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# List of changes to FAR3d distribution

#### linstart.f90:

changed "write(\*," "write(0," so these screen writes work on all platforms

#### vmec.f90:

added xkprl = real(n,kind=IDP) - real(m,kind=IDP)\*qqinv(j) so that Landau damping works properly

added kind=IDP specifier to complx statements so precision doesn't revert to lower \*4 level cmplx1 = cmplx(0.\_IDP,1.\_IDP,kind=IDP)

replaced "1/r" in several places with "rinv" so there is no possibility of division by zero

# inputlist.f90:

increased format of eq\_name from a20 to a40 so longer names can be used

## inputlist\_mod.f90:

increased format of eq\_name from a20 to a40 so longer names can be used

#### ae\_profiles.f90:

set pol\_rot\_vel\_e = 0 since it is not included in taefl.dat file and should not be used added \_IDP specifier to constant numbers so precision is not lost corrected vzt\_eqp and vth\_eqp - should be scaled by 1.e+3 instead of 1.e+5

## eigensolver\_tools.f90:

Iln(i) and signl(i) to the jdqz.dat output file since these are needed by xEigen and for the post-processing

done to make 2D eigenfunction plots

changed "write(\*," "write(0," so these screen writes work on all platforms

## main\_jdqz\_TAEFL\_cmplx.f90:

added lln(i) and signl(i) to jdqz.dat reads and egn\_mode\_ascii.dat writes - this information is required for

post-processing done to make 2D visualizations of mode structures

# **Eigensolver.sh:**

The compile script was changed so that all codes are compiled together as a single binary, instead of the old way where the LIB\_JDQZ files were compiled as as a separate

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library. There was no need to use the library approach and it tends to lead to errors on some computing platforms.