

Windows Version of RASC Computer Program for Ranking and Scaling Biostratigraphic Events

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The RASC method for ranking and scaling of biostratigraphic and other events was developed for mainframe computers about 20 years ago. The purpose of ranking is to create an optimum sequence of events observed in different wells or sections subject to stratigraphic inconsistencies in the direction of the arrow of time. These inconsistencies, which result in crossovers of lines of correlation between sections, are due to various sampling errors and other sources of uncertainty including reworking and misclassification. They can be resolved by statistical averaging combined with stratigraphic reasoning. Subsequent scaling of the events can be carried out by estimating intervals between successive events along a relative time-scale. This yields the scaled optimum sequence. The CASC (Correlation and standard error calculation) companion program can be used to construct lines of correlation between sections without crossovers.

Ten years ago a FORTRAN 77 DOS version was prepared for Personal Computers. This program was extended during the past 5 years to include analysis of variance of deviations from lines fitted in plots of observed events against the (scaled) optimum sequence in individual sections. More recently, a new version of RASC has been prepared combining FORTRAN 95 Windows *.EXE files with new Visual Basic code for input preparation (MAKEDAT) as well as graphical presentation of RASC/CASC results.