Equilibrium reconstruction using EFIT code for KSTAR[1]
KWANG-IL YOU, D.K. LEE, Y.M. JEON, S.H. HAHN, National Fusion Research Center, Korea, L.L. LAO, General Atomics, KSTAR TEAM — For application to the KSTAR (Korea Superconducting Tokamak Advanced Research) device, we have made some modification to the EFIT code and installed it on our computing system. The main function of EFIT is reconstruction of plasma equilibrium using discharge data. After every discharge, the code will be run for a chosen time array and the results will be stored in the same way as experimental data will be. An MDSplus system will be used as the data storage for KSTAR; therefore, the EFIT reads experimental data from the MDSplus server and writes the results to it. We have added some subroutines to EFIT for direct link with the MDSplus server and also converted it to Fortran 95 form. Test runs of the code will be made by using the KSTAR plasma control system. This paper will also present results of equilibrium data obtained with the equilibrium mode of EFIT.

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