

**Validation of the LRDIAG
vessel current model,
calibration of the magnetic
diagnostics, and field null
calculations for Day 0
operation on NSTX**

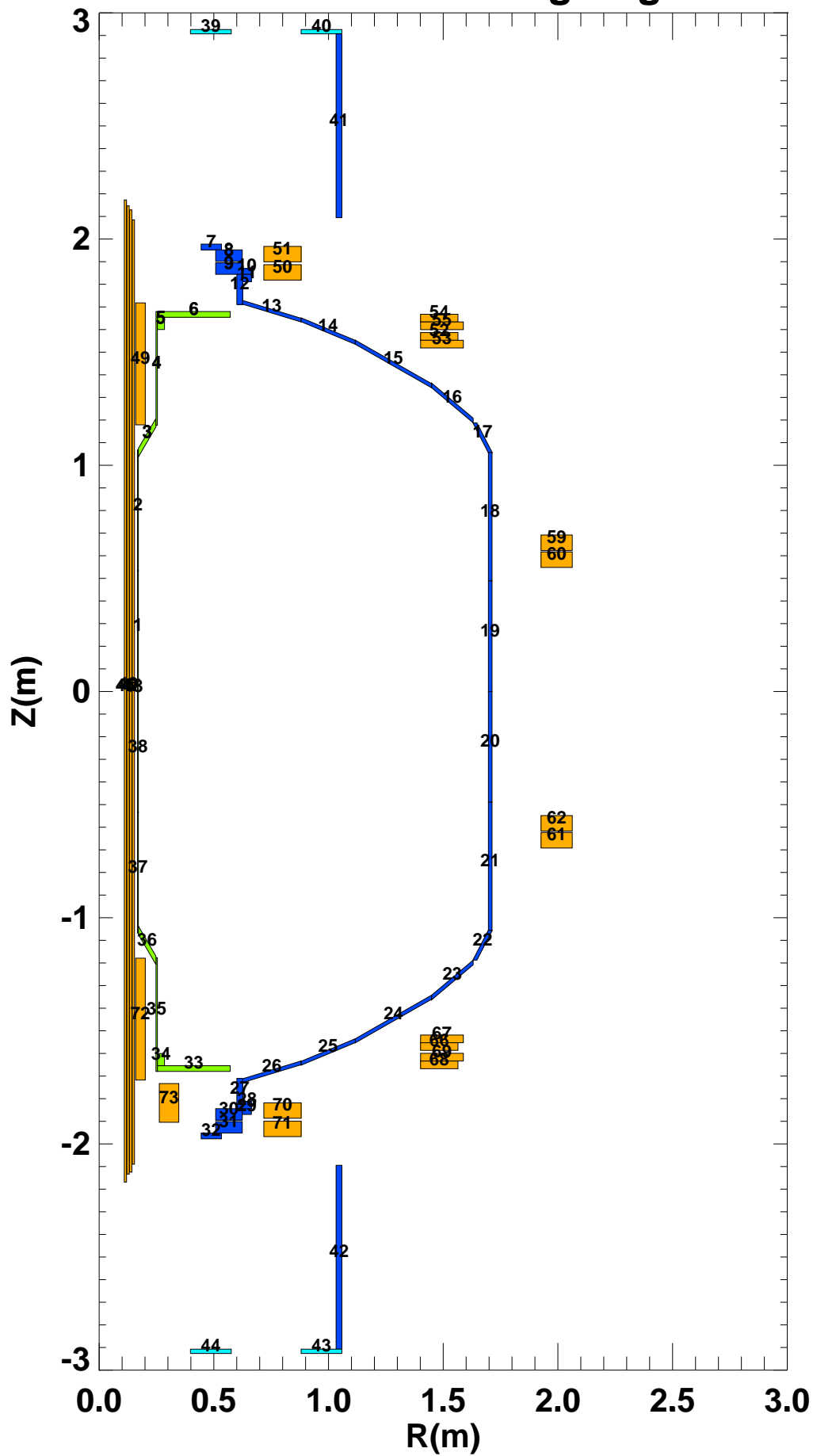
Presented by Jon Menard, PPPL

NSTX Physics Meeting

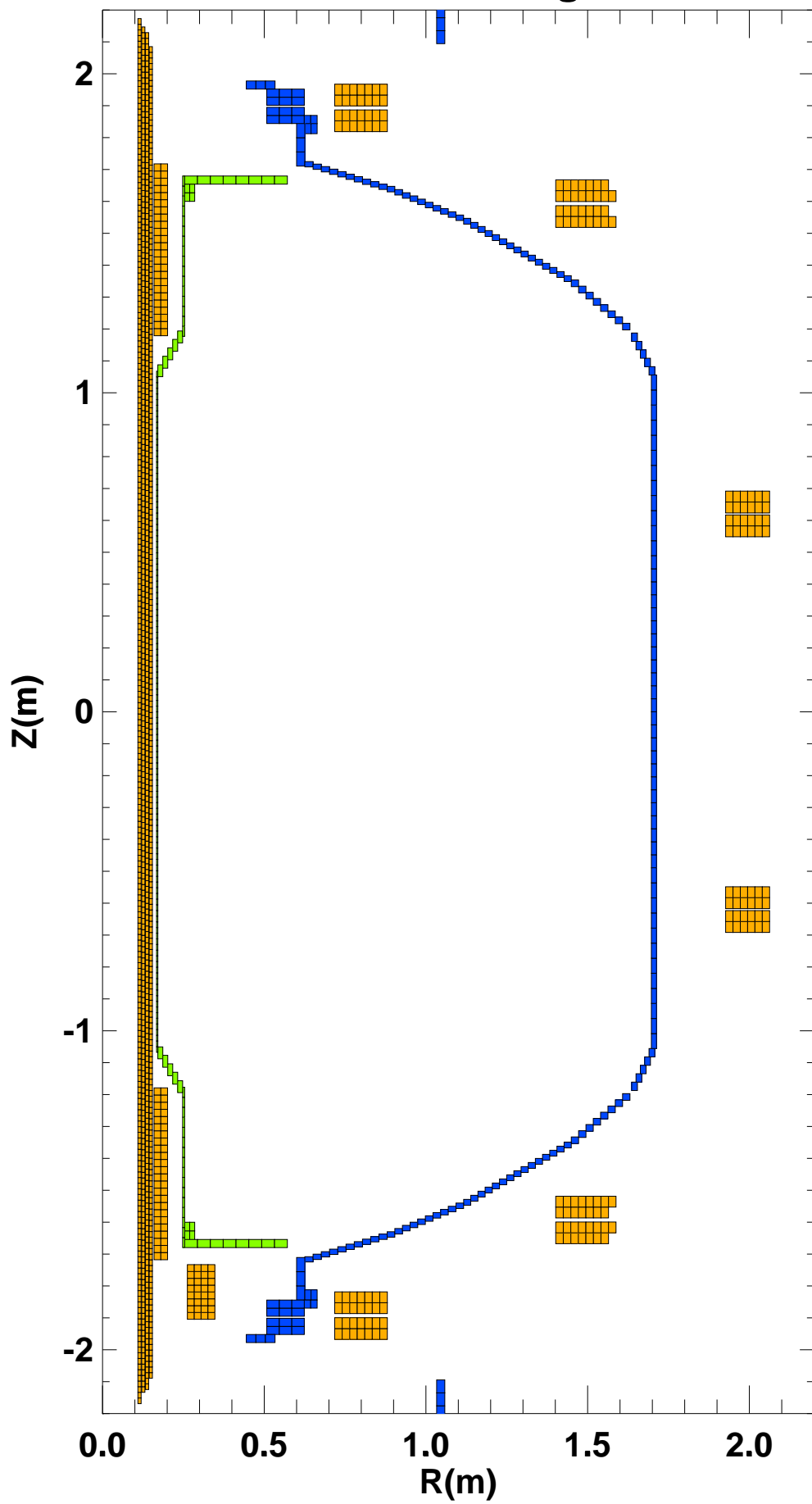
March 2, 1999 PPPL

LSB B318

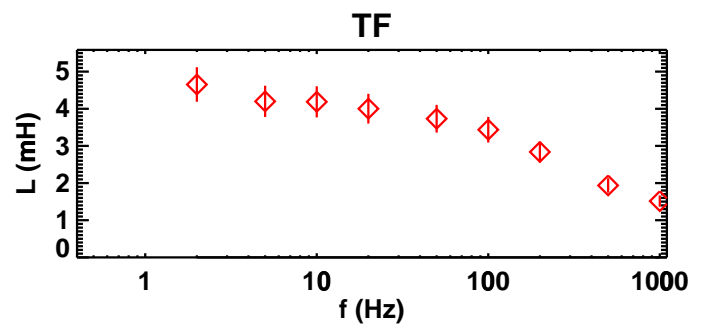
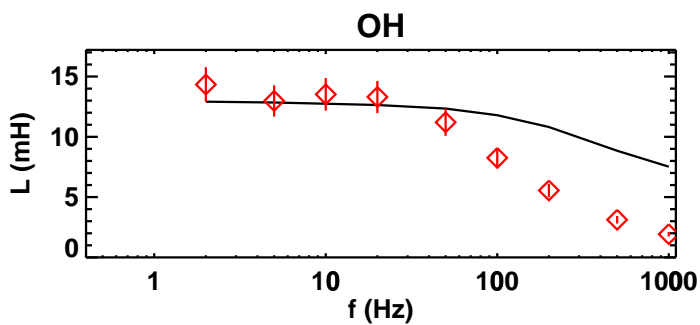
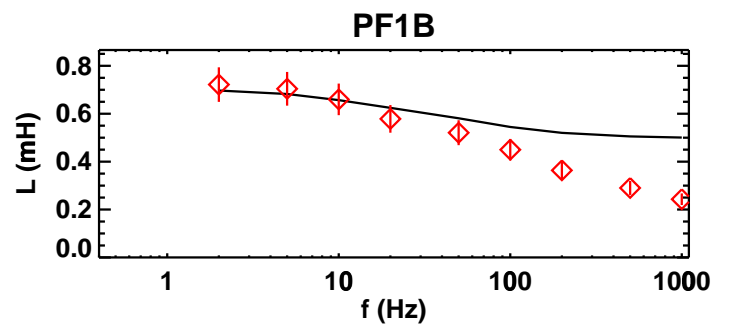
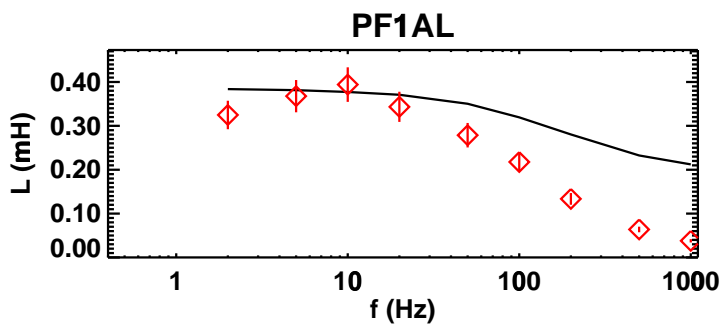
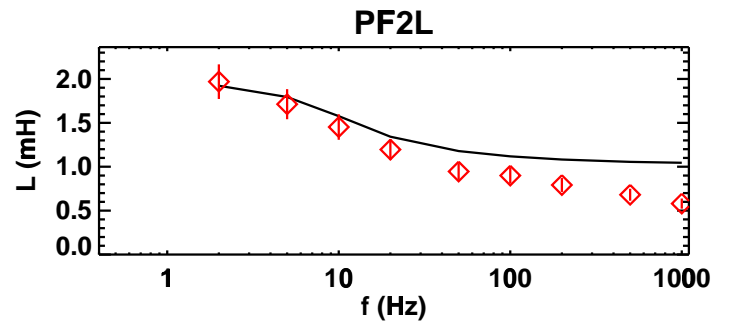
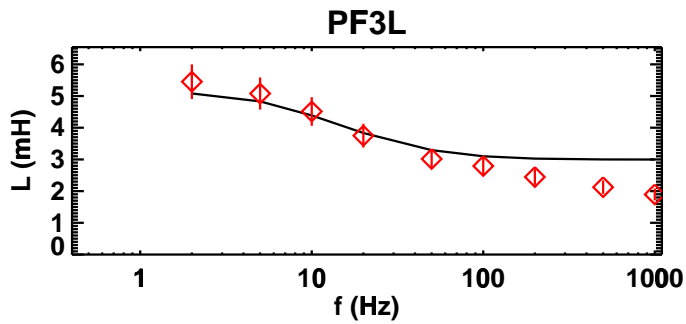
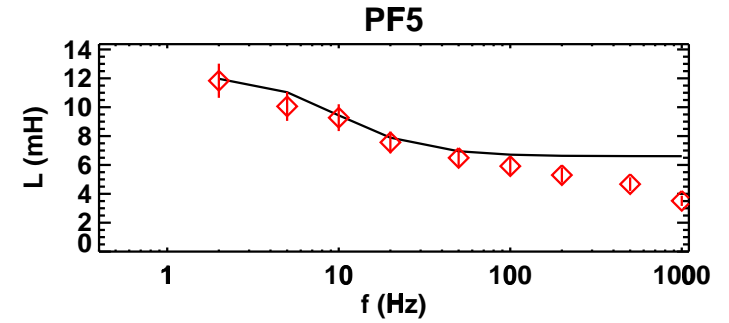
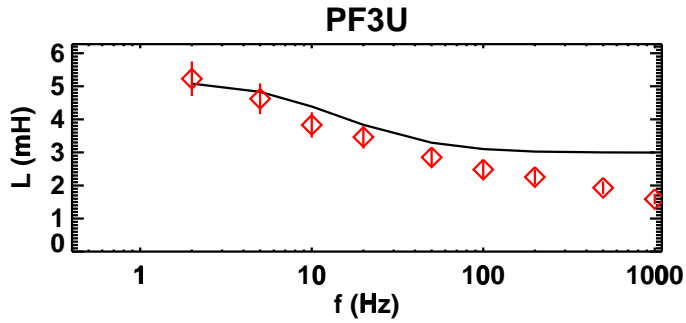
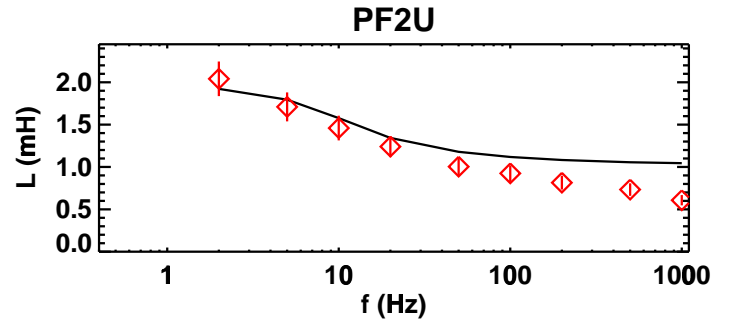
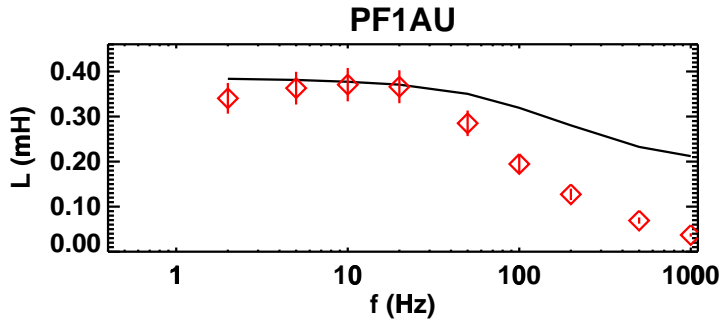
LRDIAG Representation of NSTX: Outline of Conducting Regions



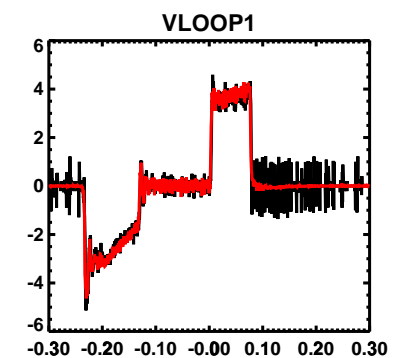
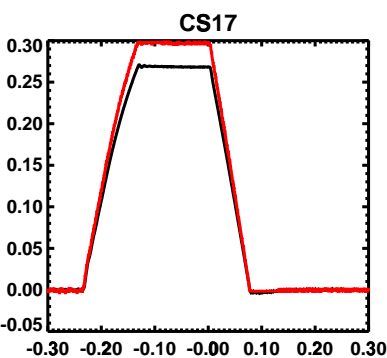
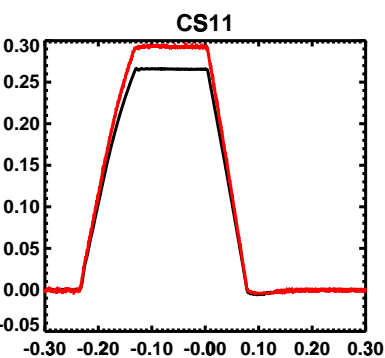
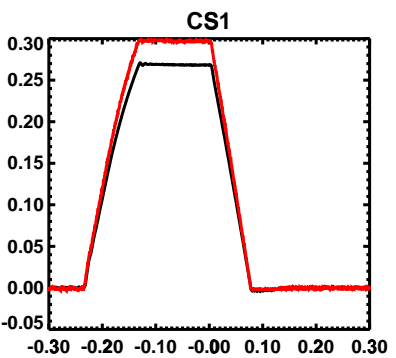
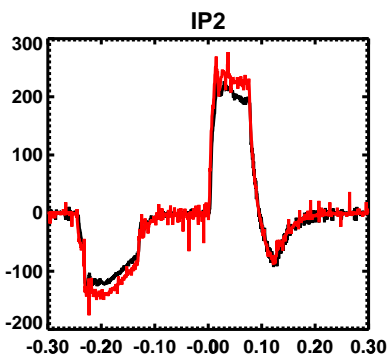
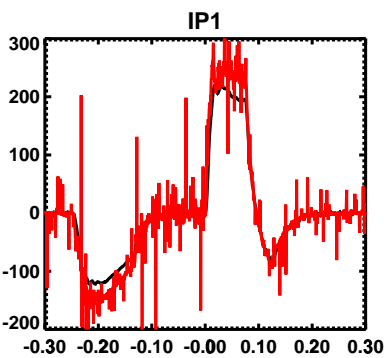
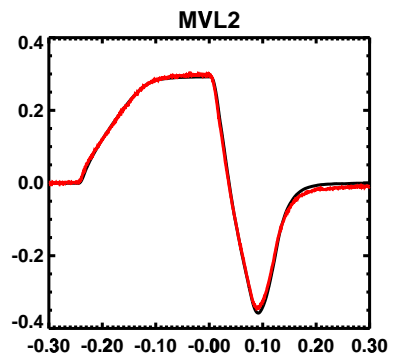
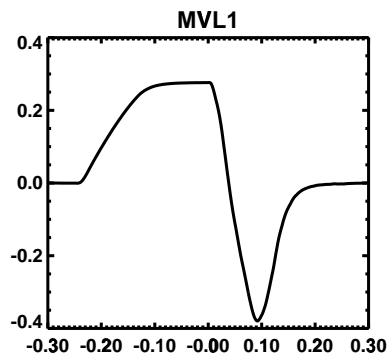
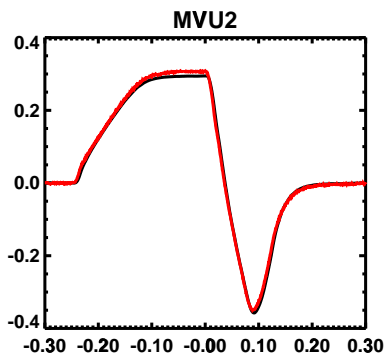
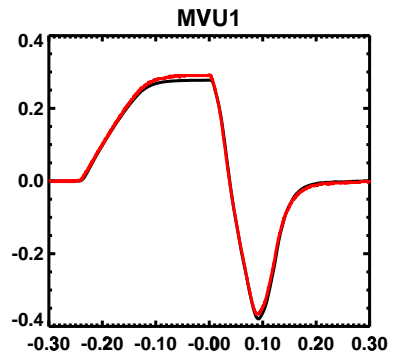
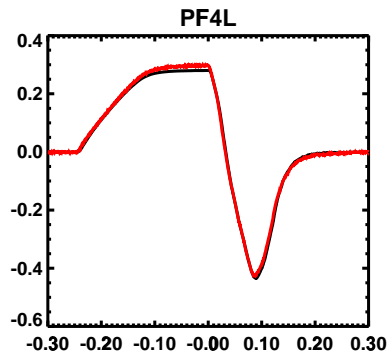
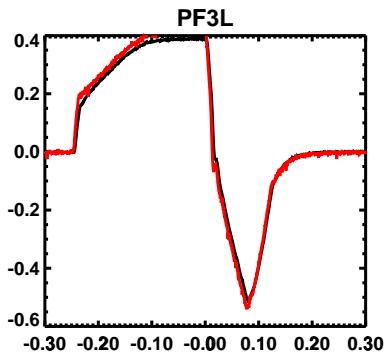
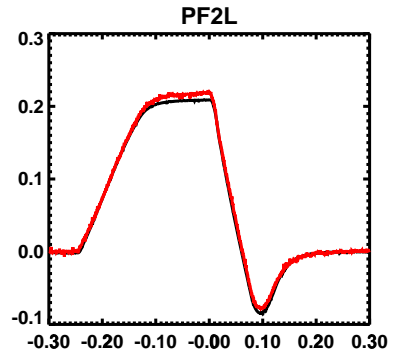
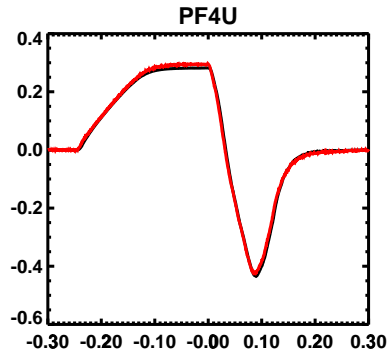
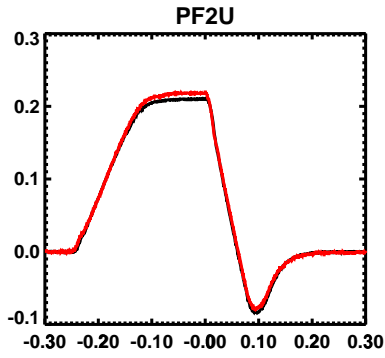
LRDIAG Representation of NSTX: Outline of Conducting Elements



NSTX Coil Inductances at FCPC SDS: Measurement versus LRDIAG Model



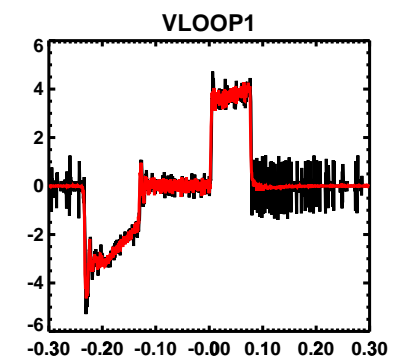
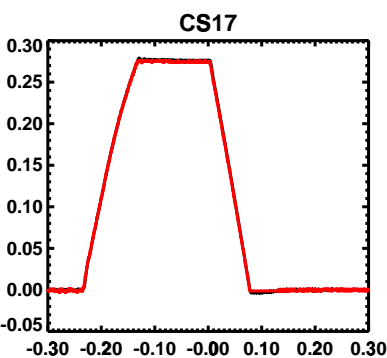
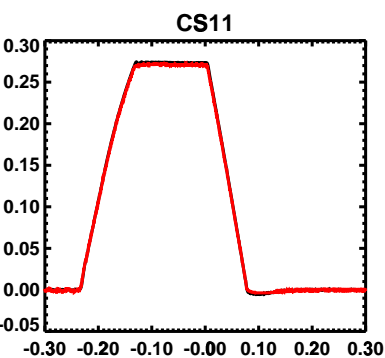
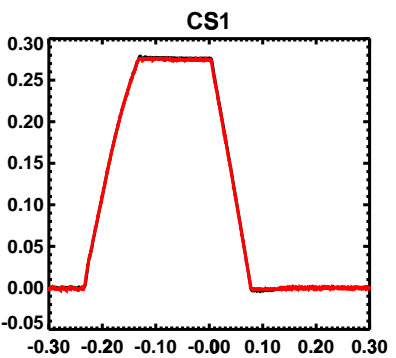
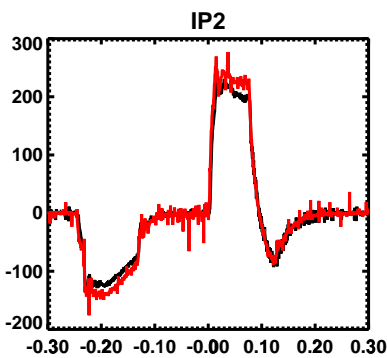
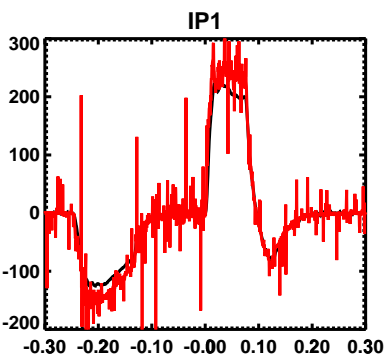
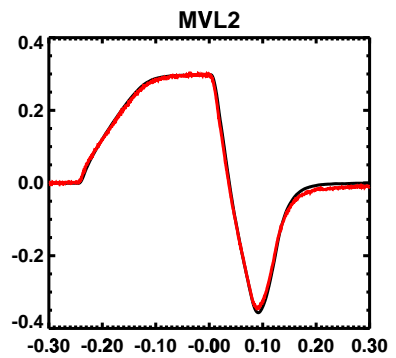
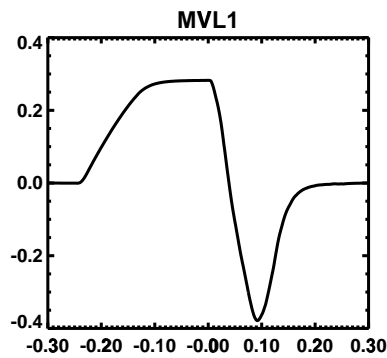
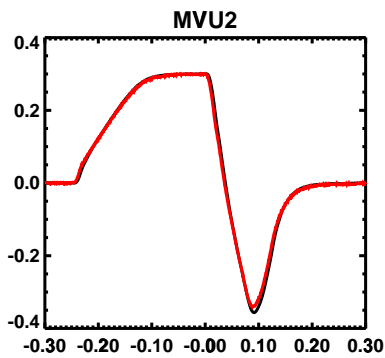
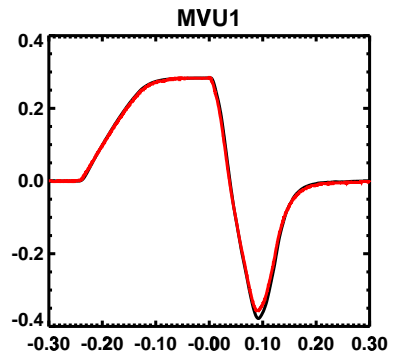
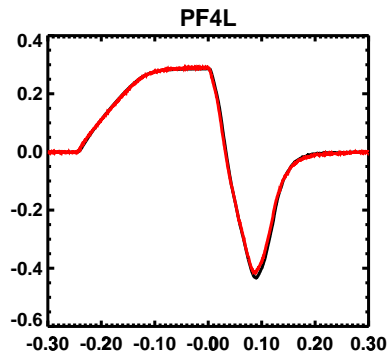
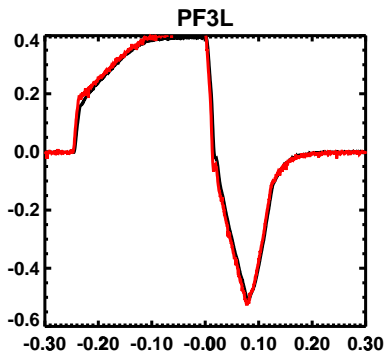
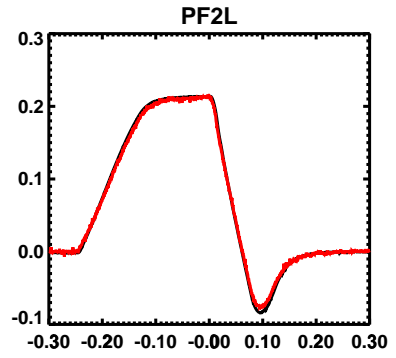
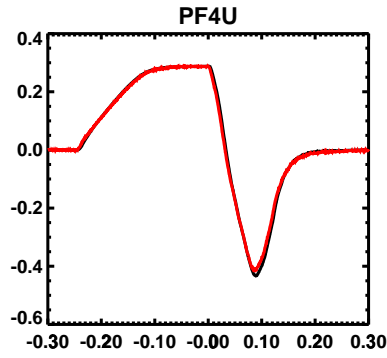
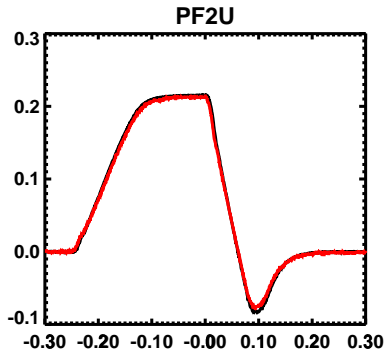
LRDIAG vs. measurements for shotnumber 100194



LRDIAG

Uncorrected Measurements

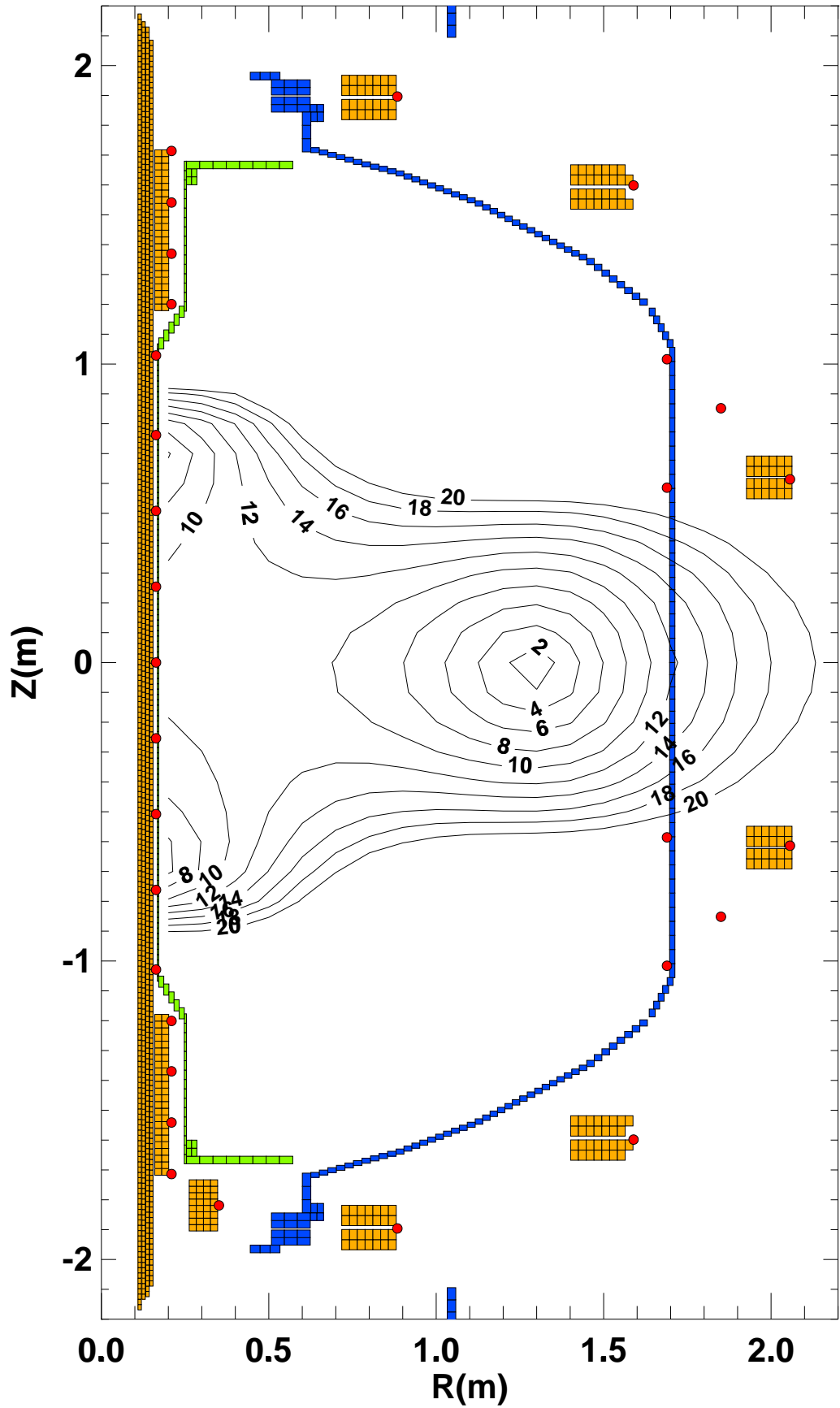
LRDIAG vs. measurements for shotnumber 100194



LRDIAG

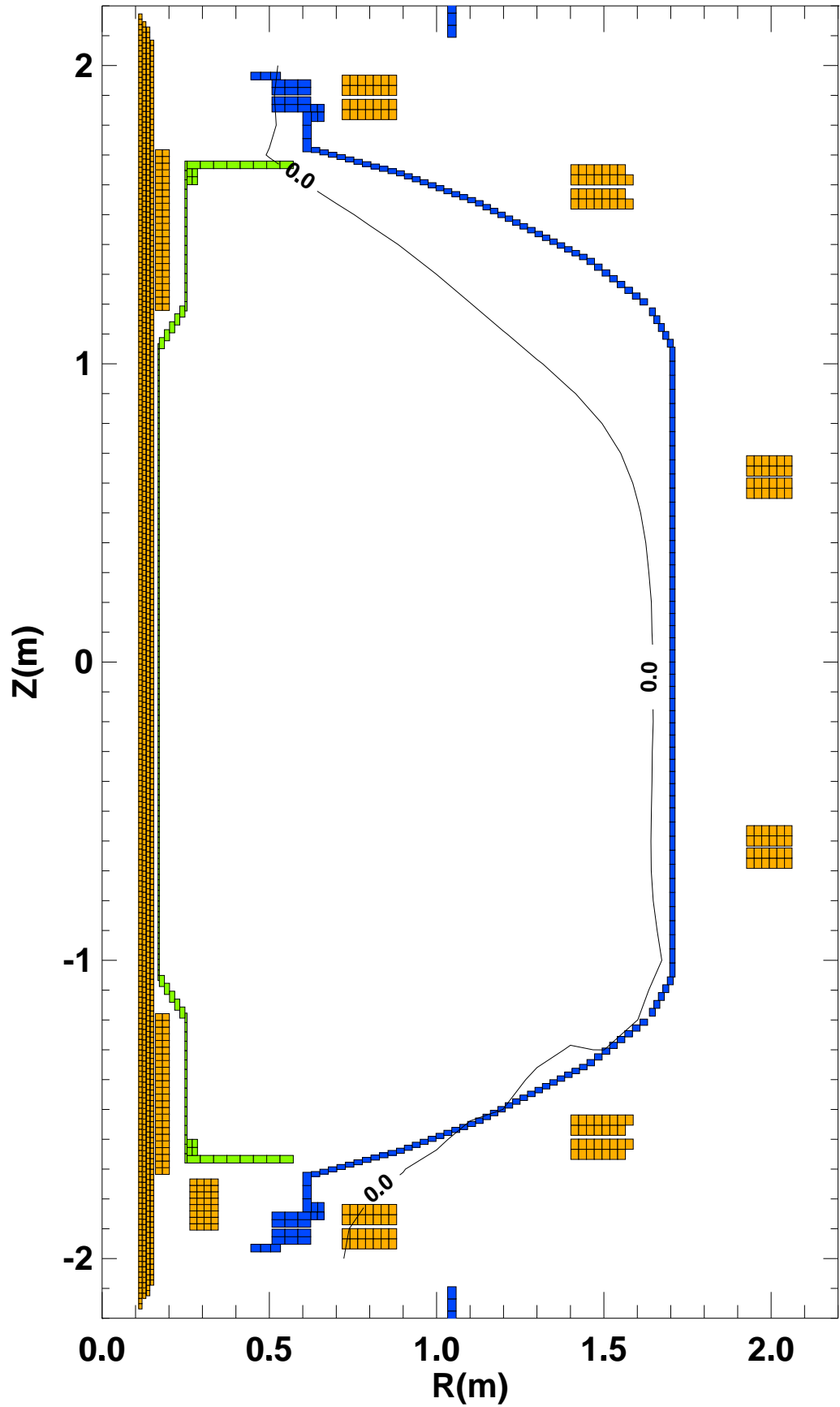
Corrected Measurements

B_p (Gauss) at $t=-4.00$ msec



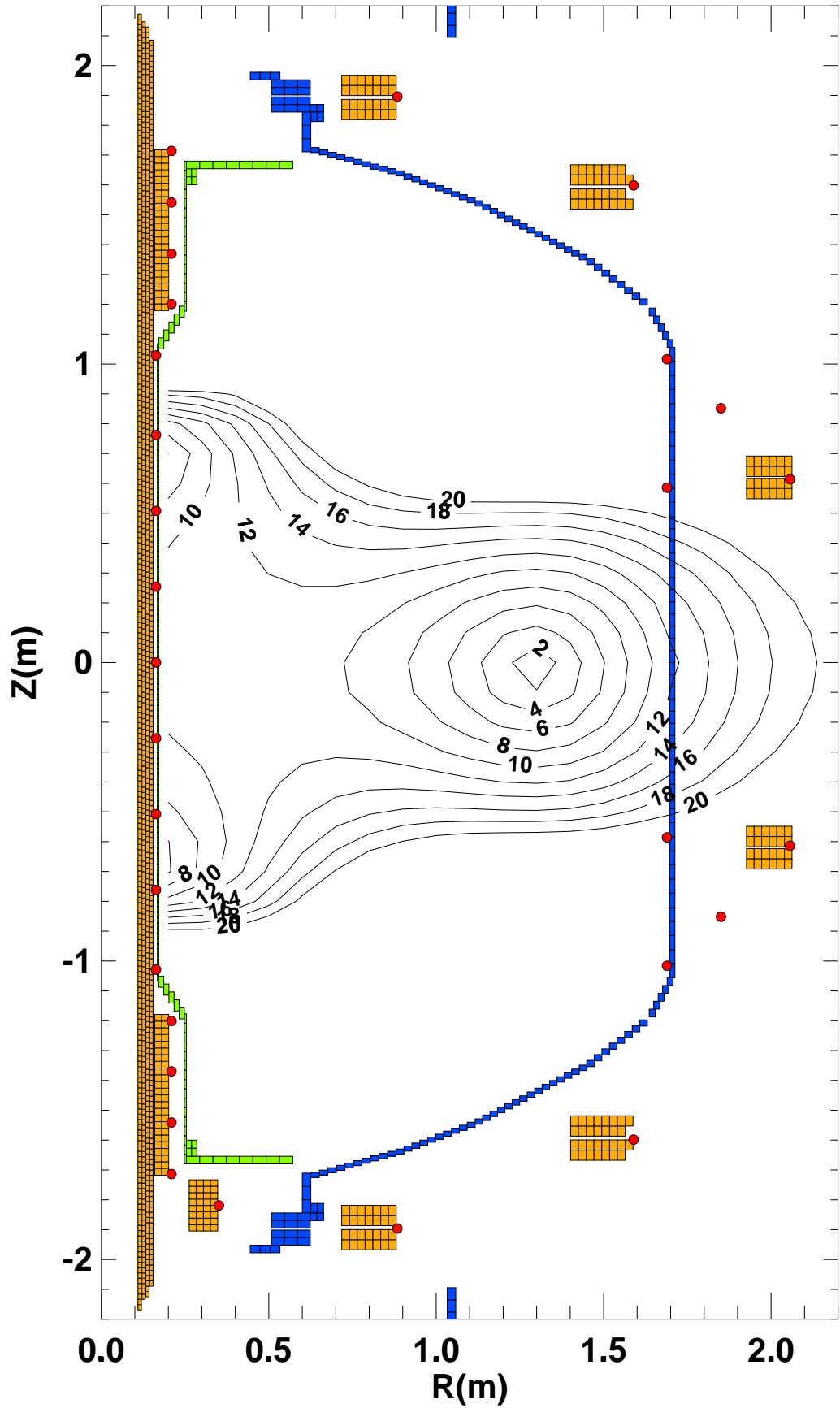
Shotnumber 100193

V_{LOOP} (V) at $t=-4.00$ msec



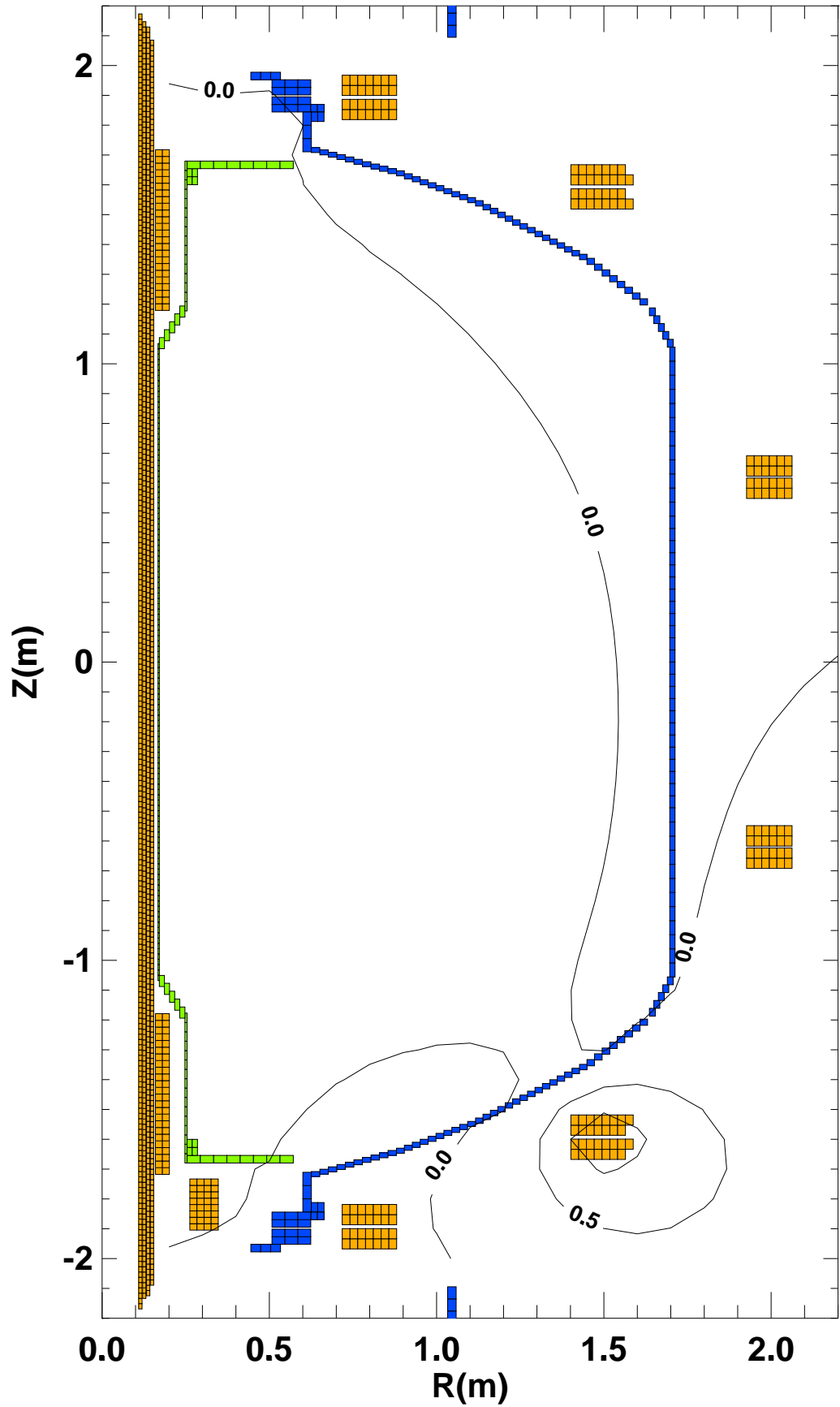
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B_p (Gauss) at $t=0.00$ msec



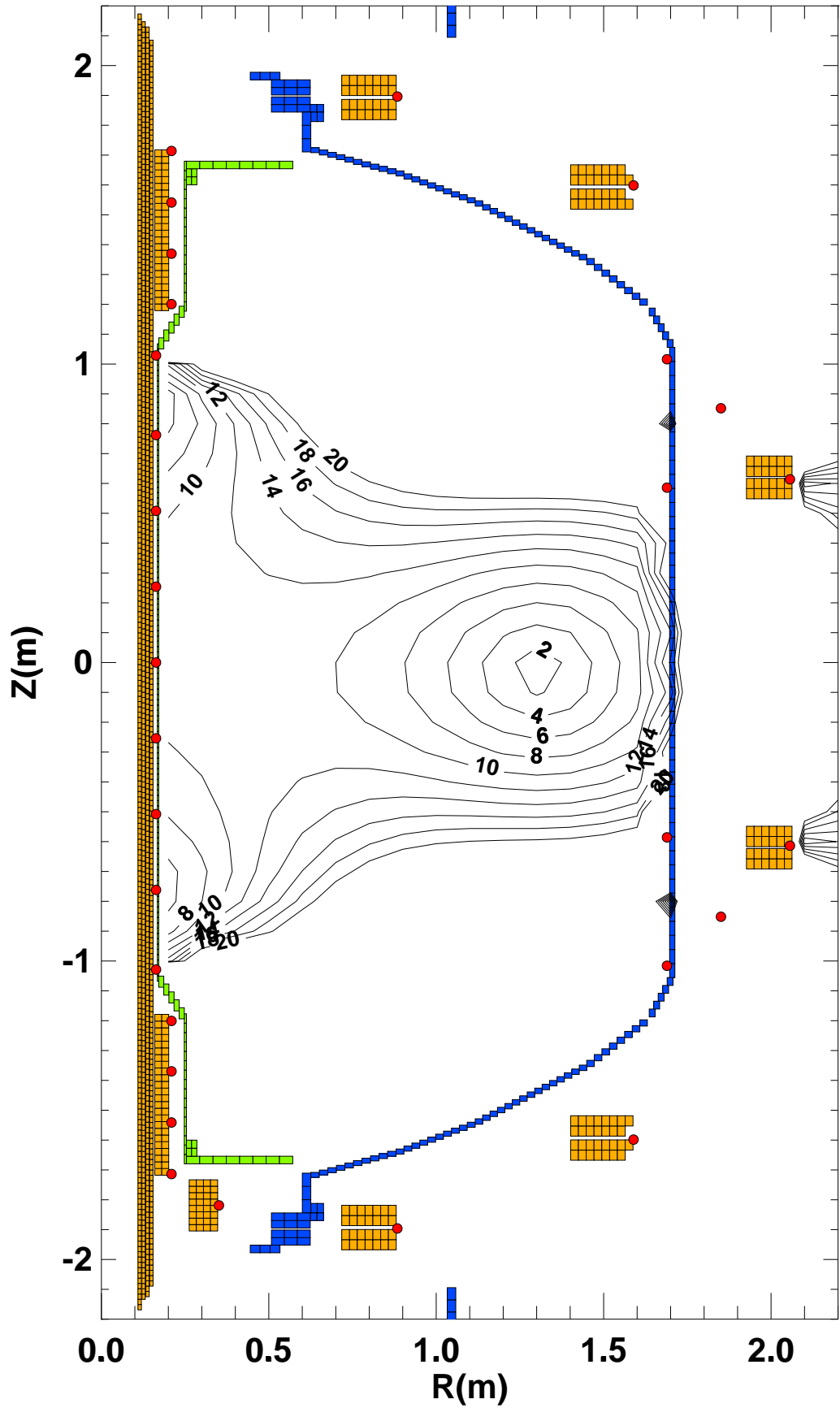
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V_{LOOP} (V) at $t=0.00$ msec



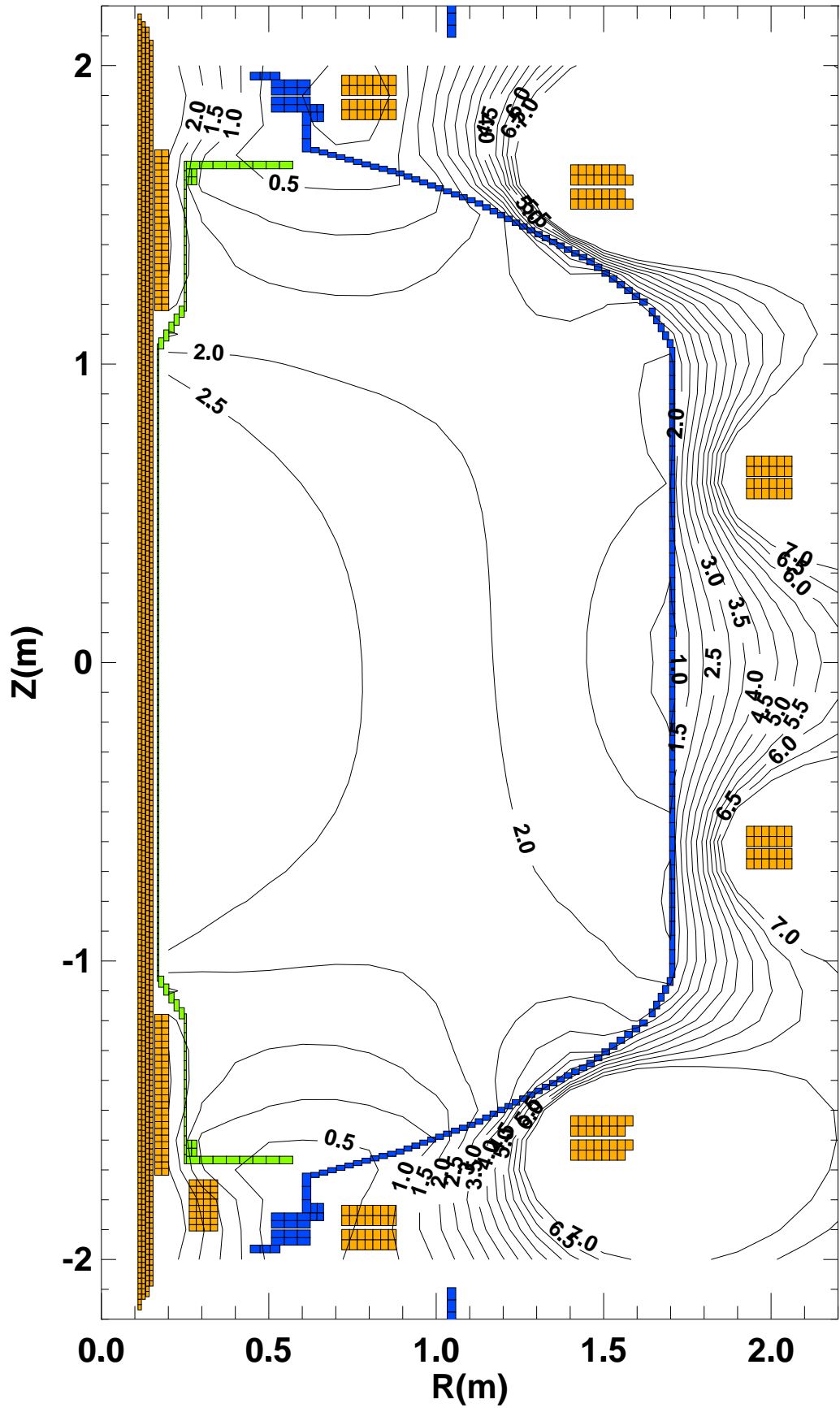
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B_p (Gauss) at $t=5.00$ msec



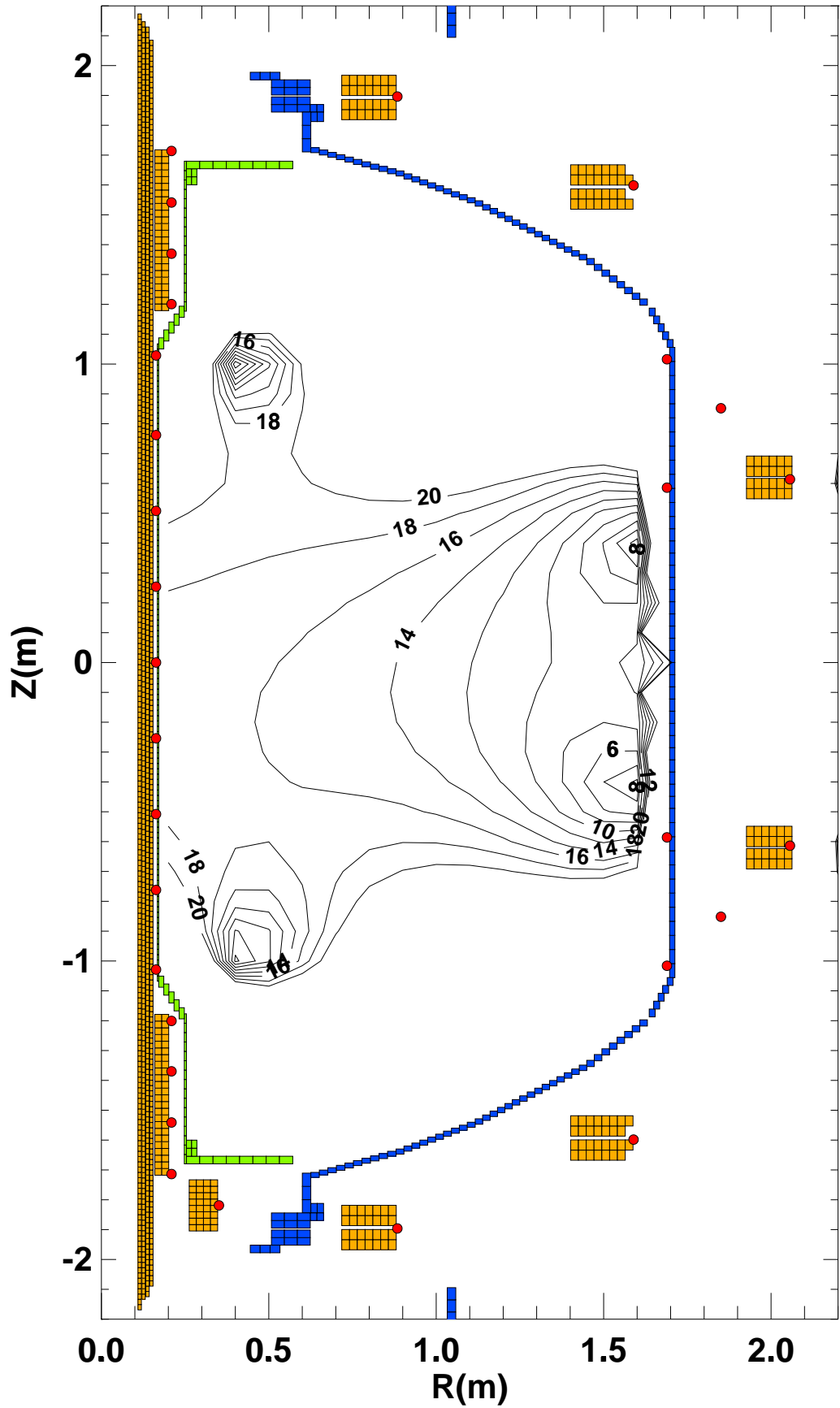
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V_{LOOP} (V) at $t=5.00$ msec



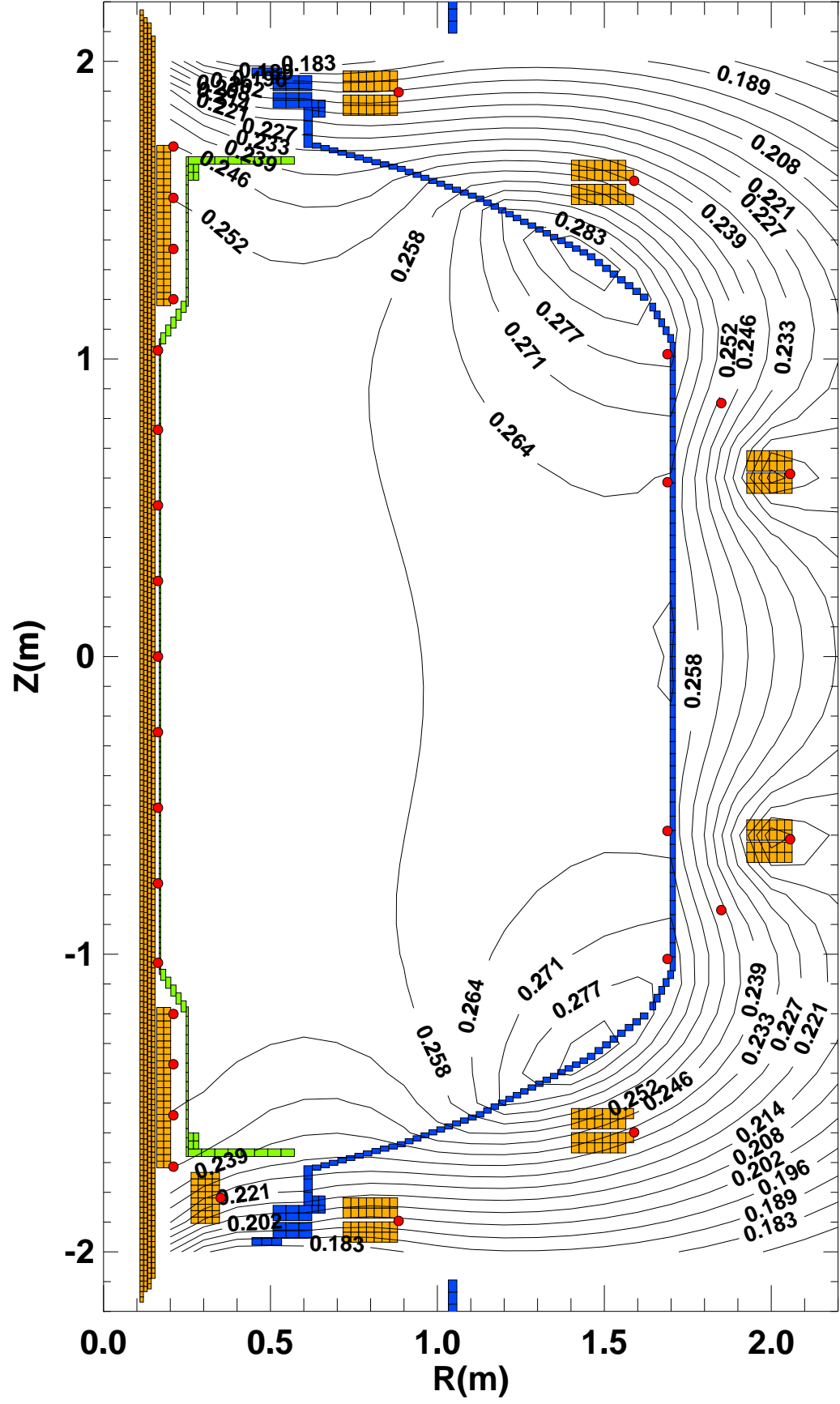
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B_p (Gauss) at $t=10.0$ msec



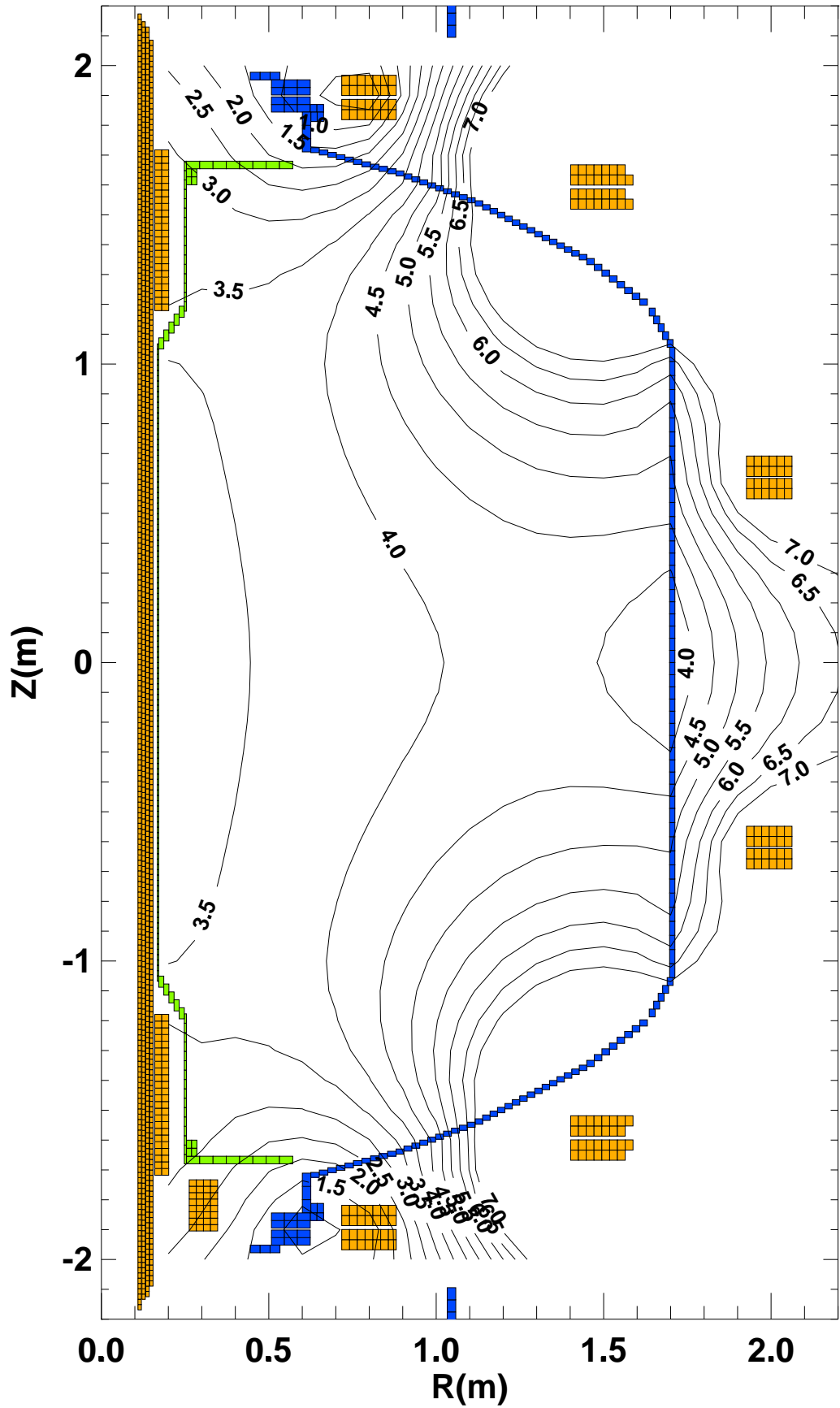
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Flux (Tm^2) at t=10.0 msec



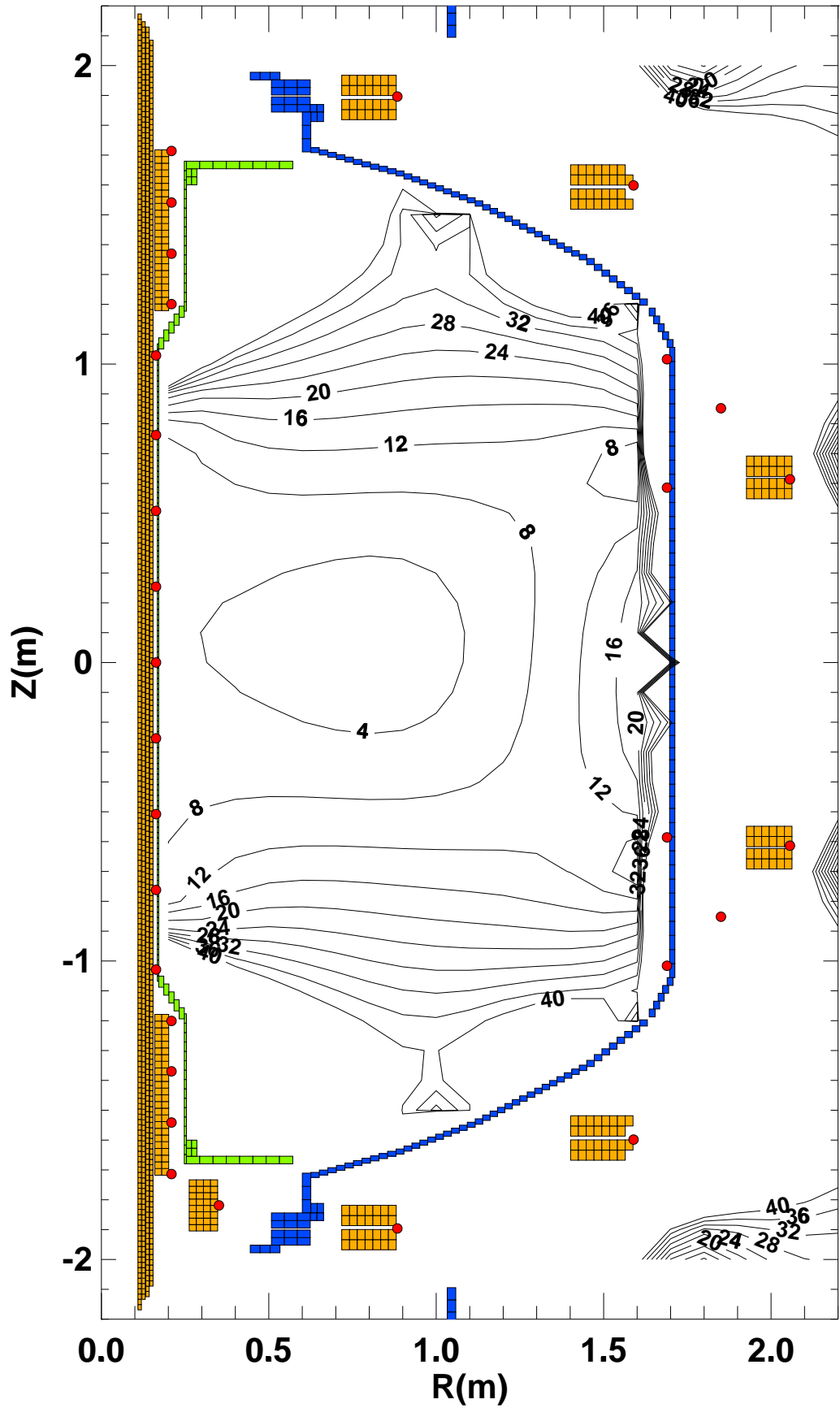
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V_{LOOP} (V) at $t=10.0$ msec



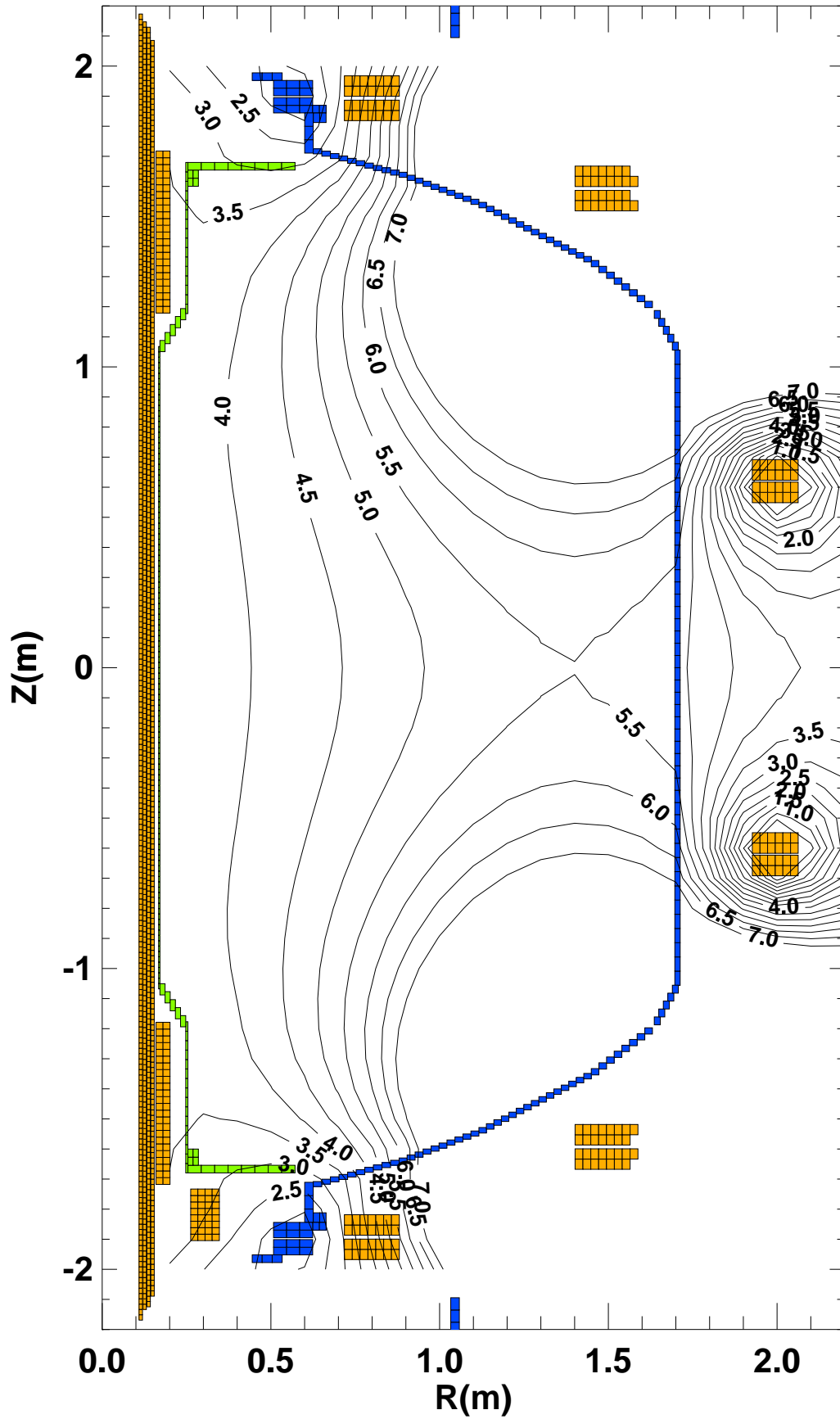
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B_p (Gauss) at $t=15.0$ msec



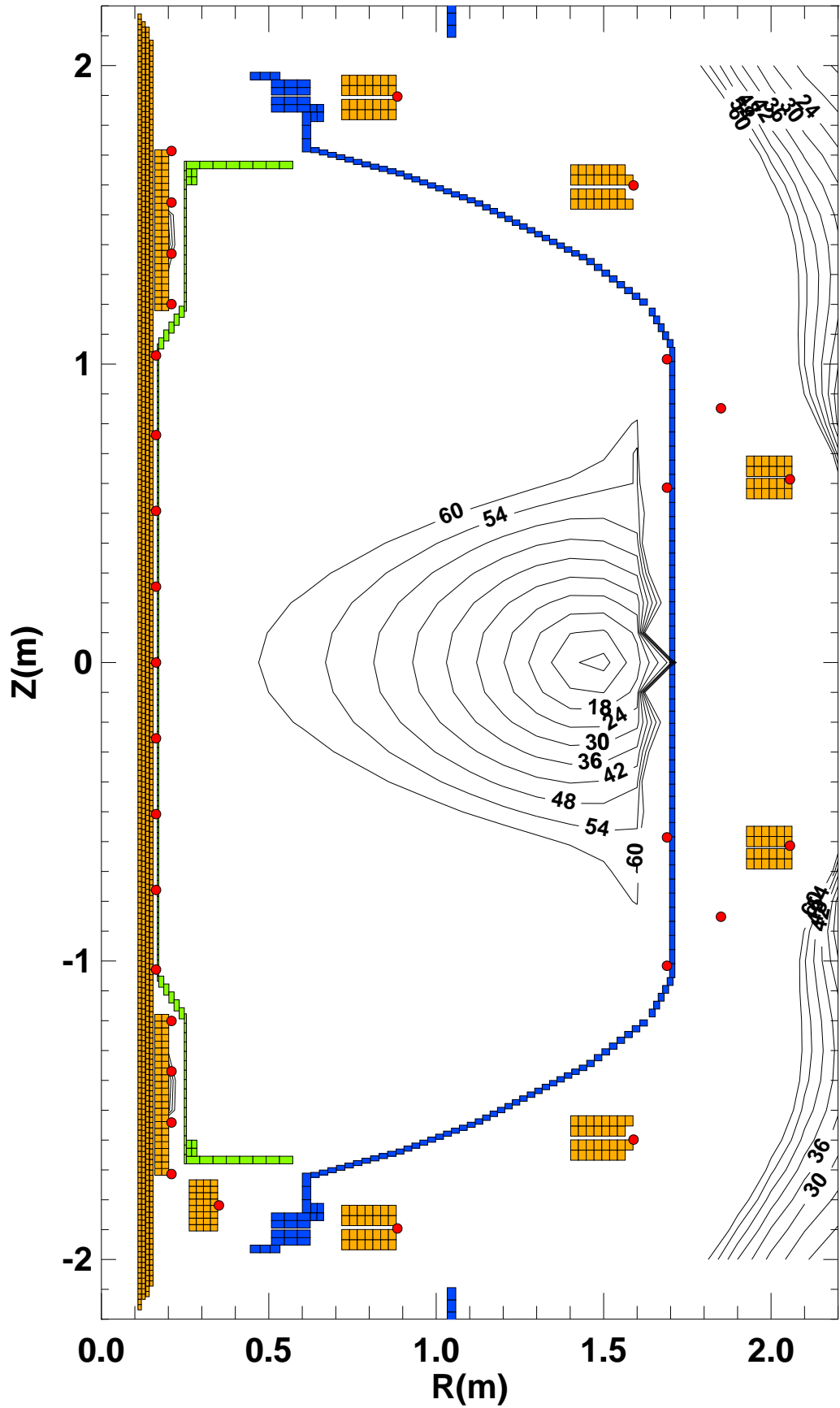
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V_{LOOP} (V) at $t=15.0$ msec



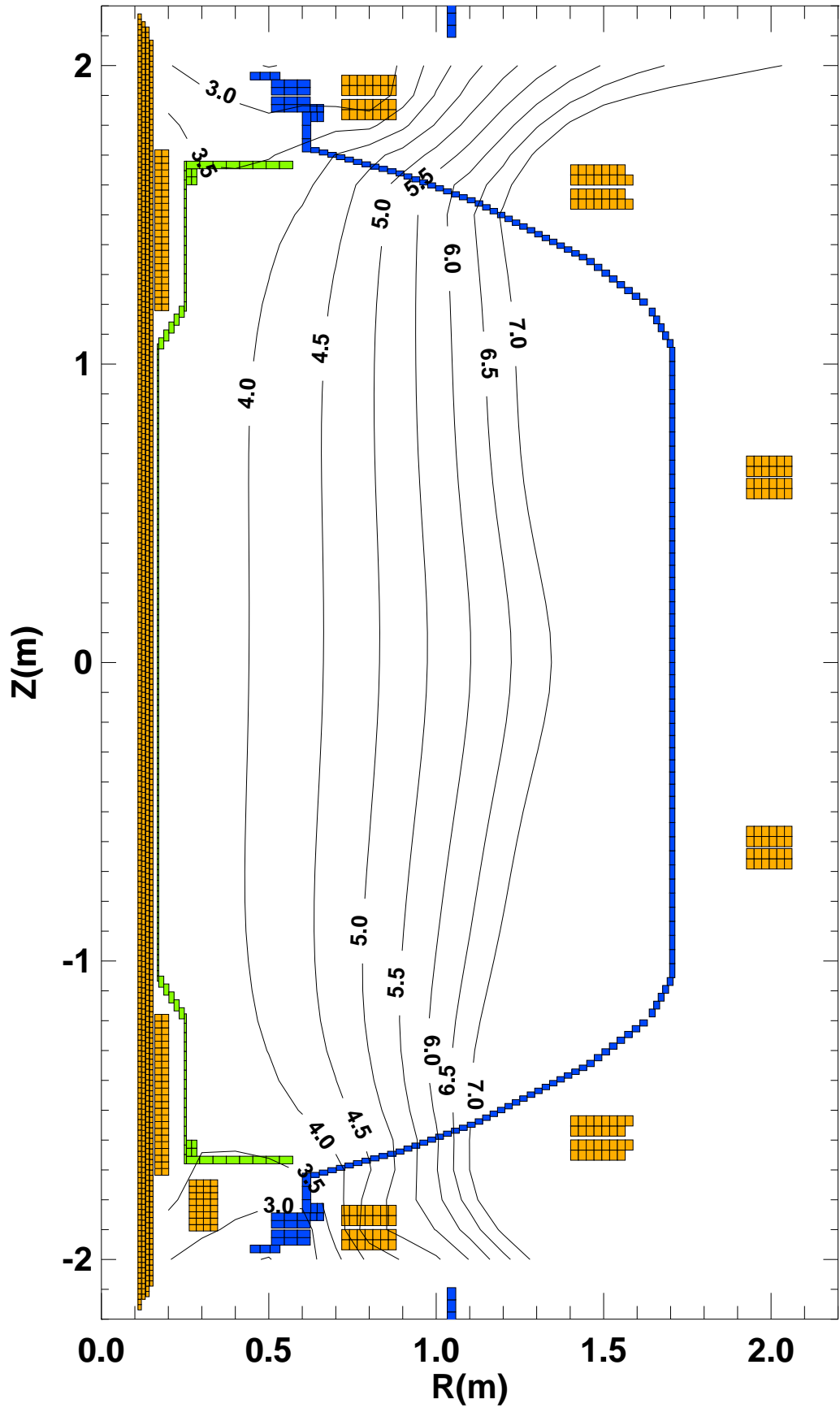
Shotnumber 100193

B_p (Gauss) at $t=25.0$ msec



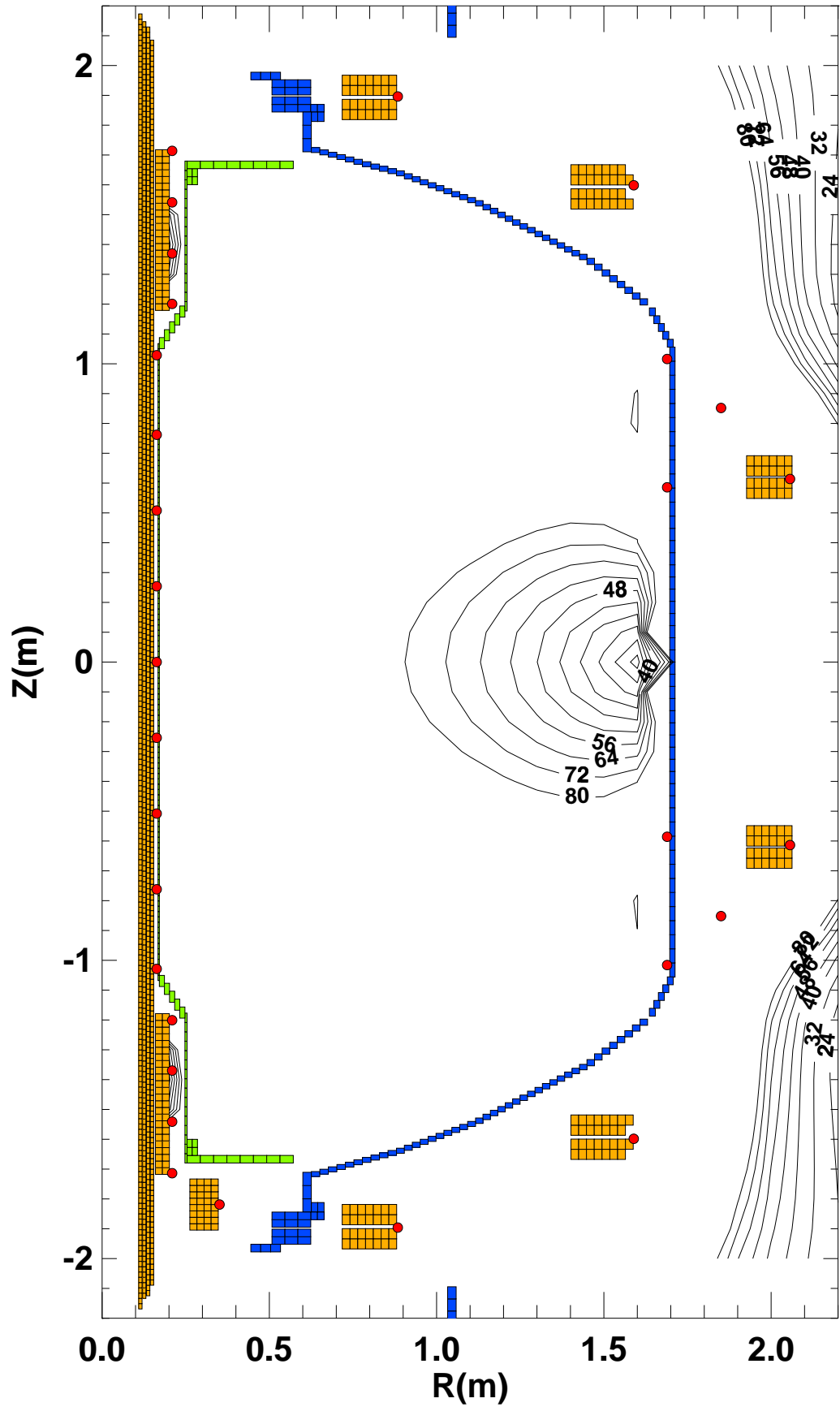
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V_{LOOP} (V) at $t=25.0$ msec



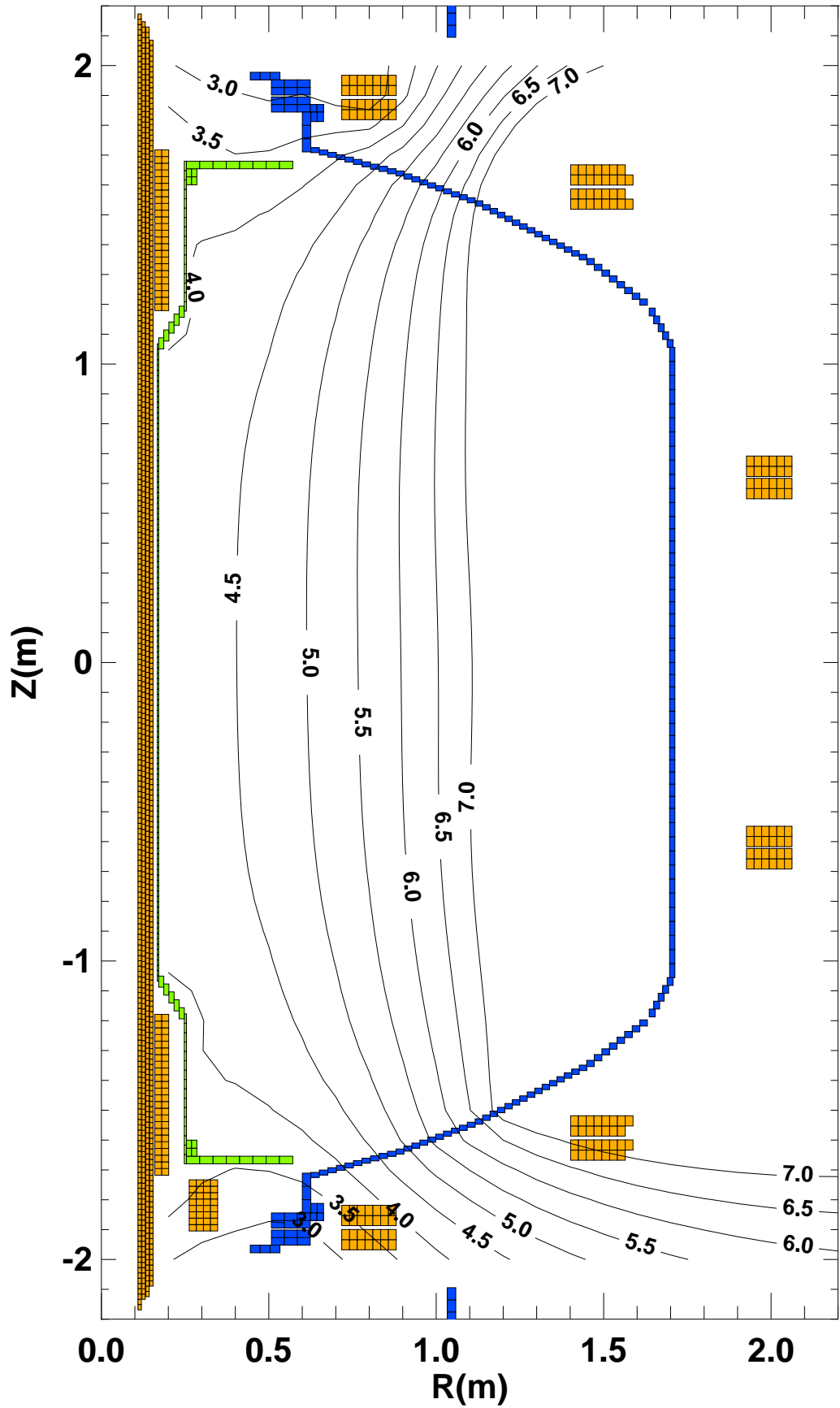
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B_p (Gauss) at $t=30.0$ msec



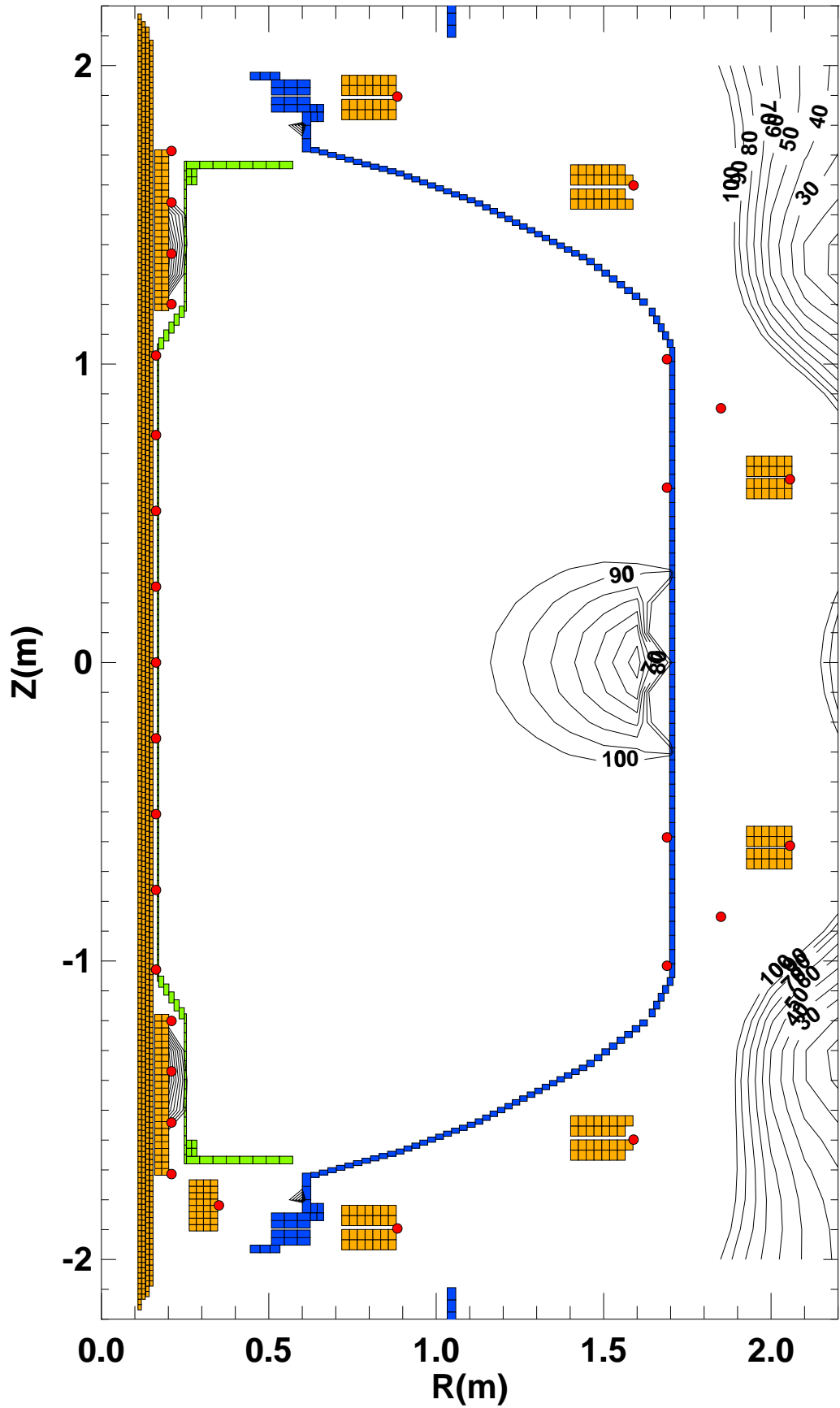
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V_{LOOP} (V) at $t=30.0$ msec



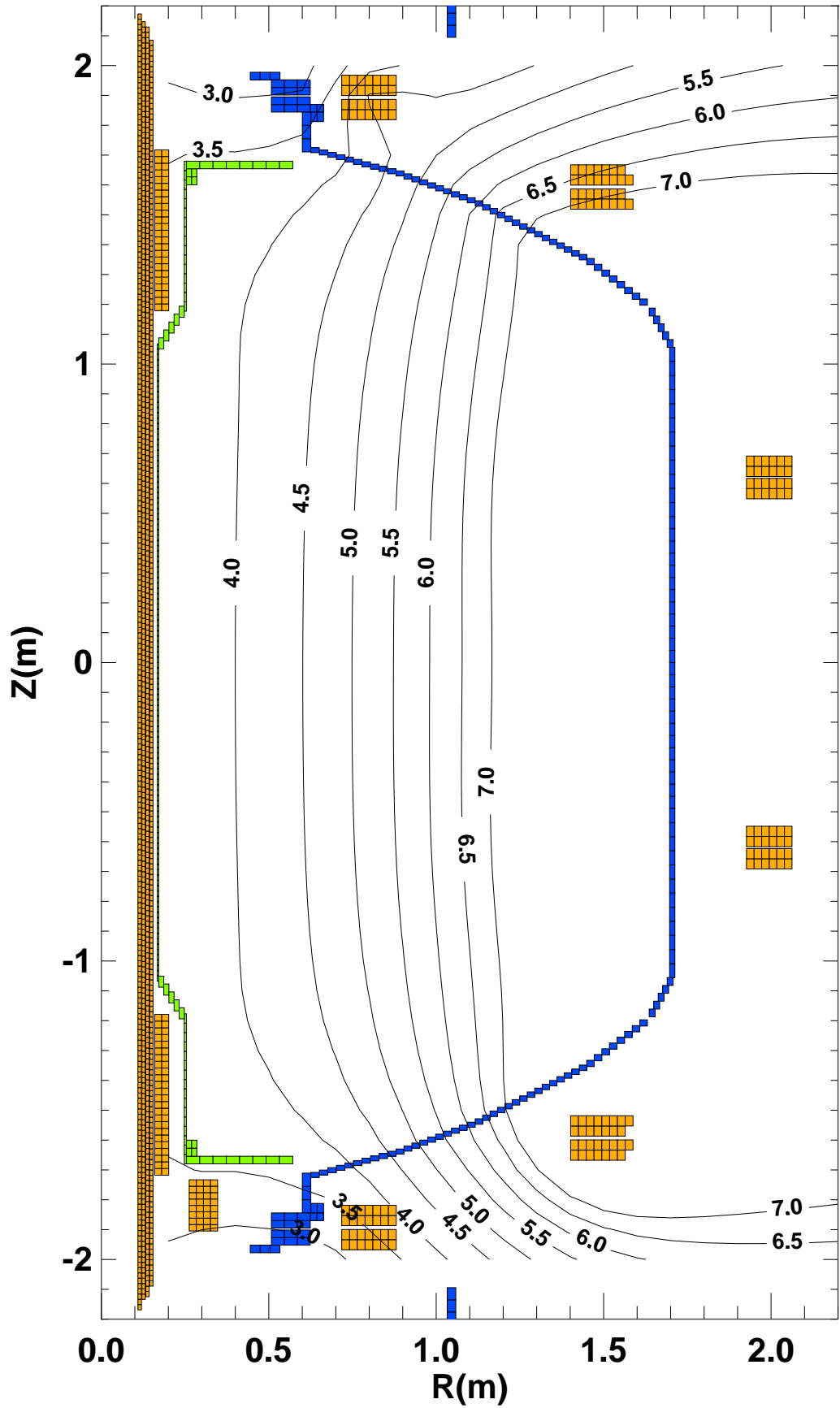
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B_p (Gauss) at $t=35.0$ msec



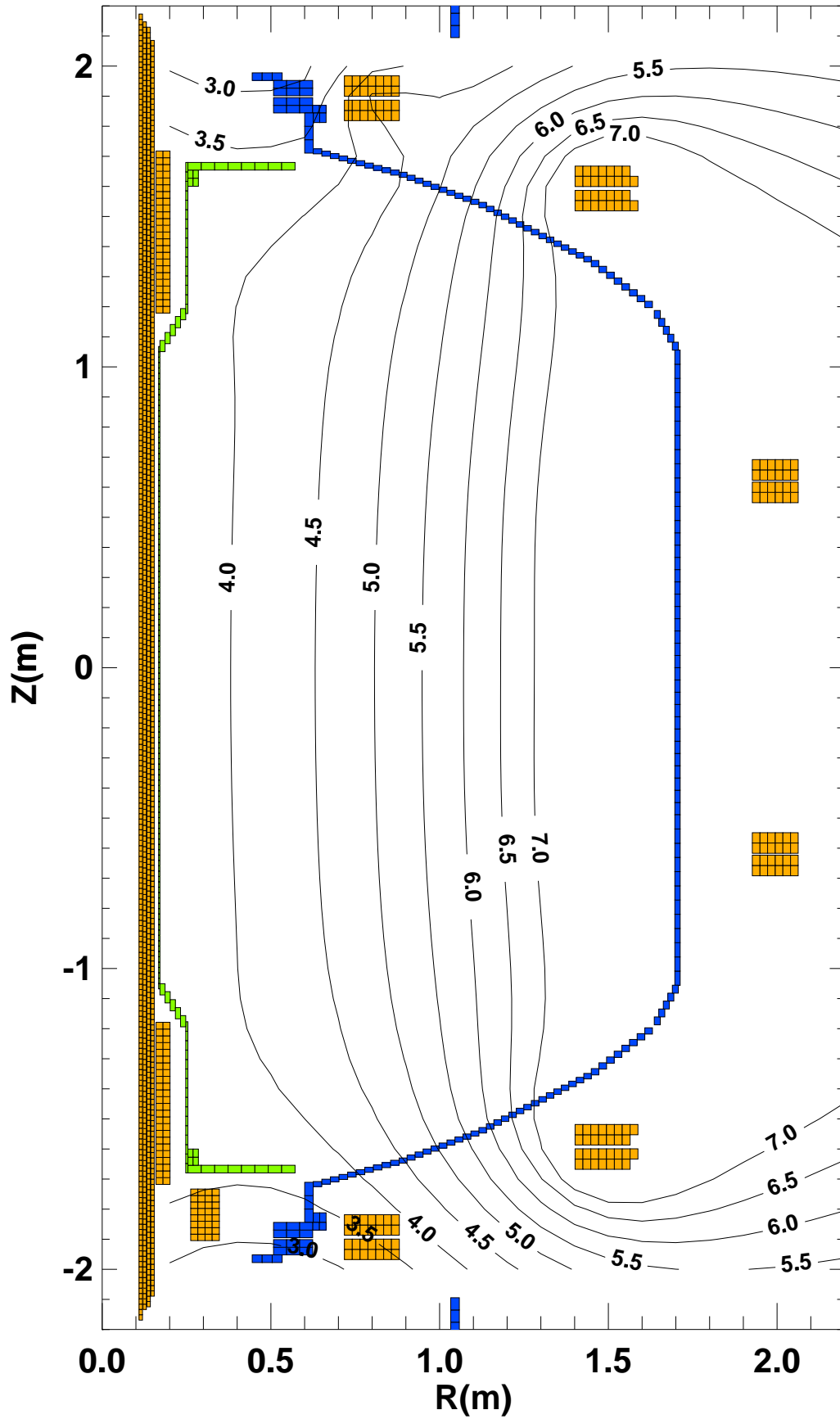
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V_{LOOP} (V) at $t=35.0$ msec



Shotnumber 100193

V_{LOOP} (V) at $t=45.0$ msec



Shotnumber 100193