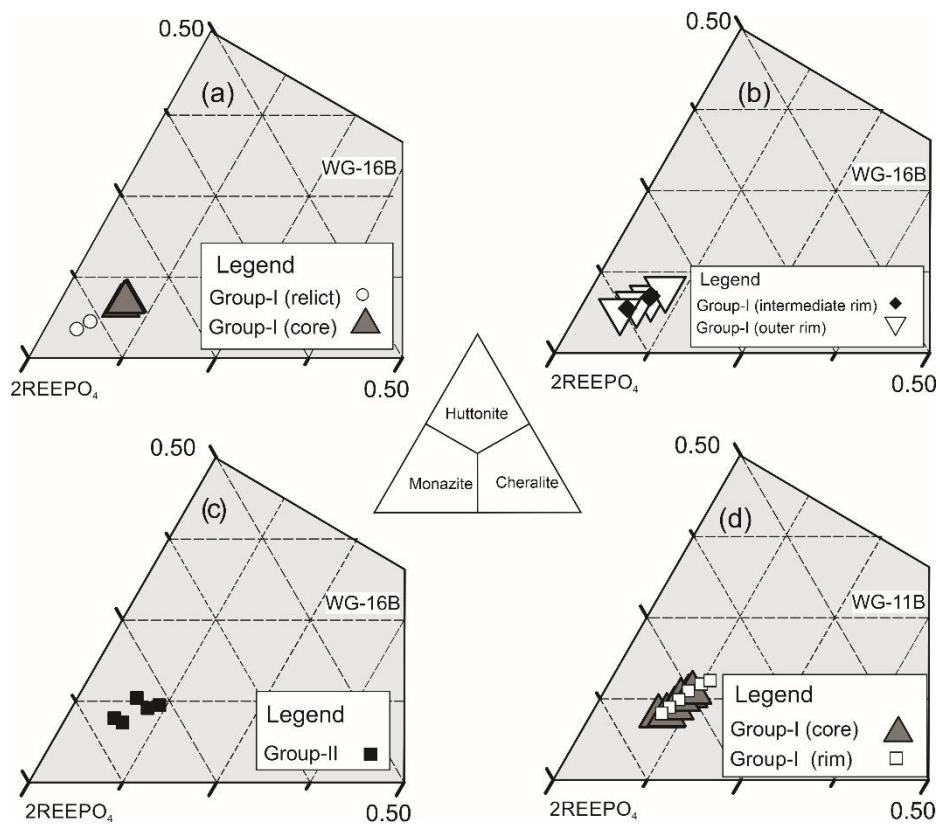
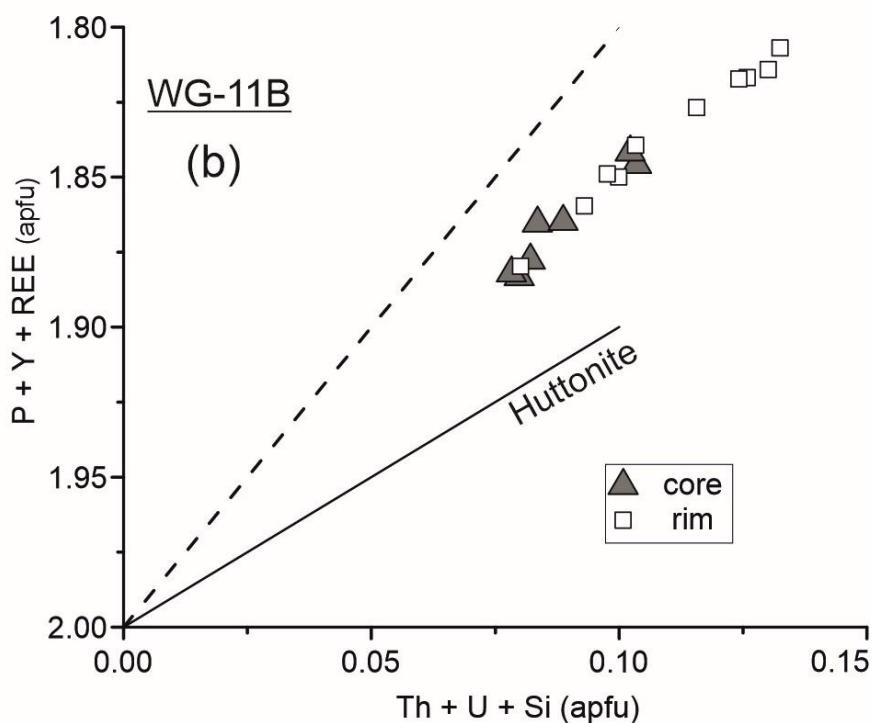
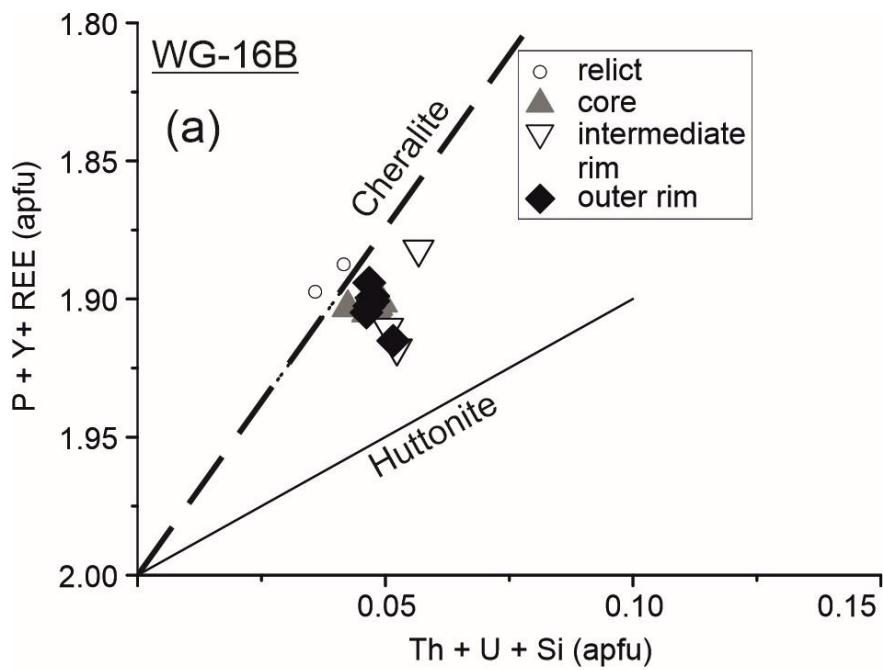


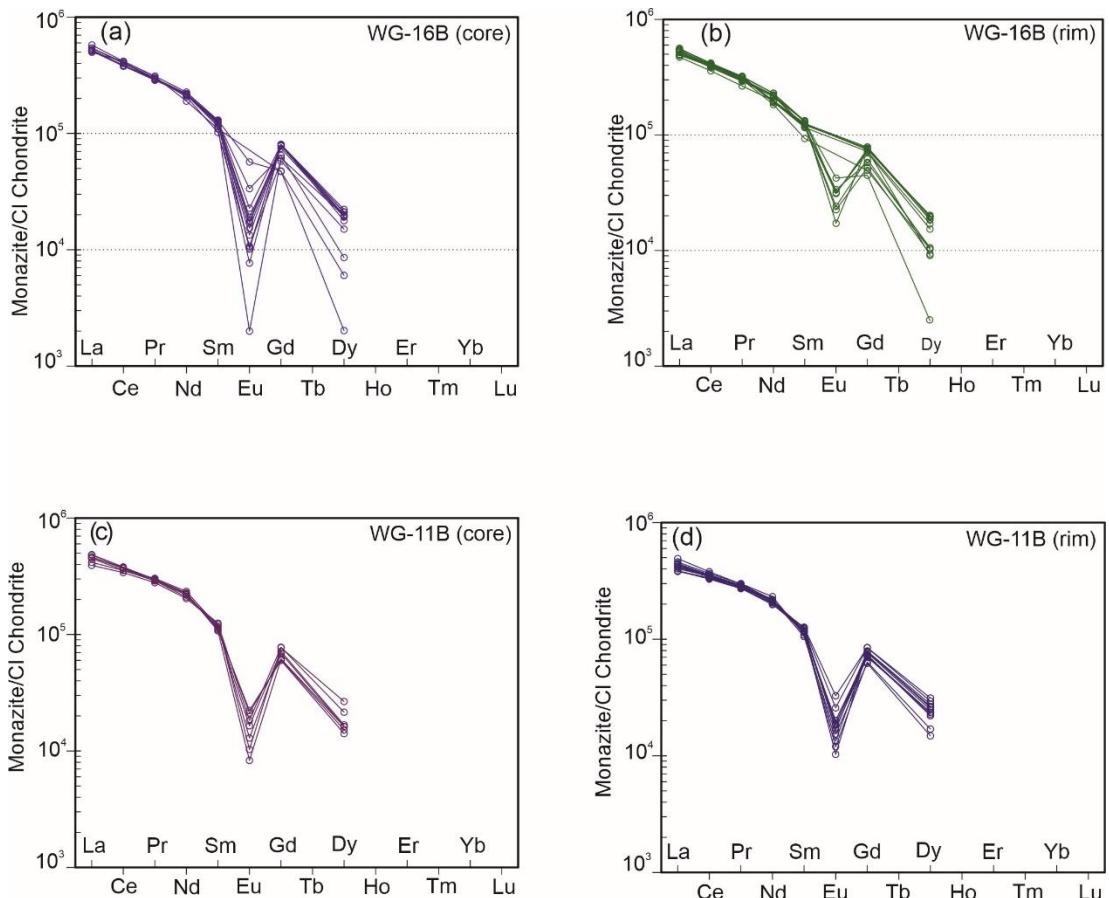
Supplementary Figures



Supplementary figure 1 a-d Plot after (Linthout 2007) showing compositional variation among Monazite grains from the studied samples WG 16B and WG 11B.



Supplementary figure 2 a, b $P + Y + \text{REE (apfu)}$ versus $\text{Th} + \text{U} + \text{Si (apfu)}$ plot for both the WG-16B and WG-11B samples.



Supplementary figure 3 a-d Cl chondrite normalized spider plot for monazite grains from the studied samples.