

## **IN SEARCH OF THE EARLY OLIGOCENE/LATE OLIGOCENE BOUNDARY STRATOTYPE IN CENTRAL ITALY**

PREMOLI SILVA, I., COCCIONI, R., MONECHI, S., MONTANARI, A., NOCCHI, M., AND OTHERS

The main purpose of our investigations has been to find a complete and continuous exposure of Oligocene marly strata in an area belonging to a pelagic environment, and to perform an integrated stratigraphic study in order to characterize the Rupelian/Chattian boundary. We have sampled in detail and analyzed several well exposed sections of deep-marine, fossiliferous, marly limestones in the Umbria-Marche Apennines in Central Italy. The integrated results indicate continuity, completeness, and consistency of the plankton biostratigraphic record (foraminifera, calcareous nannofossils, and dinoflagellate cysts), which can be correlated with a continuous and complete magnetic polarity record in some of the studied sections. On the whole the studied successions cover almost the entire Oligocene. The palaeobathymetric evolution of the Umbria-Marche Basin during the Oligocene has been inferred on the basis of benthic foraminiferal assemblages. Selected sections have been analyzed for strontium and stable isotopes, providing further stratigraphic and palaeoenvironmental informations. Our results reveal differences in the reciprocal location of standard calcareous plankton bioevents, and magnetic polarity reversals, when compared to currently used time scales. At least two of the studied sections, Monte Cagnero and Pieve d'Accinelli, bear all the potential qualities as possible GSSP candidate for the Rupelian/Chattian boundary.