

António Figueiredo's 2nd ISM Working Session Report — Cadarache, June 2013

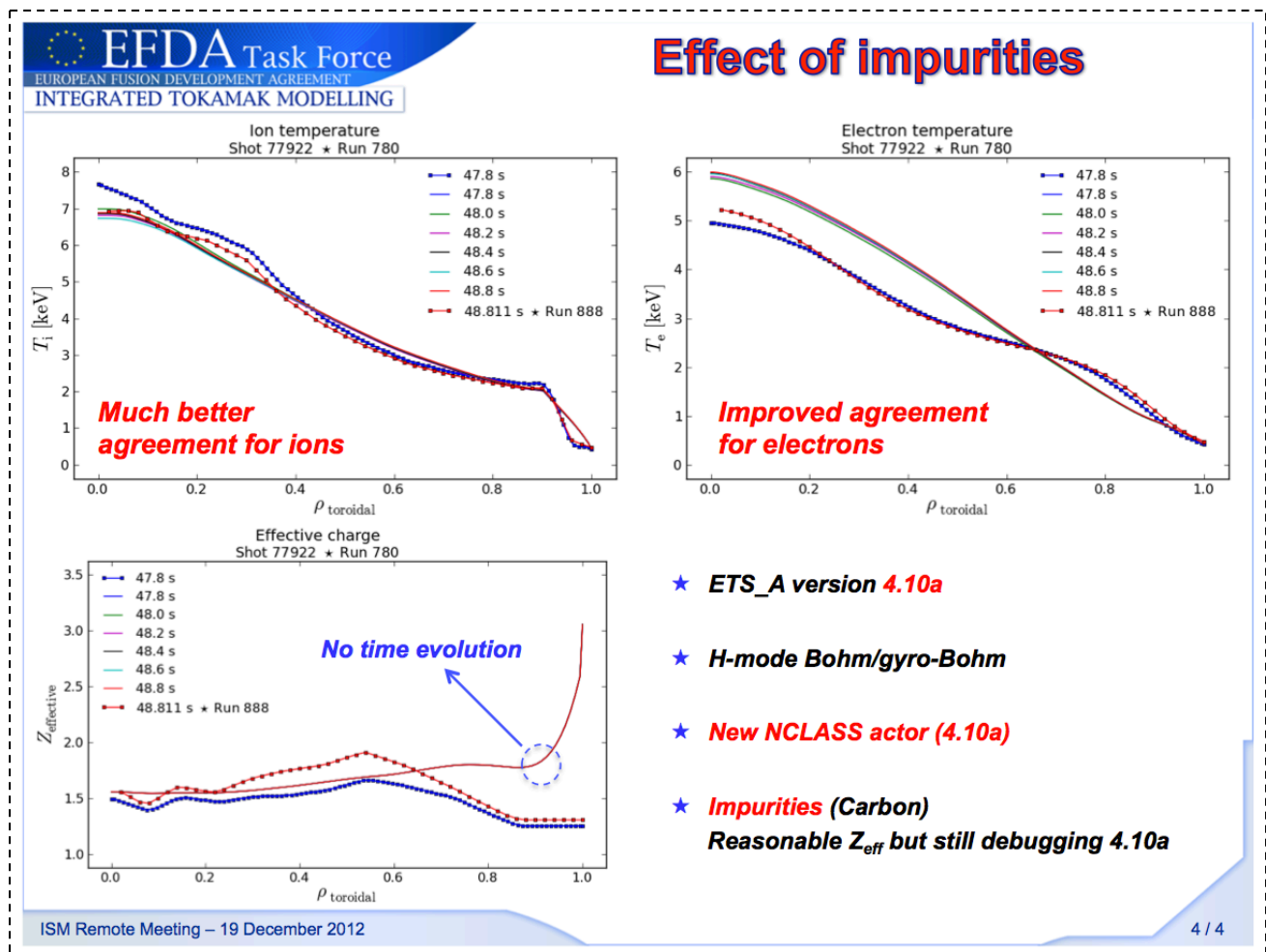
Status of the EPS 2013 paper: It's late!

- Objective was to obtain the runs/results for the EPS paper and start writing it

Modelling of JET hybrid scenarios with the European Transport Solver

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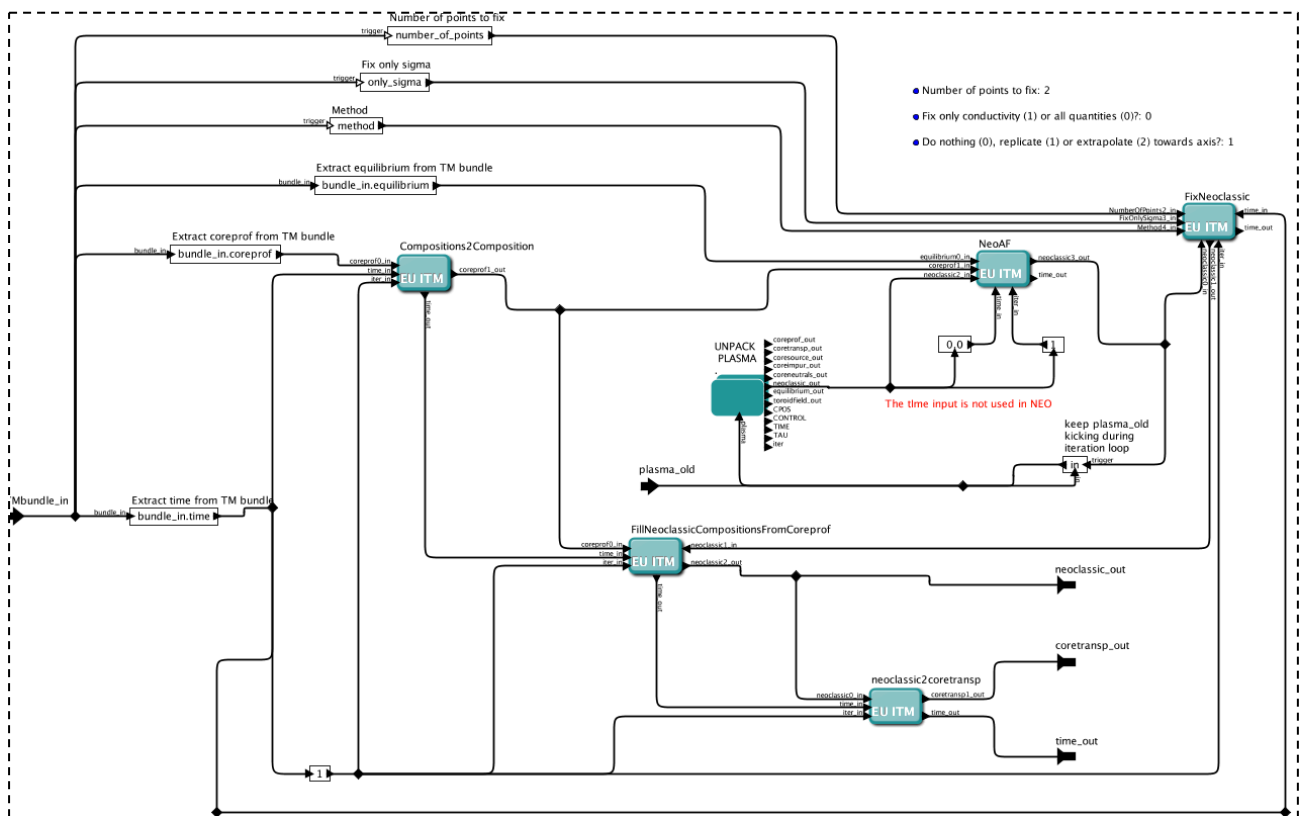
- Needed to do a lot of IMP3 & IMP4 work (again)
- Worked to recover the capabilities of ETS_A as it was in December 2012 (Innsbruck)



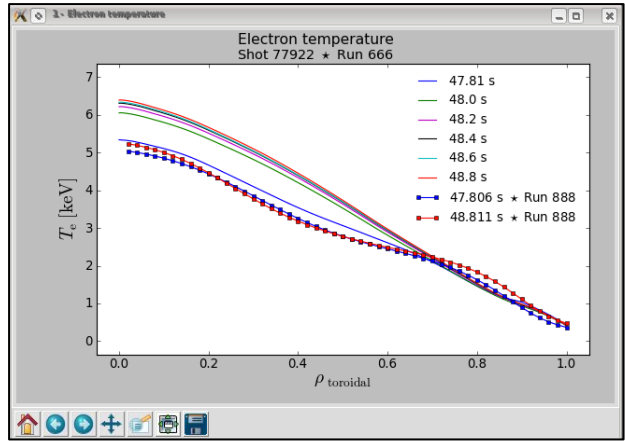
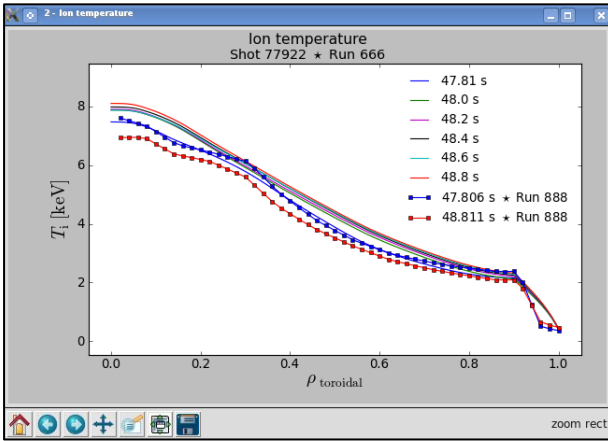
- ETS_A was almost ready in the Garching working session: the only missing feature has then been requested (allocation and initialization of the neoclassic CPO, needed to use NEO), which

was made available during this week... but the UAL bug (only 1 time slice available reading CPOs with arrays of structures, such as coresource) has been fixed meanwhile!

- Due to the many changes in ETS_A, all the work done in Garching to reconfigure it for the EPS runs had to be repeated: include H-mode BgB and particle transport, include NEO (NCLASS), circulate old state, fill old plasma composition, fix neoclassic at axis, copy new to old compositions and then back, etc.
- Several things stopped working since Garching, which had to be identified and dealt with: the CPOcontent actor stopped working, Neoart makes the workflow crash... any long run makes the workflow crash, and it also crashes when neoclassical resistivity is chosen (not yet solved), etc.



- Impurities still do not evolve in time when density is not solved, and there seem to be other issues (?)
- NCLASS (NEO) is finally back... but not sure if it is exactly the same as the one provided in Innsbruck by IMP4
- NEOS is available, and provides conductivity and bootstrap current that are similar to the ones coming from TRANSP (NEO values are higher)
- Still need to do the final runs and provide them to Vincent to get equivalent results from ETS_C



Best result so far (work in progress...)