

Electronic Annex-3. (A) SEM image of sample Pa3, showing good preservation of crystal structure. (B) SEM image of sample Mi13 showing good preservation. Acicular texture of aragonite is present. (C) SEM image of sample R7 showing poor preservation and extensive dissolution despite the presence of aragonite as indicated by XRD. (D) SEM image of sample R5 showing poor preservation. The coral skeleton is pitted indicated microboring and dissolution. (E) SEM image of polished sample Mi3 showing good preservation and acicular textures. Texture is particularly evident in the top right where skeleton is chipped. (F) SEM image of sample Mi2 showing good preservation. (G) SEM image of sample K2 showing the presence of acicular aragonitic textures despite the presence of calcite infilling. (H) SEM image of sample E1 showing good preservation of acicular aragonitic textures. (I) Petrographic microscope image (crossed polars) of sample Ol5 showing good preservation of growth banding structures. (K) Petrographic microscope image (crossed polars) of sample K1 showing acicular texture of aragonite within the skeleton. (L) Petrographic microscope image (crossed polars) of sample J1 showing acicular texture of aragonite within the skeleton.