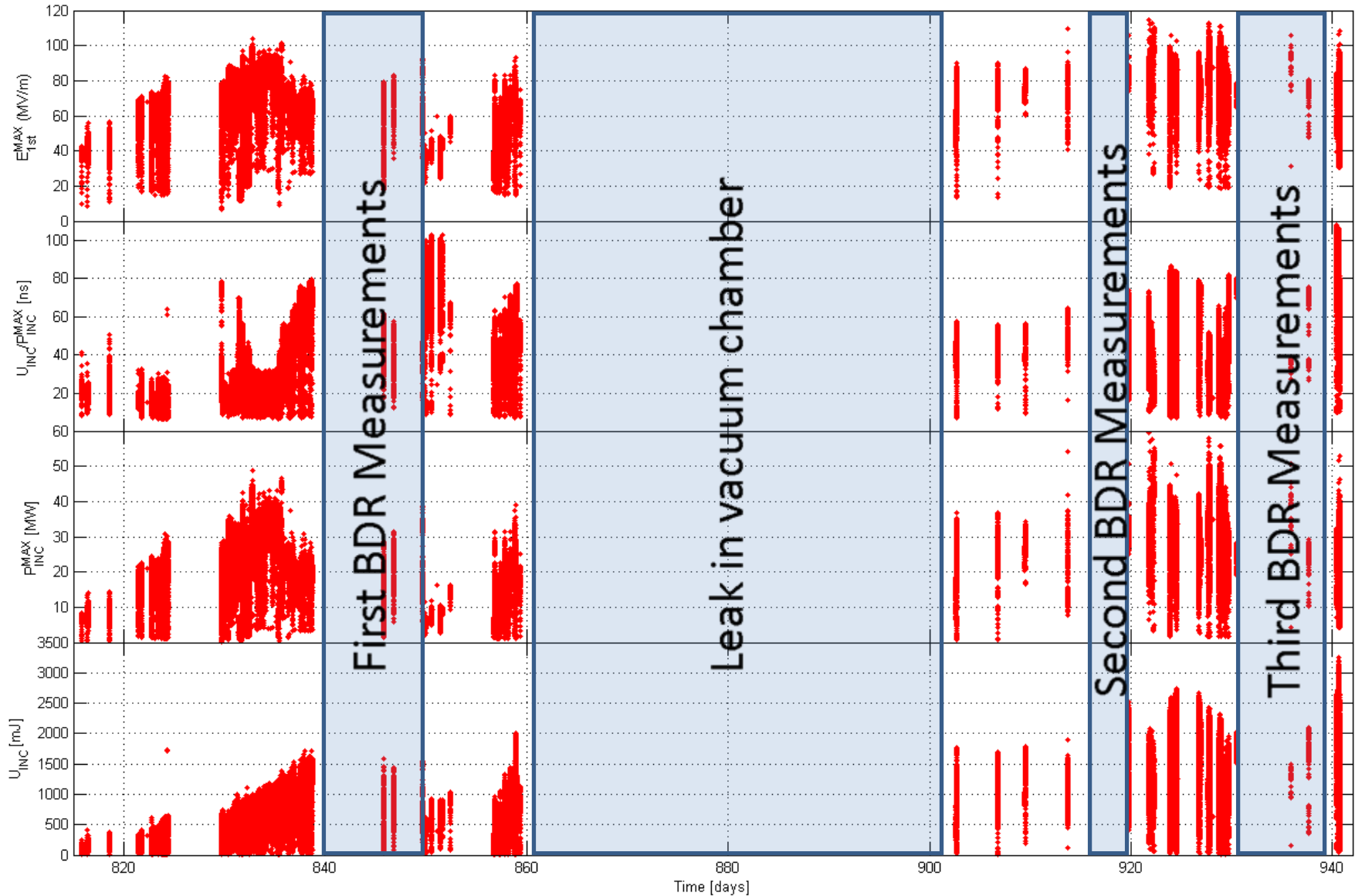


Results of the structure 30CNSD1P2CU

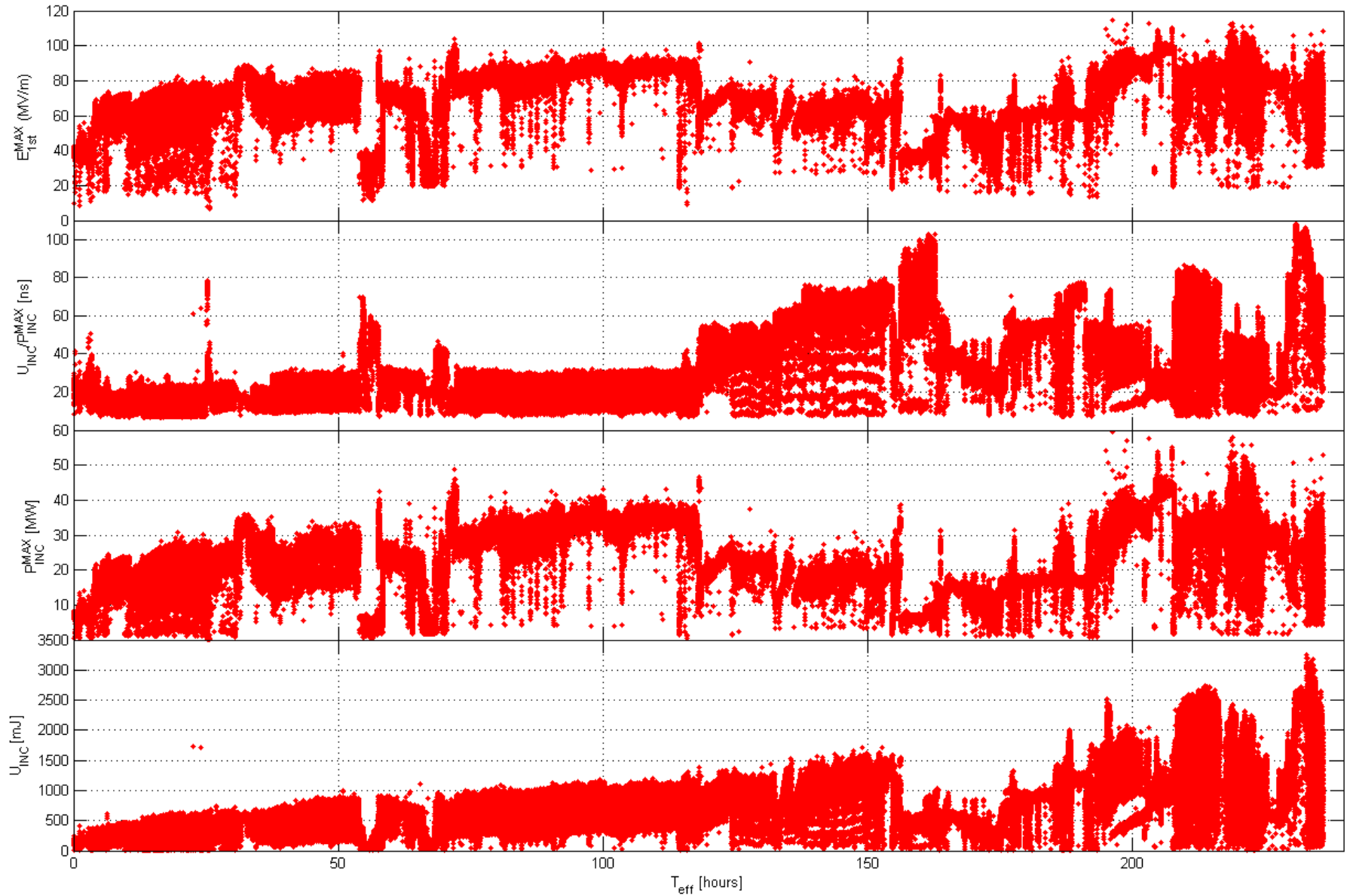
Contents

- Main results of the 30CNSD1P2CU
- Preliminary results of the 30HDSTKCU
- Relative performance of Cu structures
- Conclusion

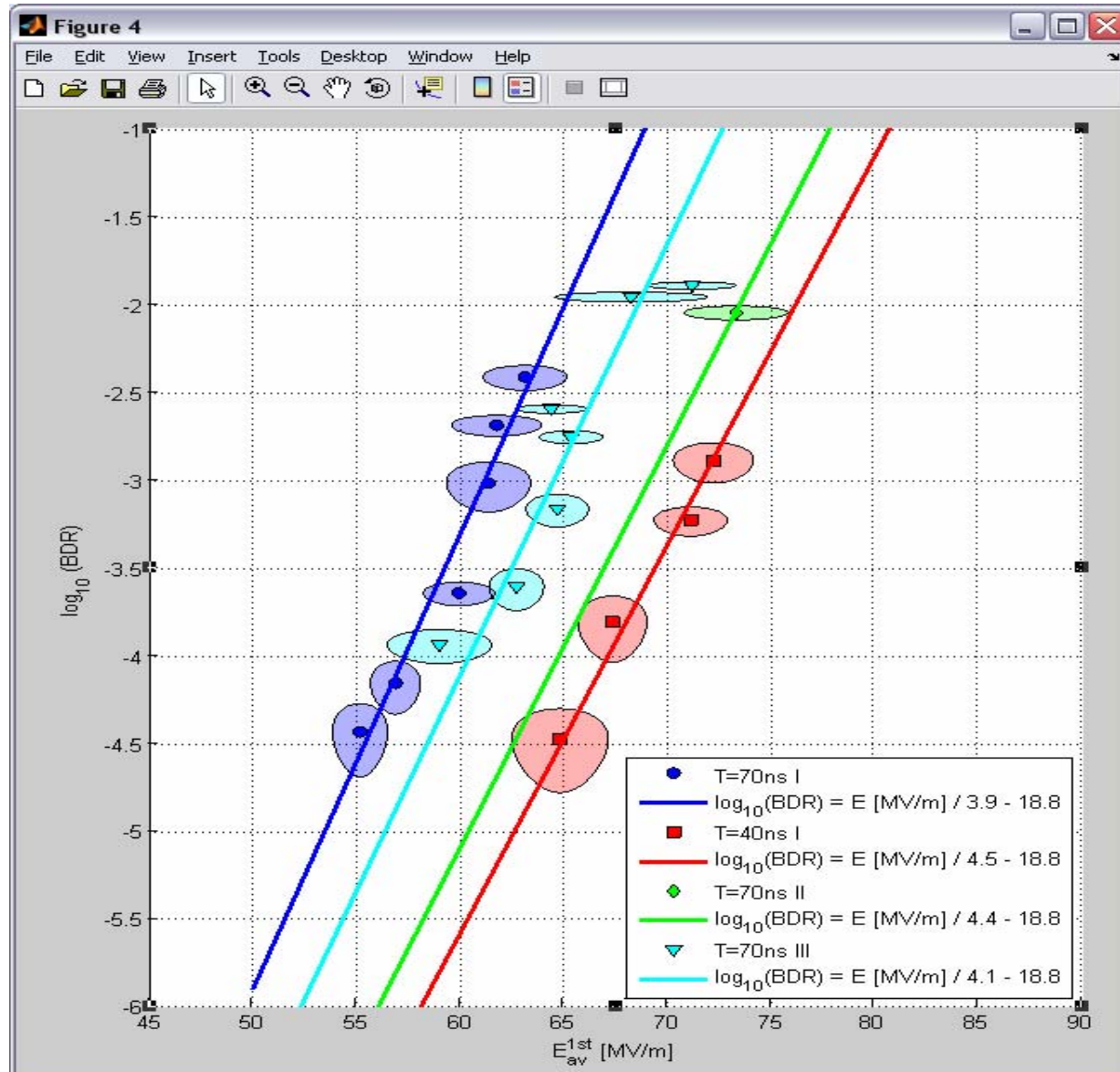
Conditioning history 30CNSD1P2CU



Conditioning history 30CNSD1P2CU

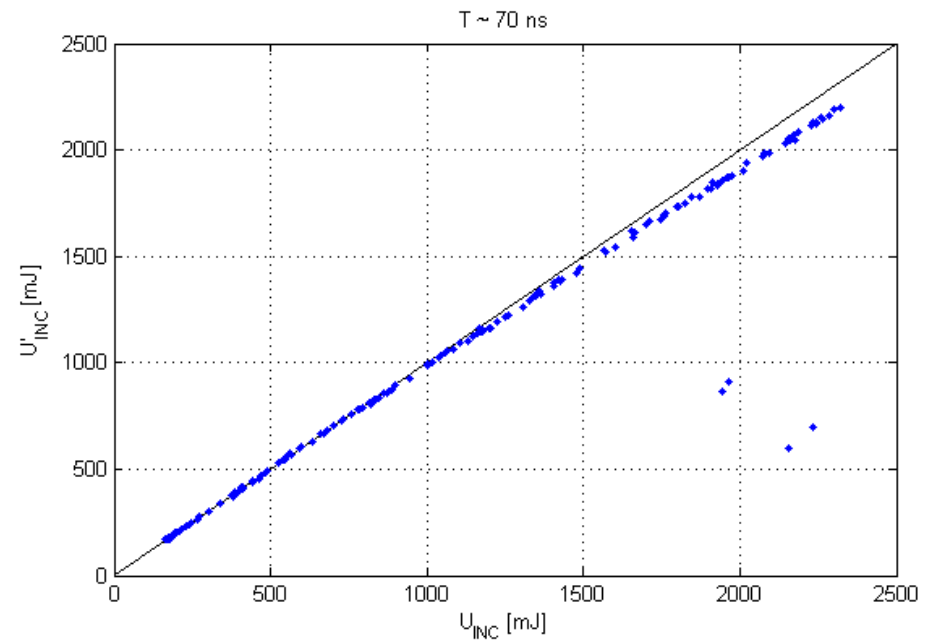
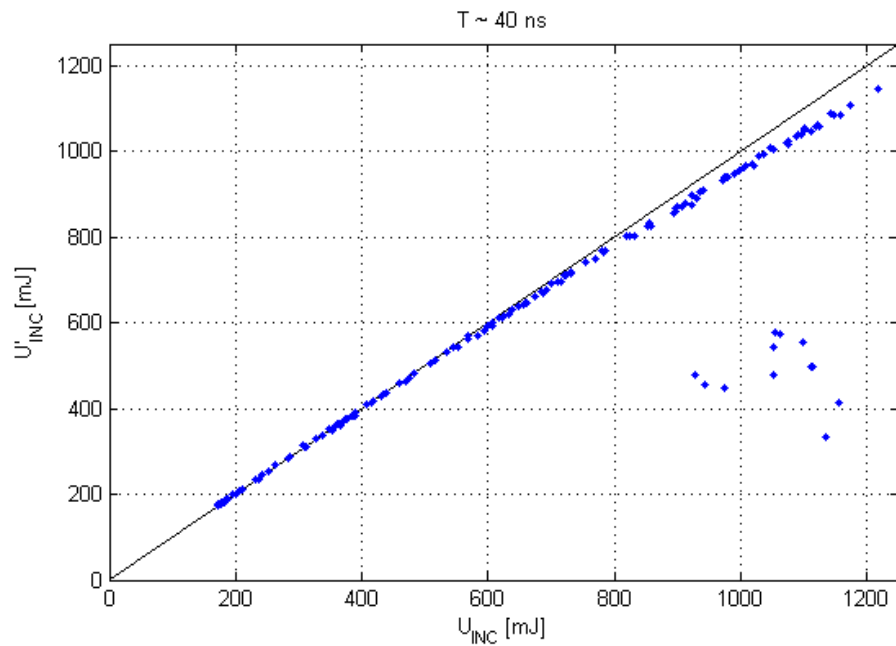


BDR measurements 30CNSD1P2CU



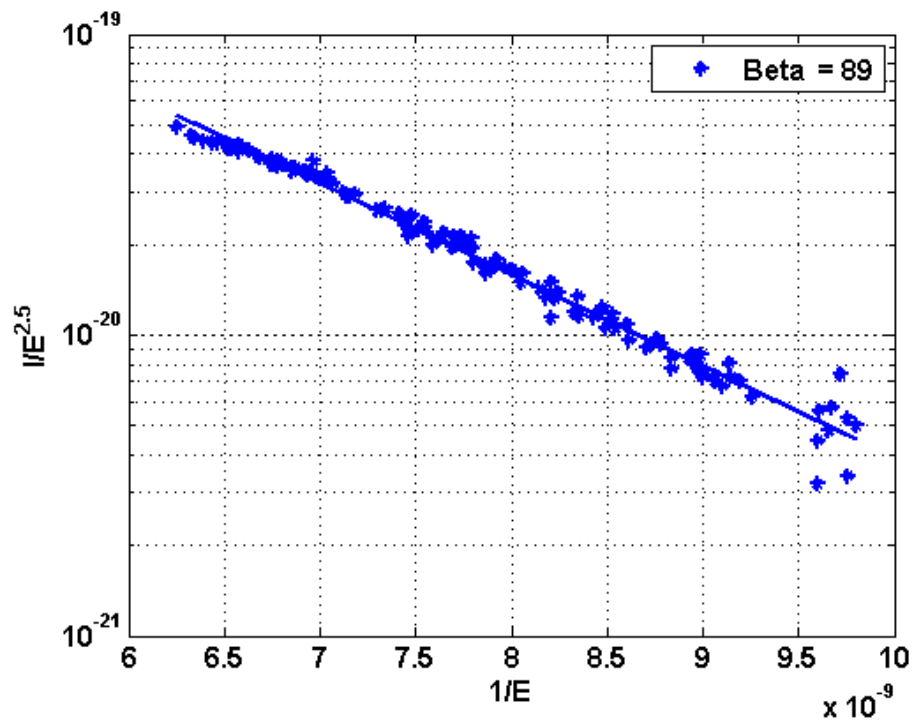
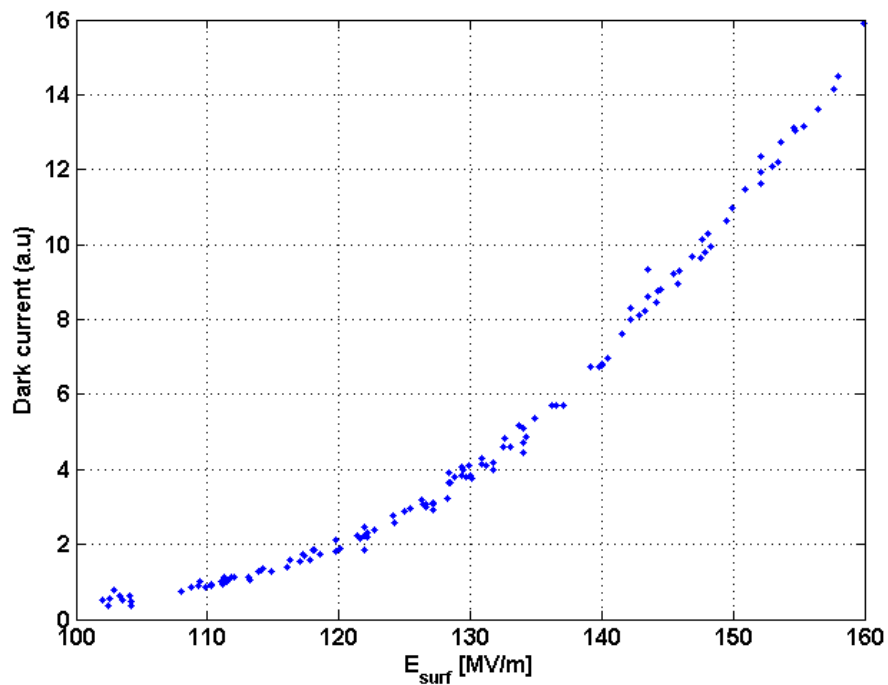
Calibration & non-linearities

30CNSD1P2CU

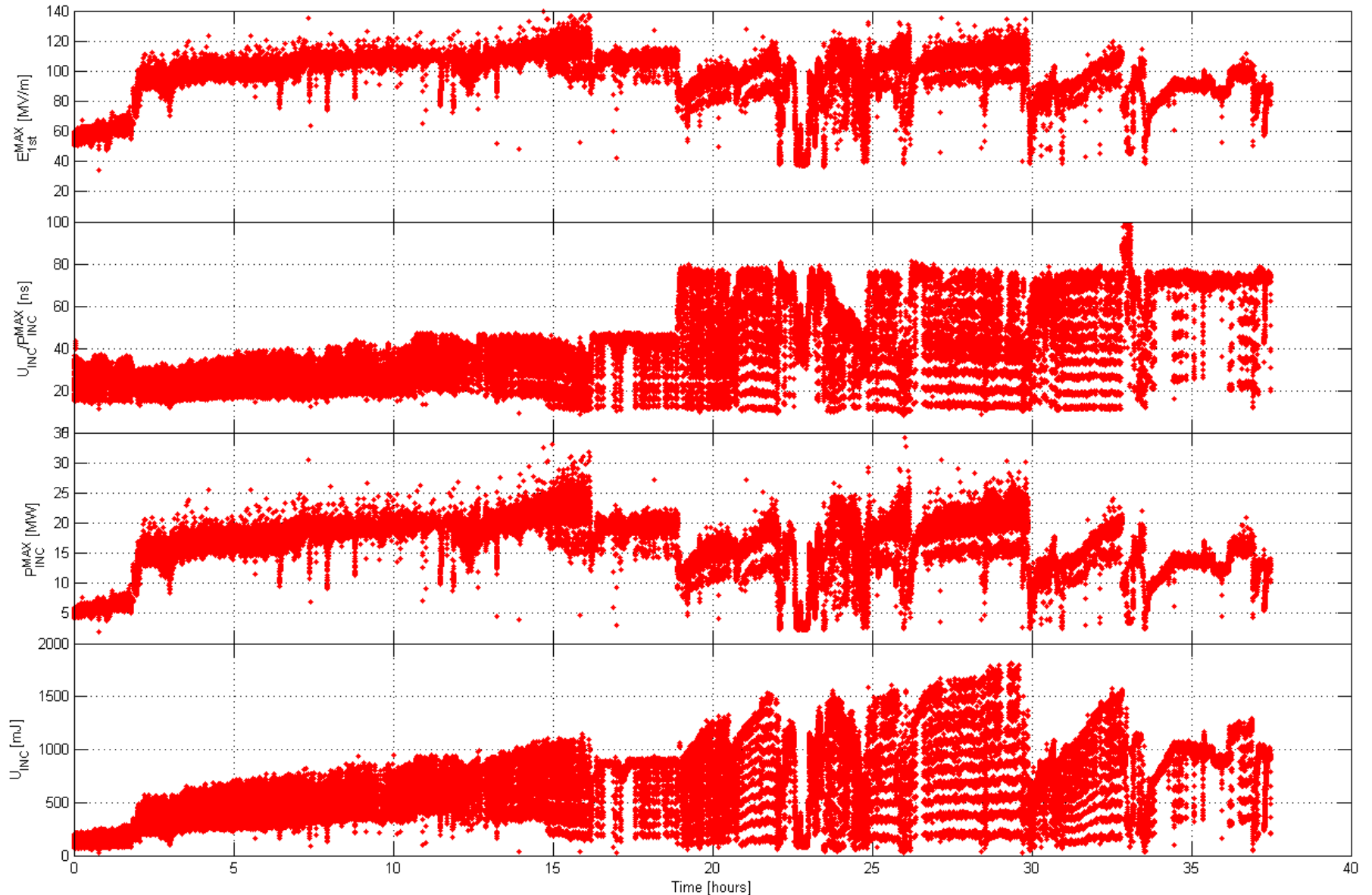


Dark Current measurement

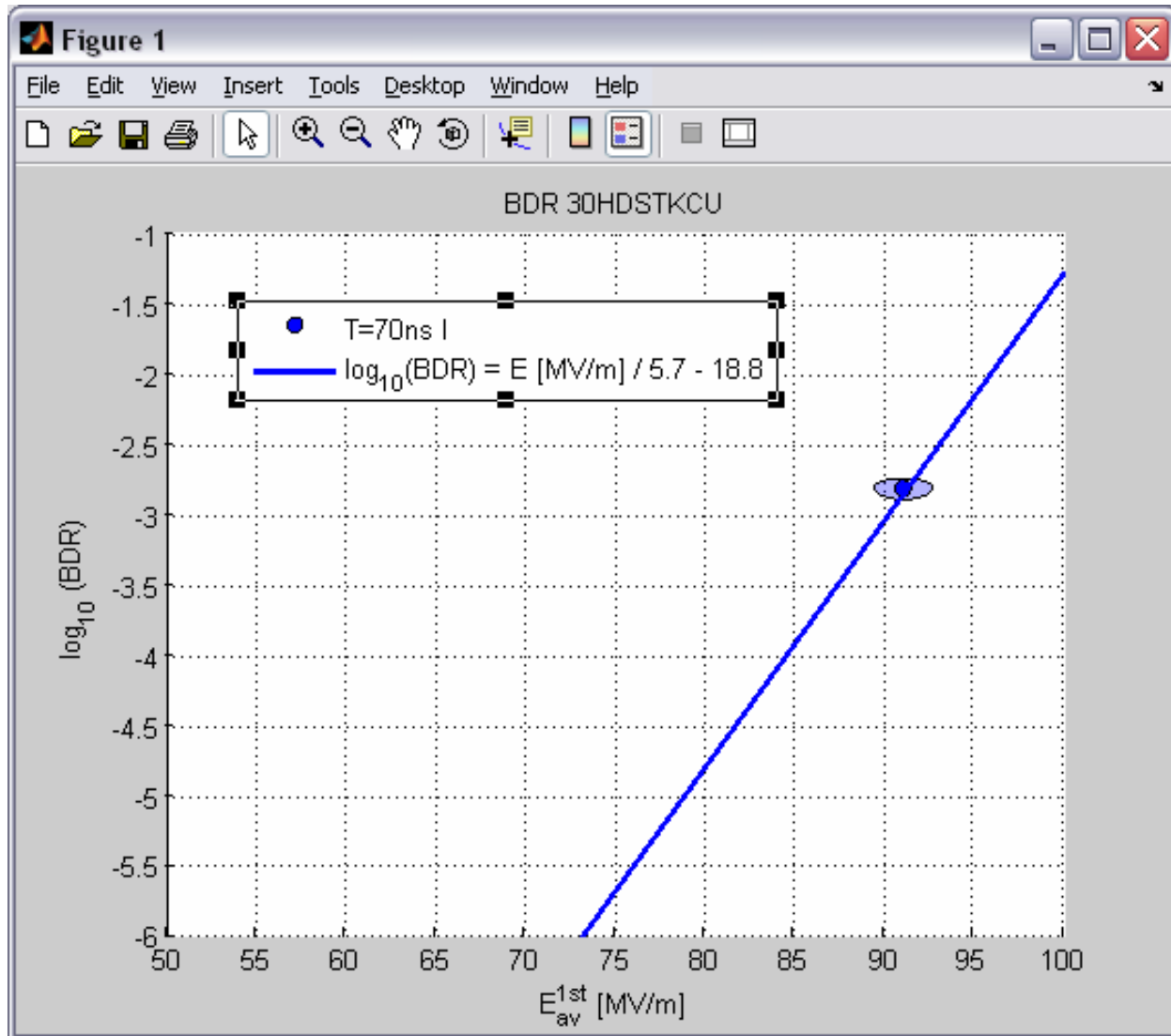
30CNSD1P2CU



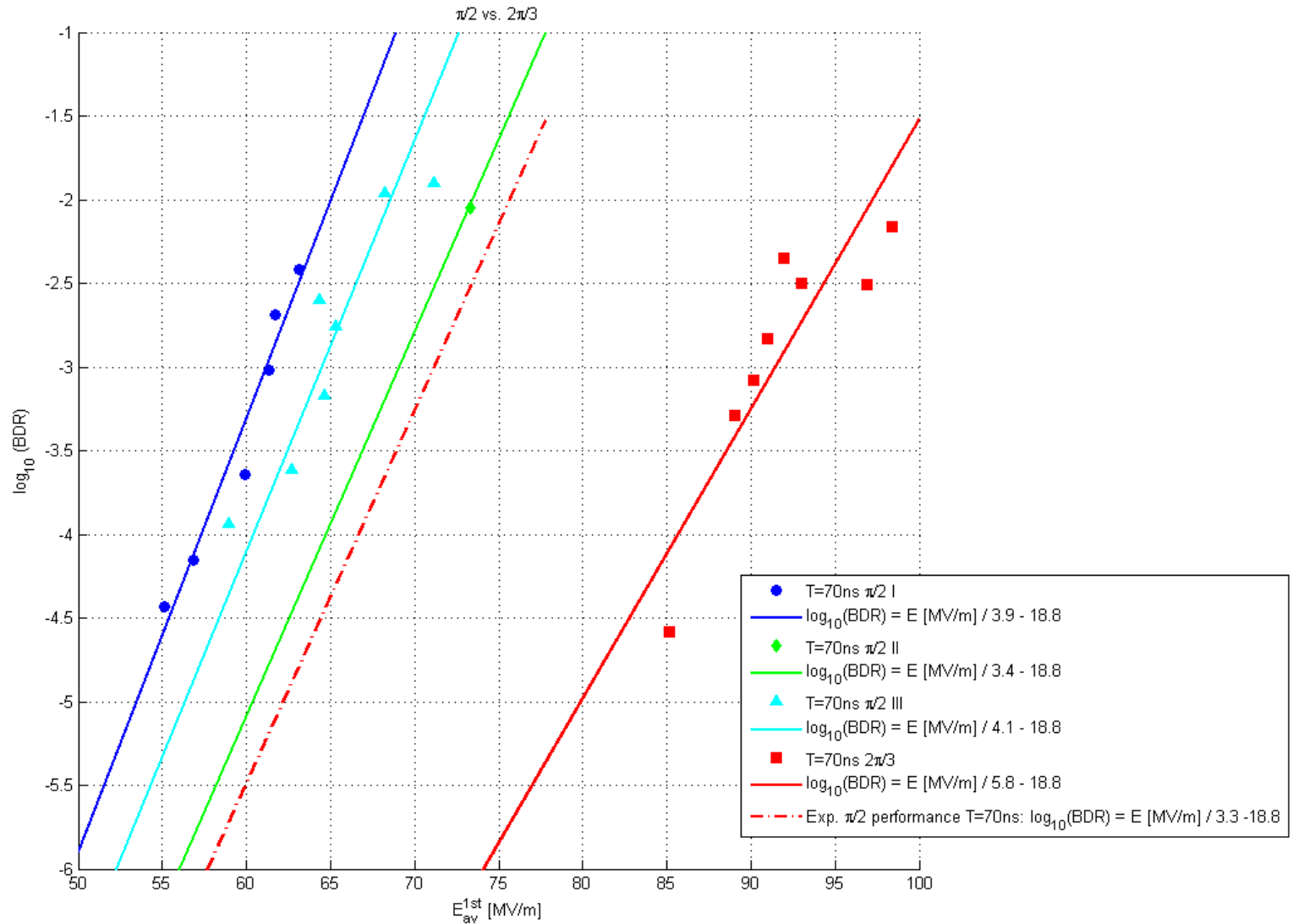
Conditioning history 30HDSTKCU



BDR measurements 30HDSTKCU



Relative performance



Relative performance

Structure	P [MW] @ T = 70 ns BDR = 10 ⁻³	E [MV/m] @ T = 70 ns BDR = 10 ⁻³	P T ^{1/3} /c [Wu] @ T = 70 ns BDR = 10 ⁻³
30CNSD2P3CU	20.2 (0.92)	91.6 (1.32)	7.6 (1.06)
30CNSD1P2CU	21.9 (1.00)	69.5 (1.00)	7.2 (1.00)
30HDS60LCU	16.1 (0.74)	60.8 (0.87)	5.6 (0.78)
30HDS60SCU	13.3 (0.61)	74.5 (1.07)	5.5 (0.76)
30HDSTKCU	13.5 (0.62)	90.1 (1.30)	5.1 (0.71)

Conclusion

- Performance of the two circular structures tested scales well with P/C (although, P by itself could also be used).
- Assuming P/C scaling, other differences between the structures are less relevant:
 - Surface preparation
 - Conditioning strategy
 - Other rf characteristics
- HDS structures seem to perform systematically worse than circular structures in terms of P/C (but not in E if results for HDS thick are confirmed).

Relative performance

