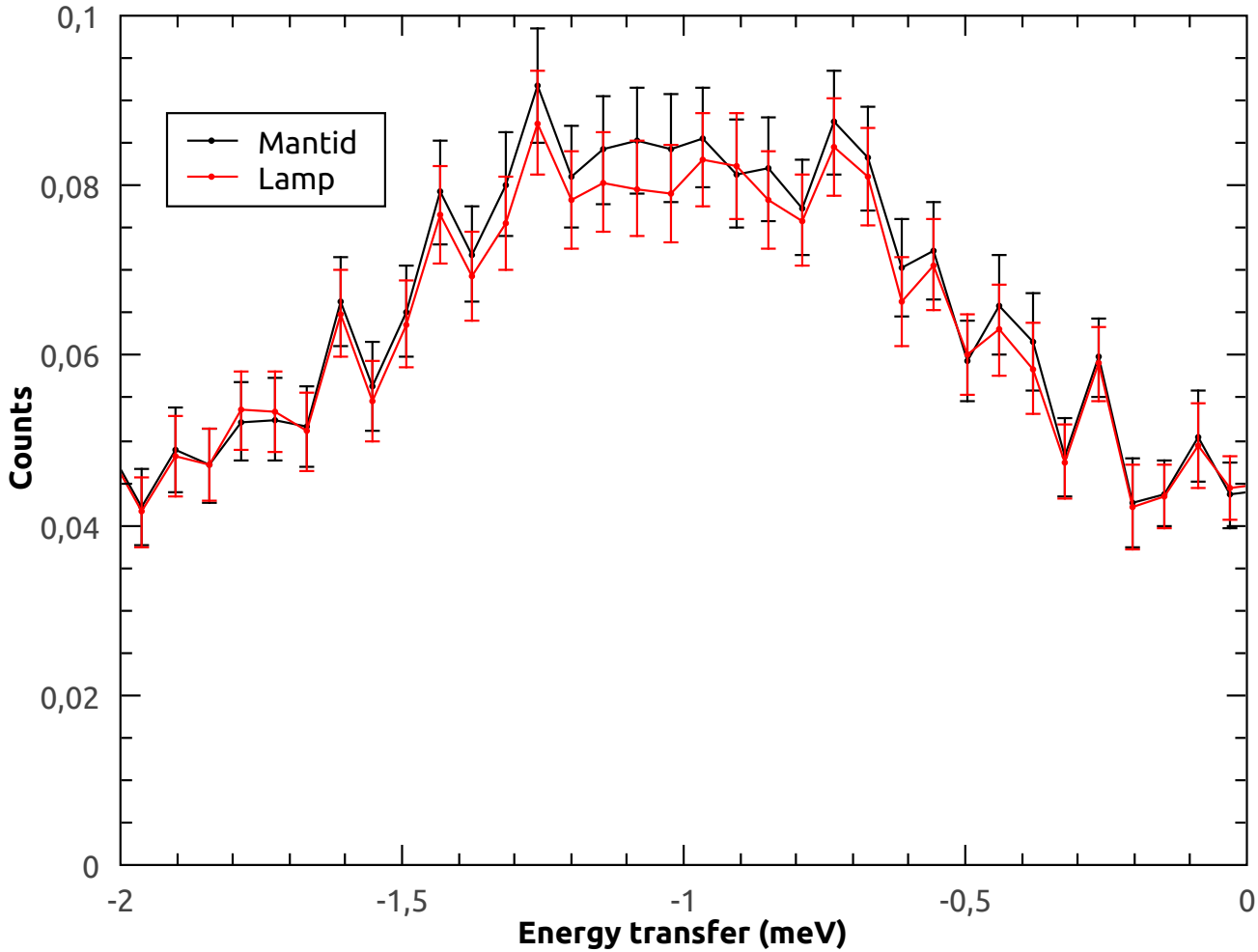
Lamp-Mantid comparison, reduction and calibration

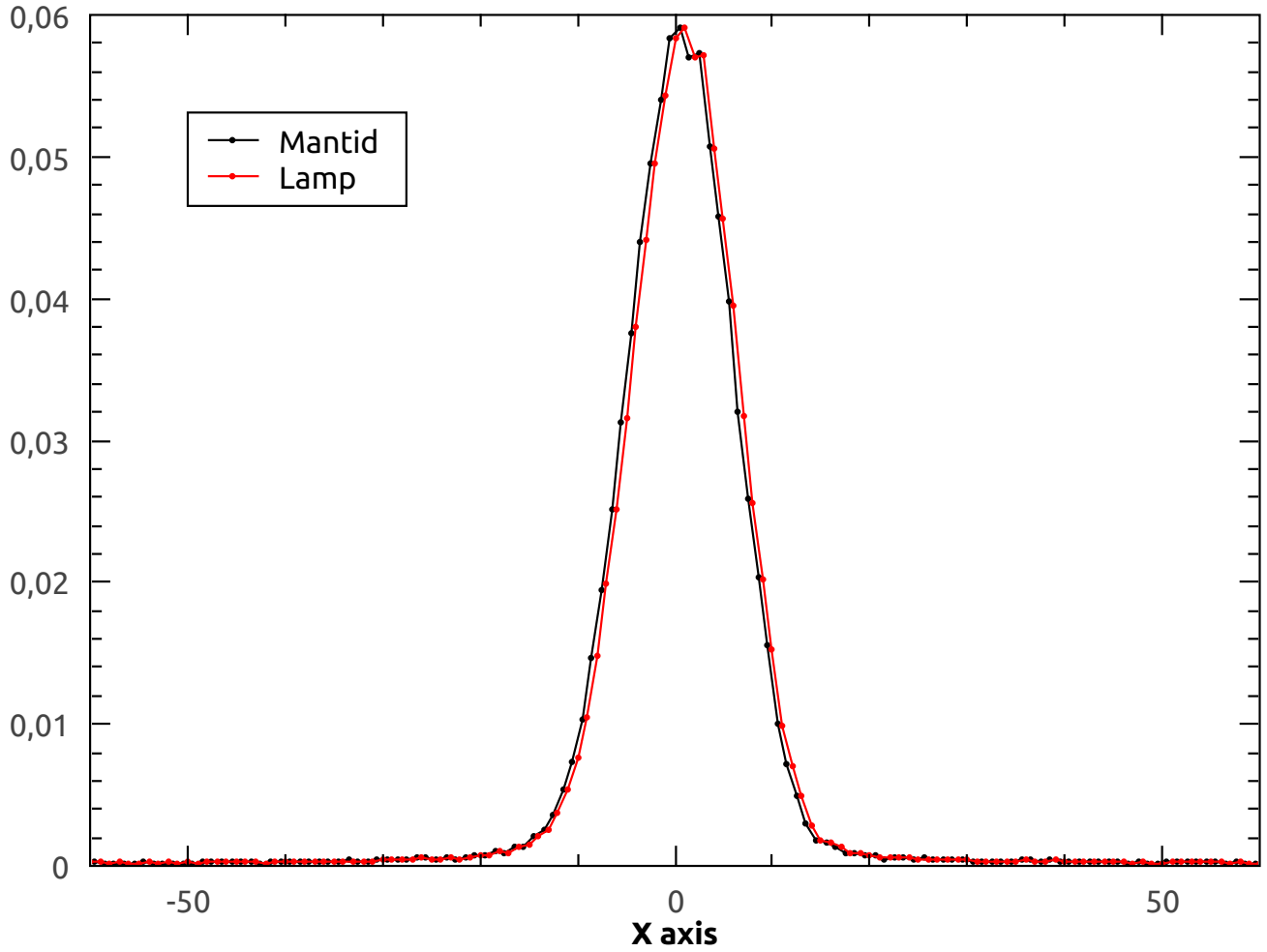
Sample run: 146195

Vanadium run: 146007



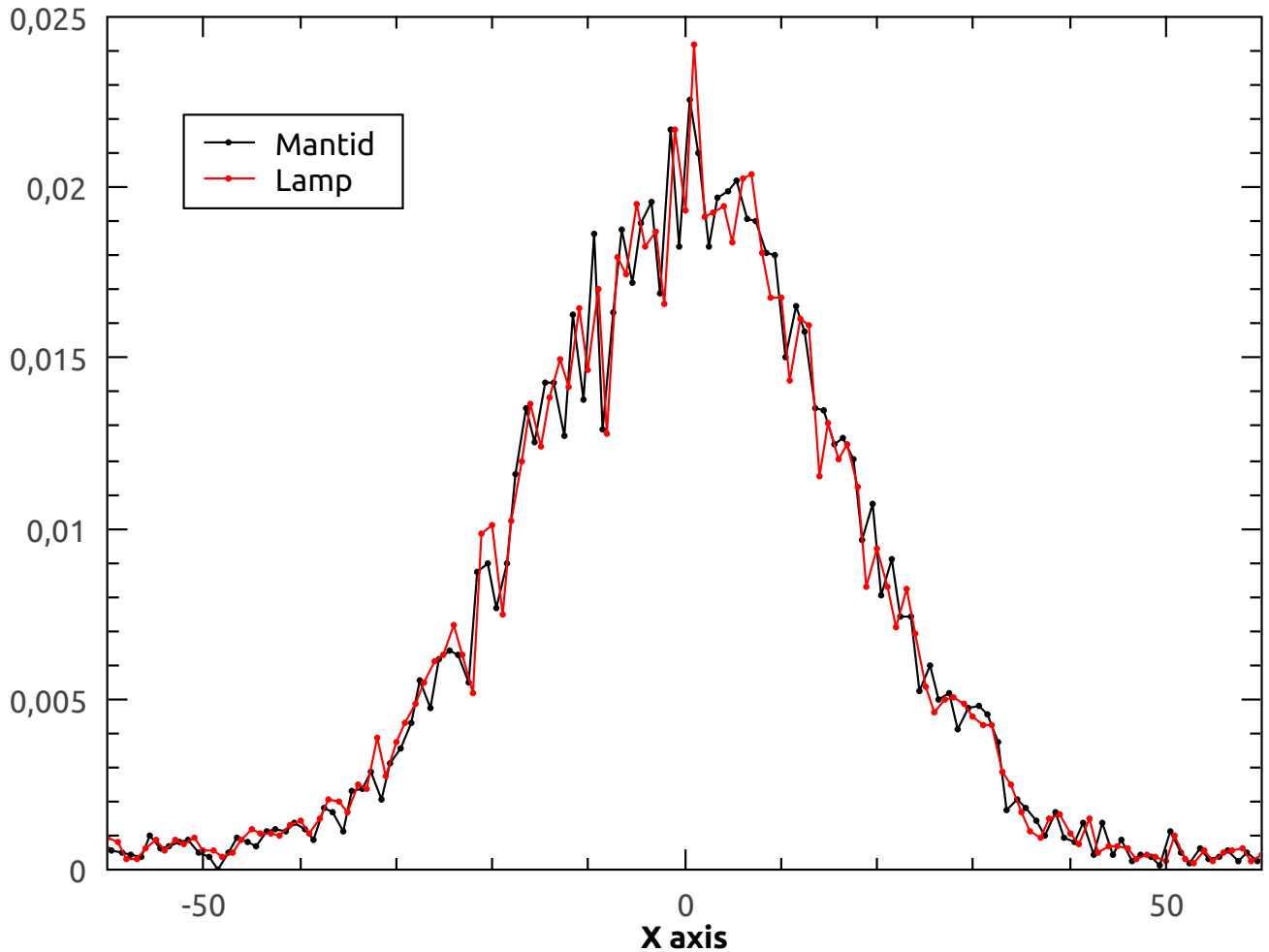
Lamp-Mantid comparison, MirrorMode (shift operation)

Vanadium run 146007:



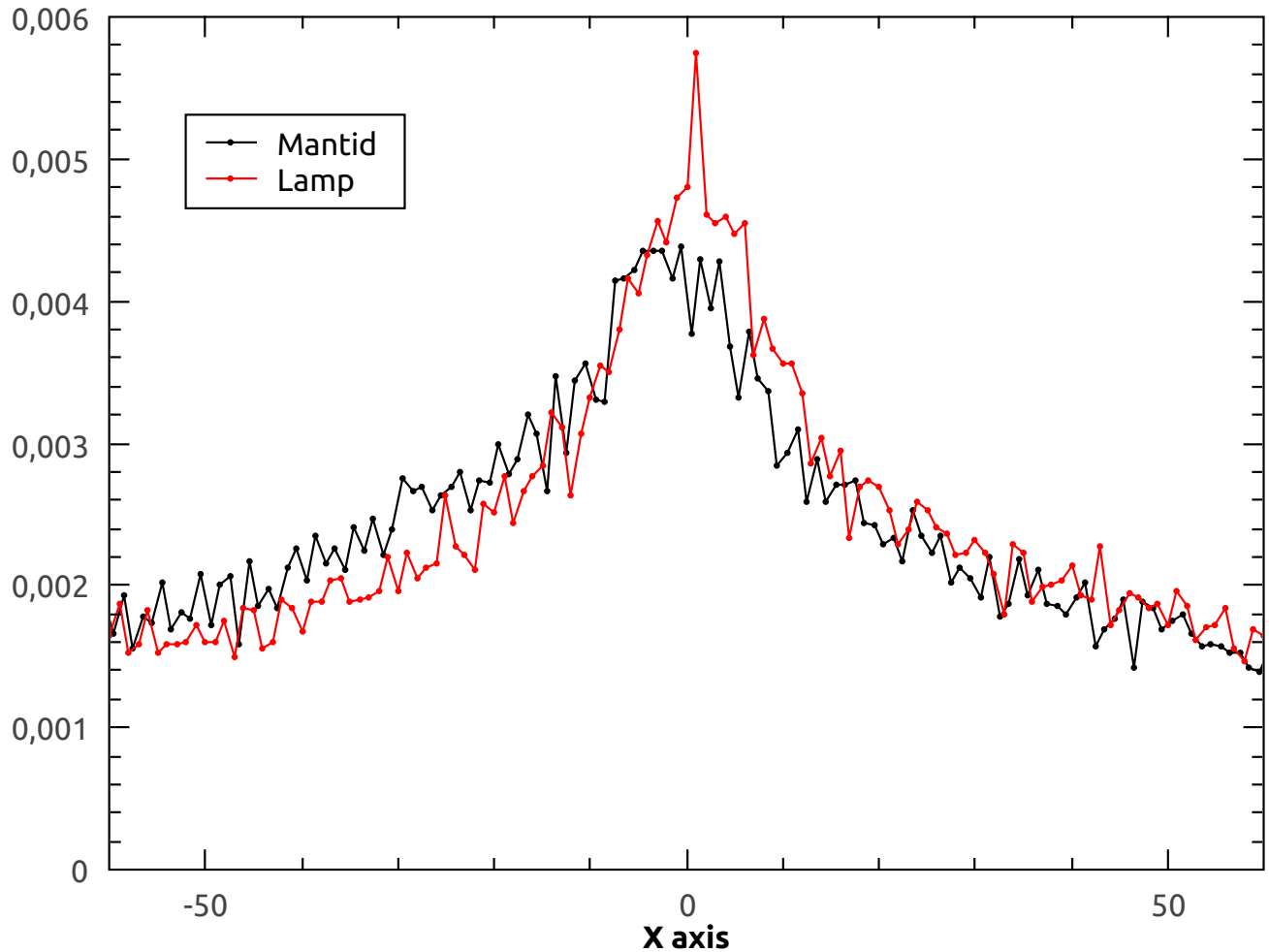
Lamp-Mantid comparison, MirrorMode (shift operation)

Sample run 127500:



Lamp-Mantid comparison, MirrorMode (shift operation)

Sample run 146195:



Details shift operation

Taking MLZ FindEPP (elastic peak position EPP) algorithm
Modifications:
Validator for TOF X-axis disabled

Shift operation design:
Python numpy (insert, delete, append)

Shift operation unit test design:
Test data to shift:
7 X values
6 Y values
Test correct positions to shift for each possible offset
Test dimensions of newly created 2DWorkspace (number of histograms, number of bins)

Conclusion and remarks

Please note that X-axis labels are still wrong

Mantid and Lamp may estimate peak positions differently:

- Differences occur less likely for Vanadium run(s)
- Differences for sample runs likely

To do:
Further investigations (multiple runs, ...), unit tests
Final IndirectILLReduction.py, IndirectCalibration.py and FindEPP (Python3)

Finished:
Comparison of reduction (Lamp unmirror options 0, 1, 2, 3) and Vanadium calibration tested for few sample and Vanadium runs.