

Application Note 1318-005

OptiCool Stray Fields

Purpose

This document 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 7 T at the magnet center. 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.

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.

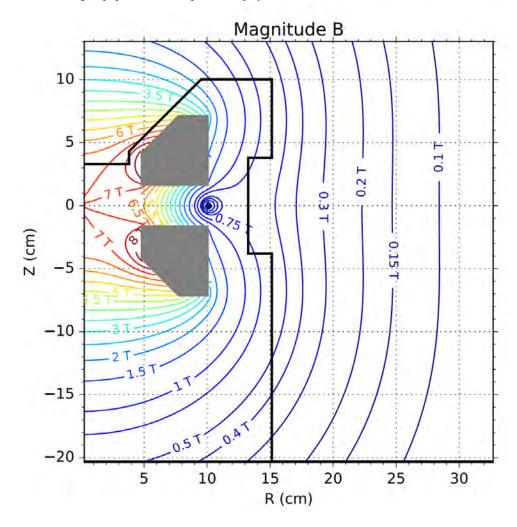


Figure 1: Calculated field contours inside and close to the cryostat. Field values are in Tesla.

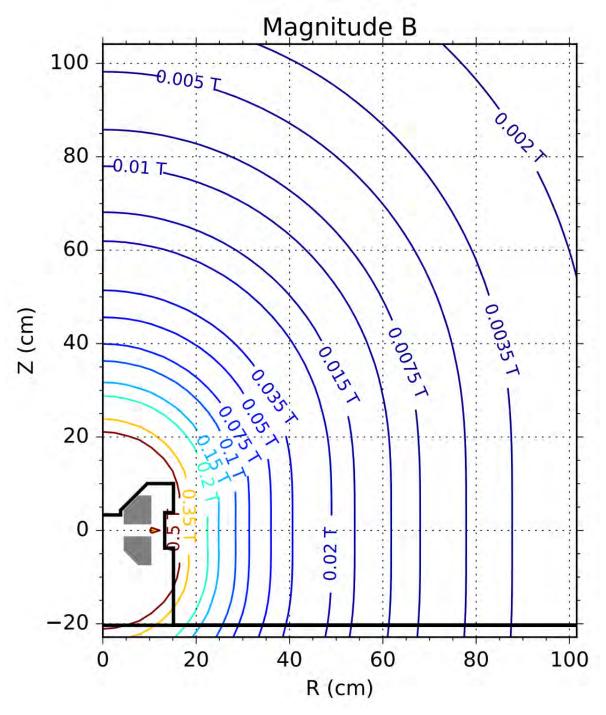
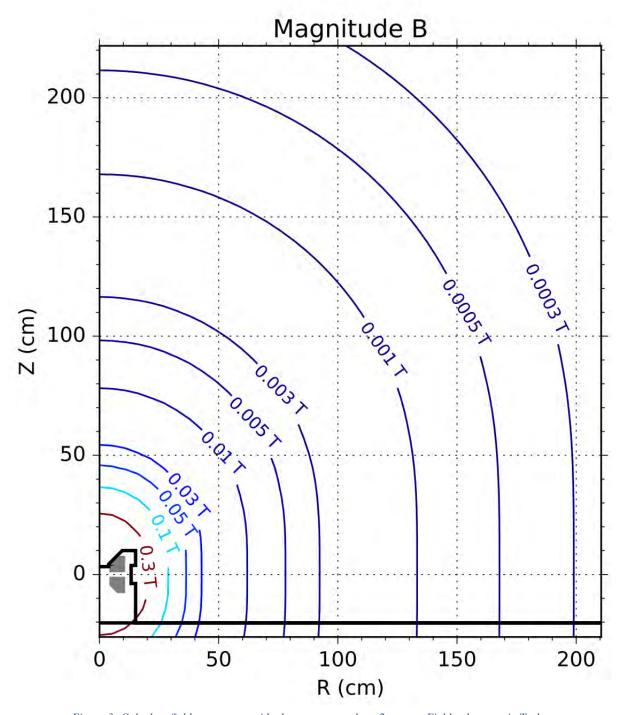


Figure 2: Calculated field contours outside the cryostat to about 1 meter. Field values are in Tesla.



 $Figure\ 3:\ Calculate\ field\ contours\ outside\ the\ cryostat\ to\ about\ 2\ meters.\ Field\ values\ are\ in\ Tesla.$