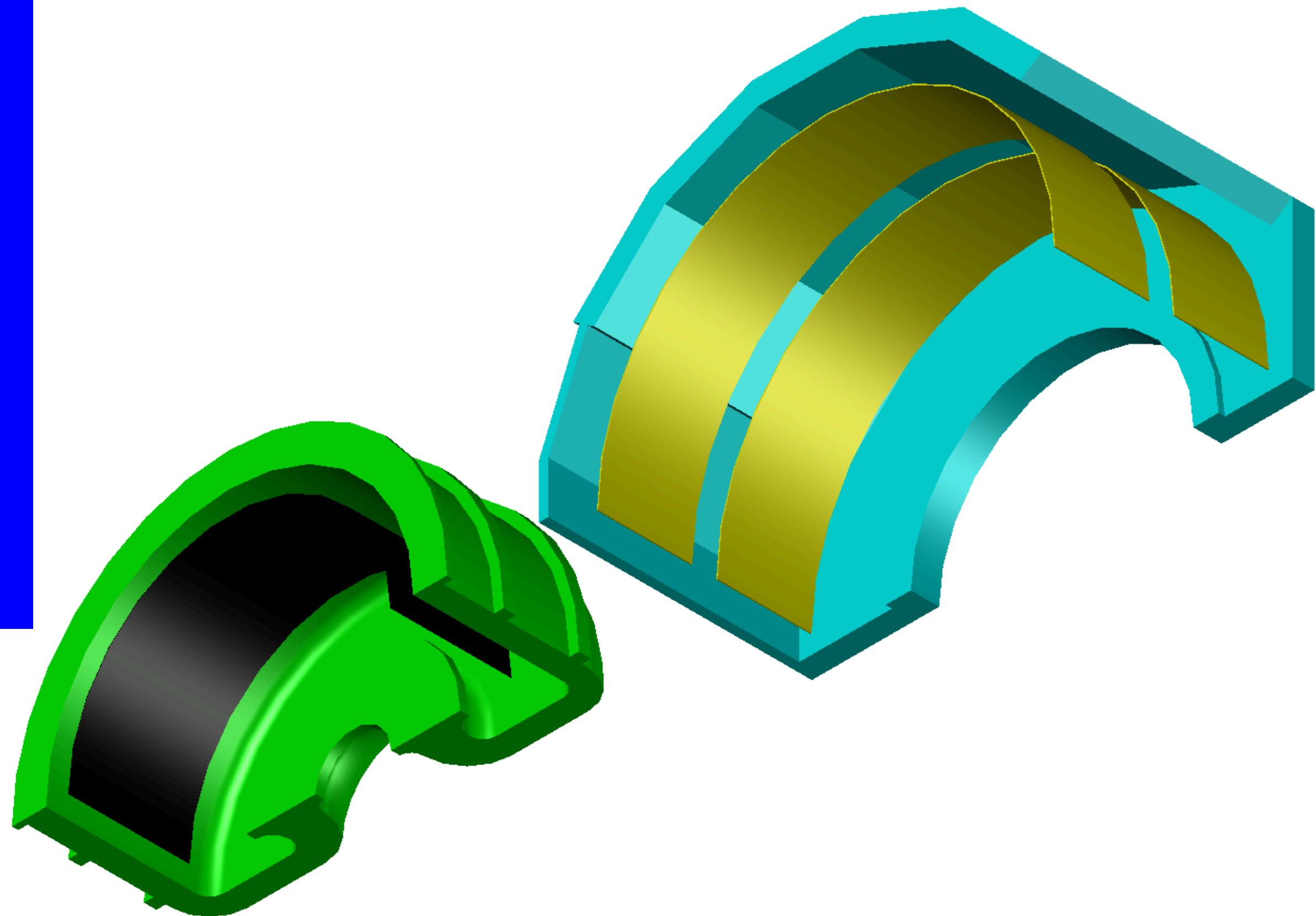
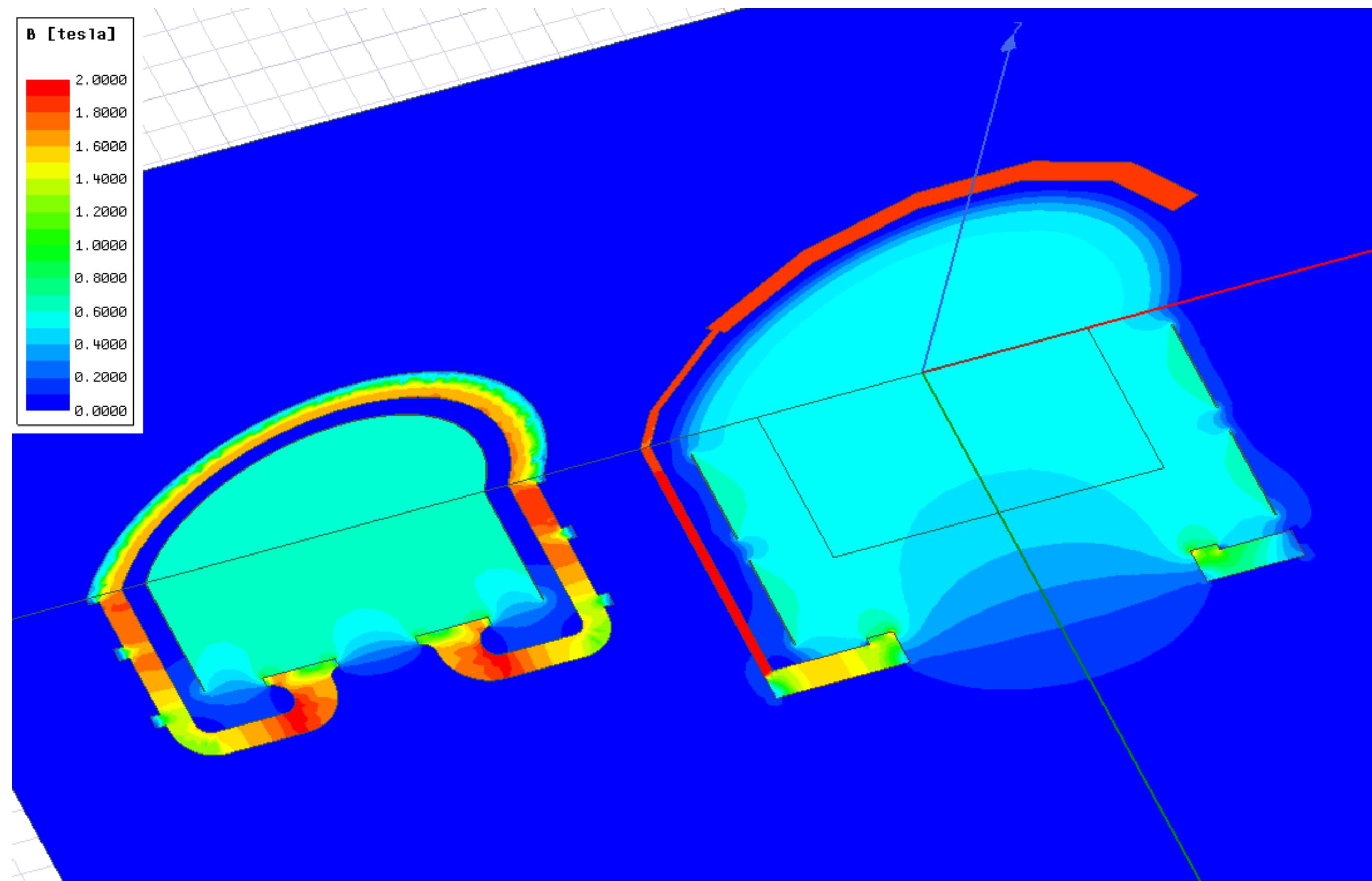


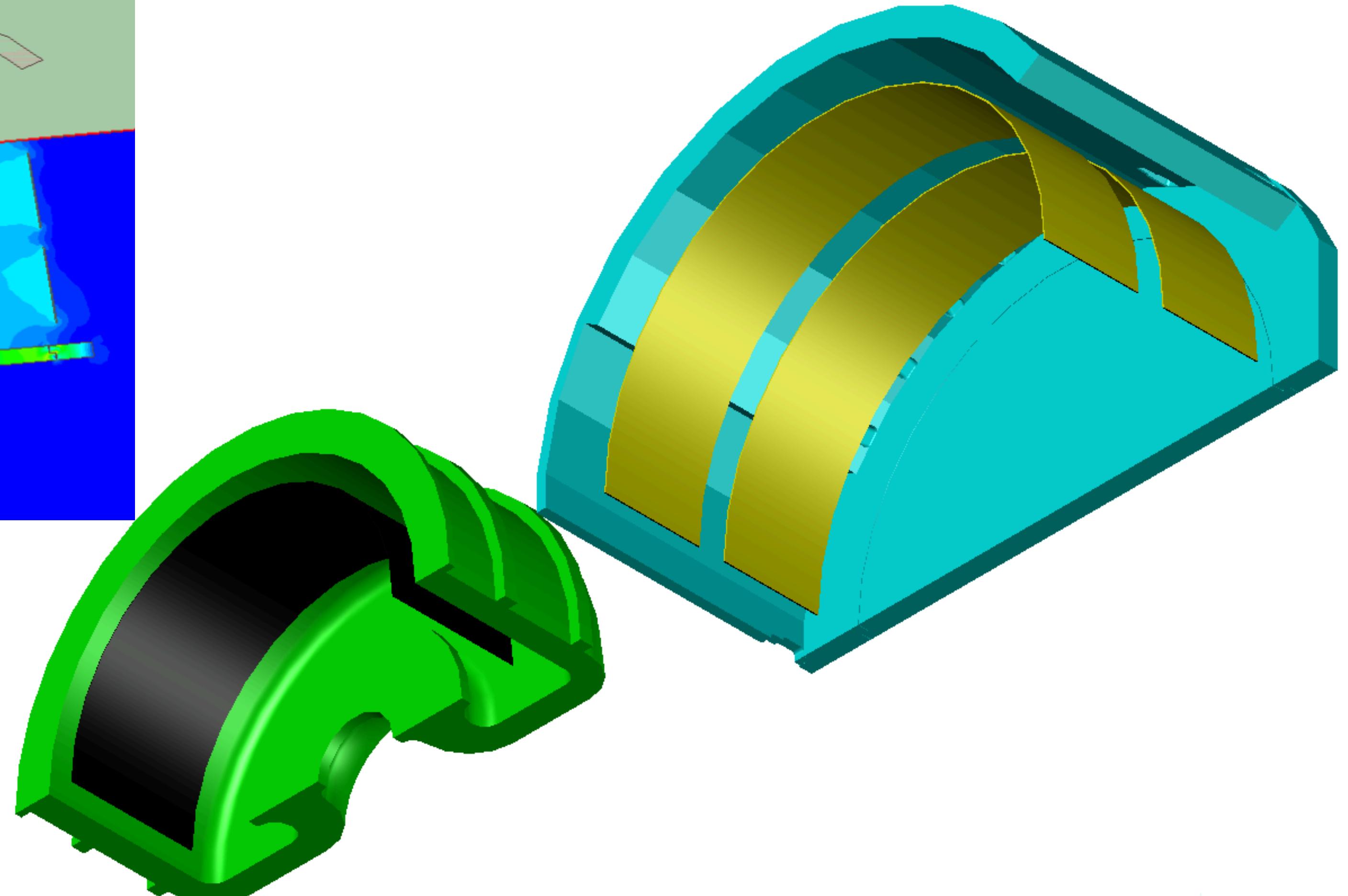
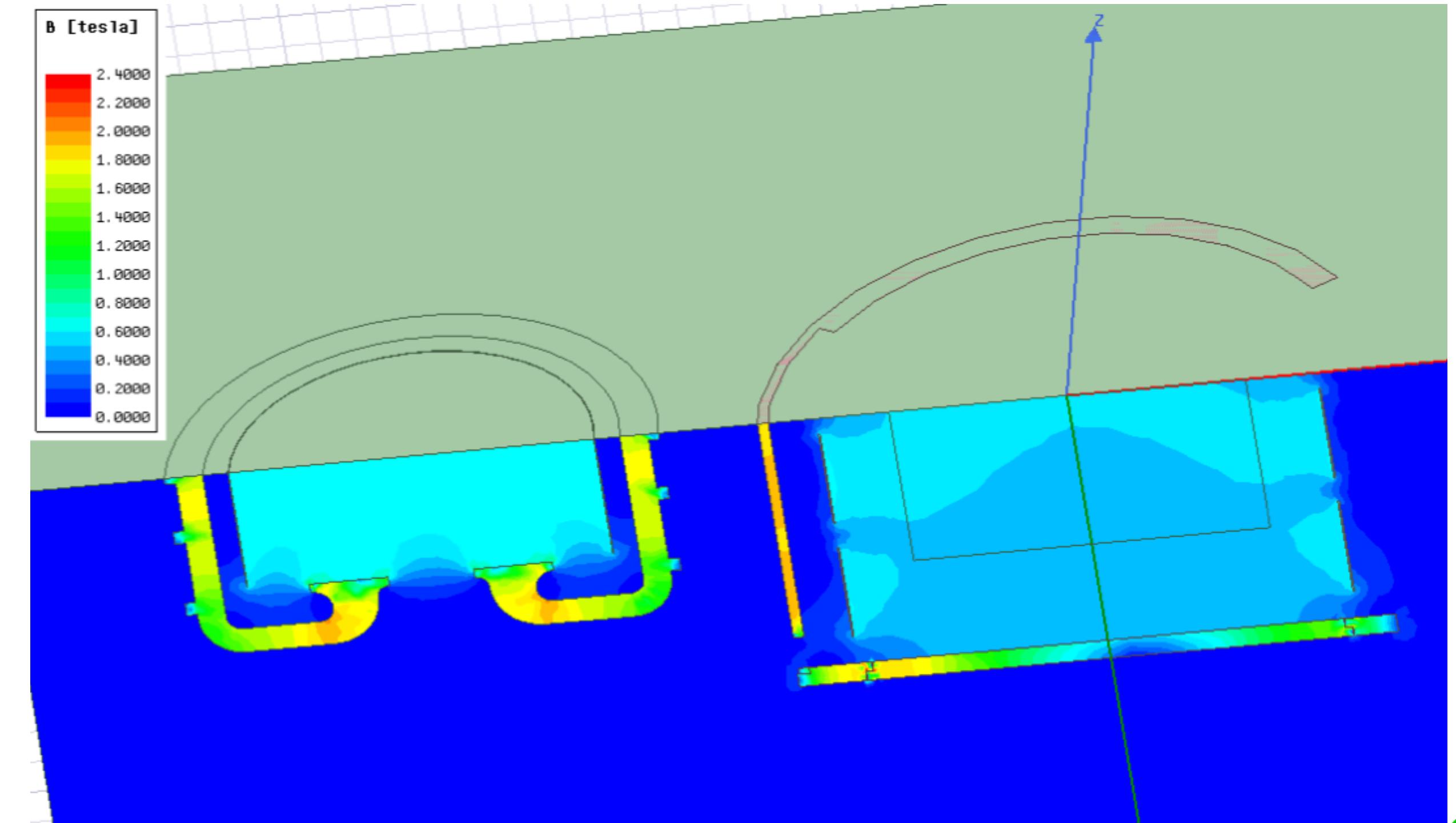
SPY@DND magnetic analysis

Andrea Bersani

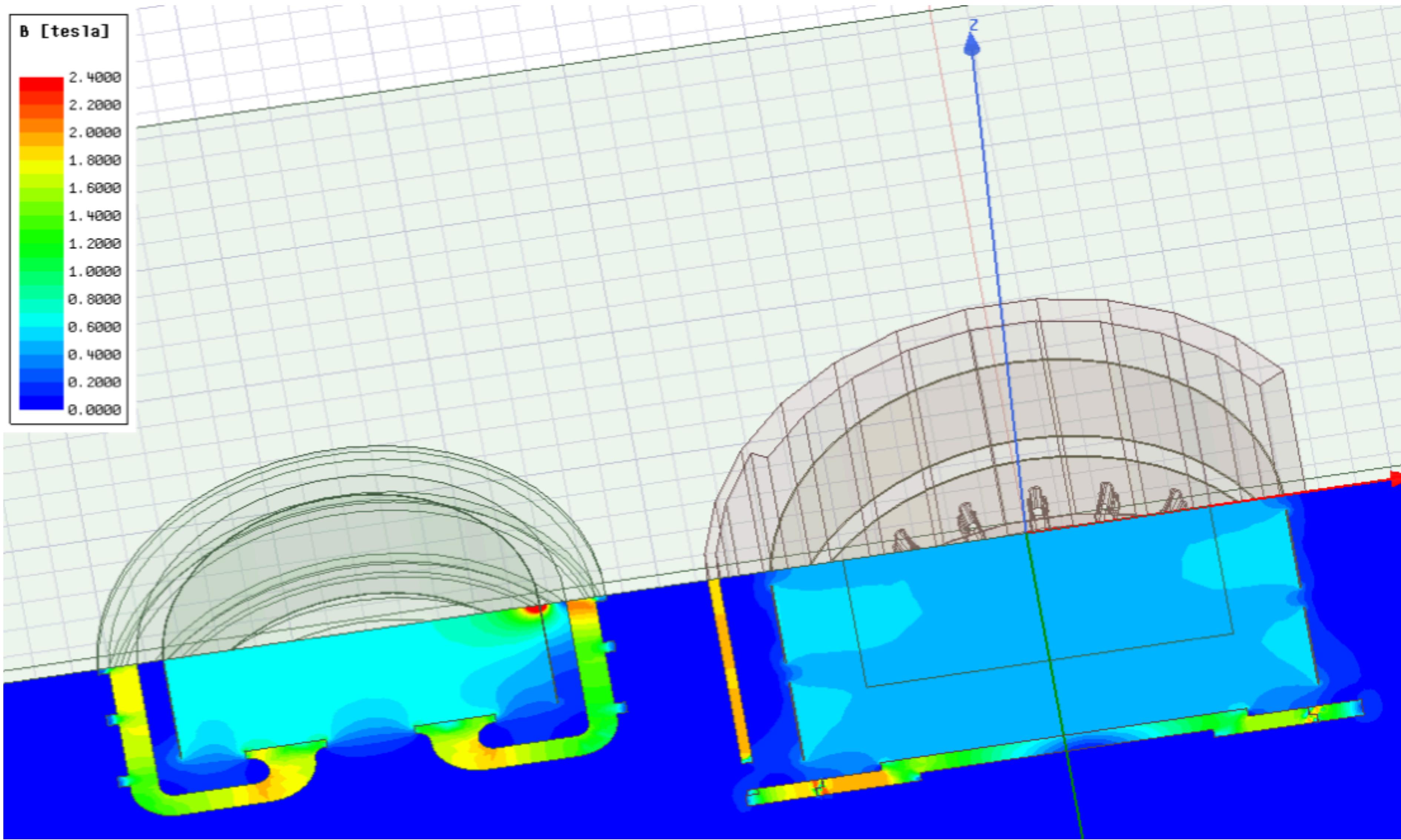
SPYDND15



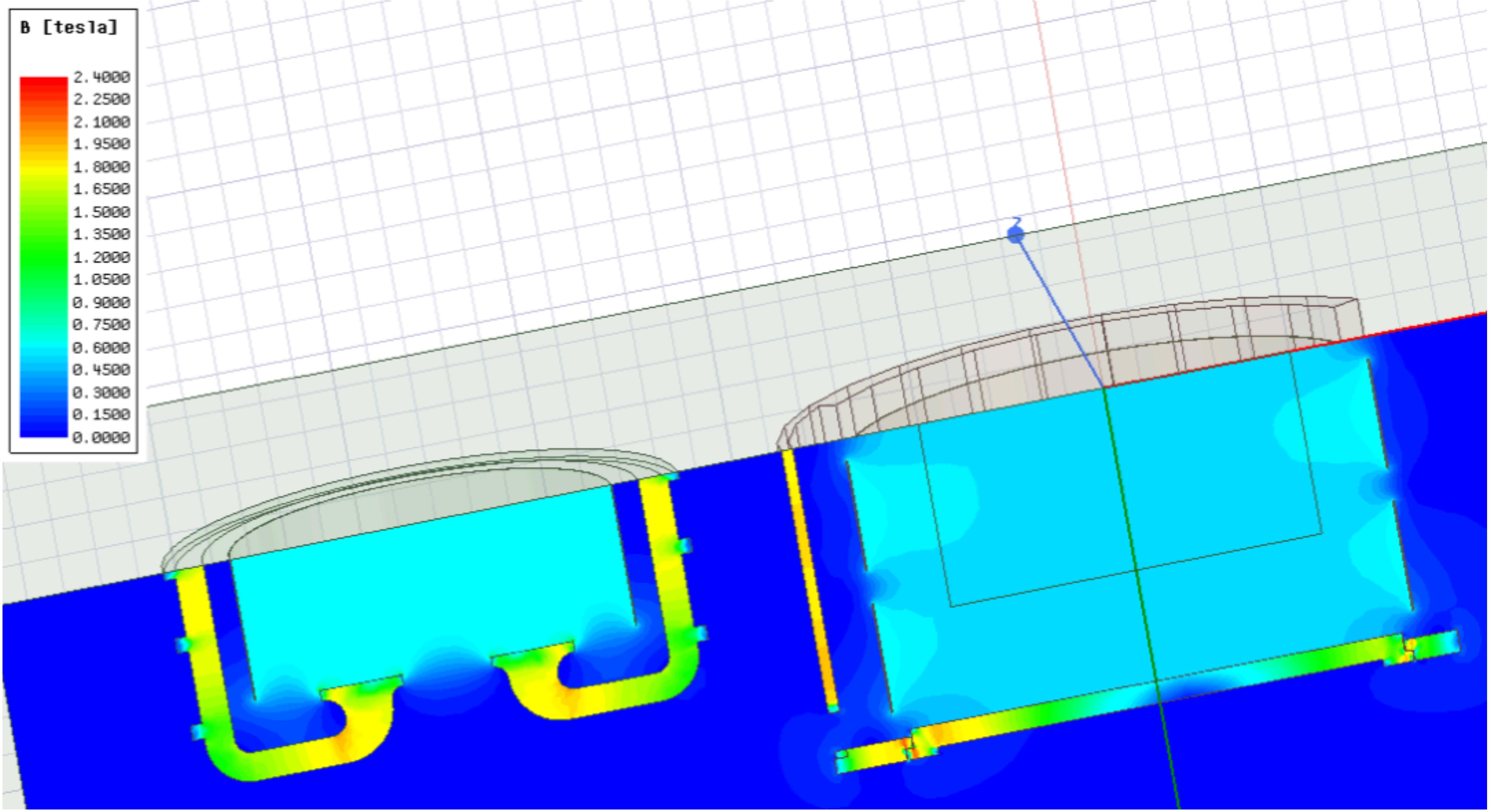
SPYDND16



SPYDND17



SPYDND18



SPYDND15

	15 Sand //	15 Sand anti//	15 Sand off	15 Off axis	SPYDND16	SPYDND17	SPYDND18
Bmin on TPC	0.4655 T	0.4661 T	0.4653 T	0.4640 T	0.4798 T	0.4853 T	0.4845 T
Bmax on TPC	0.5507 T	0.5521 T	0.5521 T	0.5491 T	0.5186 T	0.5116 T	0.5108 T
Force along beam	92 kN	100 kN	100 kN	94 kN	112 kN	136 kN	128 kN
Force along axis	0.72 MN	0.72 MN	0.72 MN	0.72 MN	1.37 MN	1.03 MN	0.89 MN
Current per coil	0.95 MA	0.95 MA	0.95 MA	0.95 MA	0.87 MA	0.86 MA	0.865 MA
Stored energy	NA	NA	43 MJ	42.9 MJ	47.2 MJ	50.4 MJ	47 MJ
Force on SAND	24 kN	26 kN	29 kN	NA	6 kN	~ 15-20 kN	10 kN

- ↪ Force along beam: force felt by the 4 coils pointing towards SAND
- ↪ Force along axis: force felt by 2 coils pointing towards the other 2 coils
- ↪ Force on SAND: force felt by SAND yoke, generated by stray field

