

OptiCool Stray Fields

This Application Note shows contours of the magnetic field both inside and outside the OptiCool cryostat as a function of position. These values are calculated for a field value of $H = 70$ kOe at the magnet center (equivalent to $B = 7$ T). The vertical position is measured relative to the magnet center line. The table surface is located at -20.3 cm. The radial position is measured relative to the magnet axis. **Figure 1** shows the contours inside and near the cryostat. **Figure 2** and **Figure 3** show the contours progressively farther away. Note that all graphs show the magnetic field H generated by the OptiCool magnet. Magnetic materials, such as a magnetic optical bench, may impact the value of the magnetic induction, B .

WARNING: Use caution when placing optical components or other equipment near the OptiCool. Objects may be subjected to large forces when the magnet is charged. These forces can damage equipment or cause personal injury.

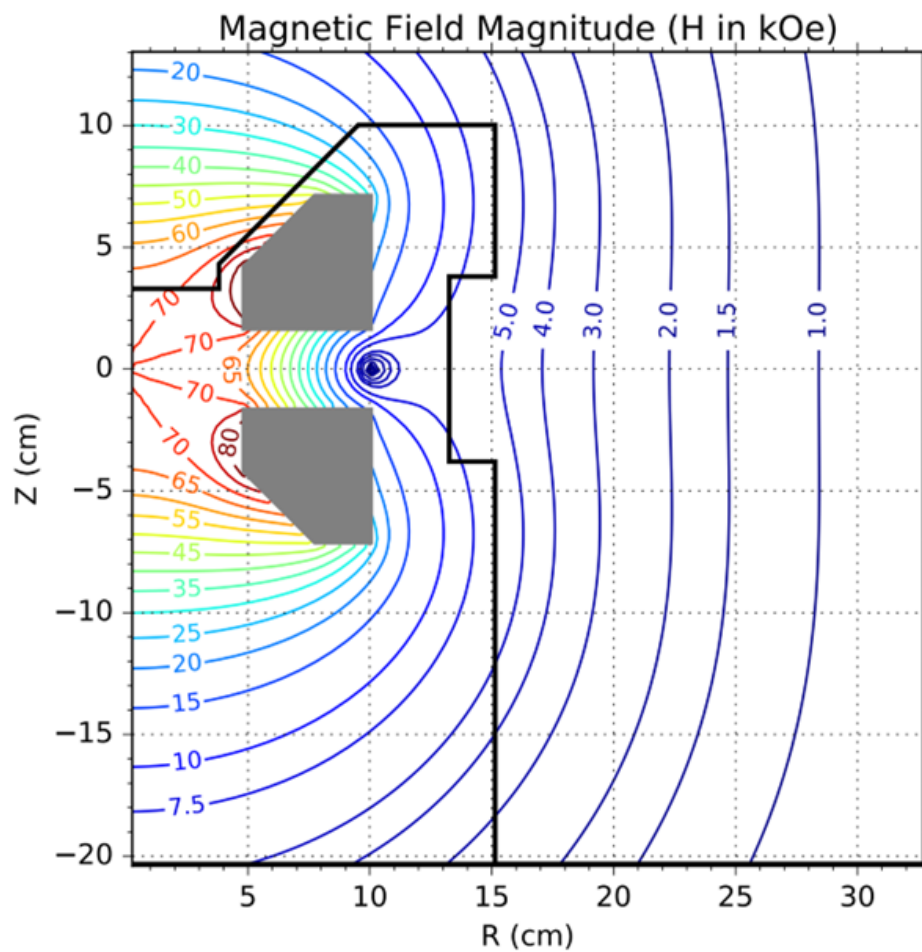


Figure 1: Calculated field contours inside and close to the cryostat. Field values are in kOe.

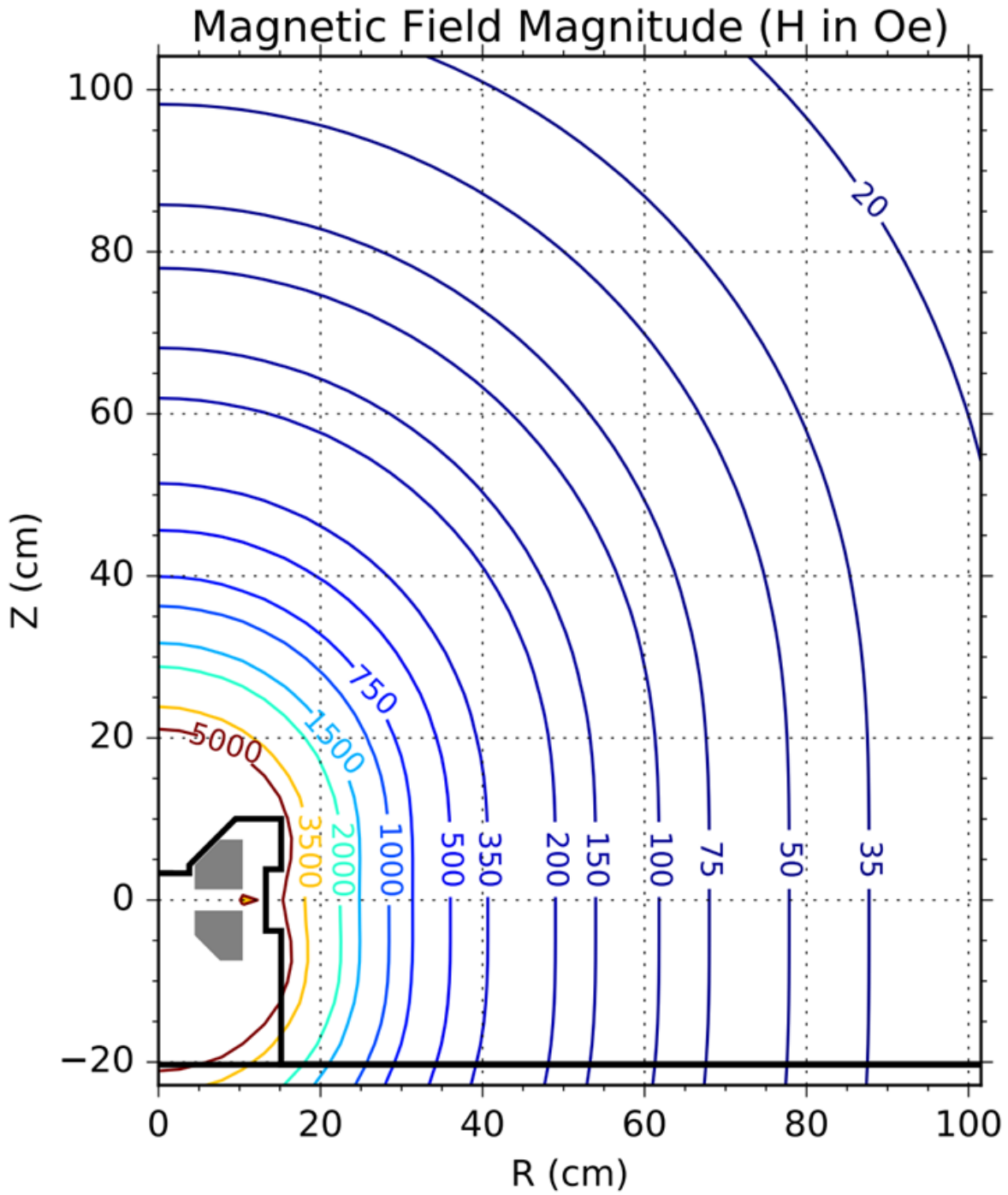


Figure 2: Calculated field contours outside the cryostat to about 1 meter. Field values are in Oe.



Figure 3: Calculated field contours outside the cryostat to about 2 meters. Field values are in Oe.