



1 Figure S2. Determination of Ca-P species using differential dissolution (CONVEX method).  
 2 (a) Alkaline sediment samples with high proportions of OCP. (b) Neutral and acidic sediment  
 3 samples with little or absent OCP. (c) CONVEX scheme for quantification of phosphorus  
 4 species in sediment. 1A/1B: Conversion procedure (pH adjustment for differential  
 5 dissolution), 2A-3C: Extraction procedure. Differential dissolution of OCP, CFAP and FAP  
 6 occurred at pH ranges of *c.* >6.9, 3.5-6.9 and 3.0-3.5, respectively. Standard addition of OCP  
 7 is shown for tidal flat sediment in S2a to exemplify OCP determination by differential  
 8 dissolution. See Oxmann and Schwendenmann (2014) for data analysis, other standard  
 9 additions and method validation. TiFl: tidal flat; Rive: river; Man: mangrove; Past: pasture.