

Ground-truthing *in situ* $\delta^{18}\text{O}$ and Mg/Ca ratios measured in planktic foraminiferal shells to reconstruct sea surface conditions

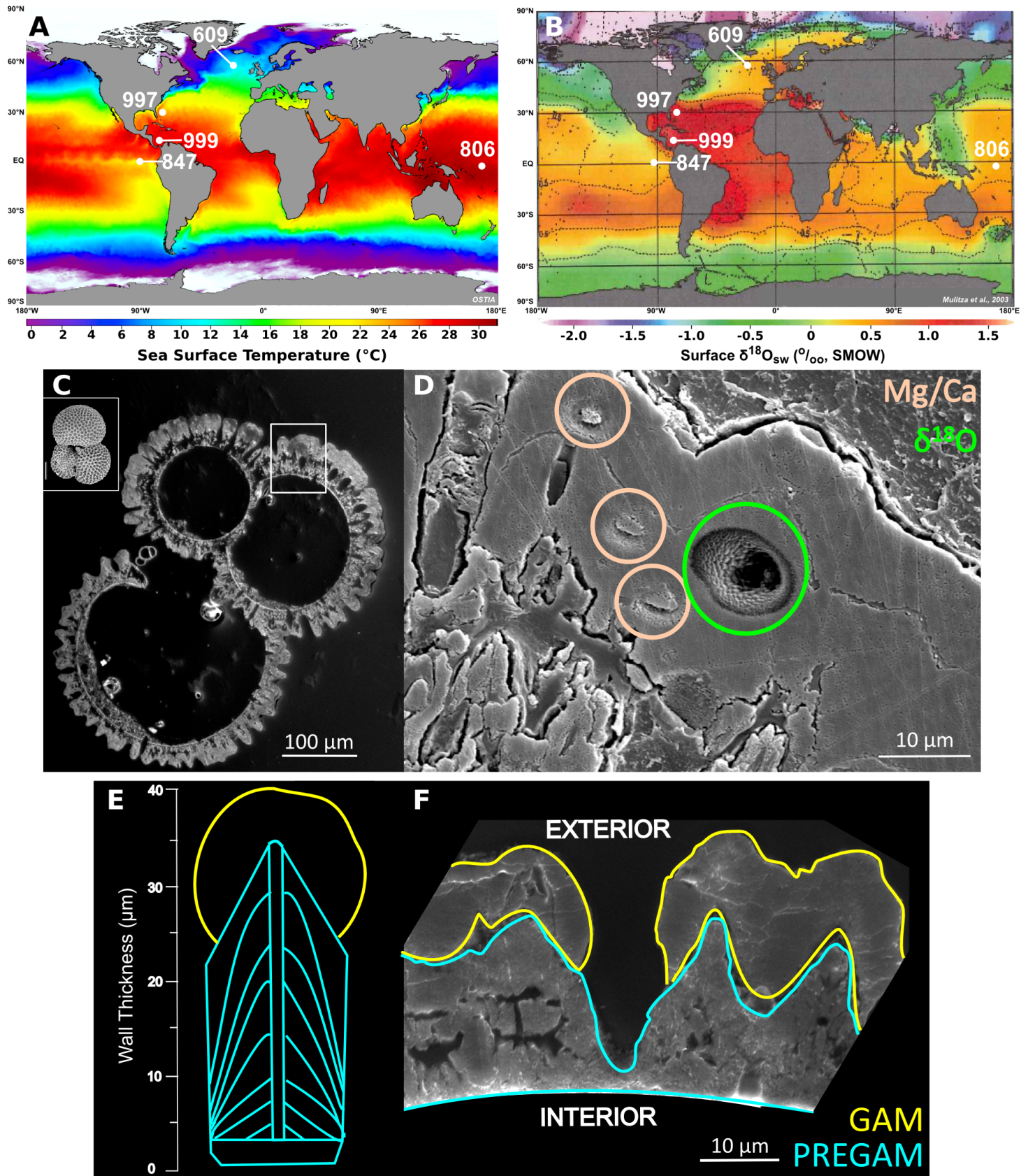


Figure. Global map of modern **A.** sea surface temperatures and **B.** surface ocean $\delta^{18}\text{O}_{\text{sw}}$. **C.** Site 806 Pliocene-age *Gs. sacculifer* shell in cross-section with whole shell (inset). **D.** Highly magnified shell wall from C showing EPMA Mg/Ca pits and SIMS $\delta^{18}\text{O}$ pits. **E.** Illustration of *Gs. sacculifer* wall texture in cross-section showing banded texture of pre-gametogenic (PREGAM) calcite and exterior gametogenic (GAM) crust (Bé, 1980). **F.** Highly magnified *Gs. sacculifer* shell wall from Site 806 with wall structures noted in E.