

Neogene benthic oxygen-18 composite

Superimposed color curves:

RED = Shackleton et al. (1995 and other datasets accessible from Delphi Project);

GREEN = alternate stack from Lisieki and Raymo (2004);

LIGHT BLUE = ODP Site 926 (Shackleton and Hall, 1997);

BLACK = ODP Site 1085 (Westerhold et al., 2005);

ORANGE and **OGRE** = Sites 1146 and 1237, respectively (Holbourn et al., 2005);

LIGHT GREEN = Site 925 (Shackleton, 2001; Leg 154); **BLUE** = ODP Site 1090 (Billups et al., 2004);

PURPLE = ODP Site 926 and 929 (Zachos et al., 2001).

For details and references, see Raffi et al. (2006). MIS numbering and nomenclature fit to Oxy-18 curve of Lisieki and Raymo (2004) as shown in Raffi et al. (2006). Miocene-Oligocene event definitions by Miller et al. (1991) and additional calibrations by Pekar et al (2002); click on events for more details and calibration references.

References:

Lisieki, L.E., Raymo, M.E., 2004. A Pliocene–Pleistocene stack of 57 globally distributed benthic $\delta^{18}\text{O}$ records. *Paleoceanography* 20, PA1003.

Raffi, I., Backman, J., Fornaciari, E., Pälike, H., Rio, D., Lourens, L., Hilgen, F., A review of calcareous nannofossil astrobiochronology encompassing the past 25 million years. *Quaternary Science Reviews* 25 (2006) 3113–3137