

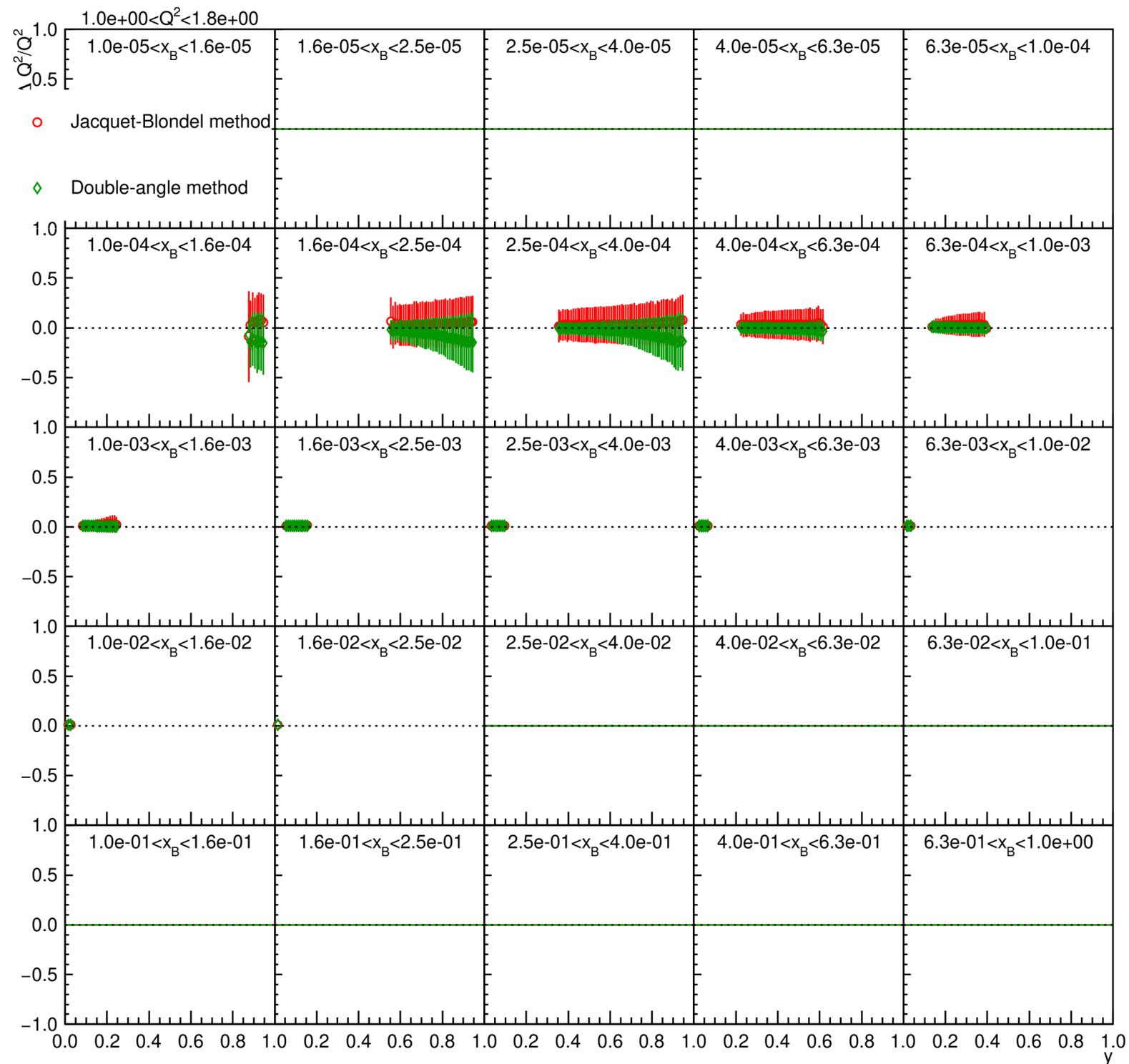
# SIDIS WG meeting

7 September 2021

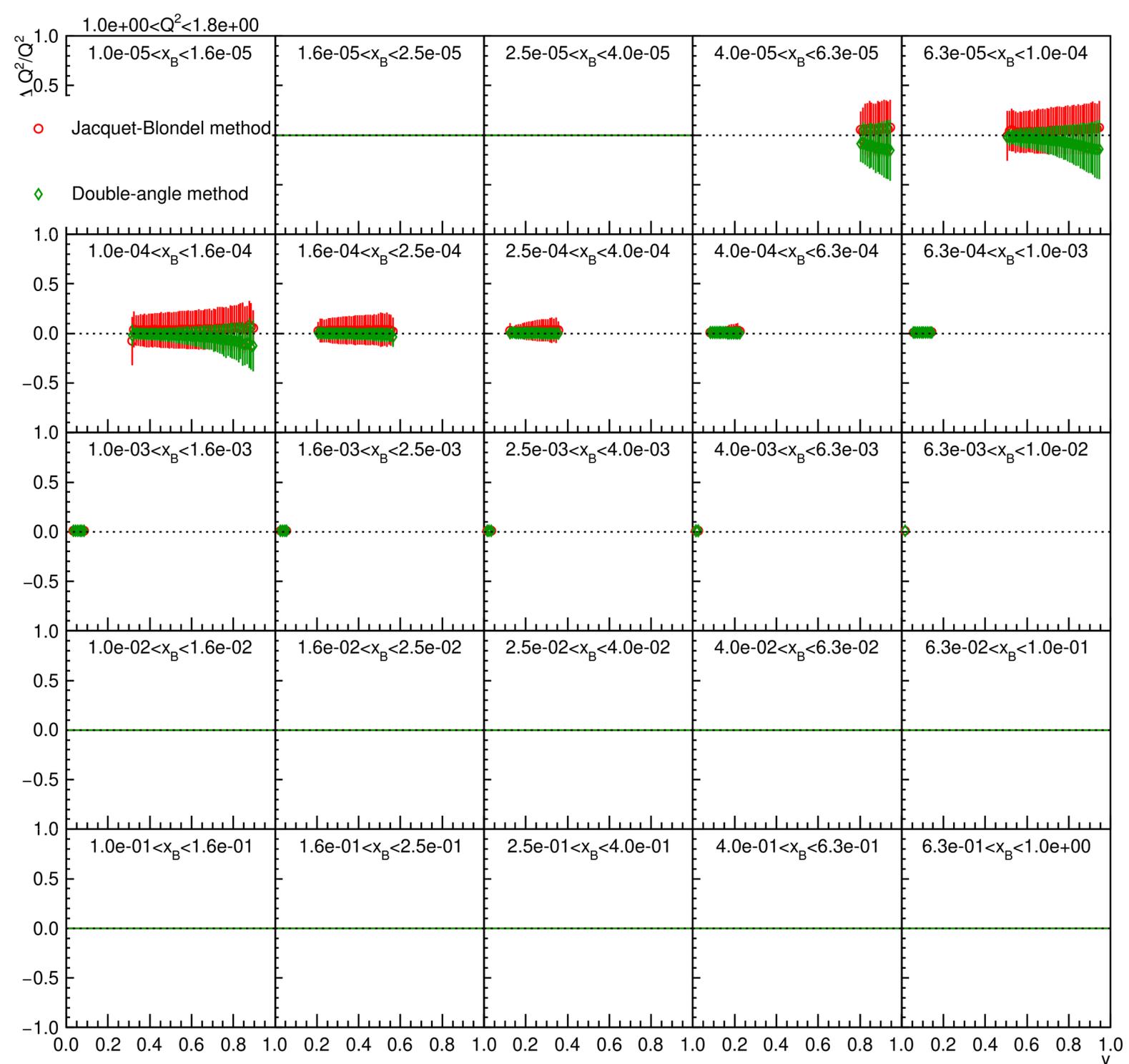
Charlotte

# Q<sup>2</sup>: difference reconstruction with and without EHCAL: low Q<sup>2</sup>

18x100



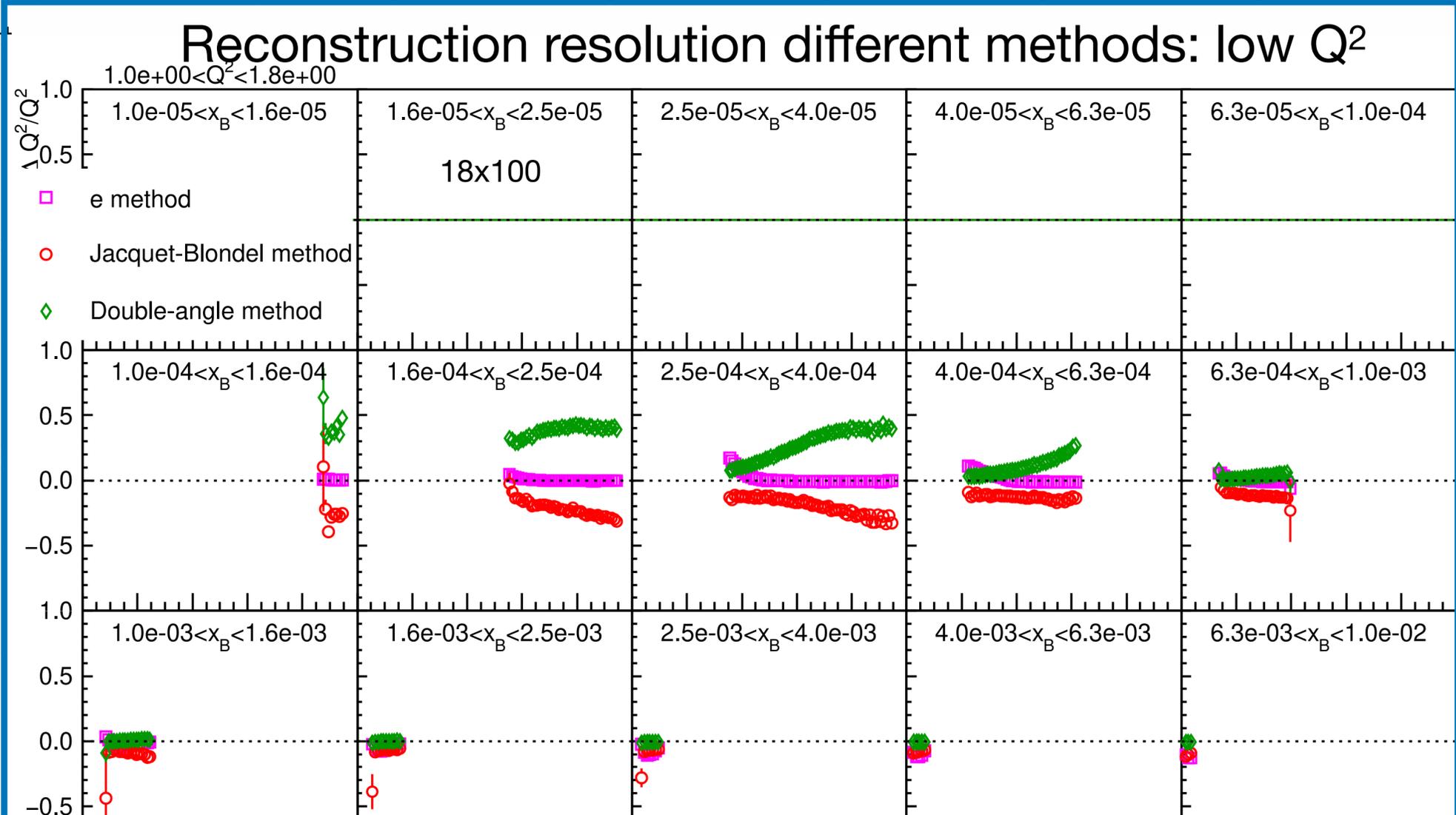
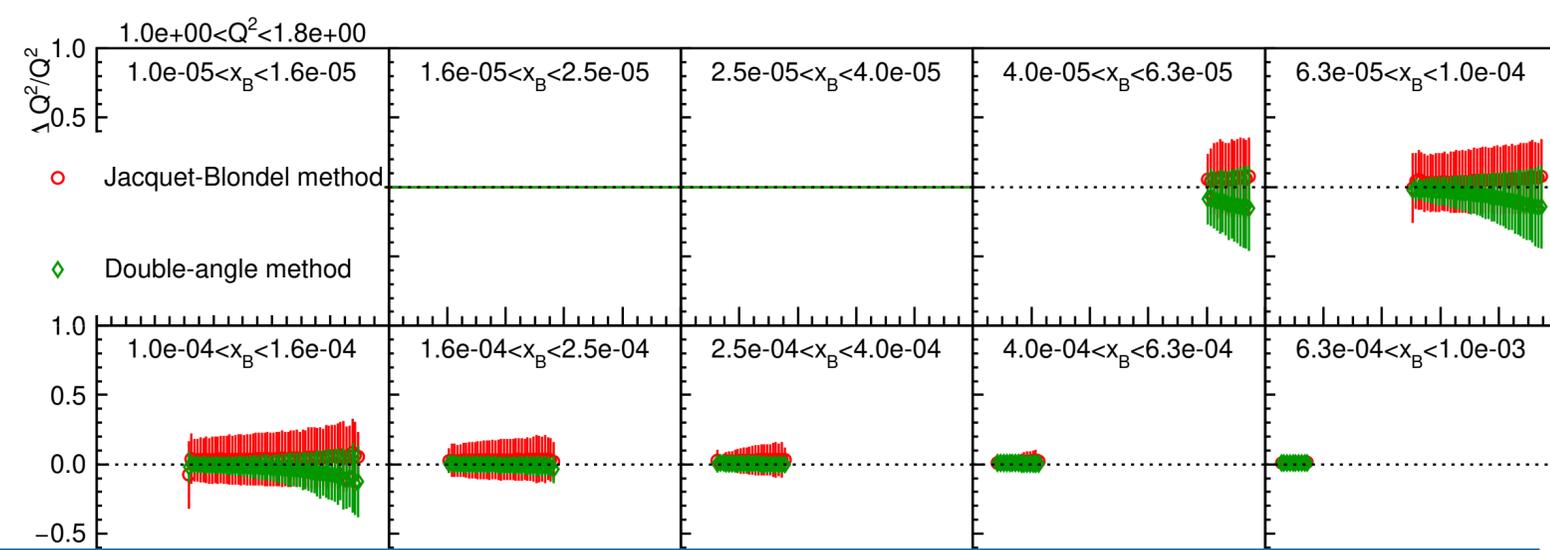
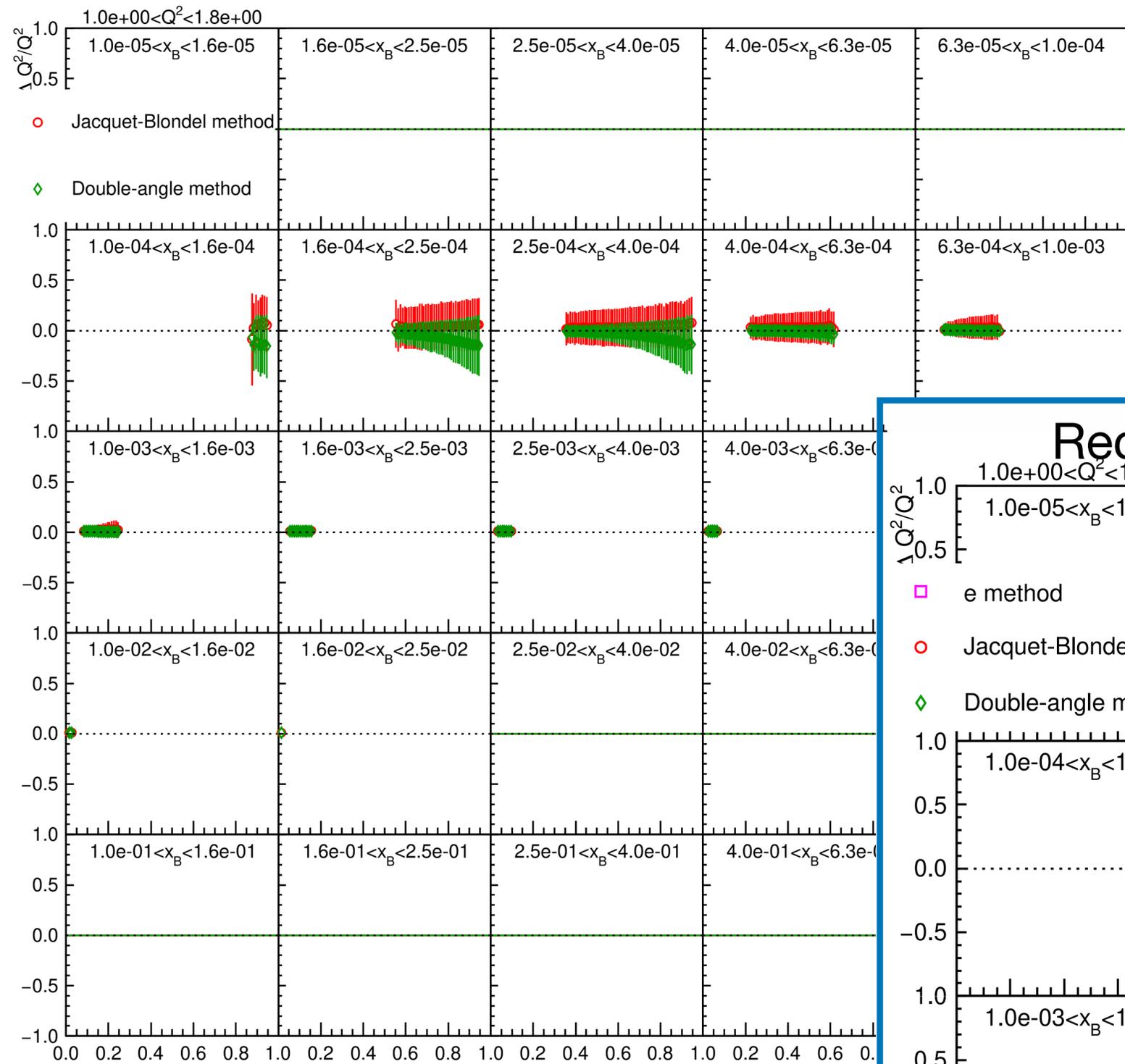
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# Q<sup>2</sup>: difference reconstruction with and without EHCAL: low Q<sup>2</sup>

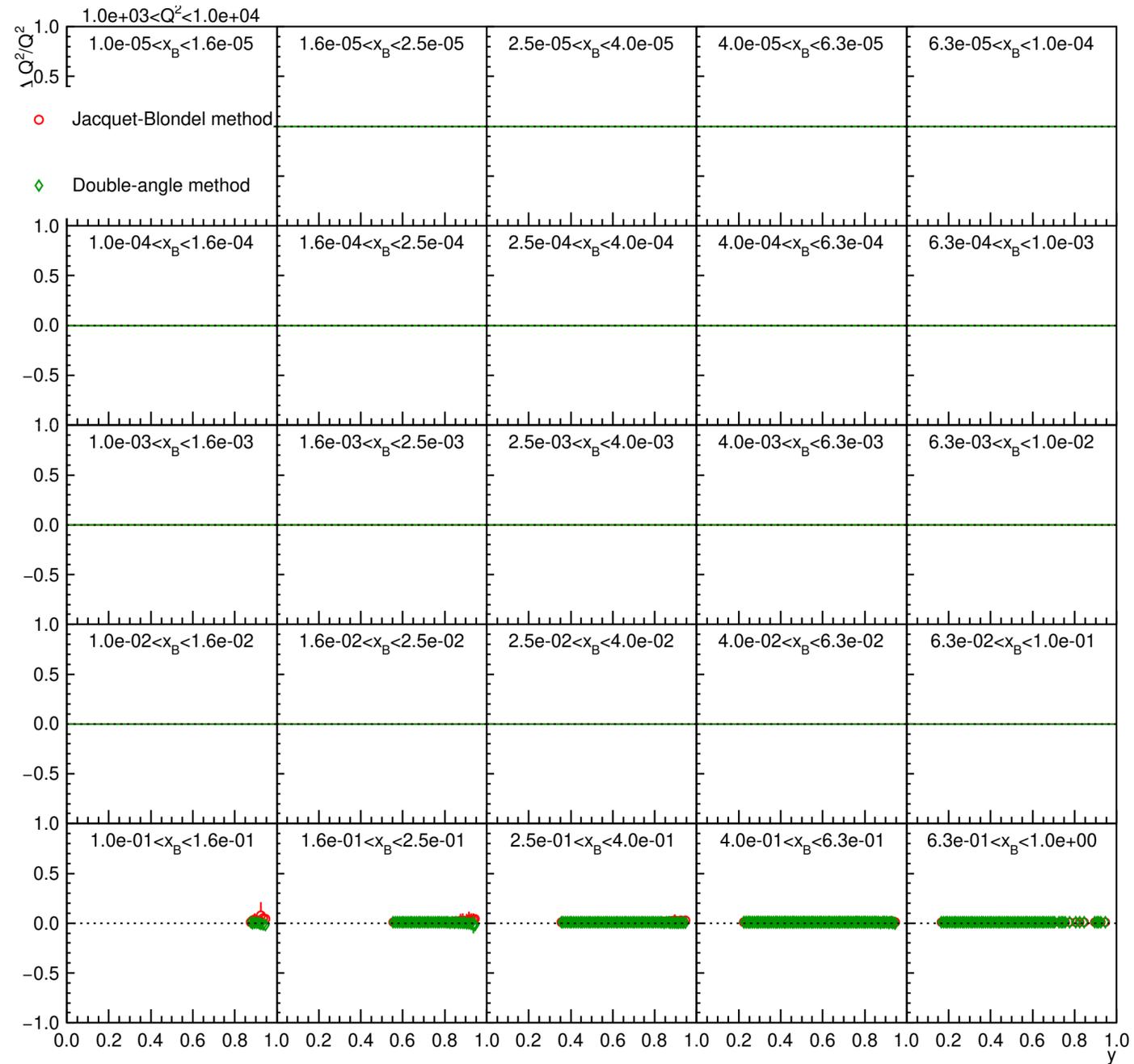
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# Q<sup>2</sup>: difference reconstruction with and without EHCAL: high Q<sup>2</sup>

18x100



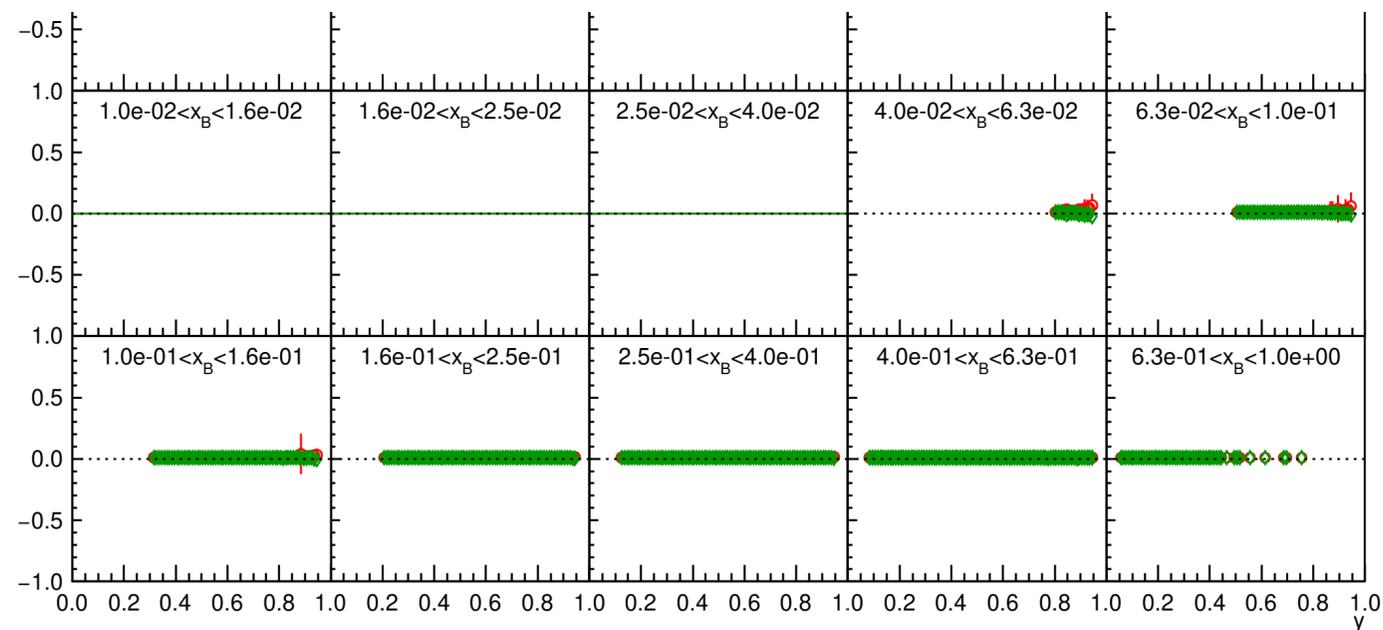
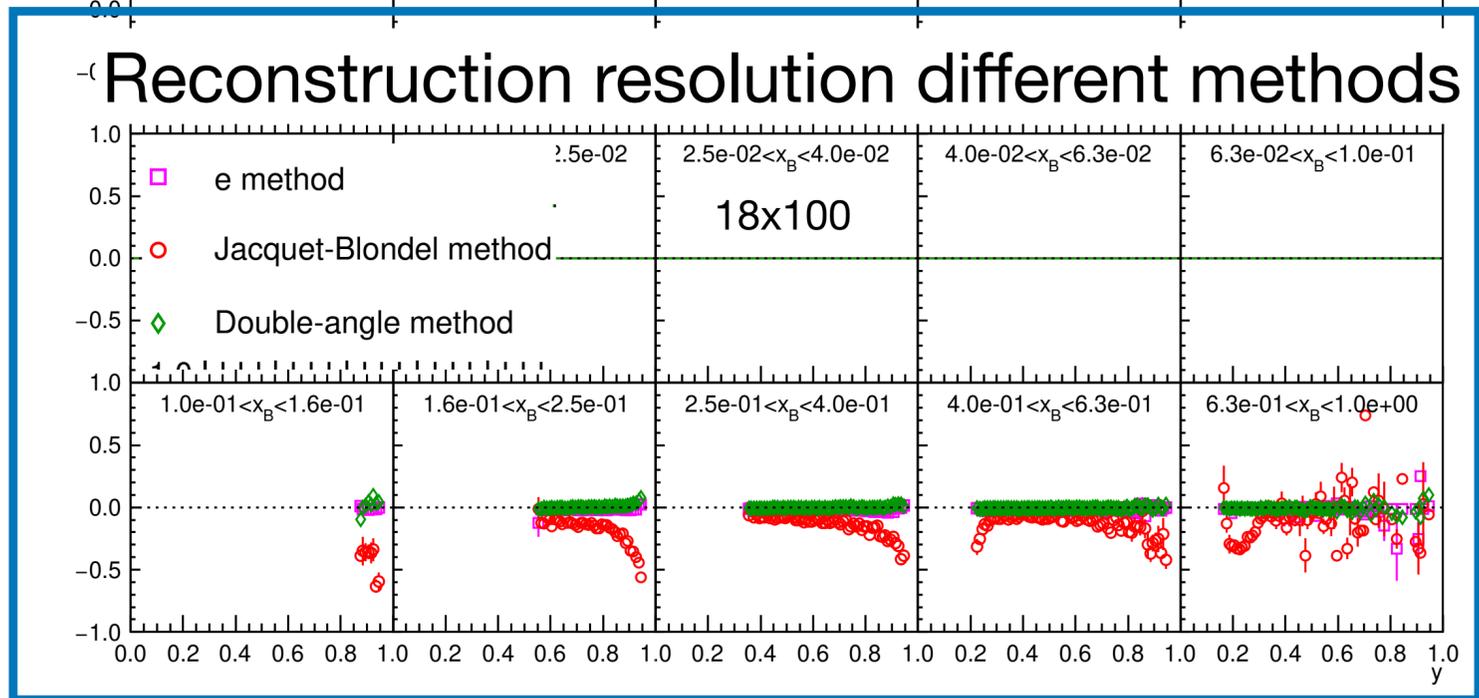
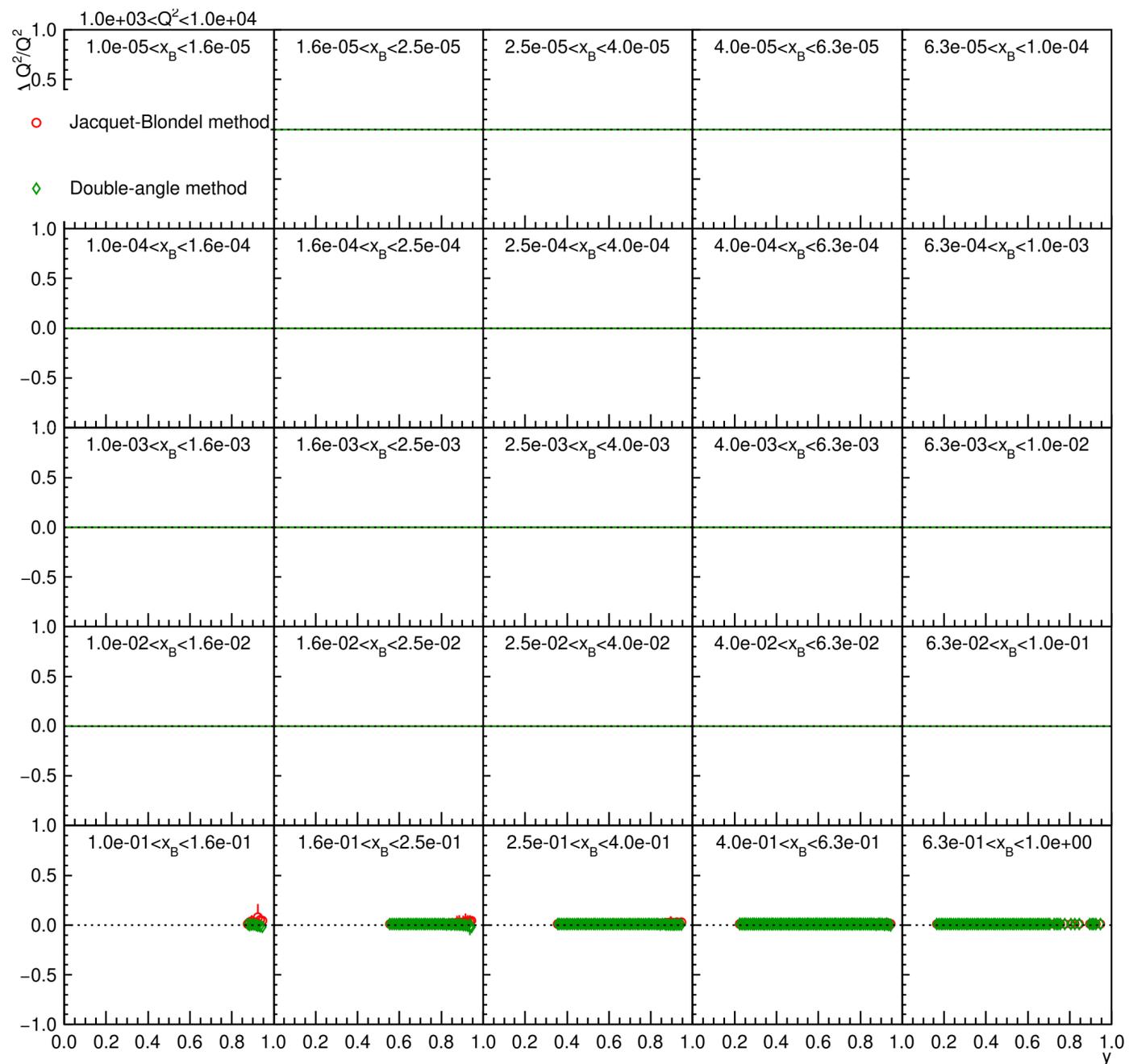
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- Absence of EHCAL visible at low Q<sup>2</sup>, low x<sub>B</sub> and high y, where e reconstruction method is superior to the JB and DA methods

# Q<sup>2</sup>: difference reconstruction with and without EHCA

18x100

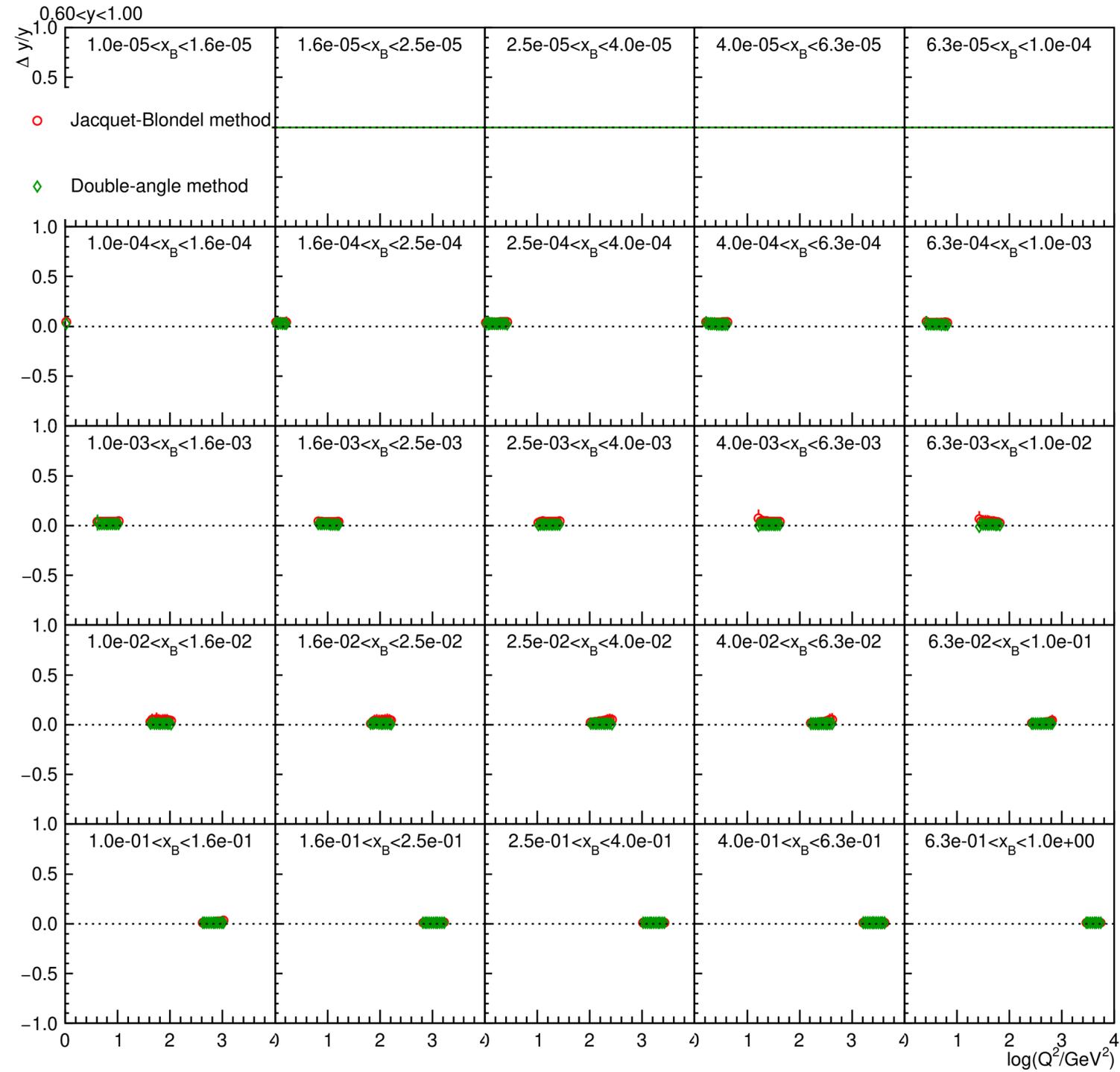


- Absence of EHCA visible at low Q<sup>2</sup>, low x<sub>B</sub> and high y, where e reconstruction method is superior to the JB and DA methods

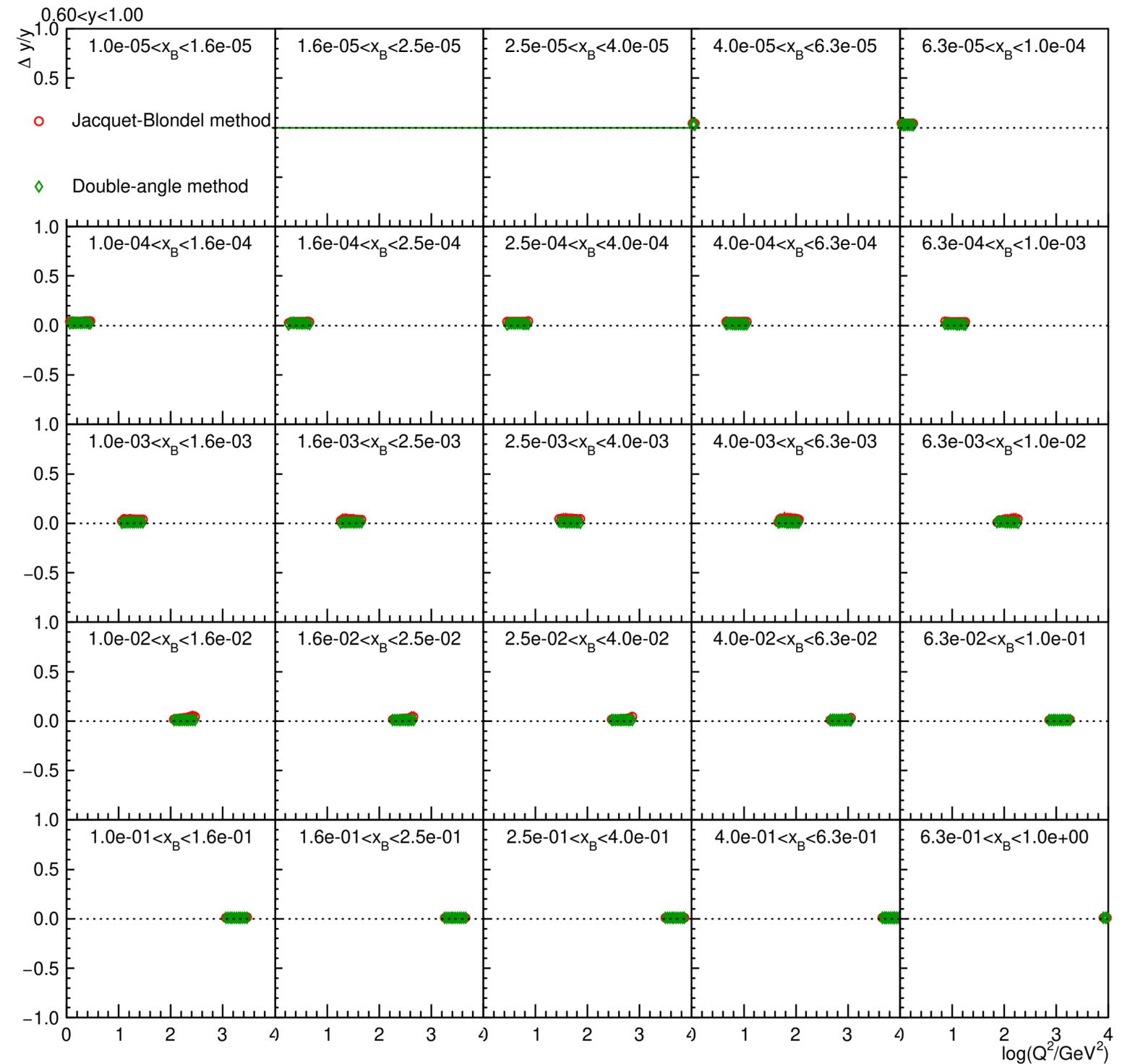


# y: difference reconstruction with and without EHCAL: high y

18x100



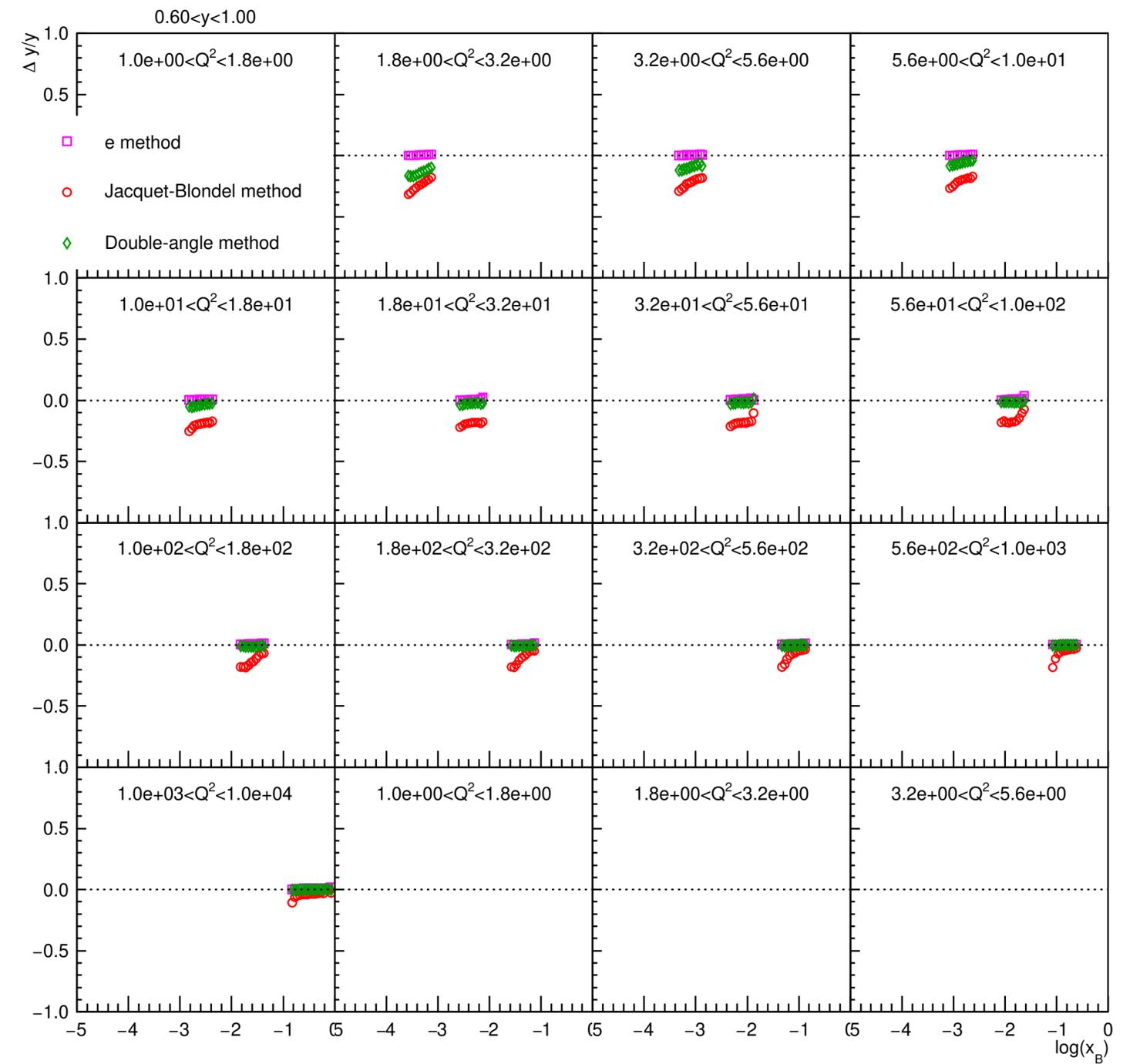
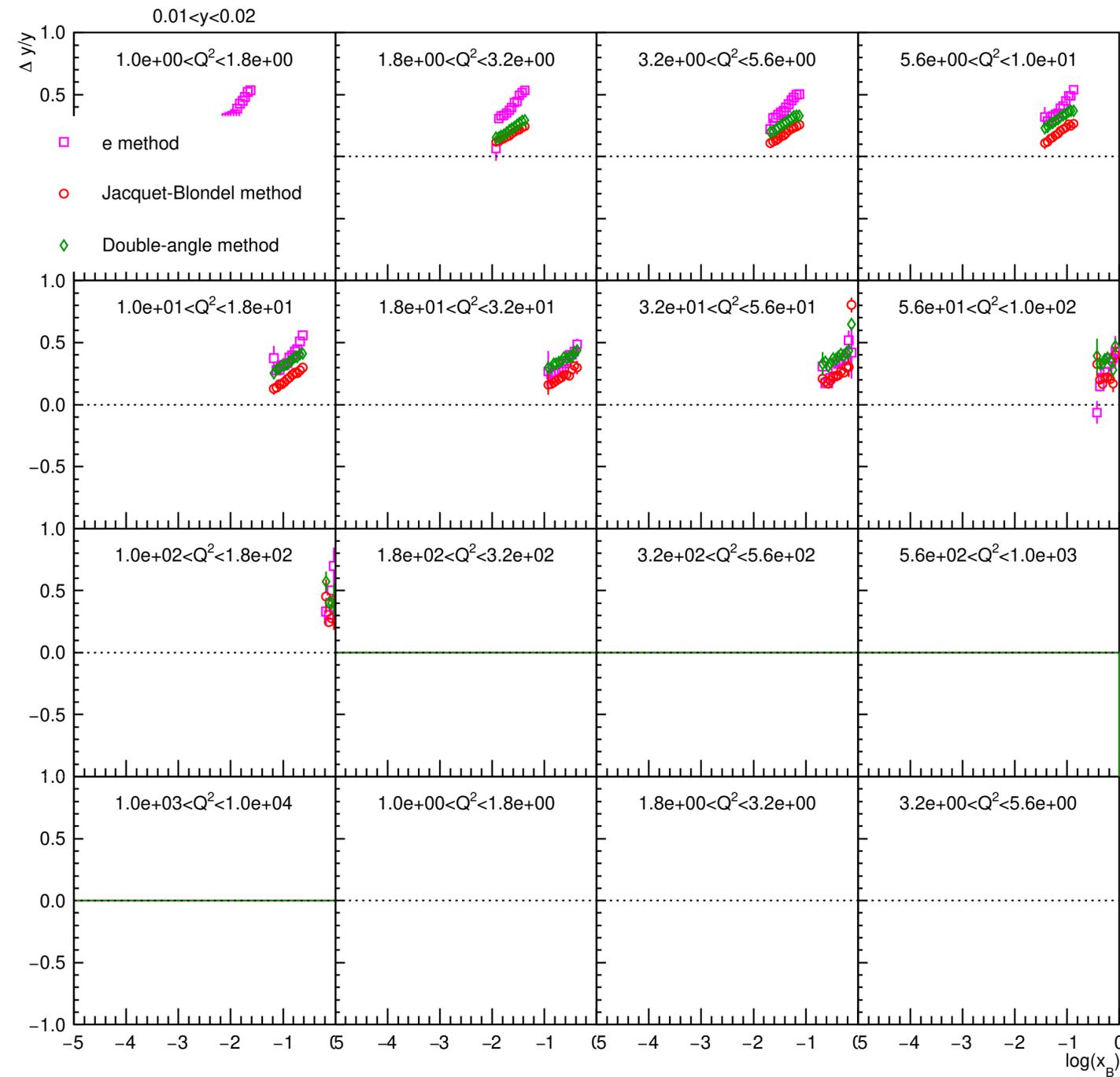
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• EHCAL does not influence the reconstruction of  $y$  with the JB and DA methods

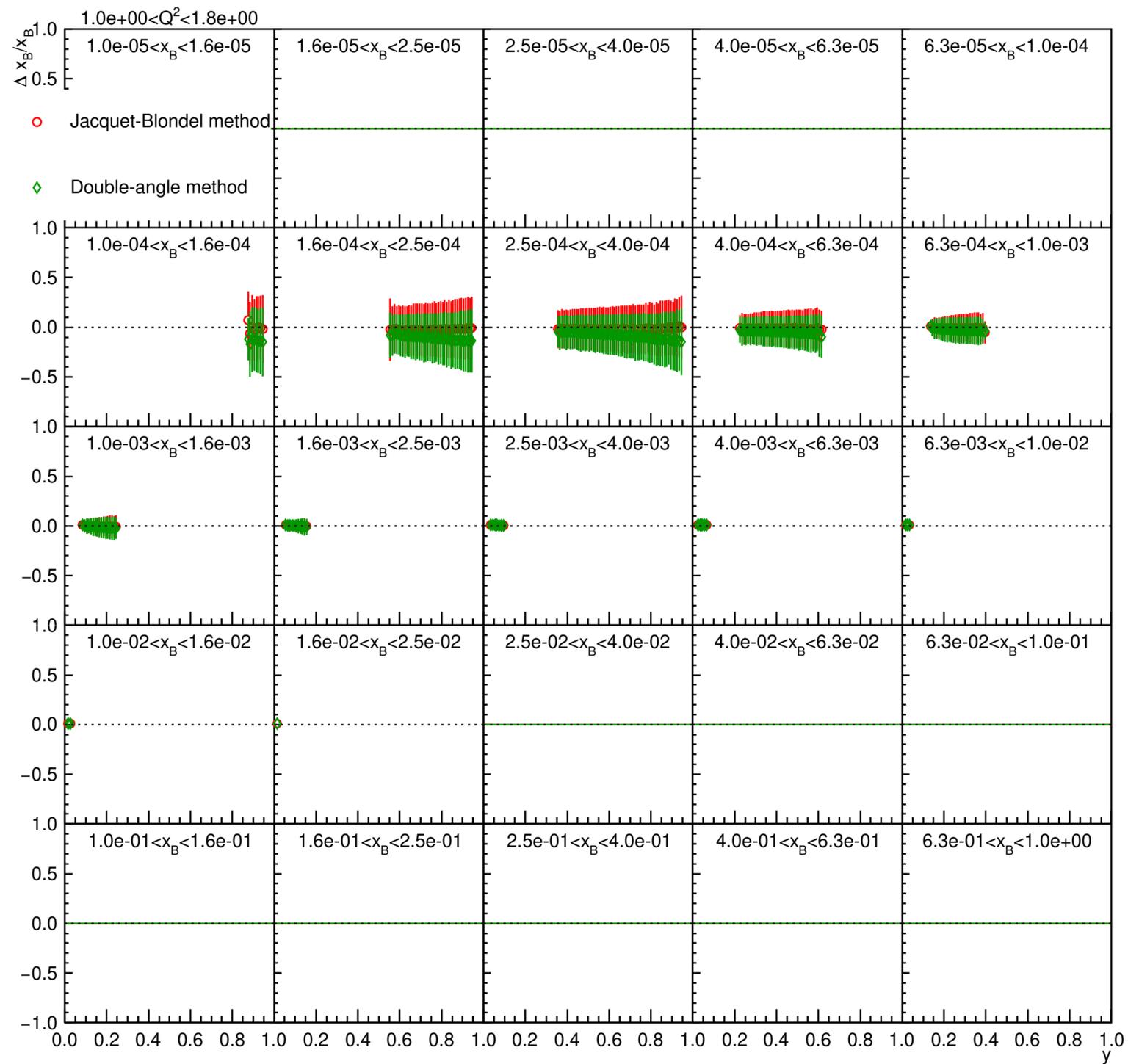
# Reconstruction resolution different methods

18x100

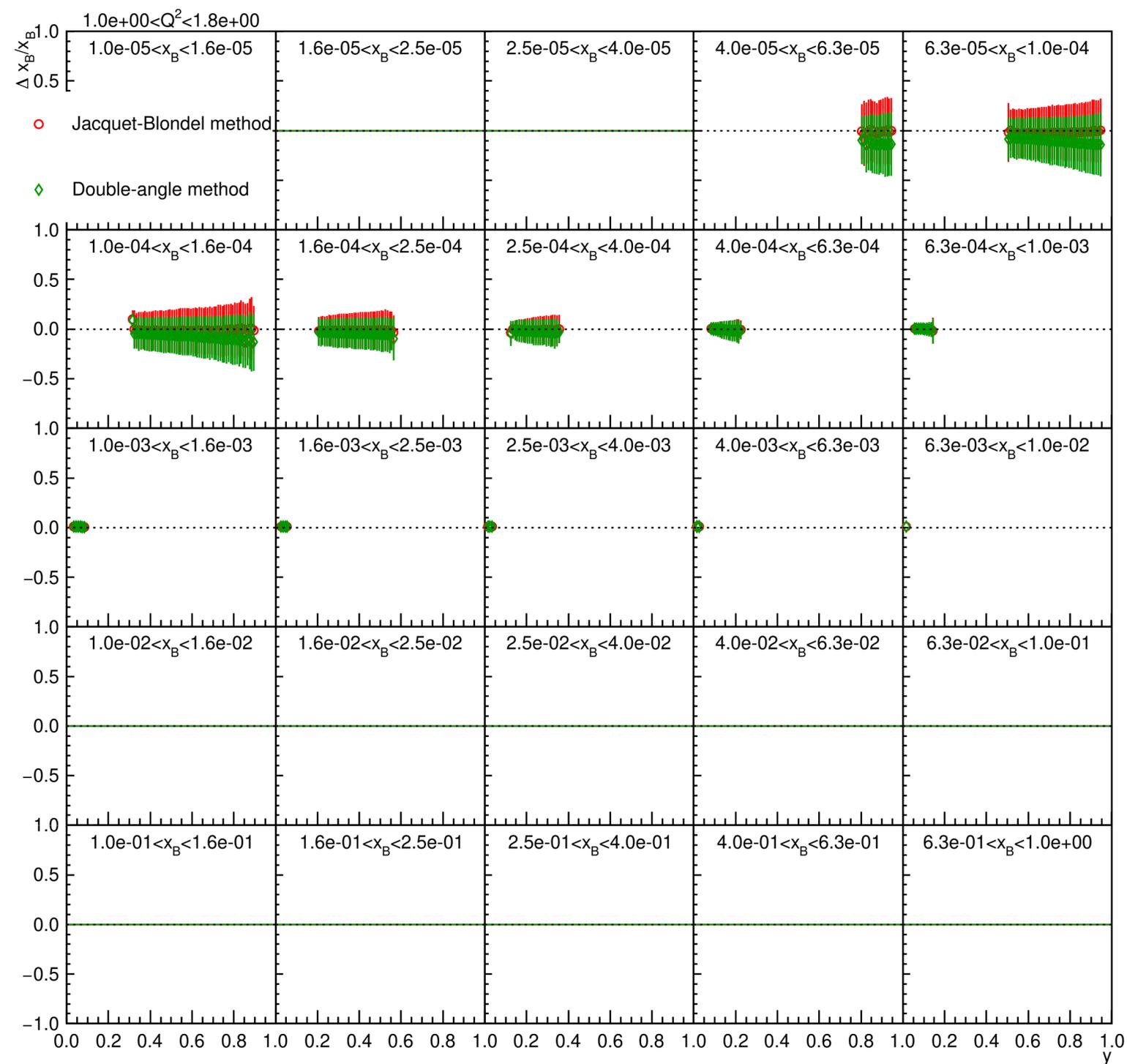


# $x_B$ : difference reconstruction with and without EHCAL: low $Q^2$

18x100

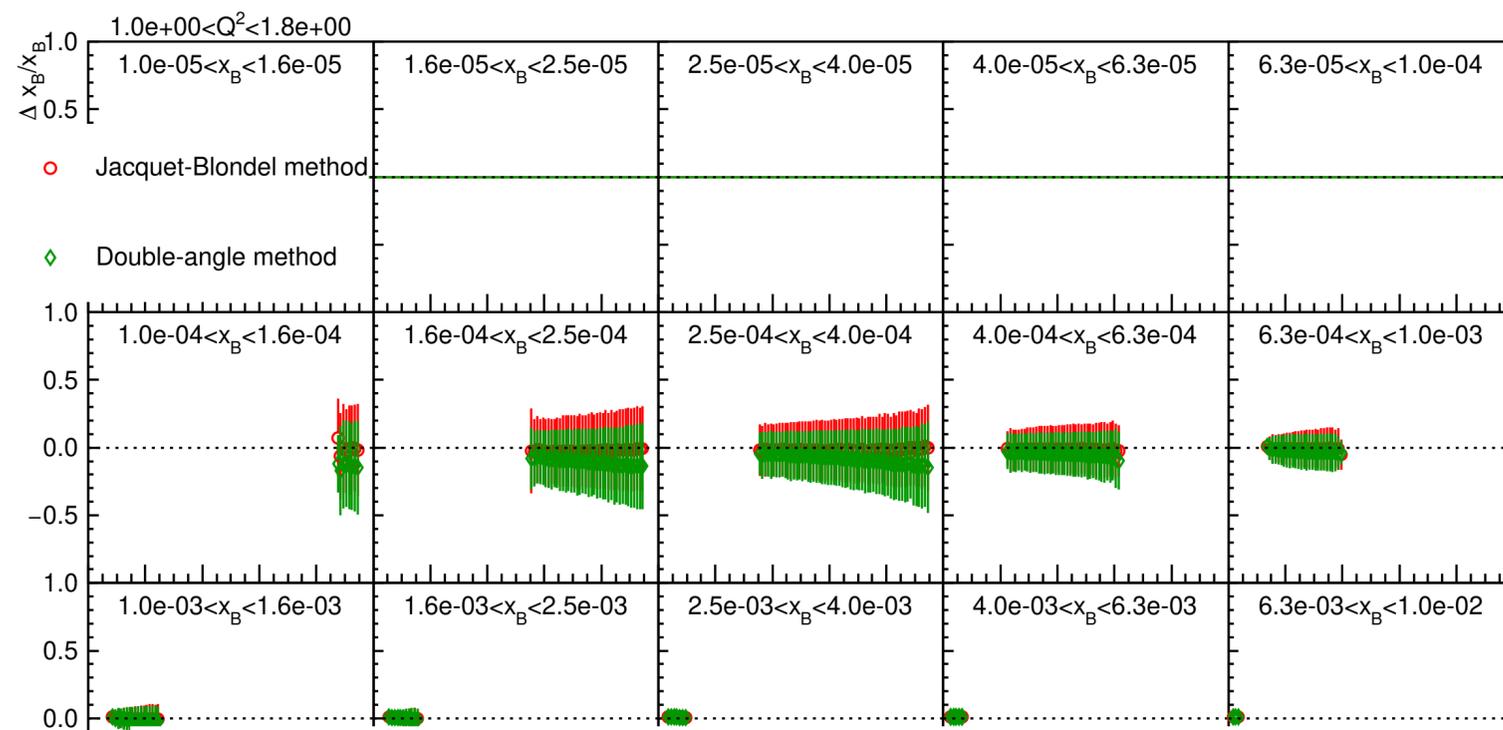


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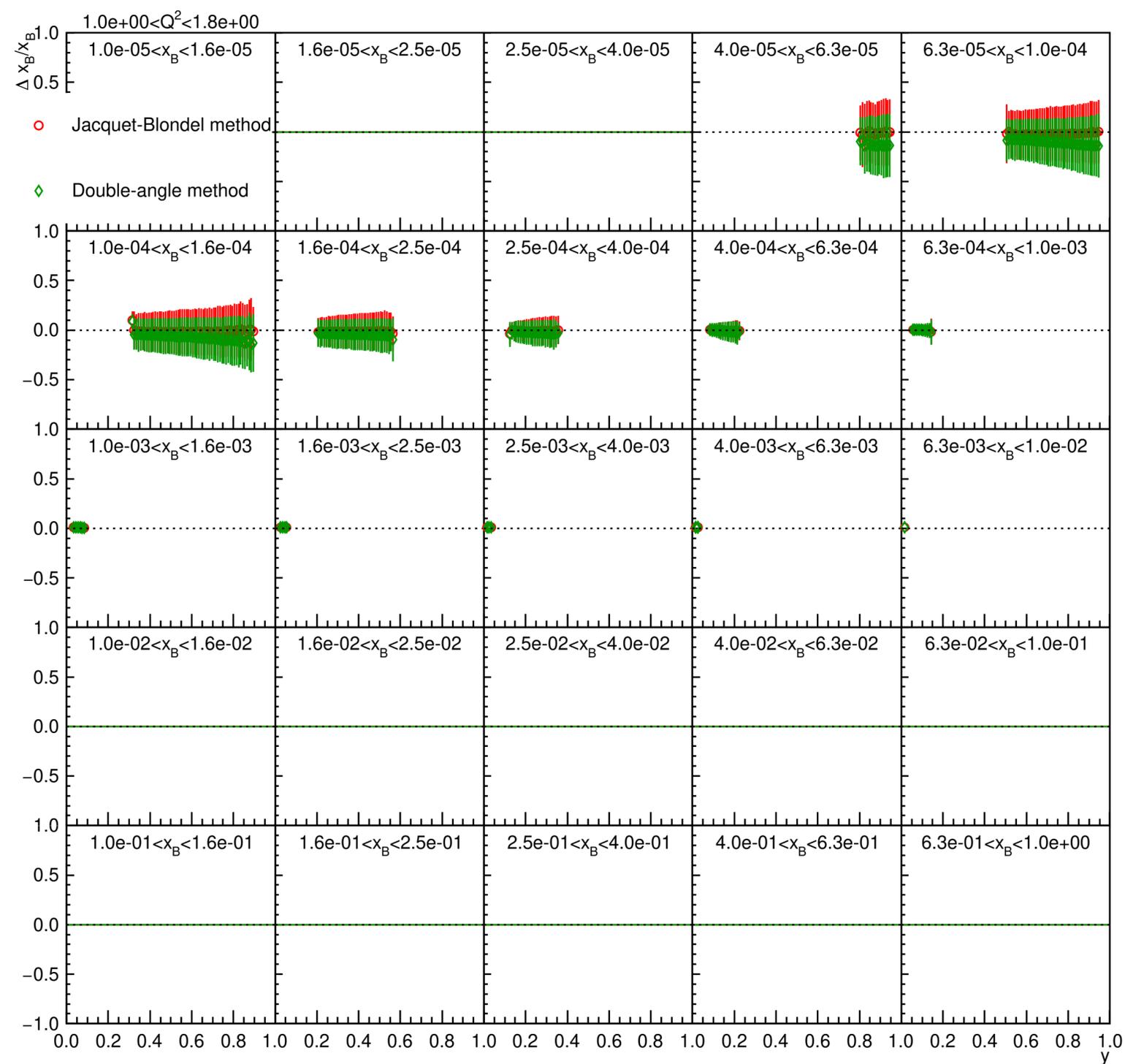


# $x_B$ : difference reconstruction with and without EHCAL: low $Q^2$

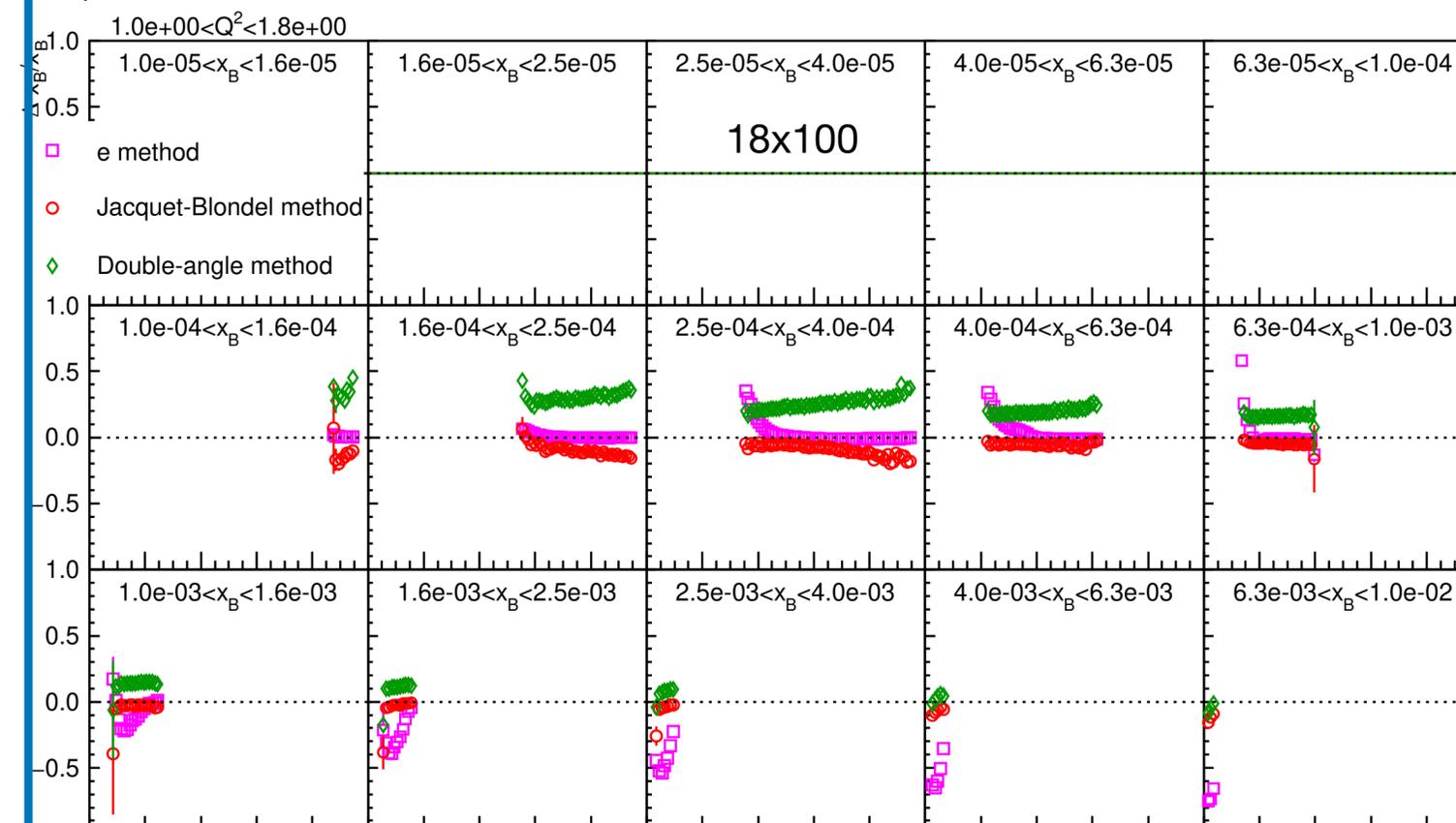
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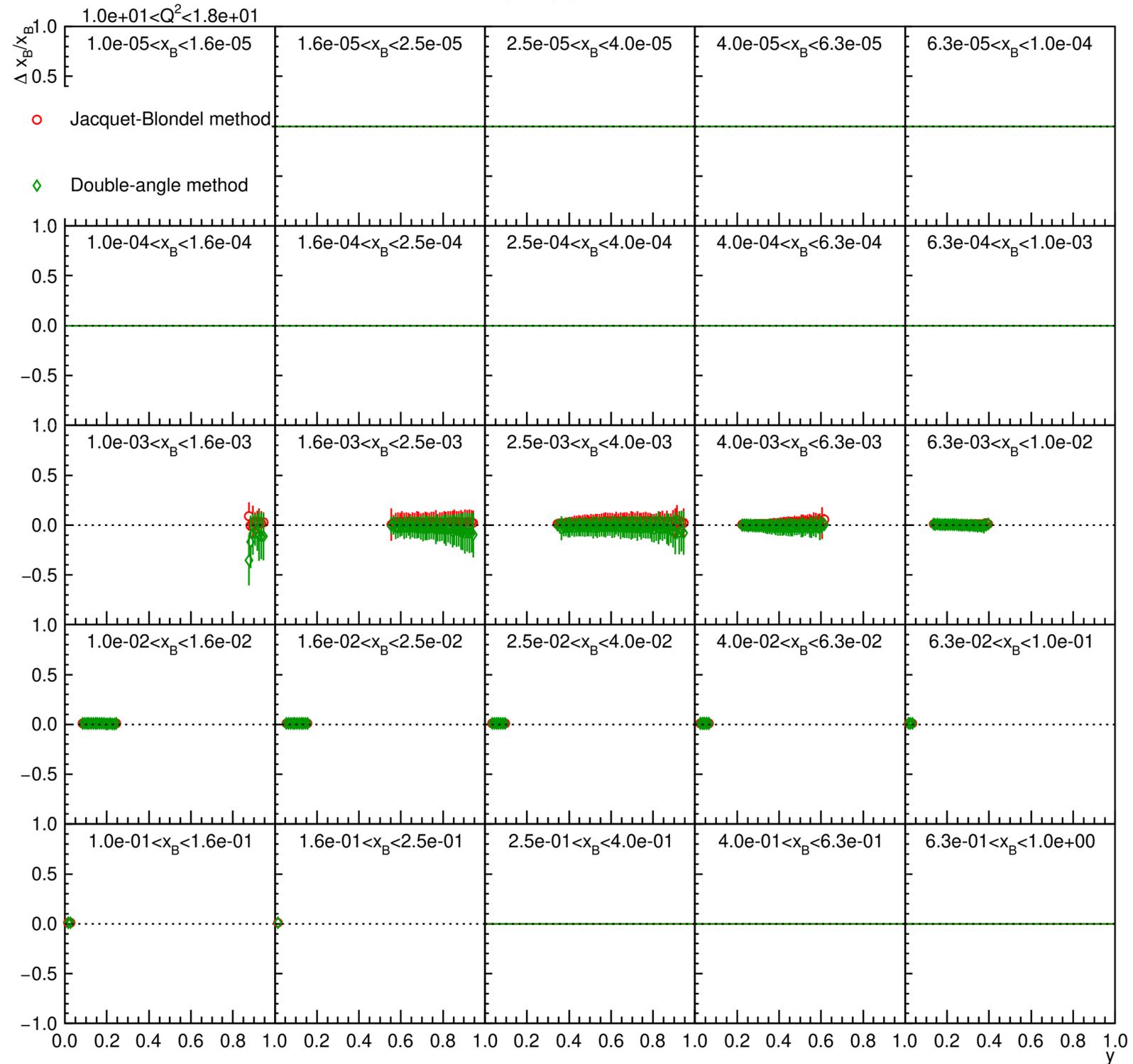


## Reconstruction resolution different methods

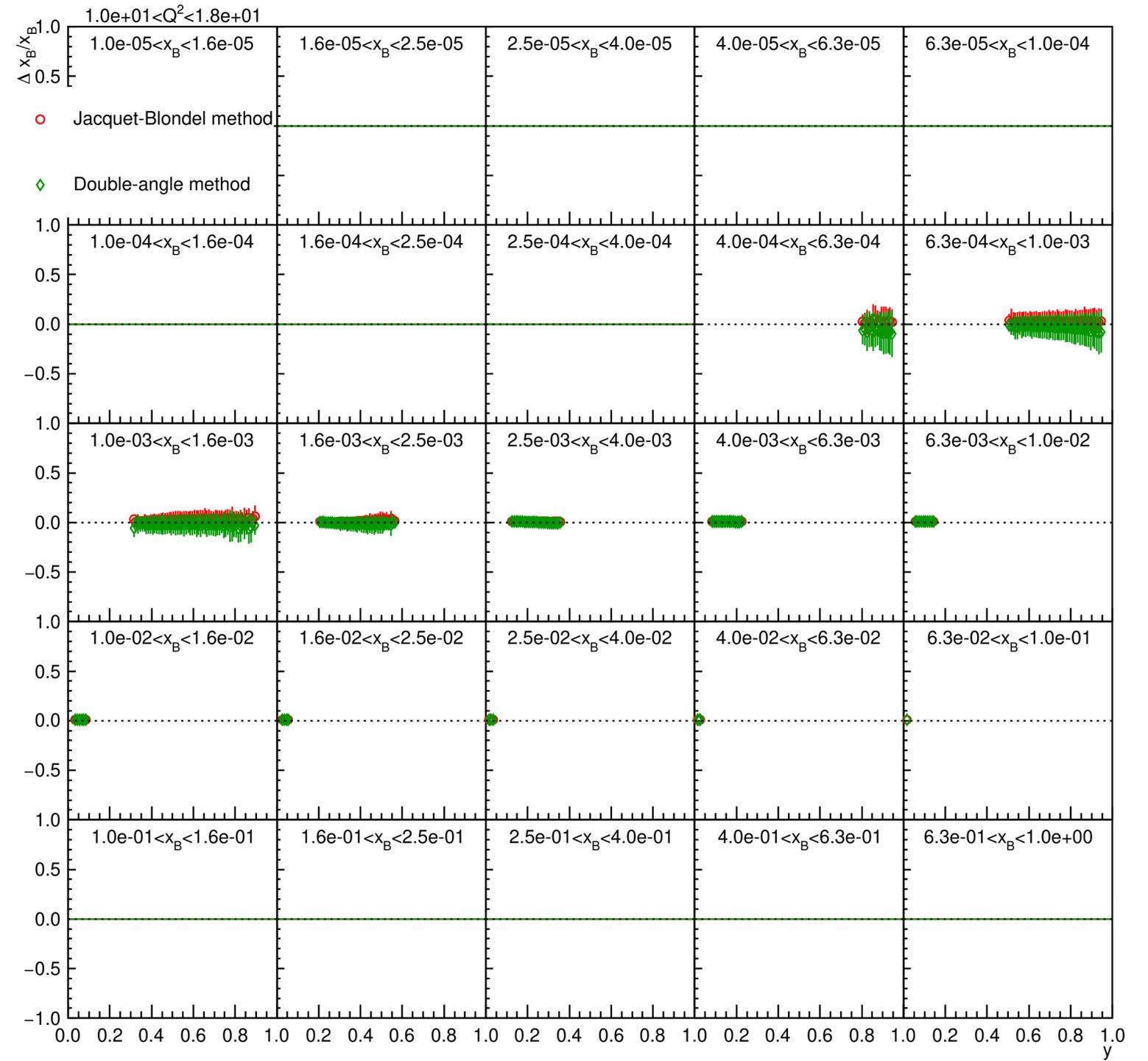


# $x_B$ : difference reconstruction with and without EHCAL: middle $Q^2$

18x100

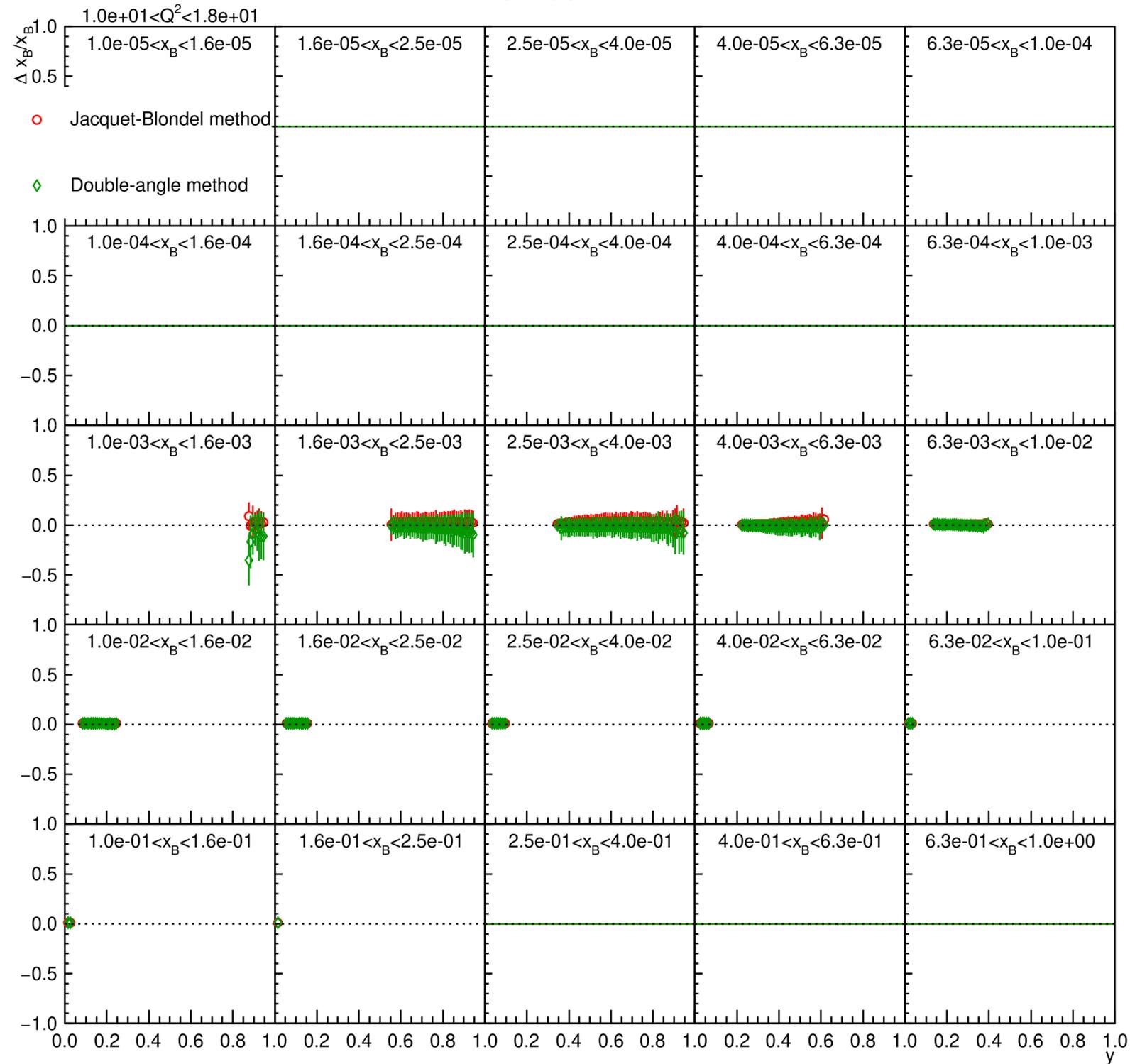


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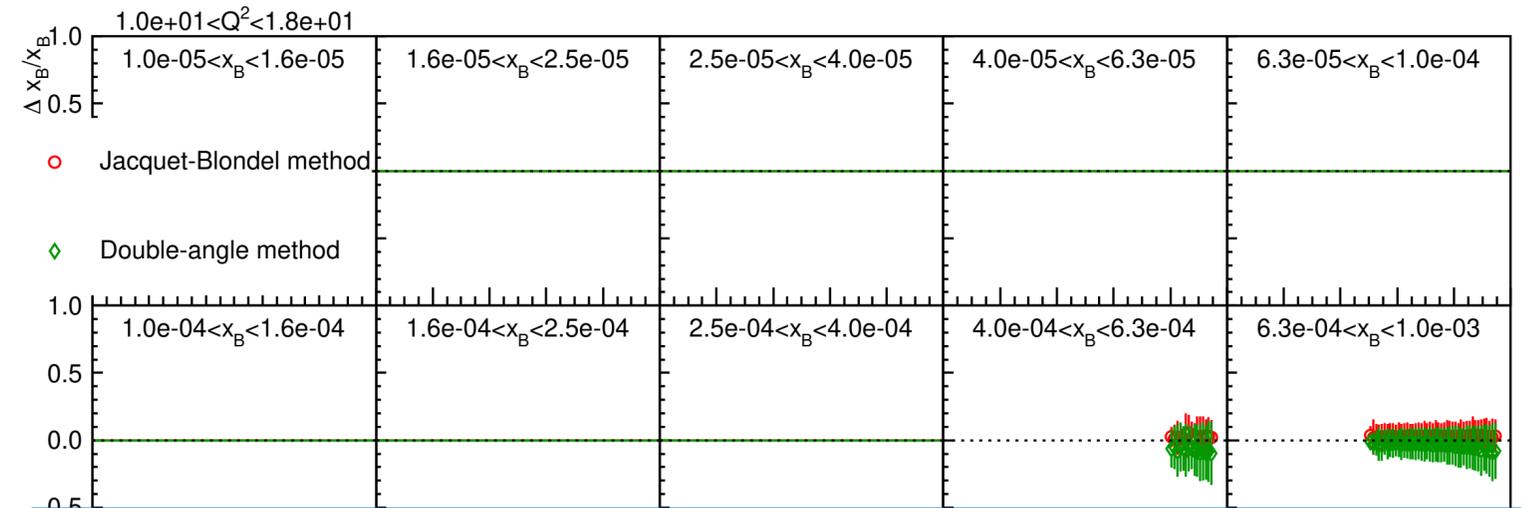


# $x_B$ : difference reconstruction with and without EHCAL: middle $Q^2$

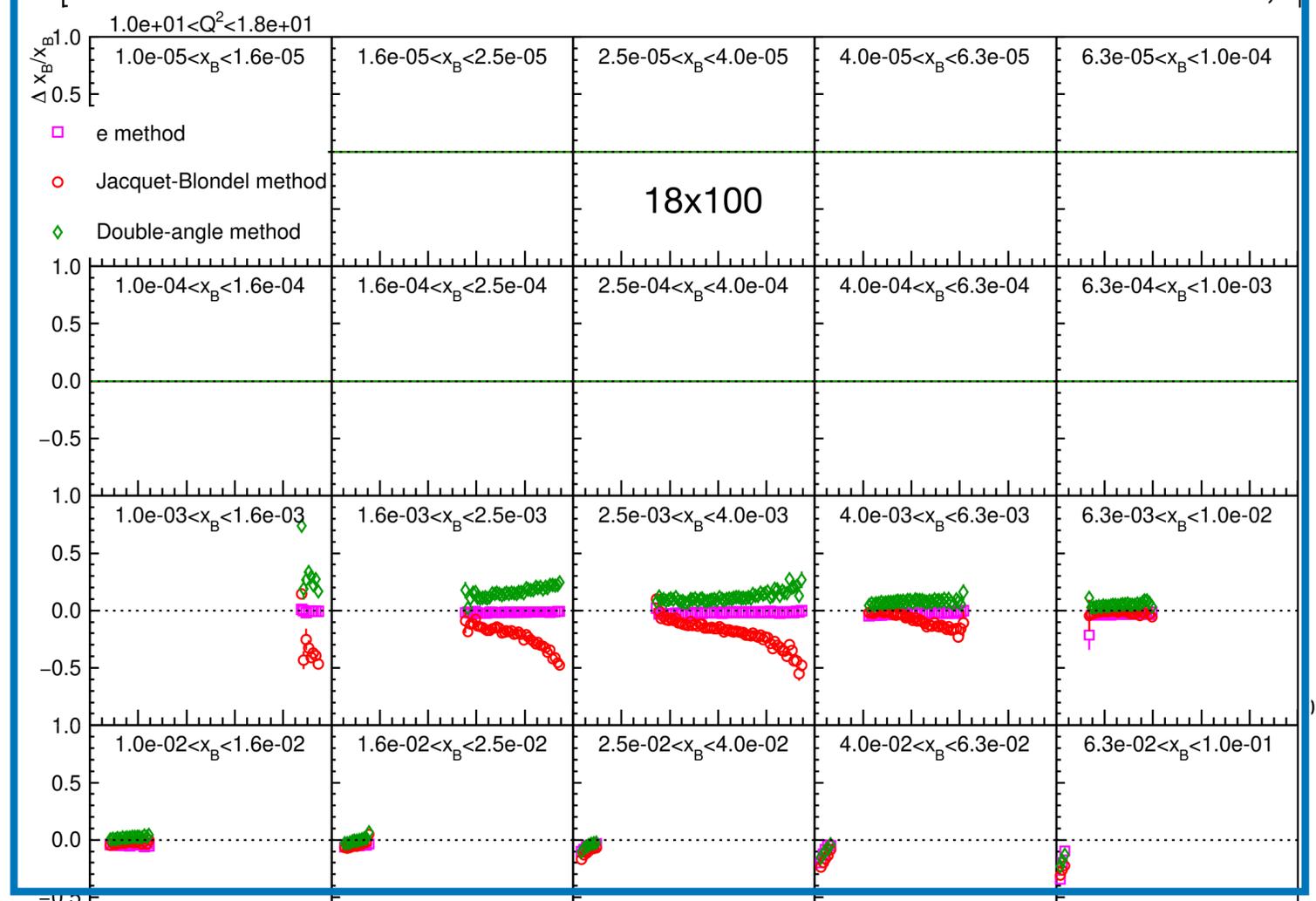
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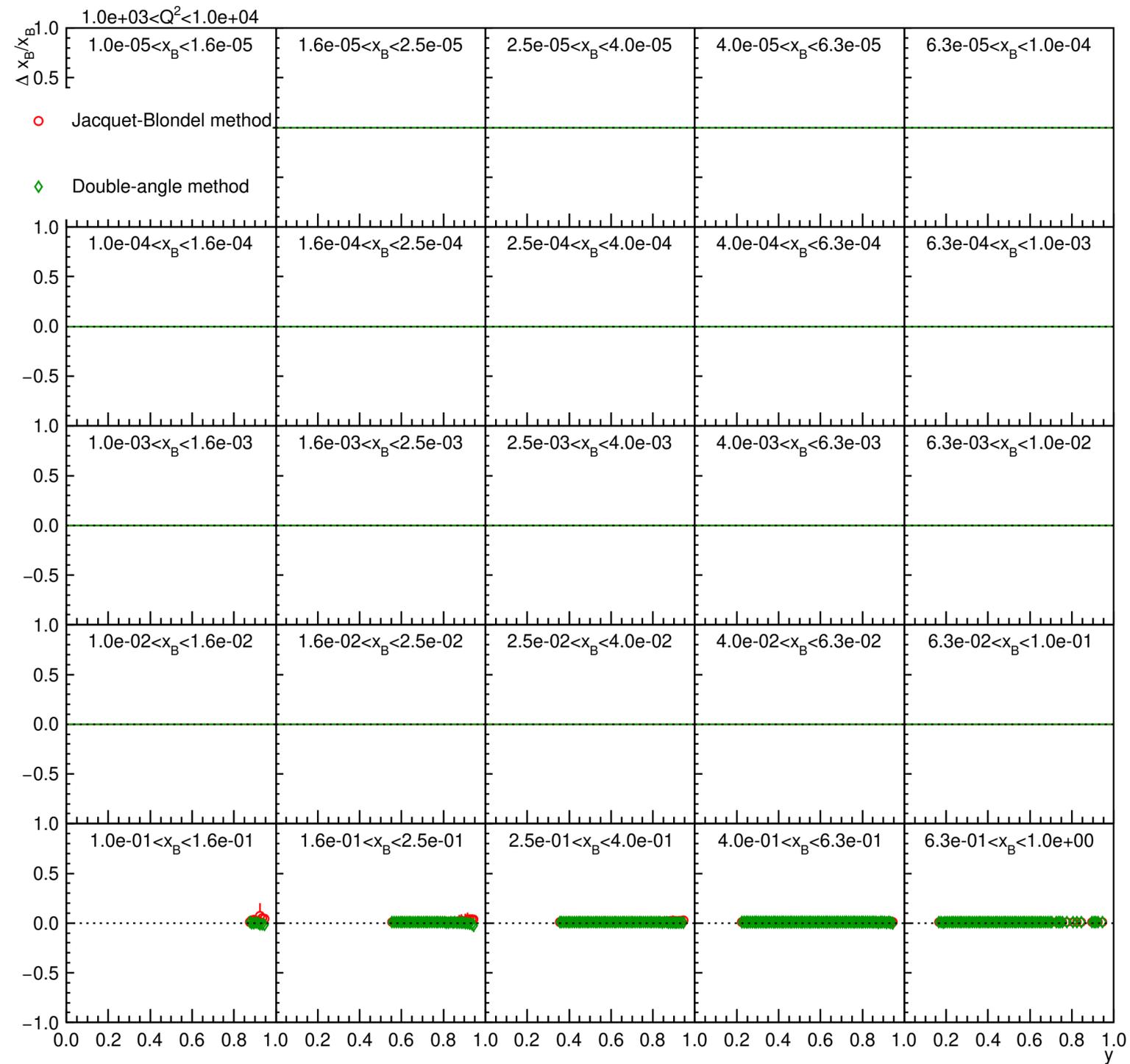


## Reconstruction resolution different methods

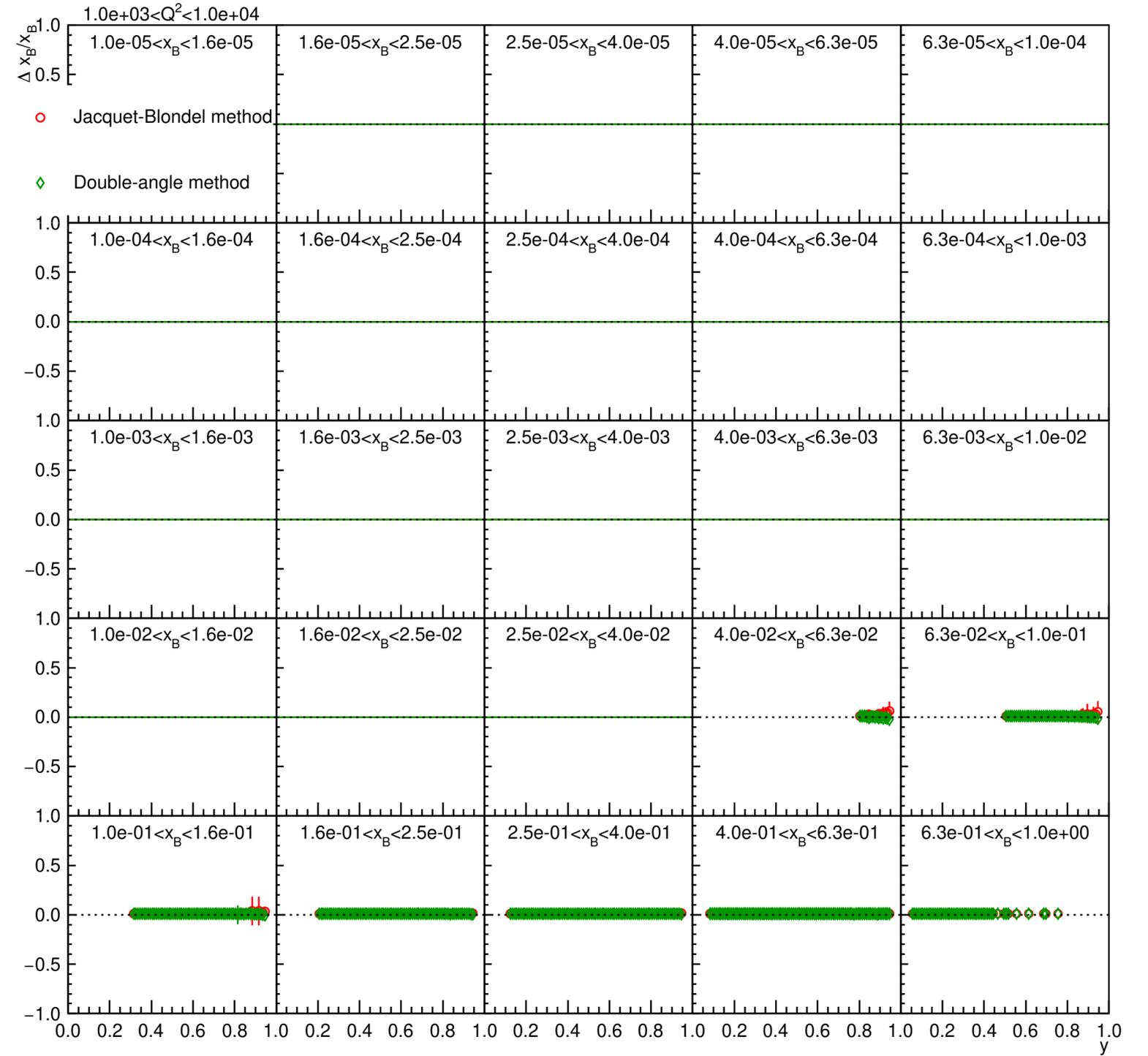


# $x_B$ : difference reconstruction with and without EHCAL: high $Q^2$

18x100



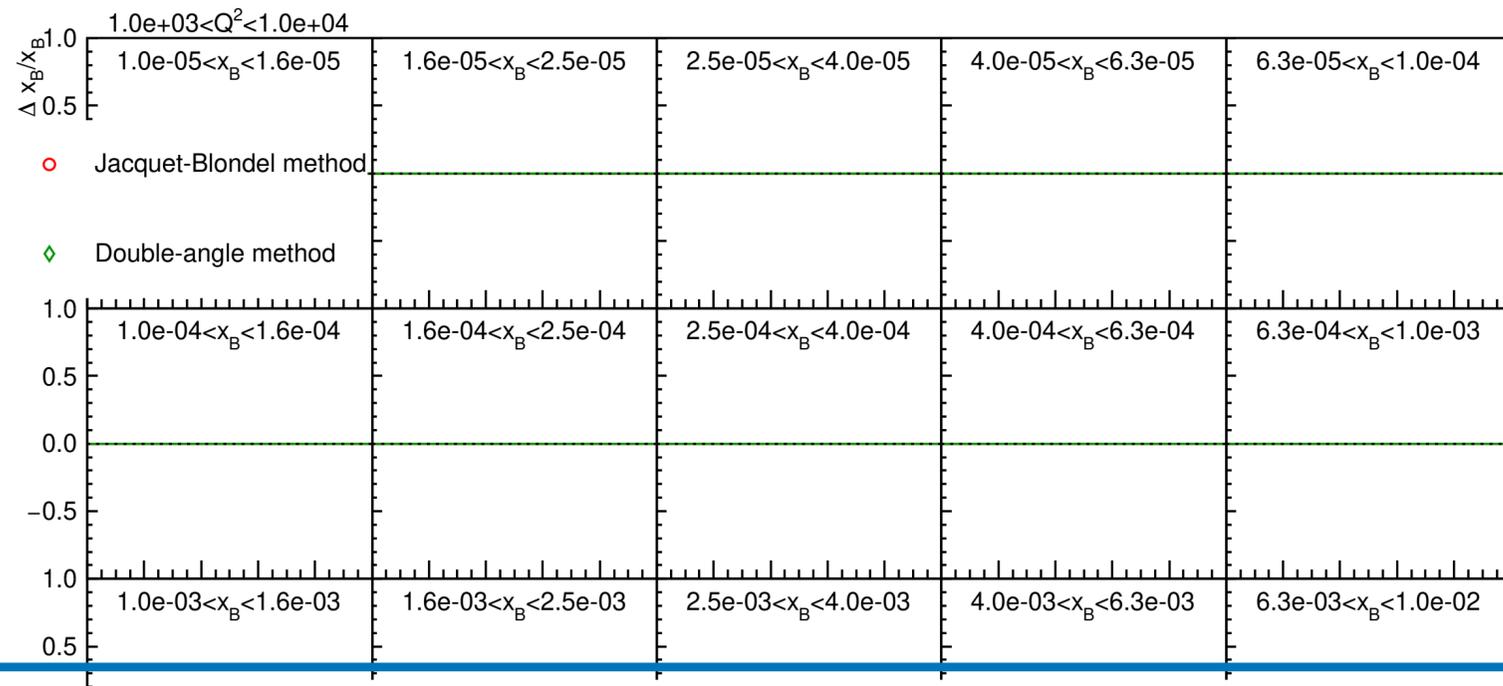
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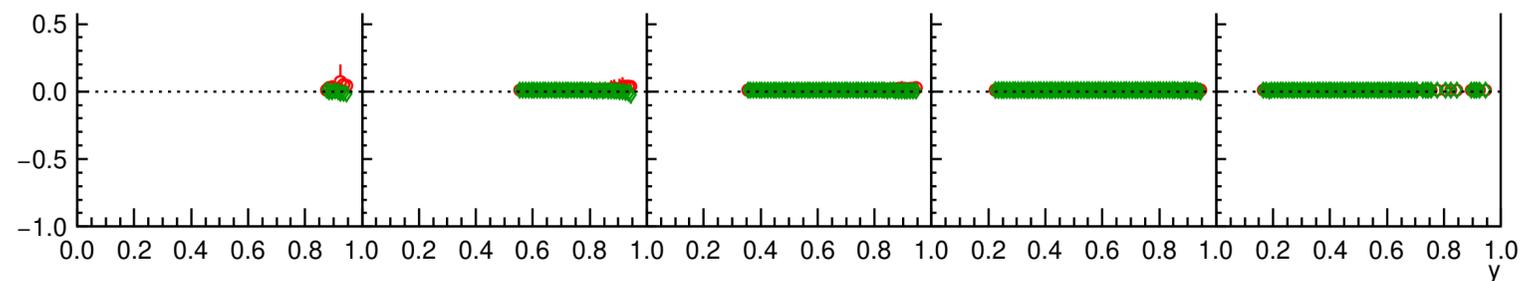
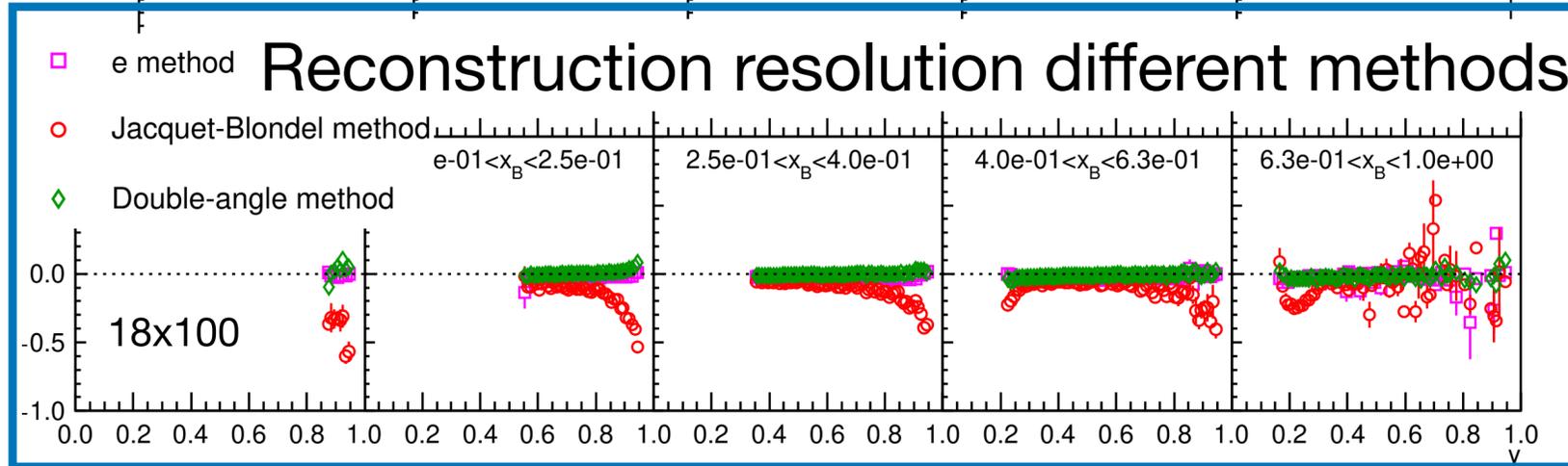
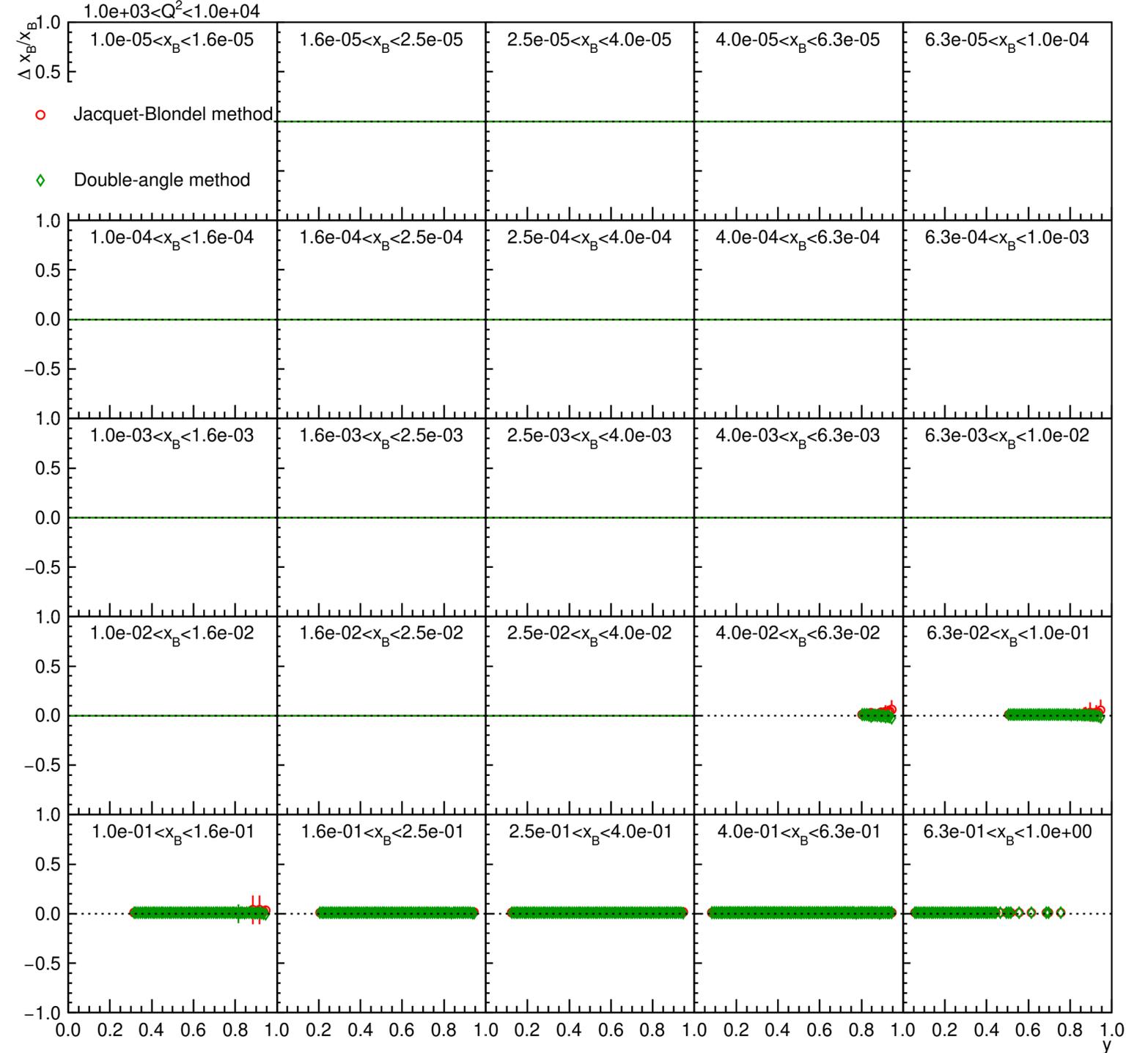
- Absence of EHCAL visible at low  $Q^2$ , low  $x_B$  and high  $y$ , where e reconstruction method is superior to the JB and DA methods

# $x_B$ : difference reconstruction with and without EHCAL: high $Q^2$

18x100



18x275



- Absence of EHCAL visible at low  $Q^2$ , low  $x_B$  and high  $y$ , where e reconstruction method is superior to the JB and DA methods

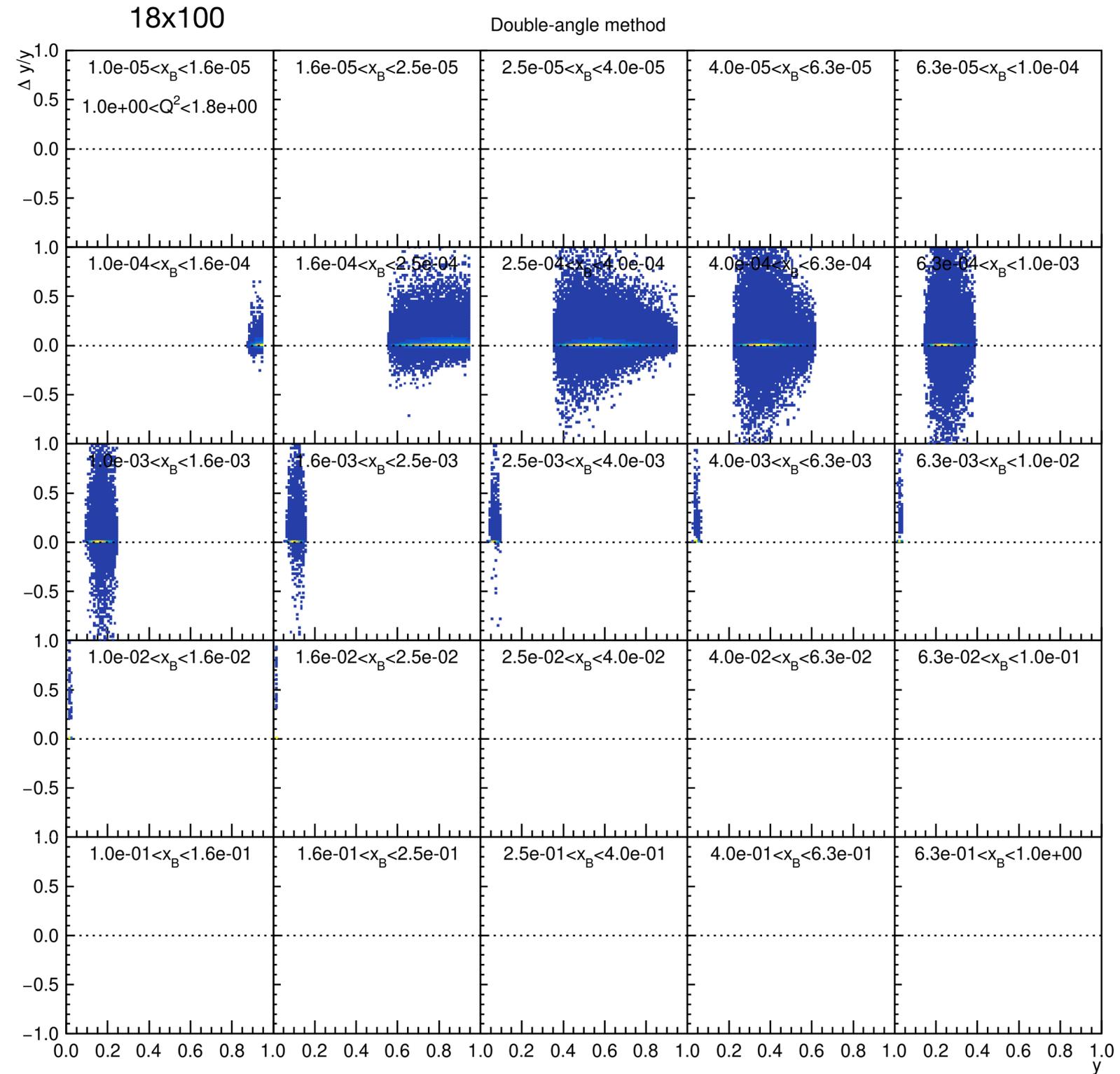
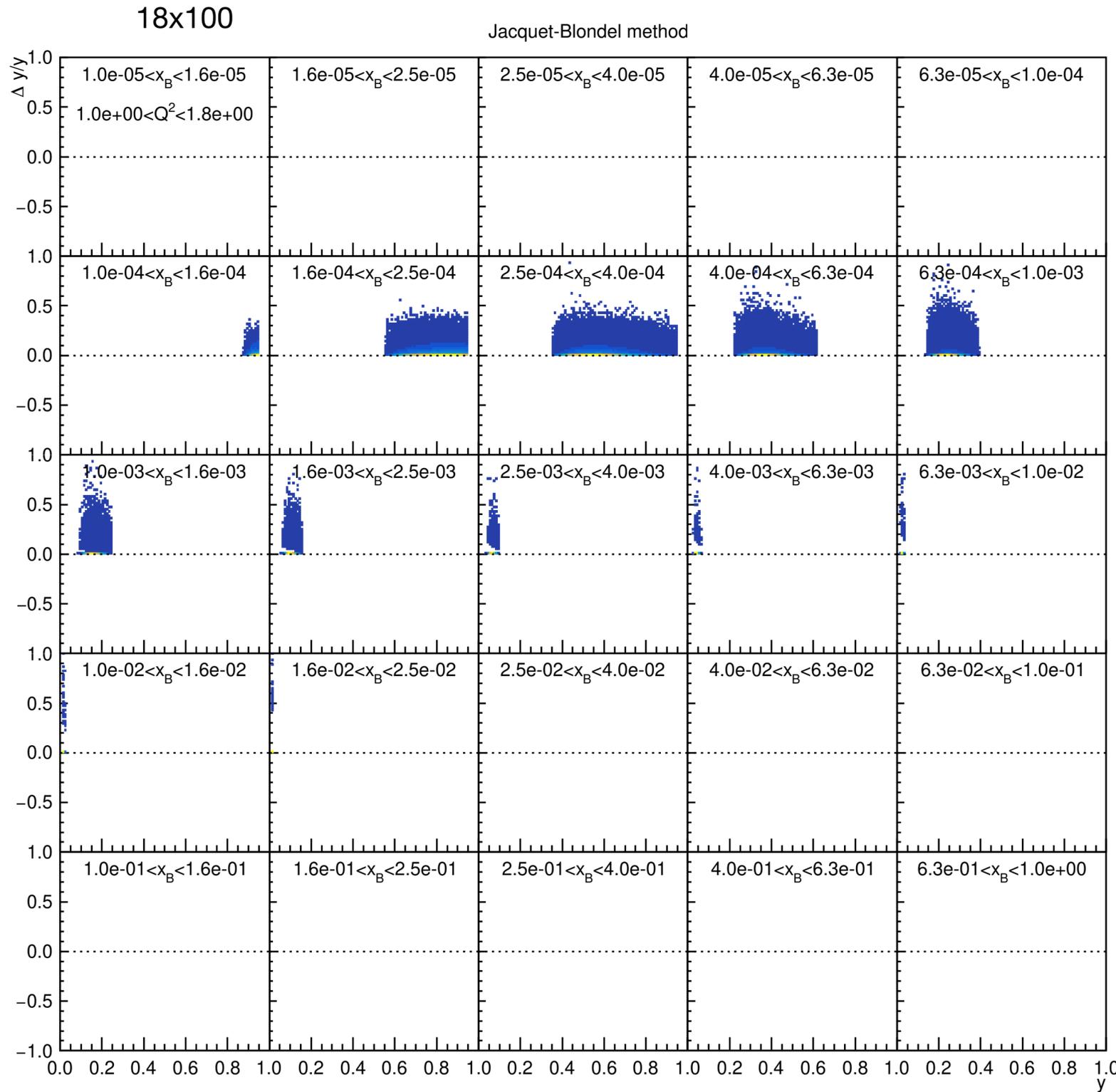
## Summary

Absence/presence of EHCAL does not seem to have an influence on the reconstruction of  $y$

Absence/presence of EHCAL visible for  $x_B$  and  $Q^2$  reconstruction at high  $y$ , low  $x_B$  and low  $Q^2$ , where reconstruction via JB and DA methods is limited and inferior to the e method

**Back up**

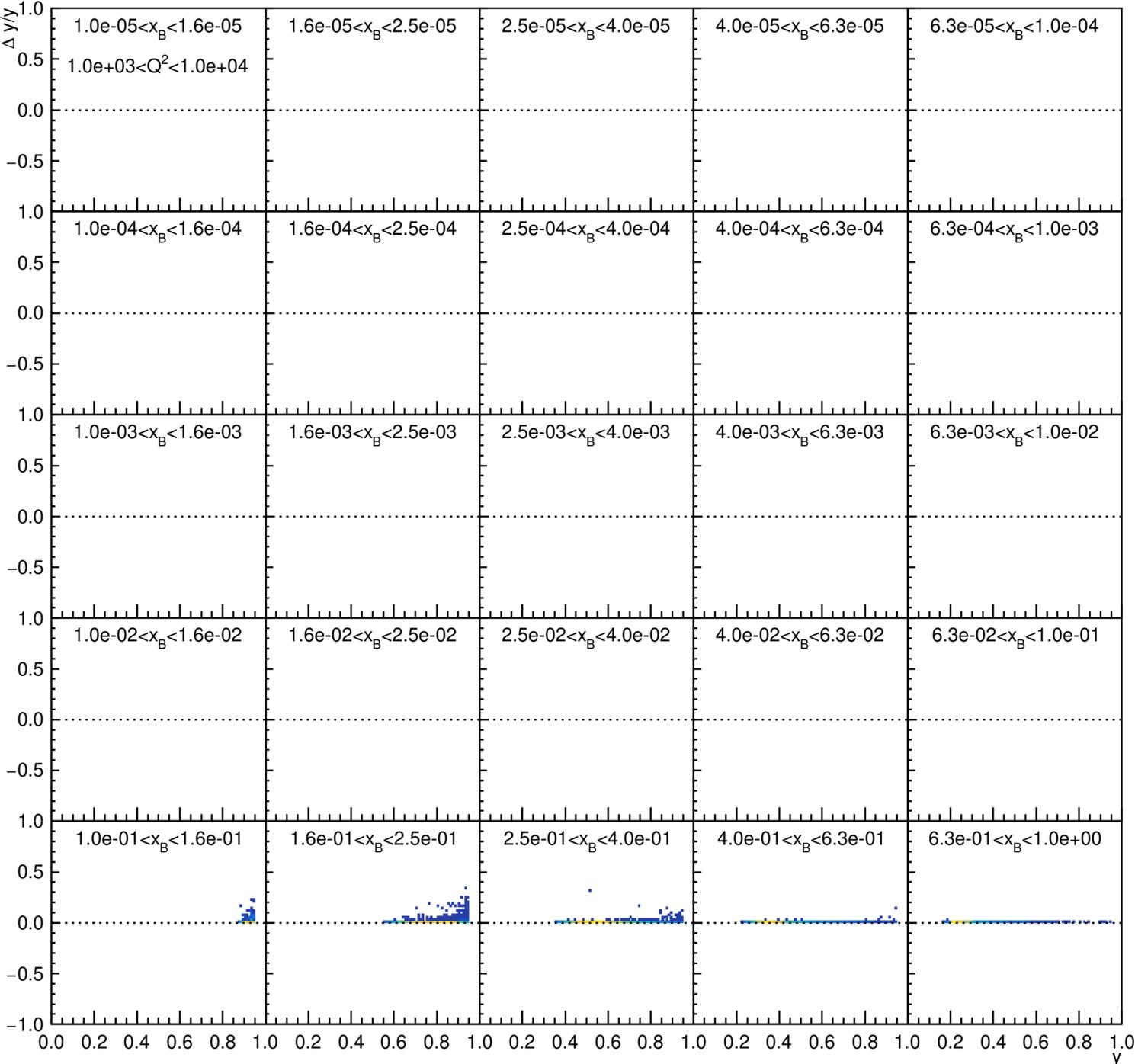
# Difference in $y$ reconstruction with and without EHCAL: low $Q^2$



# Difference in $y$ reconstruction with and without EHCAL: high $Q^2$

18x100

Jacquet-Blondel method



18x100

Double-angle method

