

Abstract Submitted
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Equilibrium Reconstruction of KSTAR First Plasma¹ K.-I. YOU, D.K. LEE, B.H. PARK, S.G. LEE, J.G. BAK, S.H. SEO, S.H. HAHN, National Fusion Research Institute, Korea, L.L. LAO, General Atomics, USA, KSTAR TEAM — To reconstruct the plasma equilibrium of KSTAR (Korea Superconducting Tokamak Advanced Research), we have made some modification to the EFIT code and installed it on our computing system. An MDSplus system is used for the data storage of KSTAR; thus, the EFIT reads experimental data from the MDSplus server and writes the results to it. We have modified some subroutines of the EFIT code for direct link with the MDSplus server. KSTAR PF and TF coil systems use a CICC (Cable-In-Conduit Conductor) type superconductor. The CICC jacket material for most PF and all TF coils is Incoloy 908, which is a magnetic material with relative magnetic permeability greater than 10 in low external field. The Incoloy 908 effects should, therefore, be considered in analyzing the magnetic diagnostics data. In this paper, we present our efforts to reconstruct the plasma equilibrium with EFIT code, including the compensation of Incoloy 908 effects.

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