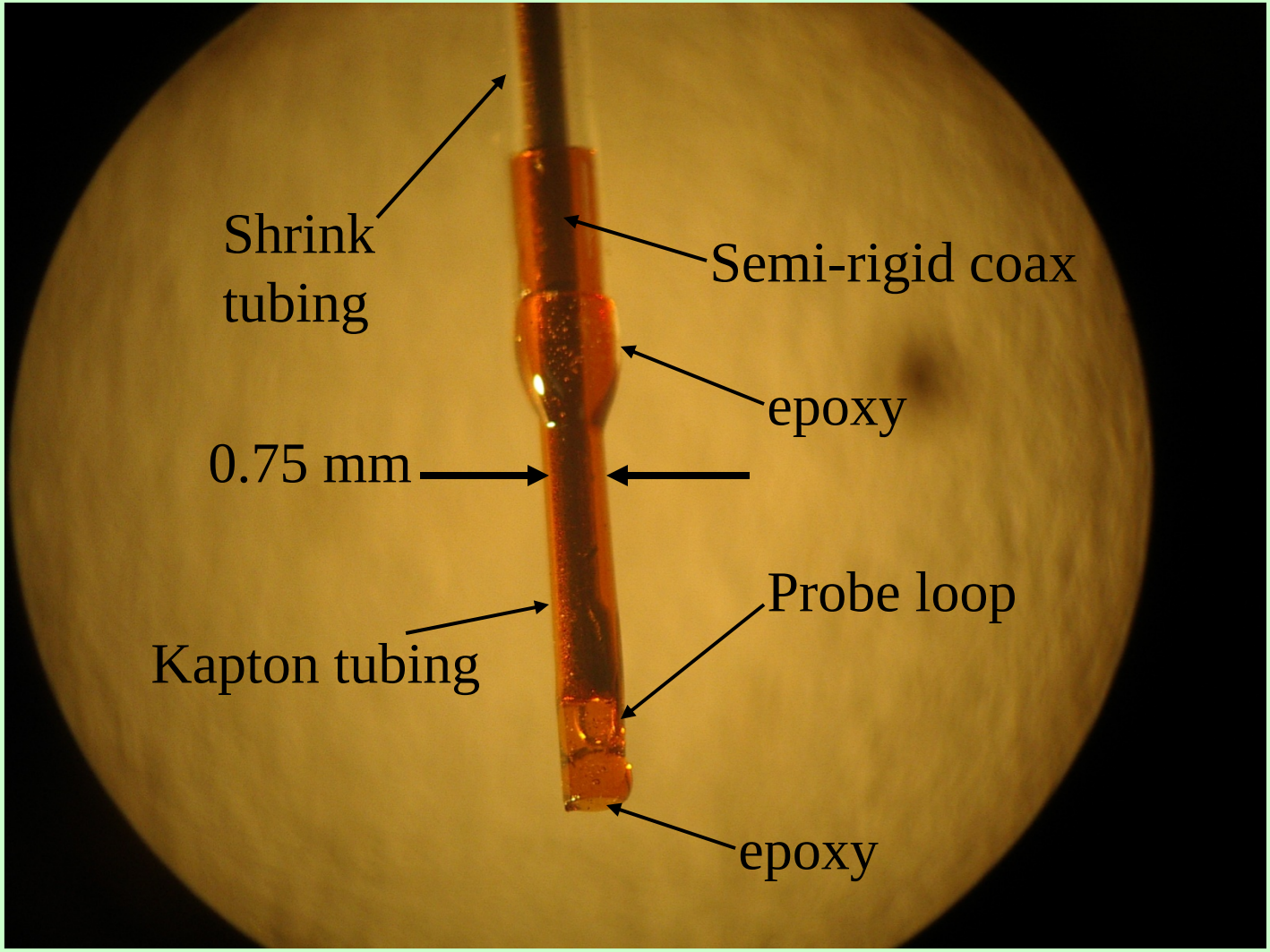
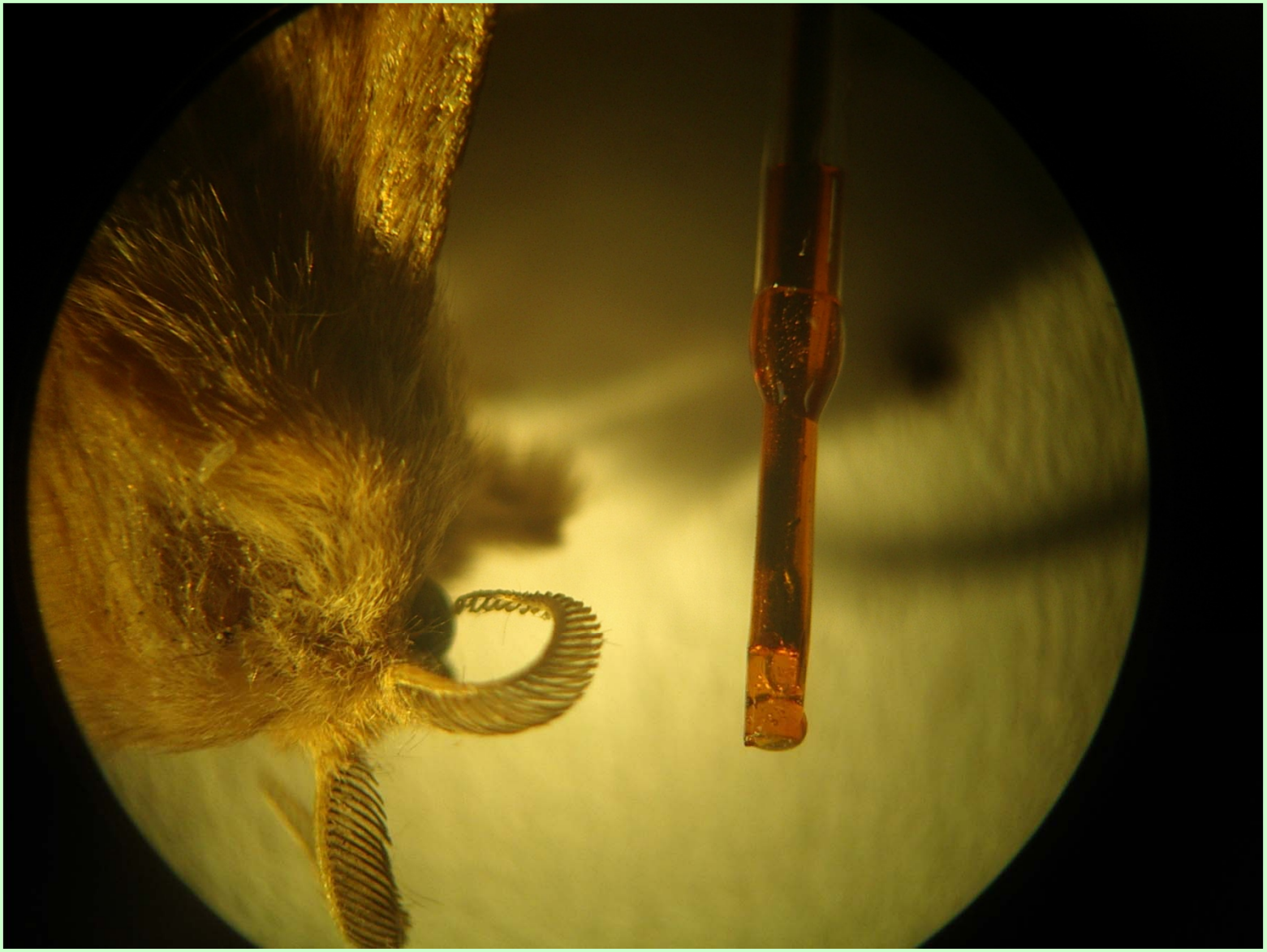
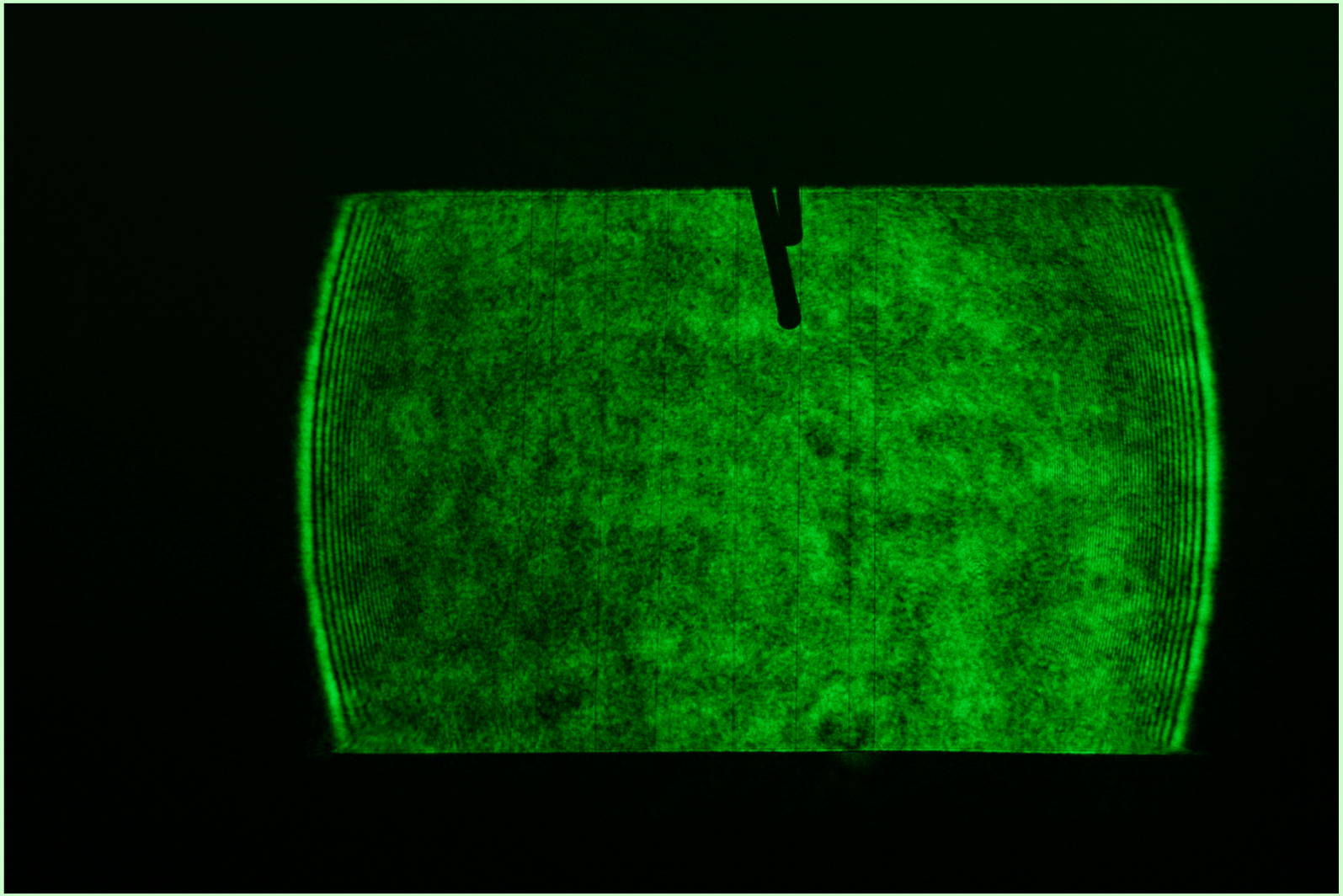
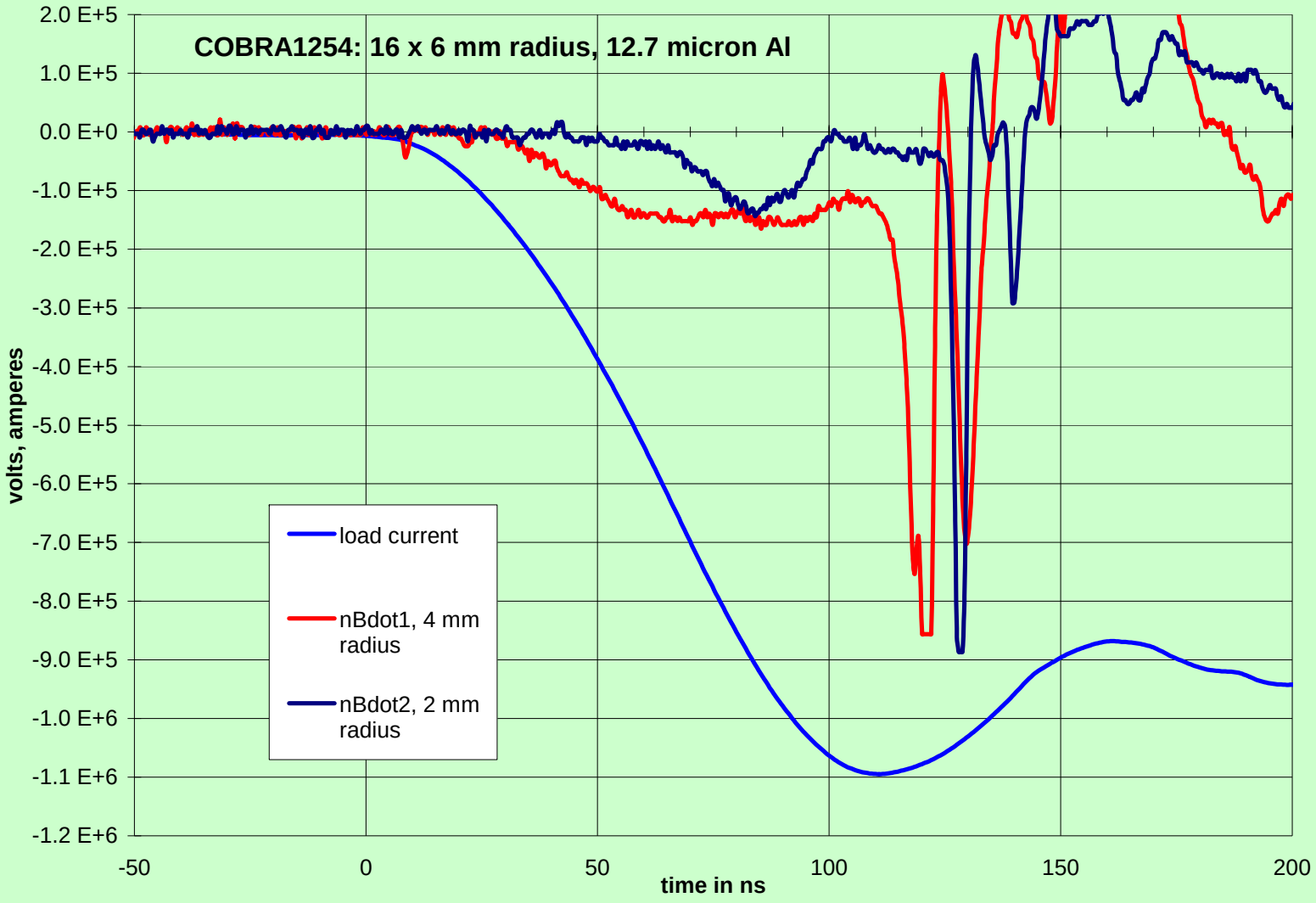
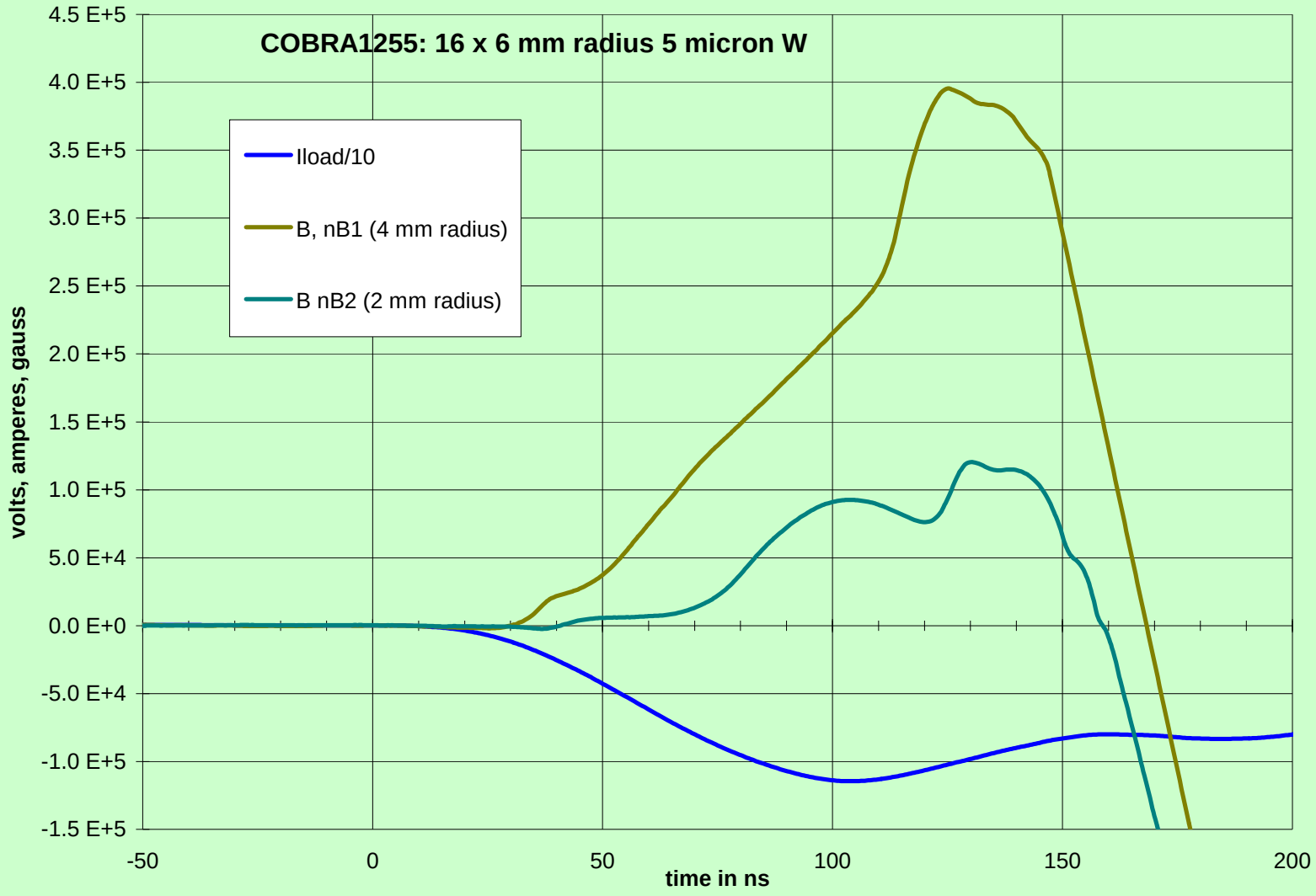


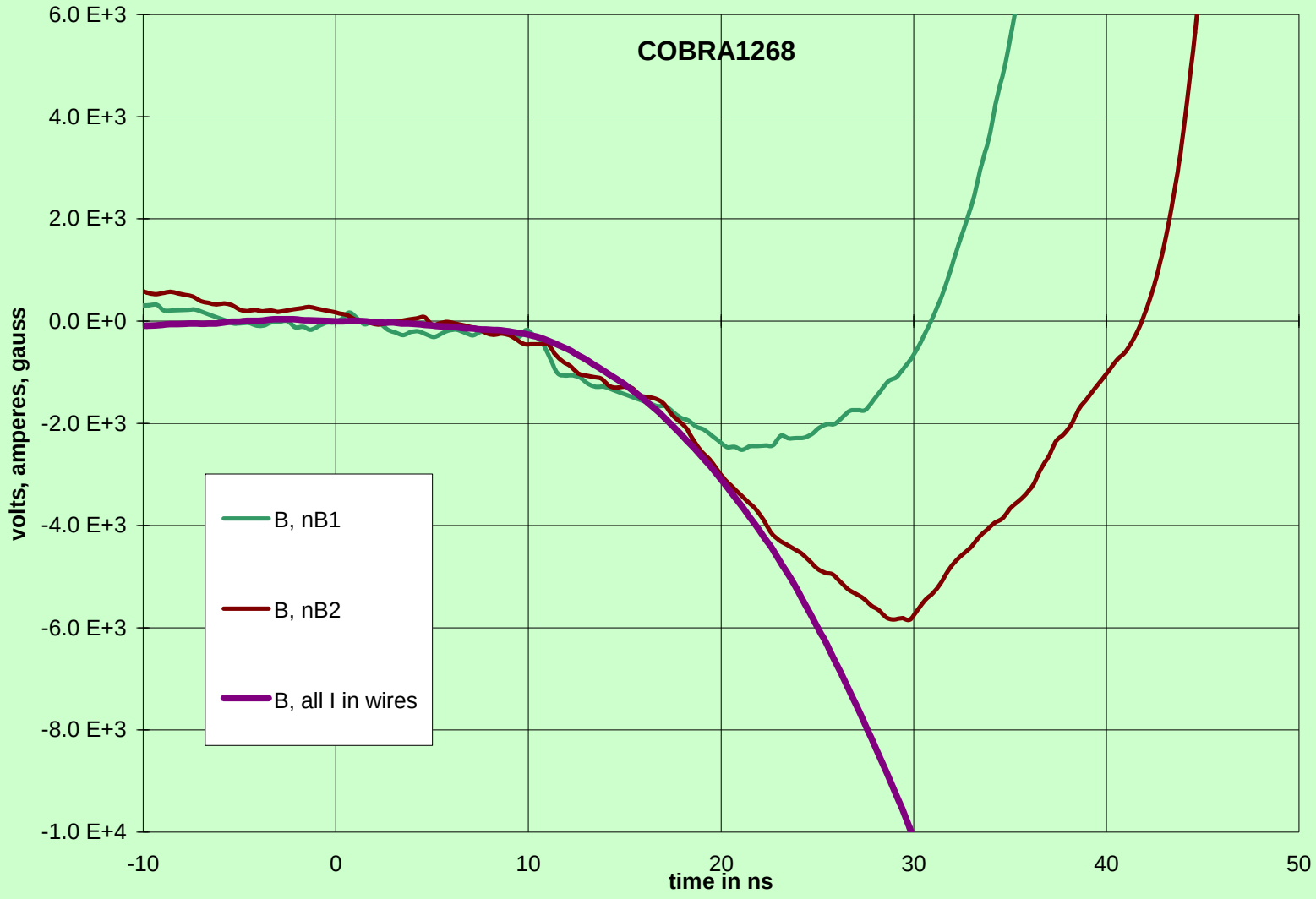
New COBRA Kapton-insulated magnetic probe construction

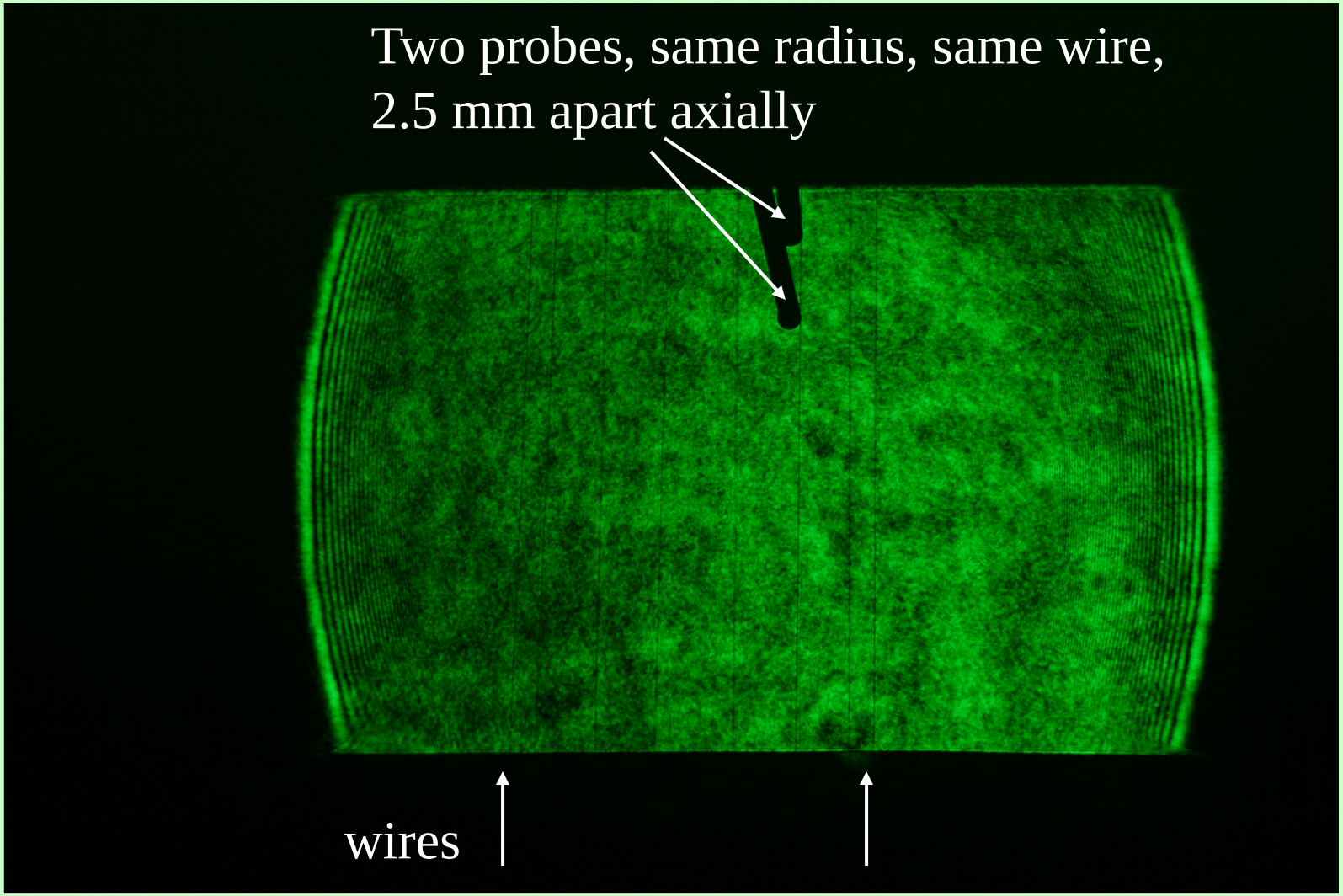


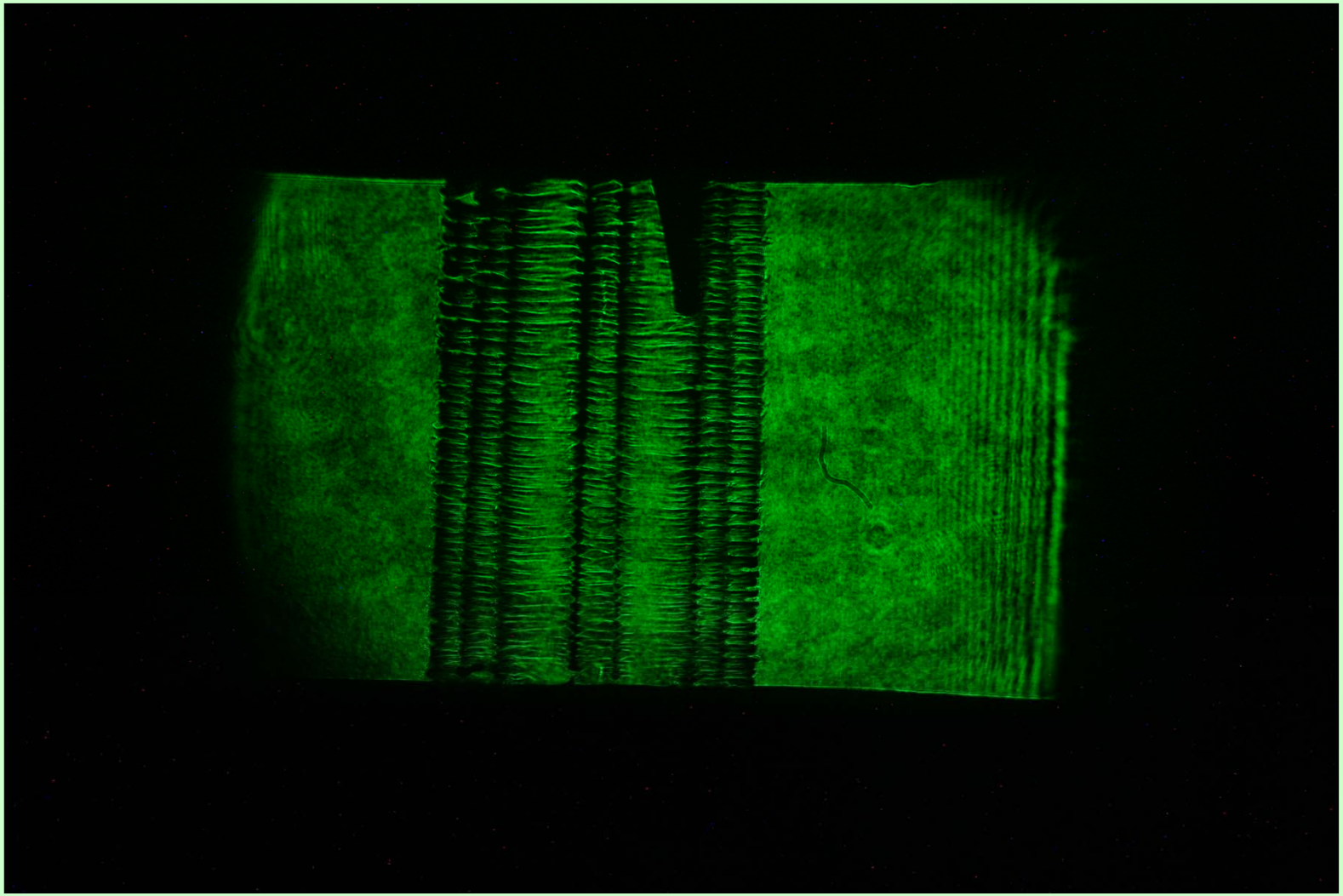


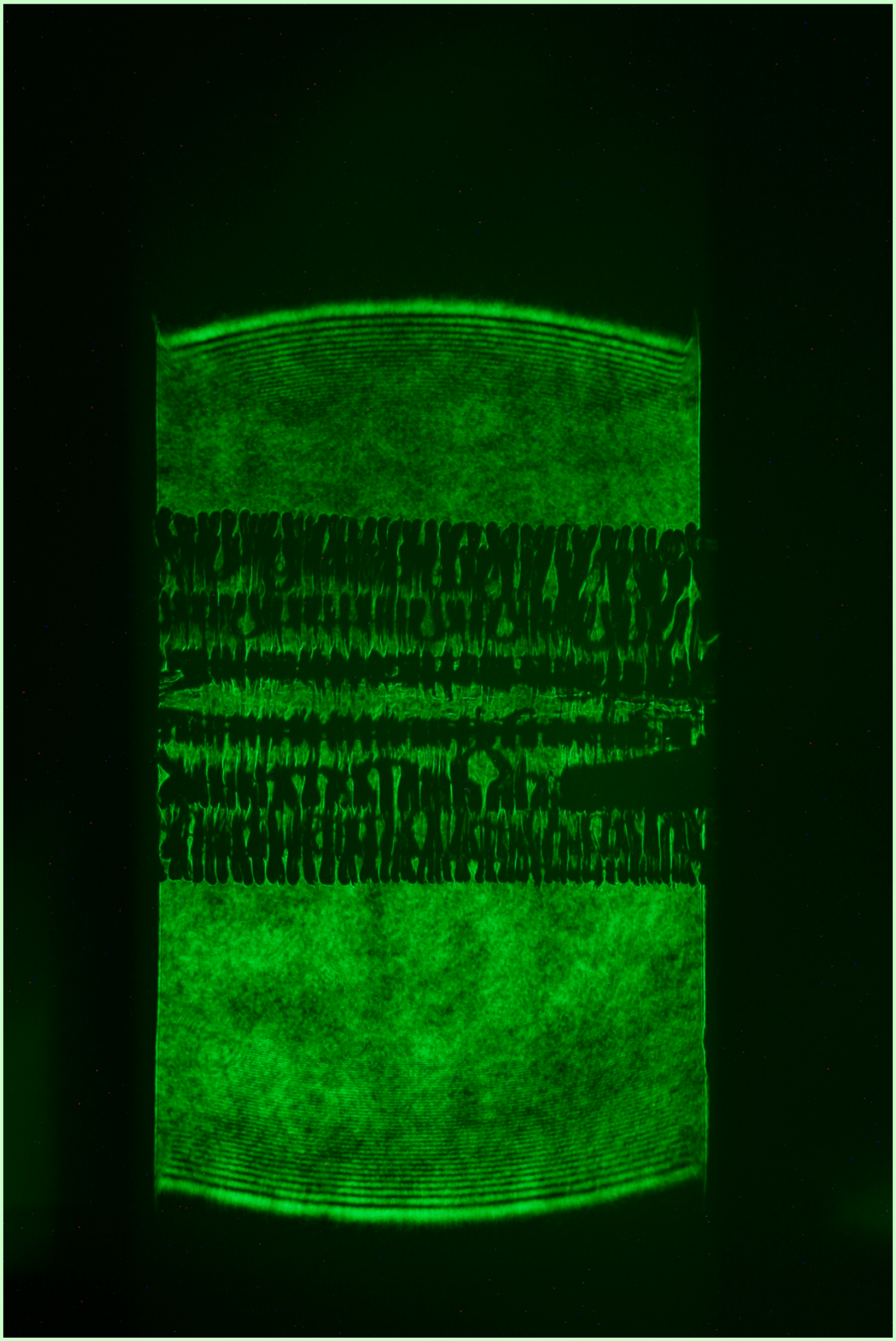

COBRA1254: 16 x 6 mm radius, 12.7 micron Al
2.0 E+5
1.0 E+5
0.0 E+0
-1.0 E+5
-2.0 E+5
-3.0 E+5
-4.0 E+5
-5.0 E+5
-6.0 E+5
-7.0 E+5
-8.0 E+5
-9.0 E+5
-1.0 E+6
-1.1 E+6
-1.2 E+6
volts, amperes
-50
0
50
100
150
200
time in ns
load current
nBdot1, 4 mm radius
nBdot2, 2 mm radius

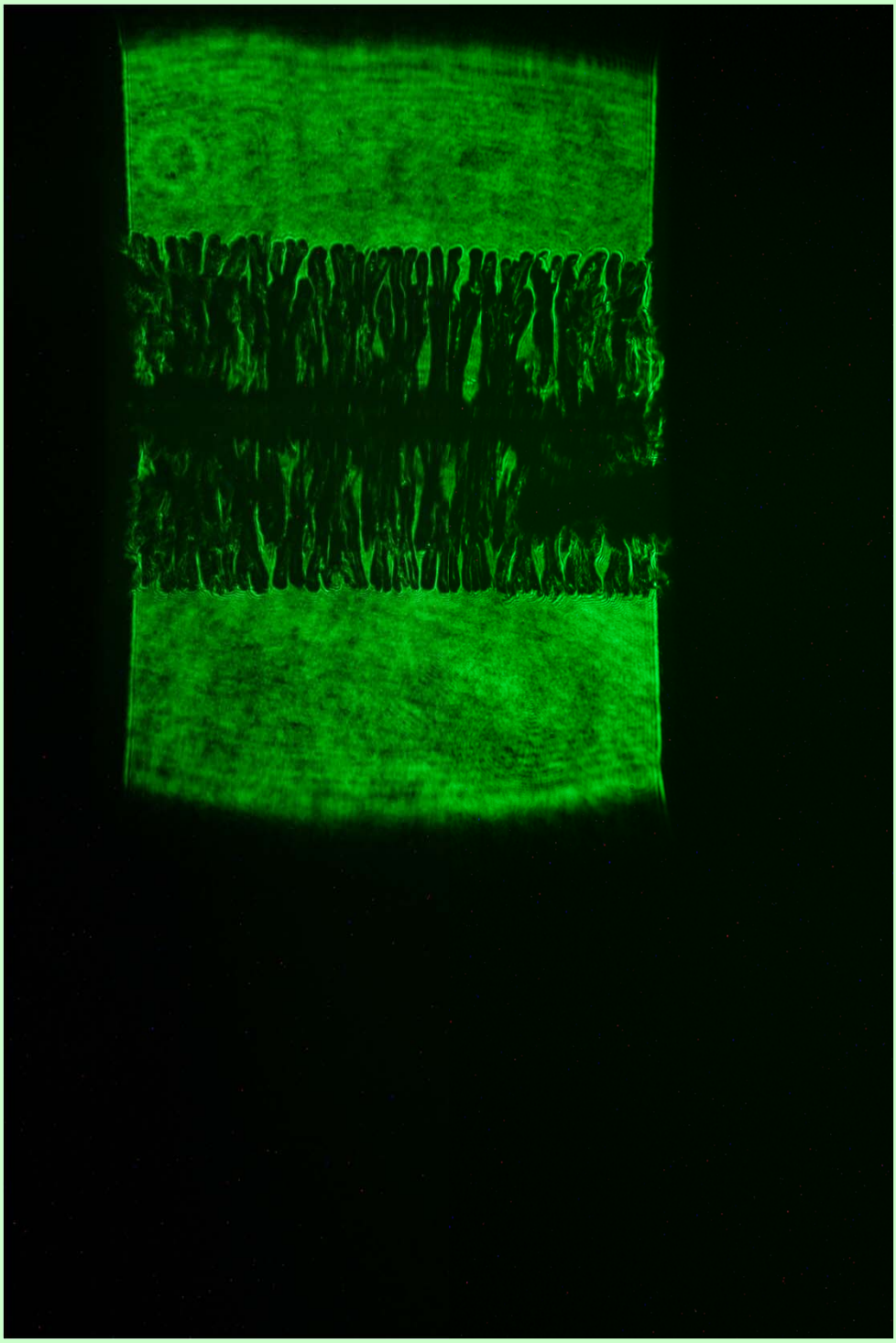

COBRA1255: 16 x 6 mm radius 5 micron W
Iload/10
B, nB1 (4 mm radius)
B nB2 (2 mm radius)
volts, amperes, gauss
4.5 E+5
4.0 E+5
3.5 E+5
3.0 E+5
2.5 E+5
2.0 E+5
1.5 E+5
1.0 E+5
5.0 E+4
0.0 E+0
-5.0 E+4
-1.0 E+5
-1.5 E+5
-50
0
50
100
150
200
time in ns

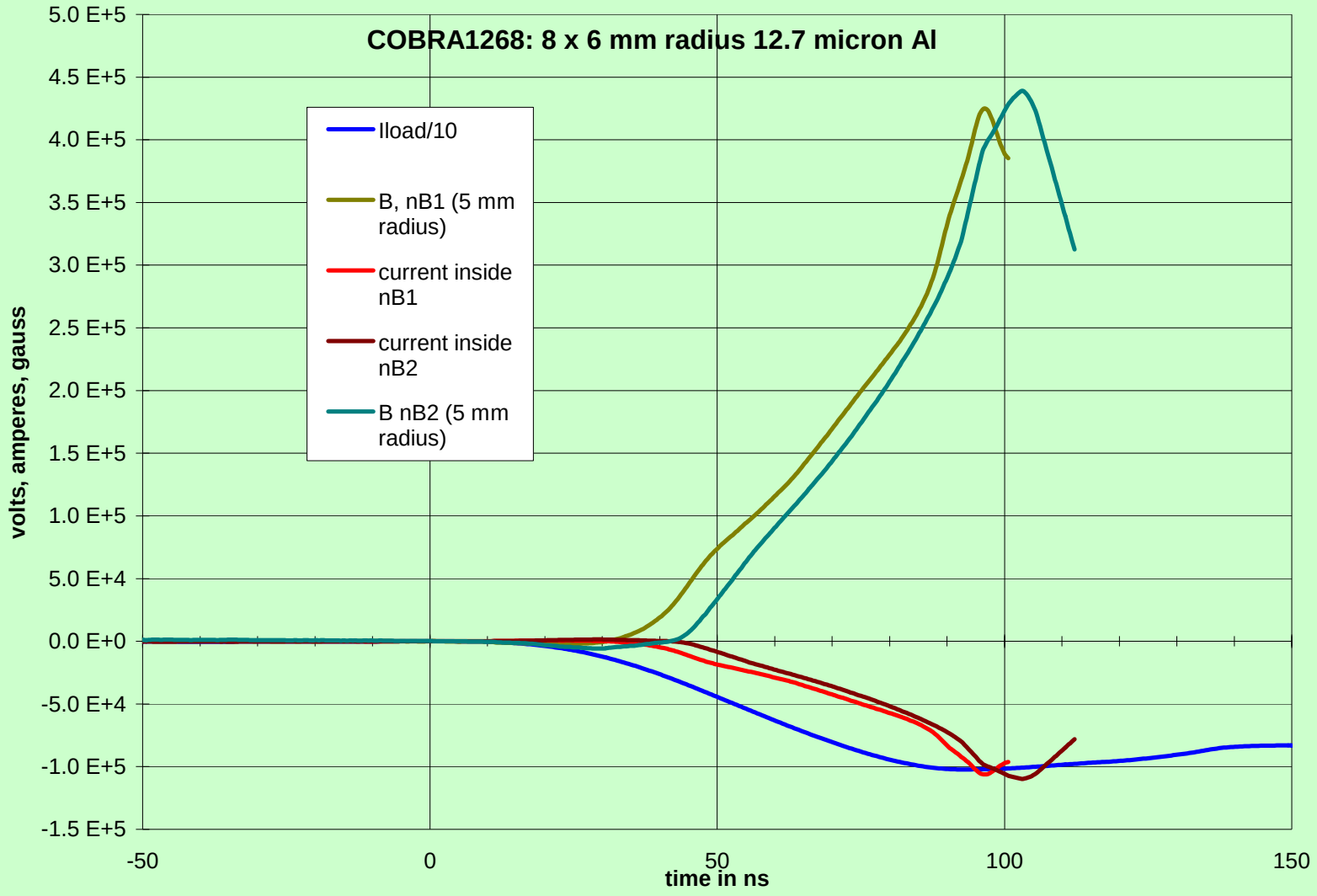

COBRA1268
6.0 E+3
4.0 E+3
2.0 E+3
0.0 E+0
-2.0 E+3
-4.0 E+3
-6.0 E+3
-8.0 E+3
-1.0 E+4
volts, amperes, gauss
-10
0
10
20
30
40
50
time in ns
B, nB1
B, nB2
B, all I in wires


Two probes, same radius, same wire,
2.5 mm apart axially
wires








COBRA1268: 8 x 6 mm radius 12.7 micron Al
Iload/10
B, nB1 (5 mm radius)
current inside nB1
current inside nB2
B nB2 (5 mm radius)
volts, amperes, gauss
5.0 E+5
4.5 E+5
4.0 E+5
3.5 E+5
3.0 E+5
2.5 E+5
2.0 E+5
1.5 E+5
1.0 E+5
5.0 E+4
0.0 E+0
-5.0 E+4
-1.0 E+5
-1.5 E+5
-50
0
50
100
150
time in ns