

DIADEM 3.1 Release Notes – changes since DIADEM 3.0

Improvements

Enhanced performance

A number of changes have been made to make the DIADEM code more efficient. This greatly reduces the time taken for the initial processing of data, i.e. the time before the first assignment starts, particularly for large models. Memory requirements have also been reduced by around 30-40%.

Parallel SATURN assignments

DIADDEM can now run SATURN assignments for different time periods in parallel, provided that a multi-core or multi-processor PC is being used. This will give significant reductions in run times; for example with a dual core processor and two time periods assigned in parallel, run times will be nearly halved. If this feature is used then the SATURN network .dat files for different time periods must be put in different directories. More information is available in the manual and help files.

The number of assignments to run in parallel is defined on a new tab entitled “SATURN settings”. This is also where the SATURN exes location should now be defined.

Improved error and warning messages

Error and warning messages written to the screen or log file have been improved to make them more informative and easier to interpret. Spurious ‘Destination totals normalised’ warnings have been suppressed.

Automatic deletion of SATURN log files

DIADDEM will now delete all SATURN MX and SATLOOK .log files produced as part of the run.

Bug fixes

Location of SATURN exes

In 3.0 DIADEM sometimes ignored the value of the SATURN exes location that was specified in the control file and used the default value instead.

User interface glitches

A number of related glitches in the user interface have been fixed. These meant that changes were not always saved properly.

“nan” values in control file

In certain circumstances 3.0 would write “nan” (meaning ‘not a number’) to the control file for undefined parameters. This then caused a fatal error in the DIADEM engine.

Progress window

The progress window that appears during a DIADEM run now remains visible throughout the run.

Calculation of intra-zonal costs

In 3.0, when the option to estimate intra-zonal costs was used this was applied to the reference costs but not to the forecast costs.

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