



**Figure S3. Elevated c-di-GMP does not increase the biofilm deficit in the  $\Delta$ *morA* or  $\Delta$ *rmcA* mutants.** Static biofilms of (A) WT, and the (B)  $\Delta$ *rmcA* and (C)  $\Delta$ *morA* mutants with either the empty vector (EV, solid line) or a plasmid carrying a gene expressing the constitutively active GcbC-R363E protein, which over-produces c-di-GMP (dotted line), were grown in M63 medium with 0.4% L-arginine plus 0.2% arabinose to induce expression of the mutant protein, and biofilm growth measured at the indicate time points. Results are representative of three biological replicates each with three technical replicates. There were no significant differences at any time point.