**Online figures captions:**

In addition to the figures included in the manuscript, we would like also to submit the following figures as online material (abbreviations: w.a.: water atmosphere, h.p.a.: hydrogen peroxide atmosphere, α-Fe: metallic iron, HPo: hexagonal pyrrhotite):

**DR1:** color of raw powders at various weathering durations:
   A: α-Fe in w.a. after 40 days  
   B: α-Fe in w.a. after 259 days  
   C: HPo in h.p.a. after 40 days  
   D: HPo in h.p.a. after 259 days  
   E: HPo in w.a. after 259 days  

**DR2:** Color of neoformed products on α-Fe metal in w.a. at various stages obtained by rubbing the powders on white paper and blowing the coarse fraction.
t = 40 days

t = 75 days

$t = 117 \text{ days}$

$t = 173 \text{ days}$

$t = 259 \text{ days}$

Chevrier V. - Figure DR2