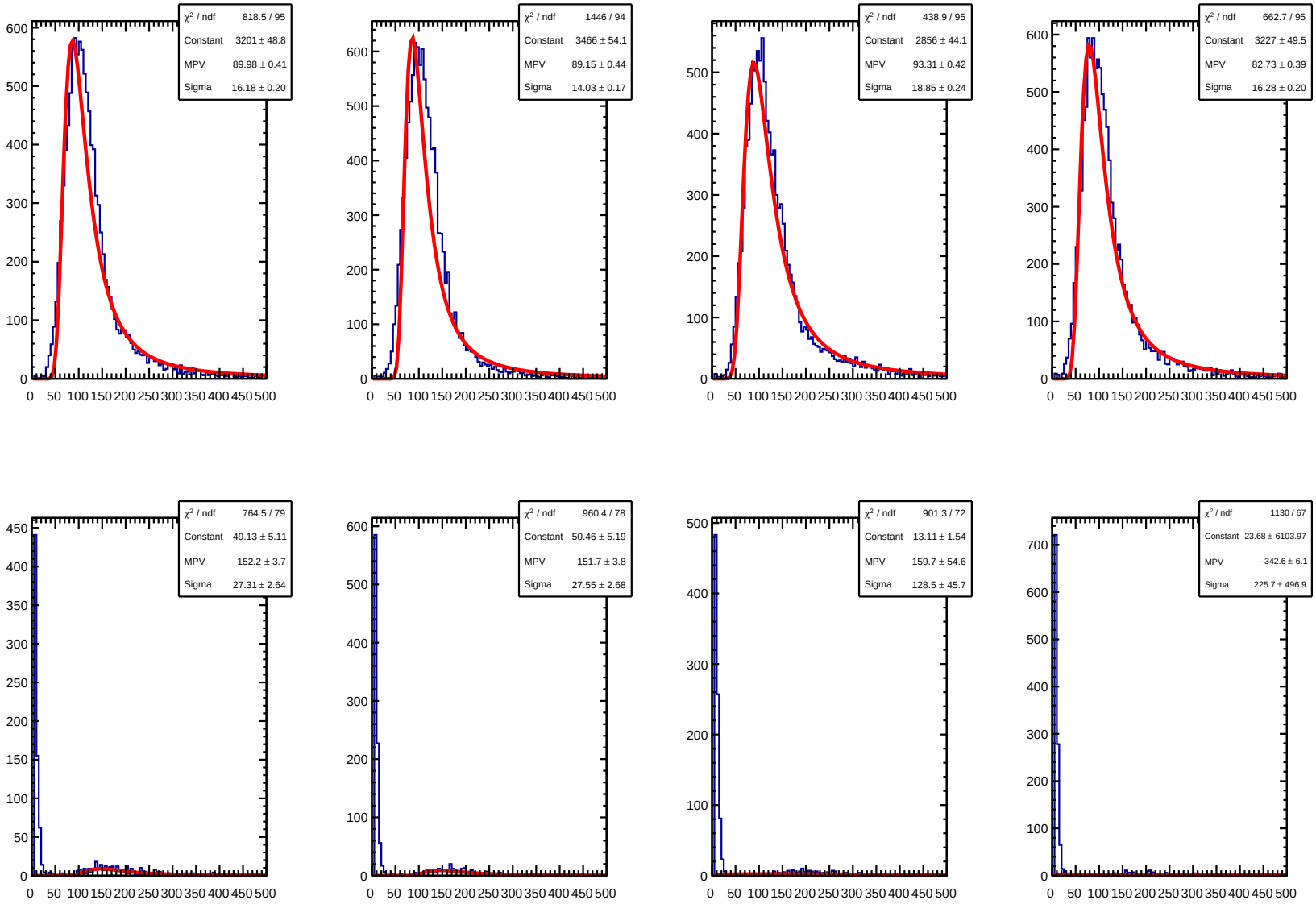

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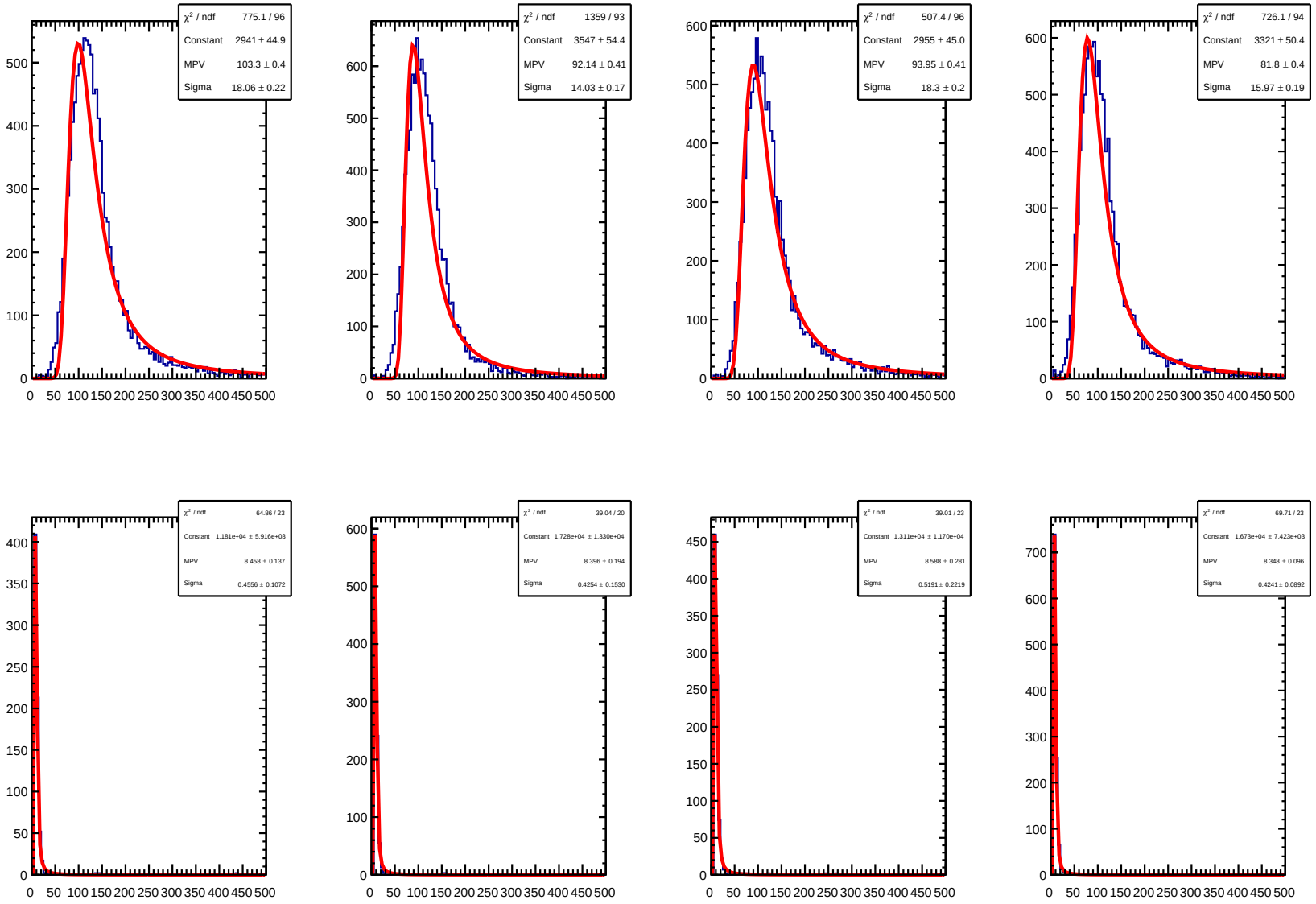

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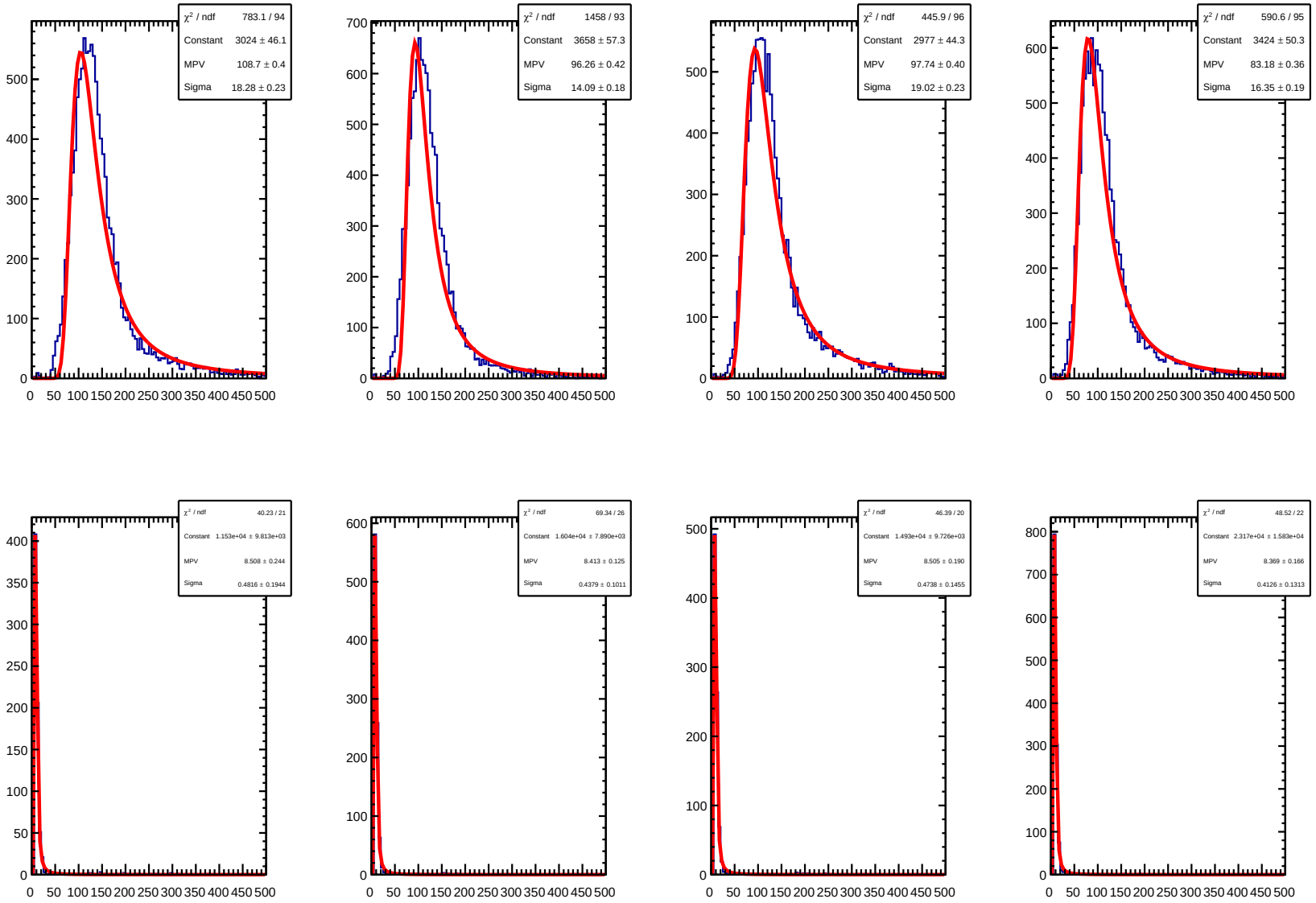

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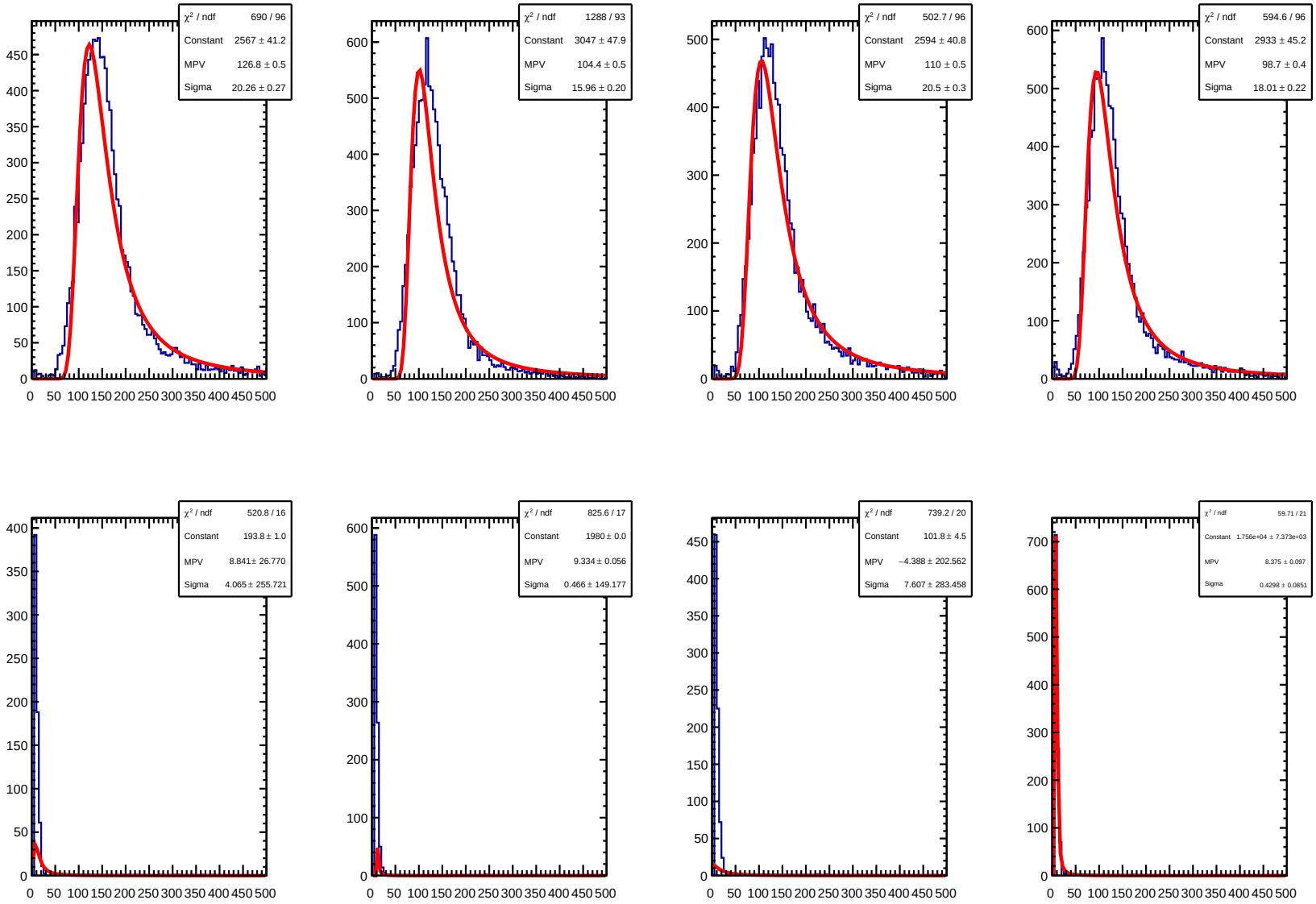
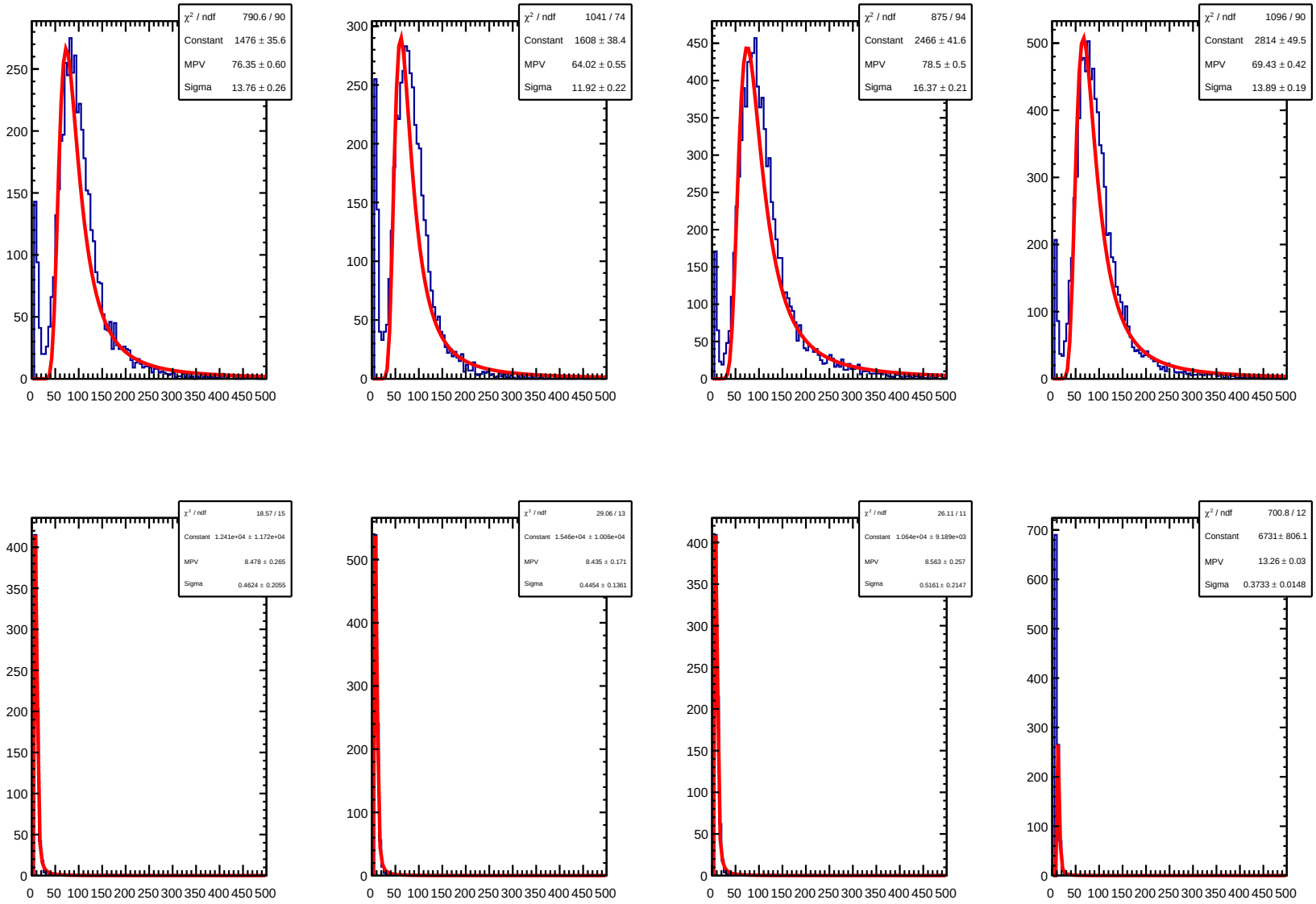
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