
HESEL project

A Data Management Plan created using DMPonline

Creator: Anders Henry Nielsen

Affiliation: Danmarks Tekniske Universitet / Technical University of Denmark

Template: EUROfusion

ORCID iD: 0000-0003-3642-3905

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Project abstract:

The numerical code, HESEL (Hot Edge-Sol-Electro-static), and its generated data

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HESEL project

Data Collection

Numerical data of fluctuations observed on the outboard midplane of medium and larger size Tokamaks.

Data generated by the numerical code, HESEL, a code developed by PPFE at DTU Physic since 2001

The code is normally run on either the local DTU Cluster, jess.dtu.dk, or at the EUROfusion supercomputer, Marconi.

The output from the code is a larger (+3 GB) HDF5 file which contains both raw (plasma field like density, temperature, potential, ..) and manipulated data (partical and energy fluxes, stress fields etc) from the simulation

Data (hdf5 files) is organized like: Tokamak.shot.vers.h5

Where

Tokamak:the specifical machine (JET, MAST, AUG, TCV, EAST, KSTAR, ...)

shot: the specific machine shot

Vers: Version number for the specifical HESEL simulation

If the project involves use of personal data, a number of requirements have to be taken into account. In particular, DTU's template for registering personal data has to be used. The template and more information can be found on DTU Inside. Follow links in the right hand side of this template in the guidance section under "Ethics and privacy".

No personal data will be generated

Data Storage

The raw data are transferred to the U-drive (\\aitpdfs.win.dtu.dk\Department) at "U:\FYSIK\FYS-PPFE\Turbulence group\HESEL 2D data" where data is backed and will be stored on a long term basis.

Documentation

Documentation of the individual simulations are performed using elog (<https://elog.psi.ch/elog/>)

Source code and documentation of the numerical code HESEL are stored at Github: <https://github.com/PPFE-Turbulence/C-HESEL>

Documentation of the individual simulations are performed using elog (<https://elog.psi.ch/elog/>)

Data Sharing

Data and source code are shared on-demand.

HESEL code is presently running be groups at the Plasma Physics institutes at Prague, Hefei (China). These groups have access to the Github repository

Results from data are published in high ranking journals and data will/are been shared externally on demand

Long-term Preservation

Data are placed on university drives with long term preservation.