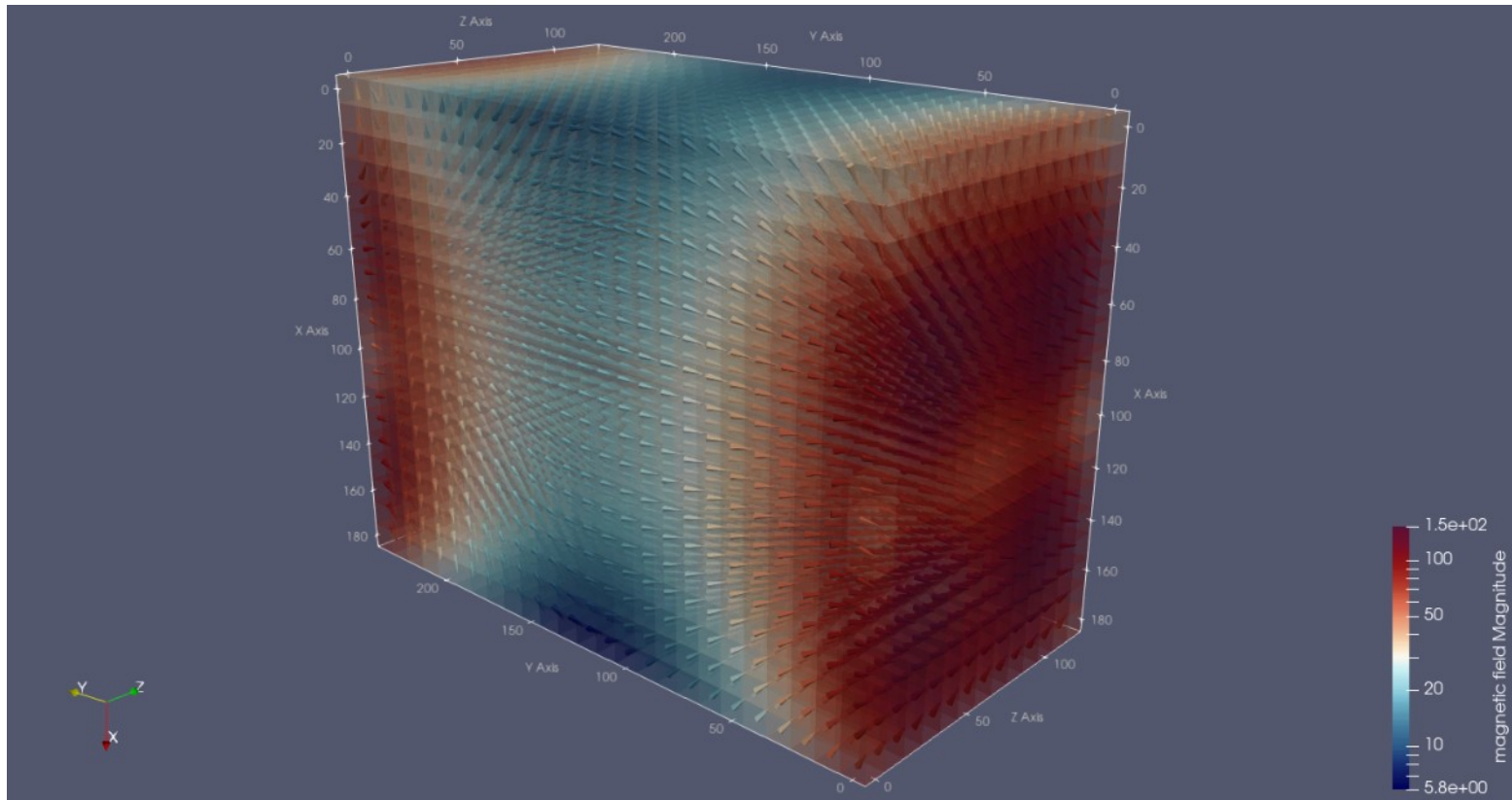


# The magnetic field measurements for FEE



**Leonard Welde**, Simon Bodenschatz, Lisa Brück, Michael Düren, Avetik Hayrapetyan, Jan Hofmann, Sophie Kegel, İlknur Köseoğlu-Sarı, Jhonatan Pereira de Lira, Mustafa Schmidt, Marc Strickert, Chris N. Takatsch

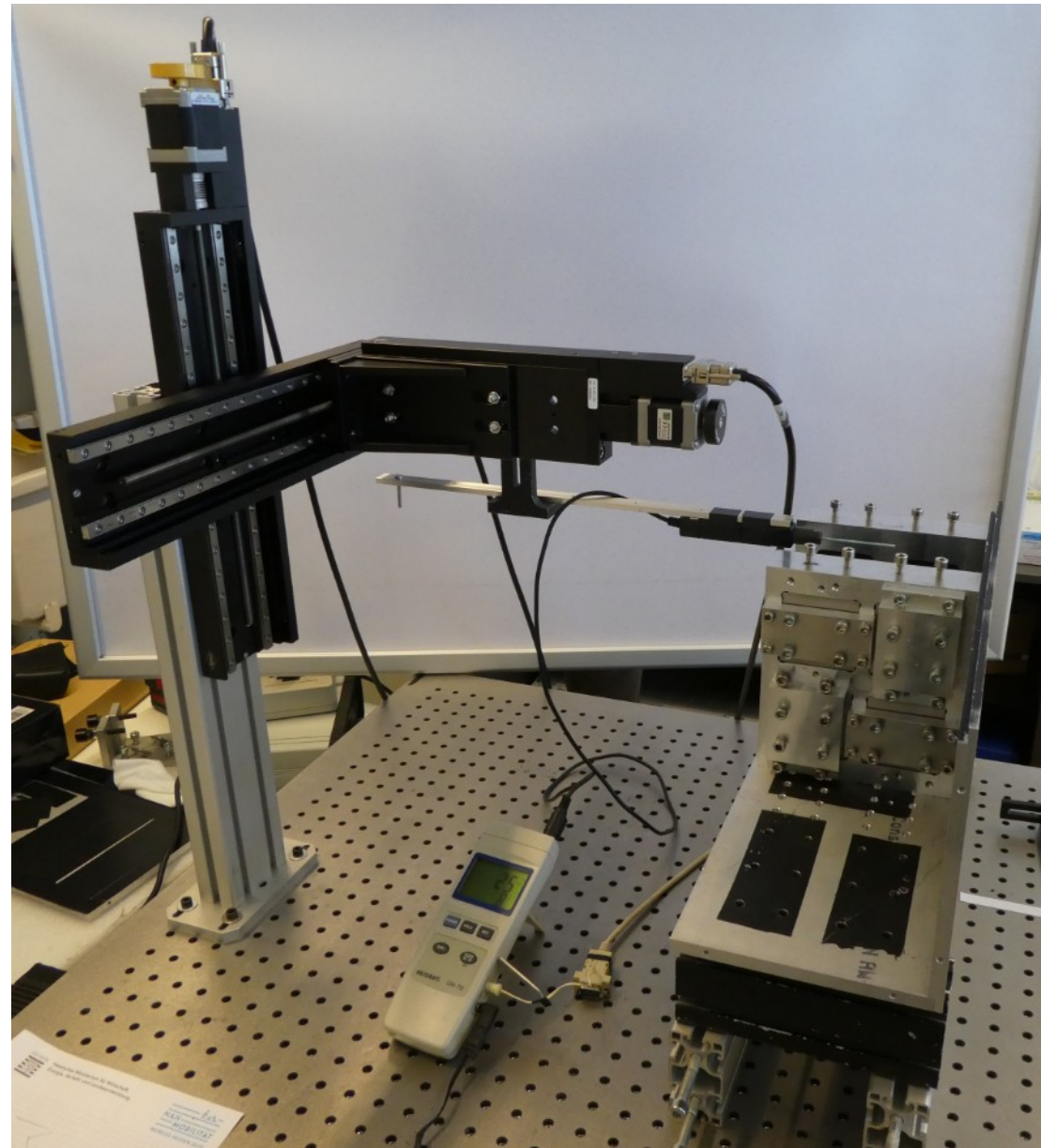
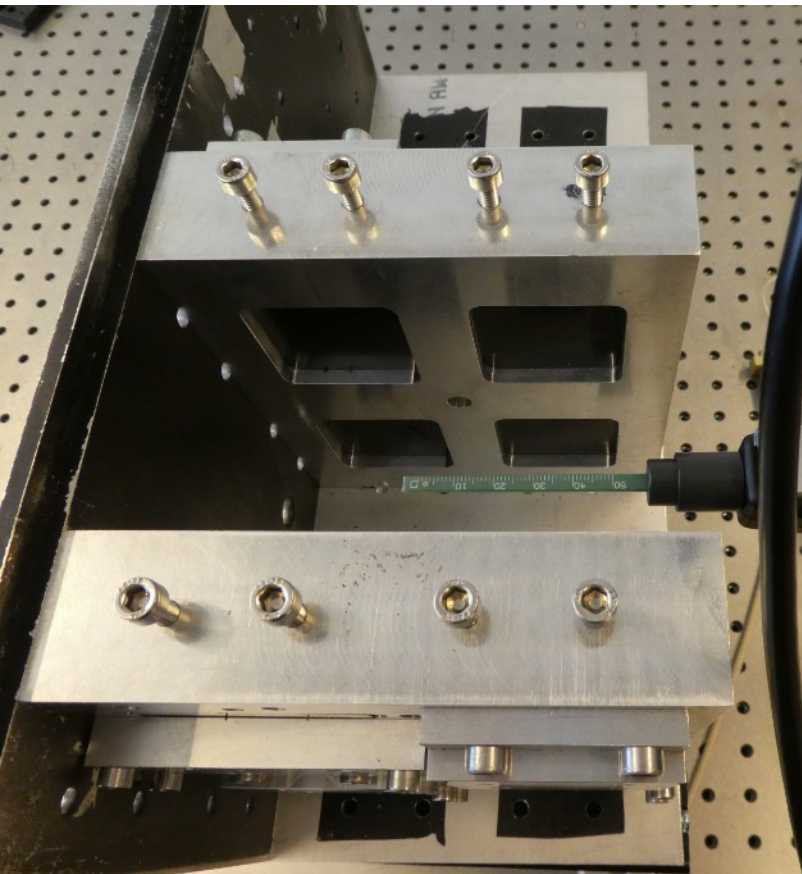
**PANDA CM 21/2- 2021/06/15**

- Aim for the magnetic field measurements
- Experiment setup
- Results of measurements
- Conclusion
- Future work

- Measurement and visualisation of the magnetic field
- If possible strong and homogeneous field
- Efficiency tests for FEE and MCP-PMT

## Experimental setup

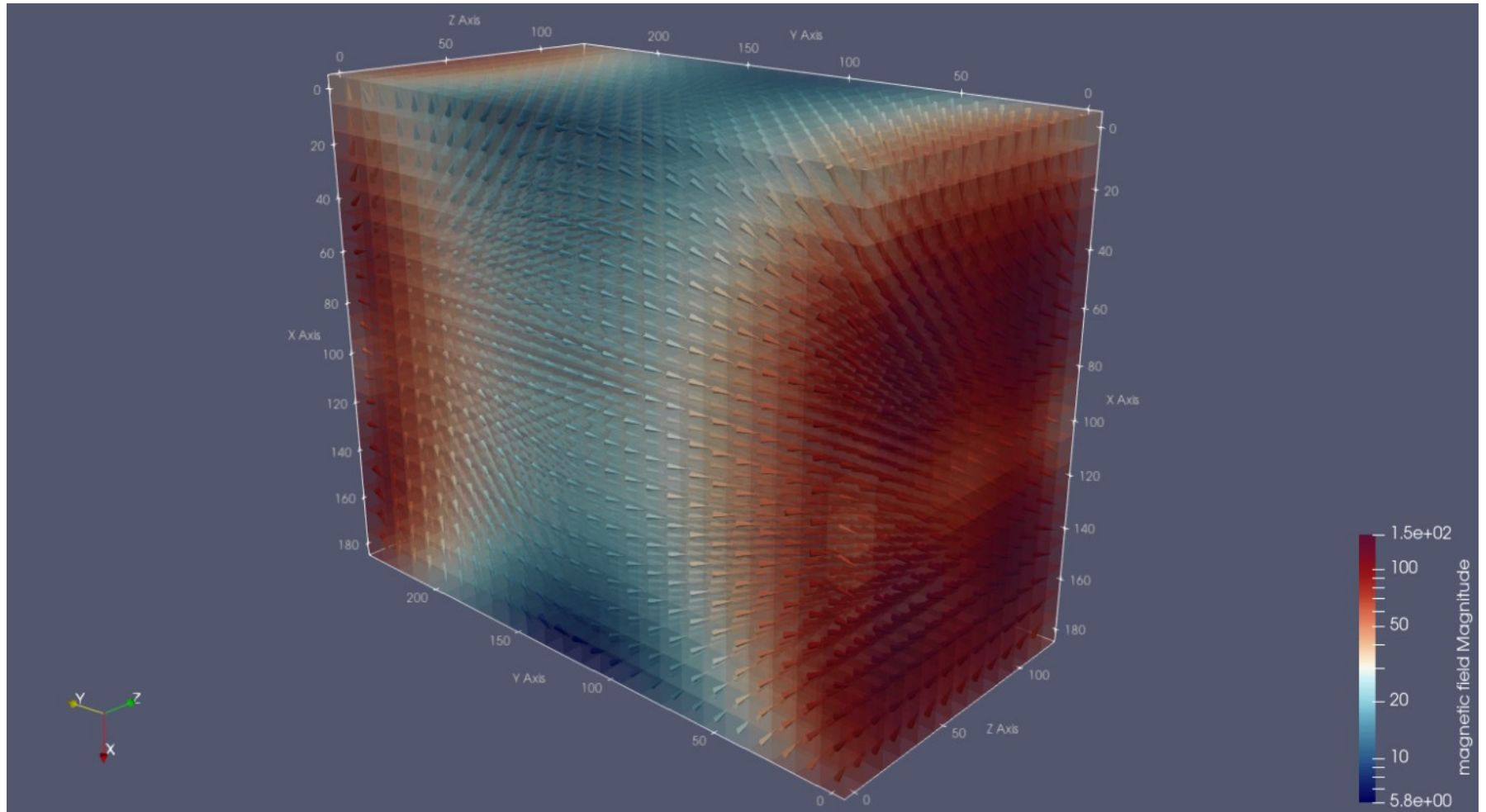
- Magnet box
- Linear stages
- Hall probe



- Control of linear stages and Hall probe readout with LabView
- Visualisation with Paraview

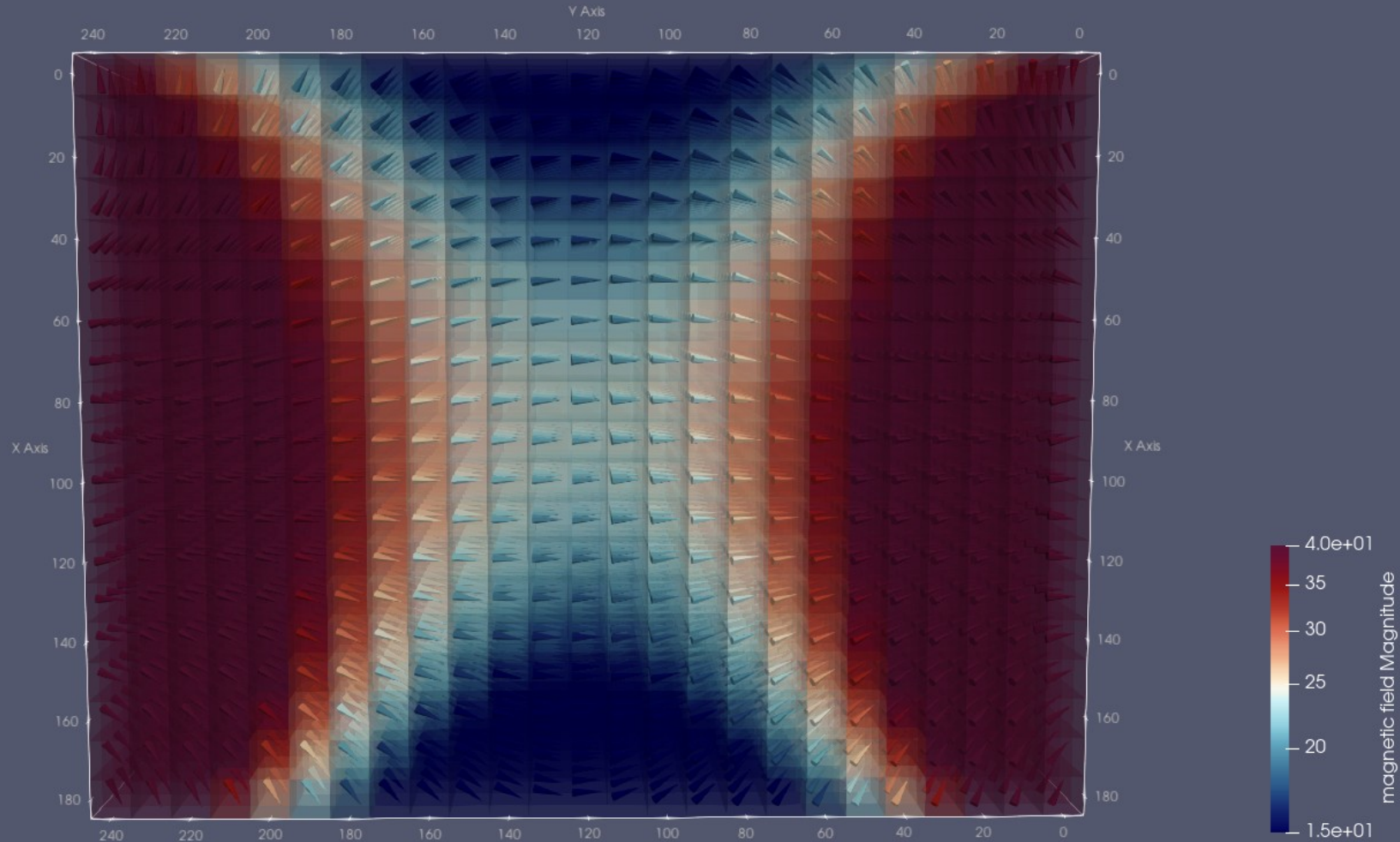
# Magnetic field measurements

- Distance between magnets: 280 mm
- Field over all ranges from 5 mT to 150 mT



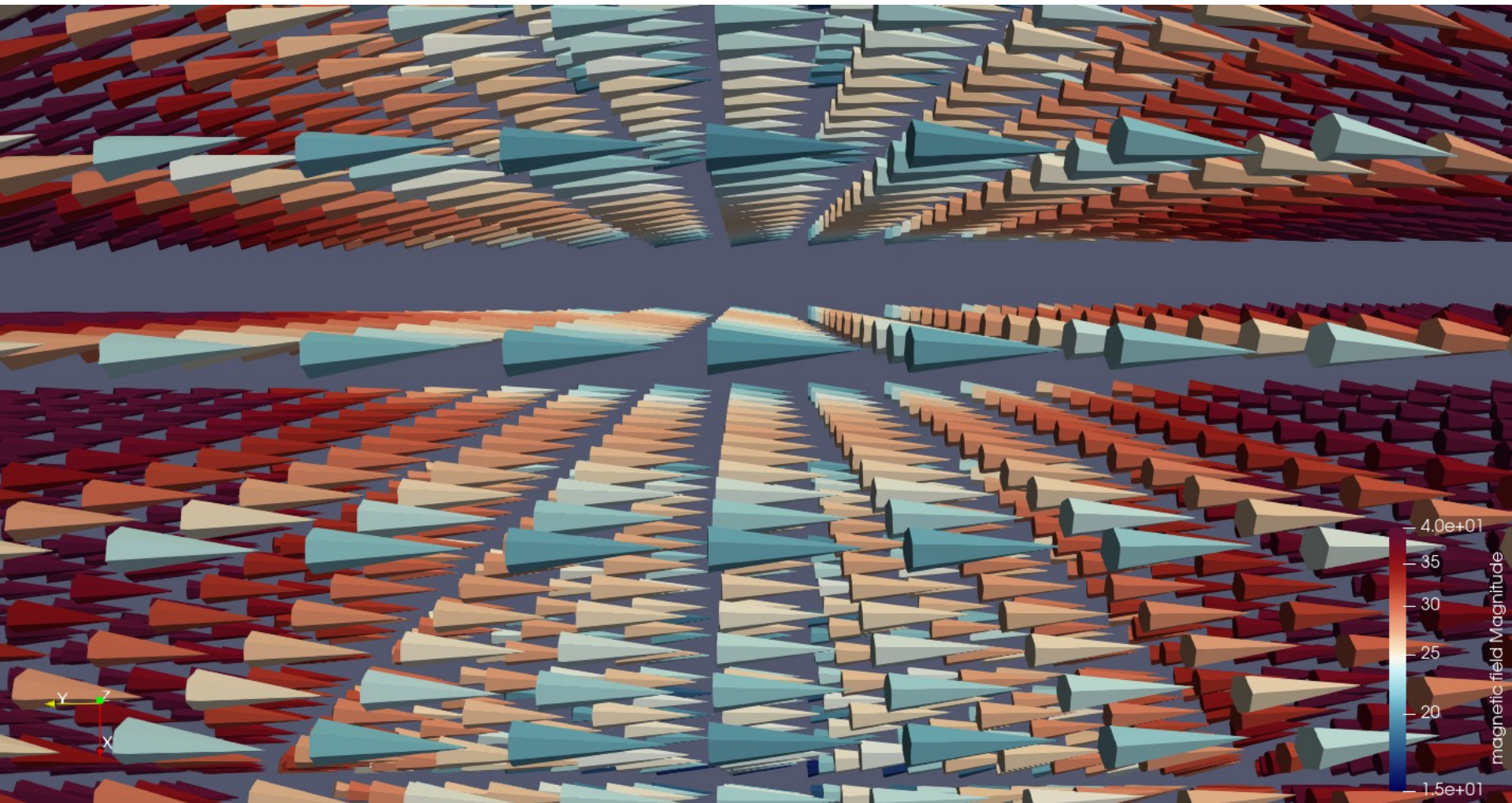
# Magnetic field measurements

- Distance between magnets: 280 mm
- Sideview: Field between magnets



## Magnetic field measurements

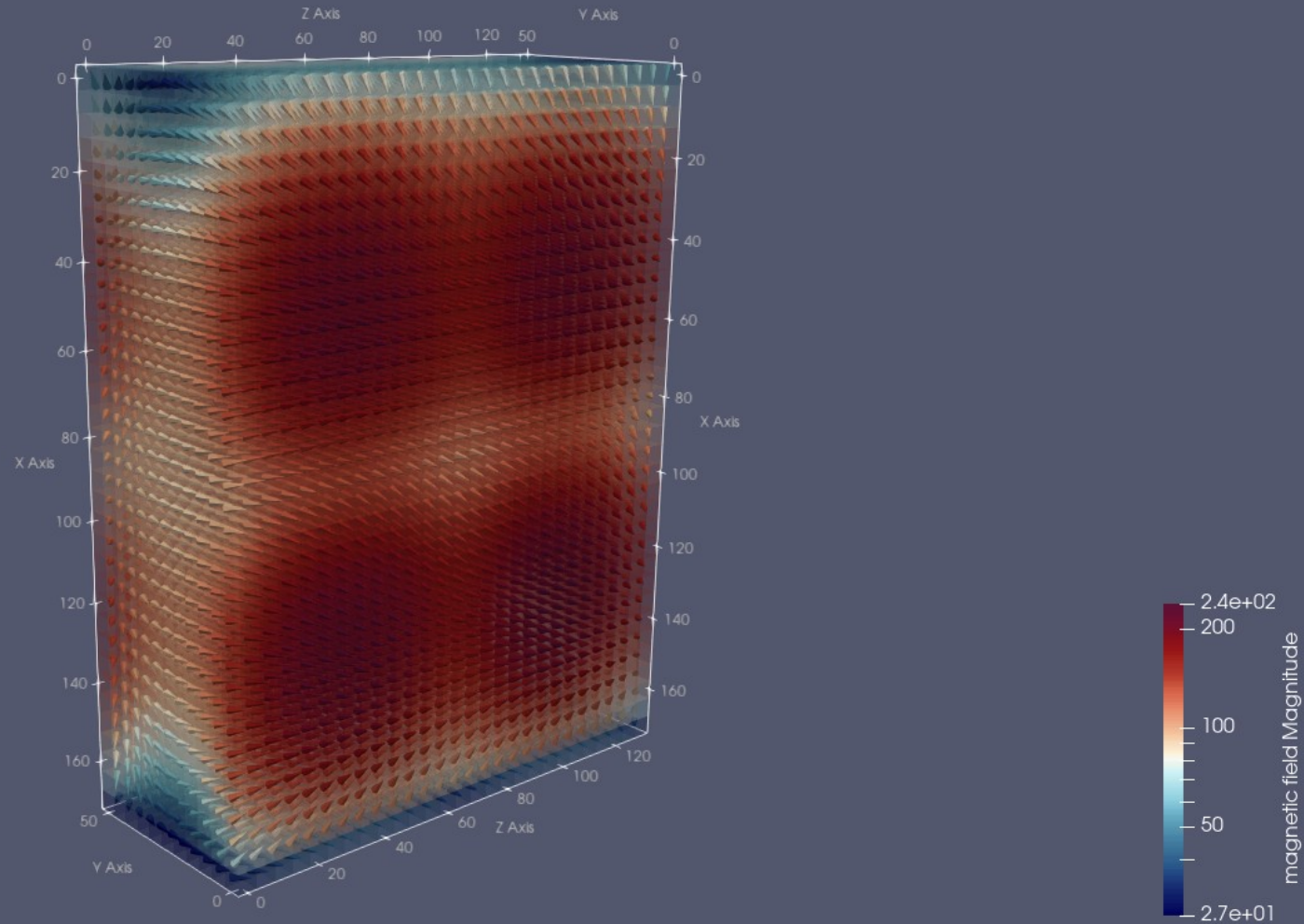
- Distance between magnets: 280 mm
- Field ranges from 20 mT to 35 mT





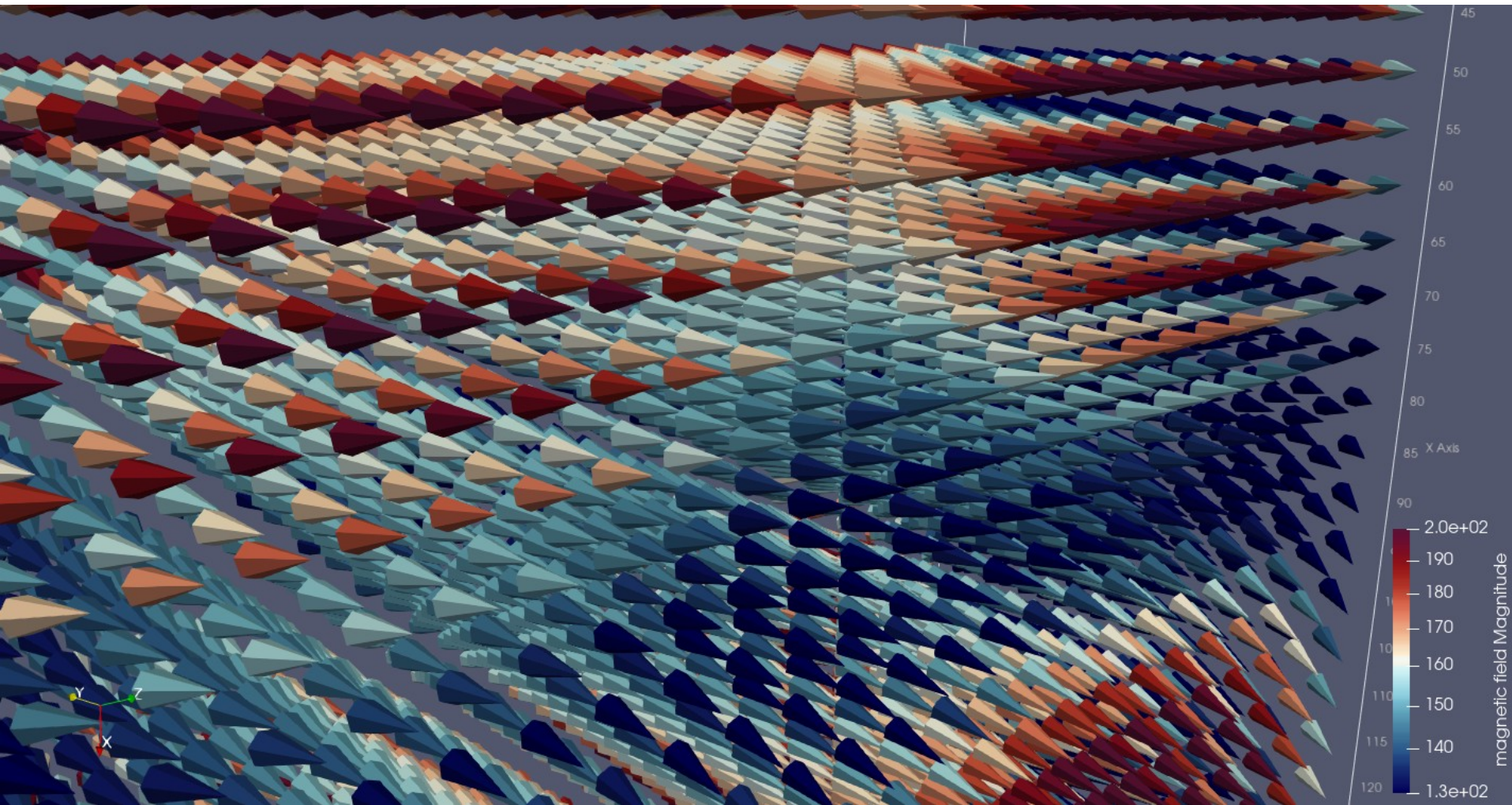
# Magnetic field measurements

- Distance between magnets: 80 mm
- Field over all ranges from 25 mT to 240 mT



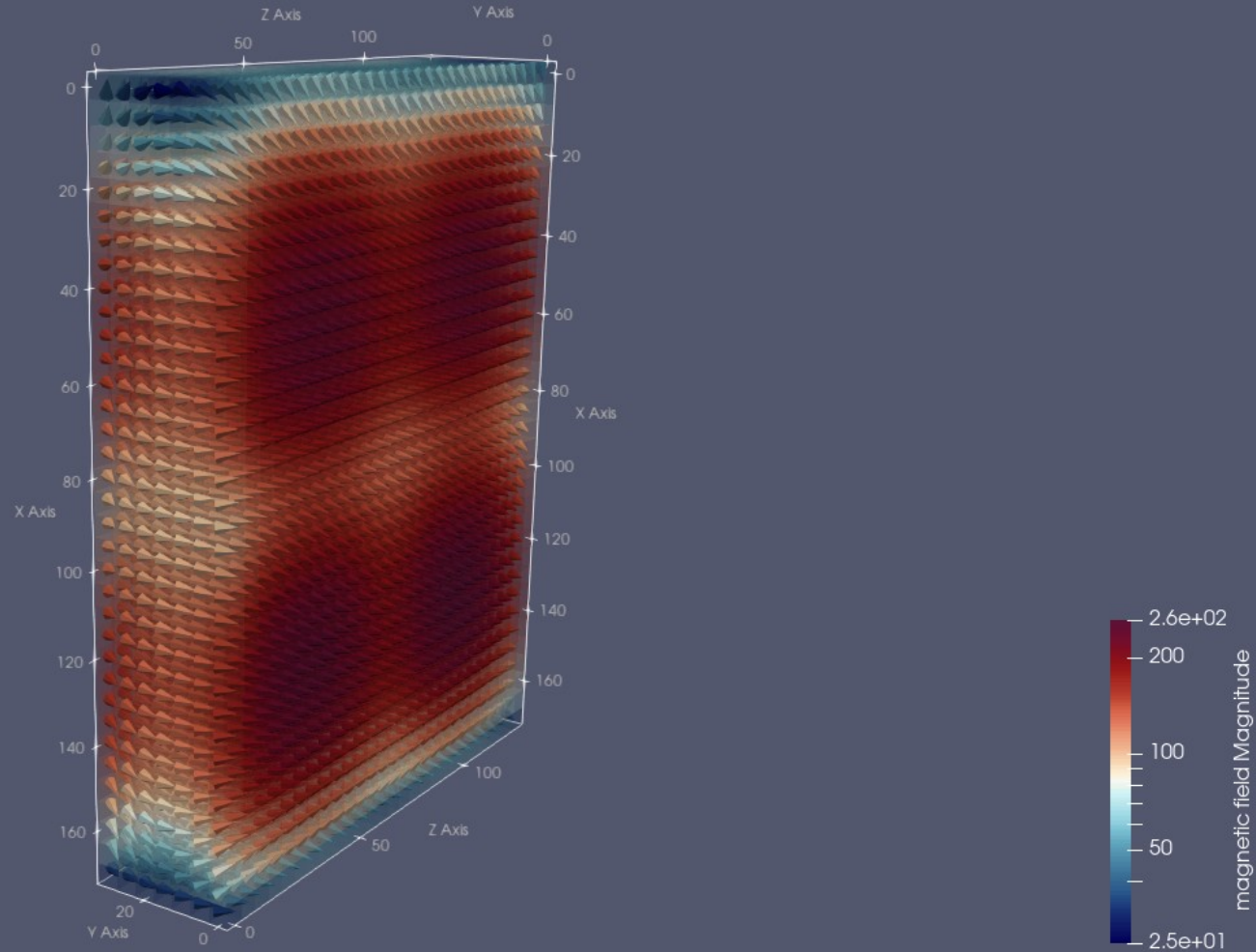
## Magnetic field measurements

- Distance between magnets: 80 mm
- Field differs from 130 mT to 200 mT



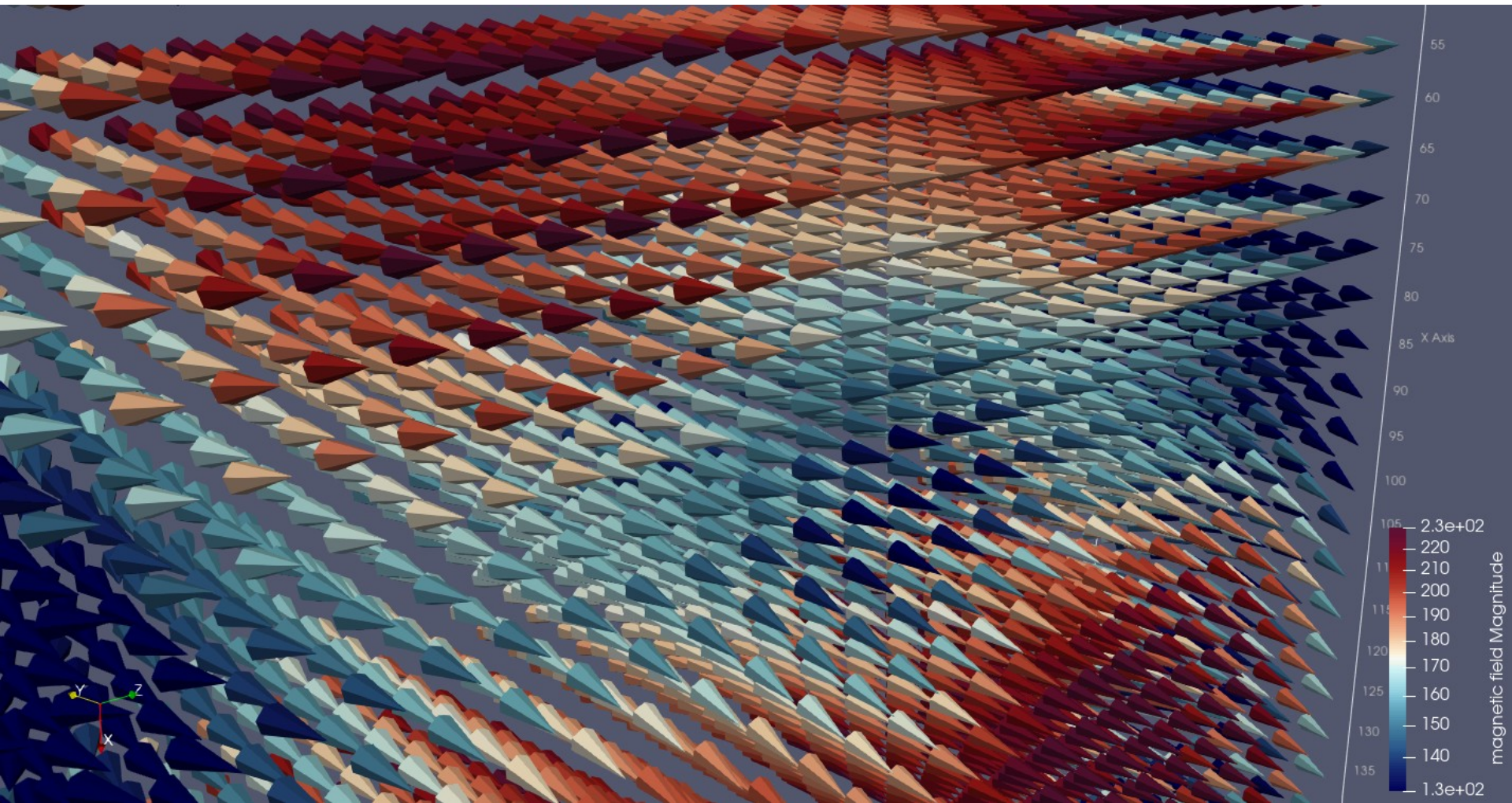
# Magnetic field measurements

- Distance between magnets: 60 mm
- Field over all ranges from 25 mT to 260 mT



## Magnetic field measurements

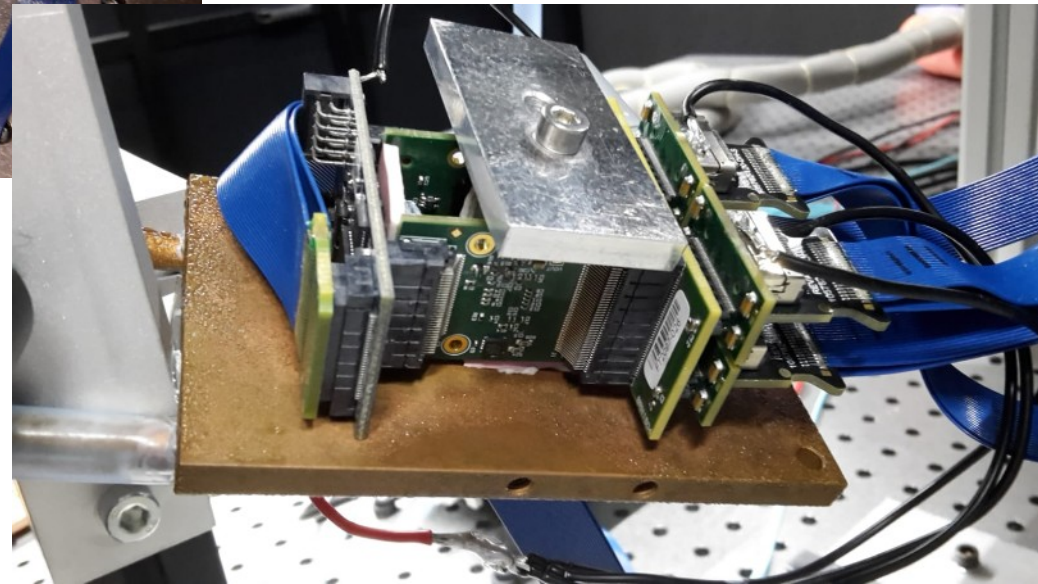
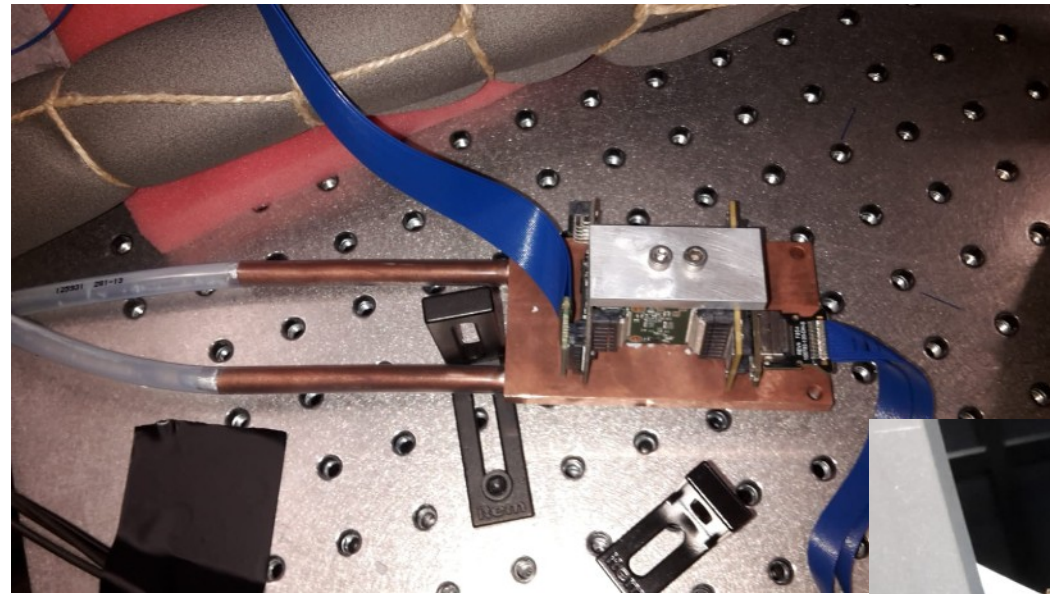
- Distance between magnets: 60 mm
- Field over all ranges from 140 mT to 260 mT



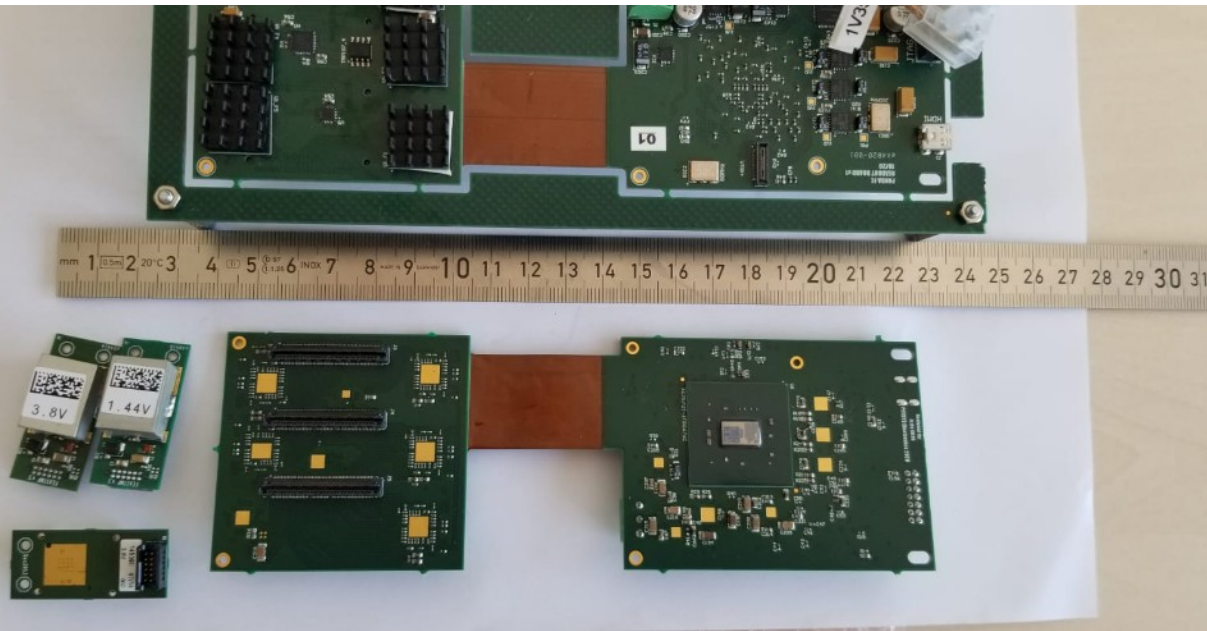
- Measurements for efficiency tests of the FEE
- Magnetic field either strong or homogeneous

## Future Work

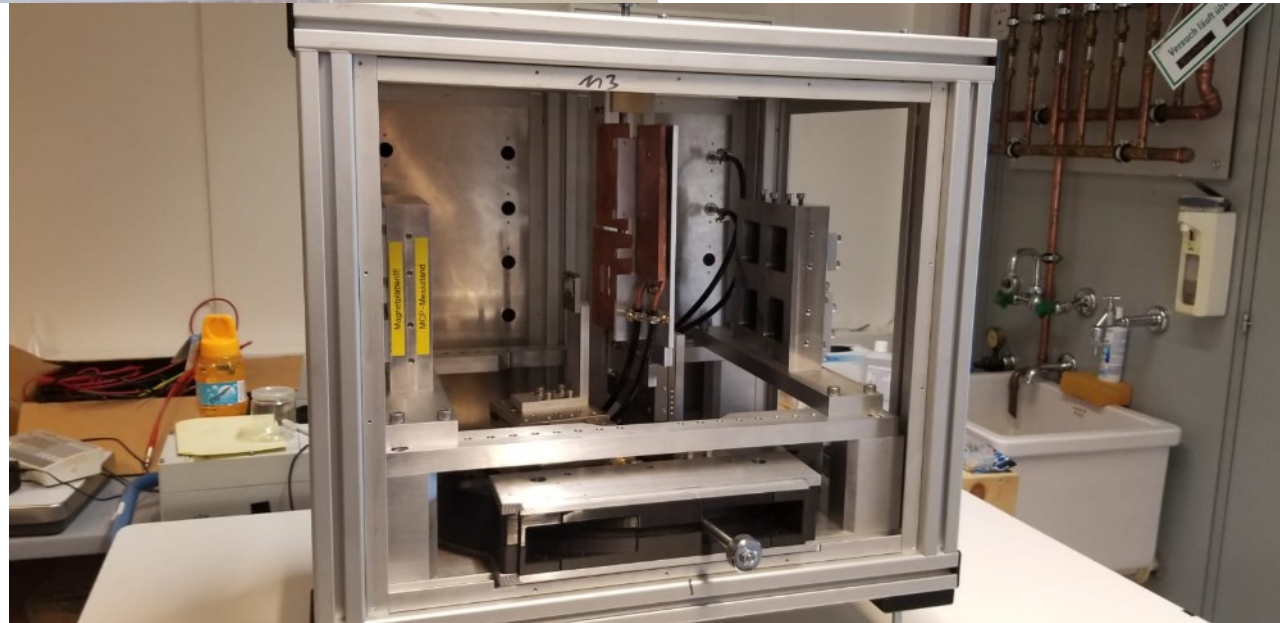
- FEE between the magnets
- Measurements of efficiency



New FEE



Light tight magnet box



- Thank you for your attention!