



**ESM6** - Comparison of whole-rock and olivine phenocrysts  $\delta^{18}\text{O}$  values from analyzed rocks with values of OIB-EMI, OIB-EMII, arc-related lavas, Sailipu mantle xenoliths, granitoids, siliciclastic sediments, carbonate sediments and Xiagulihe ultrapotassic rocks (Sun et al. 2015). The vertical band of the normal mantle olivine  $\delta^{18}\text{O}$  values from Chazot et al. (1997).