Supplementary Figure 1. Average distribution of brGDGTs without separation of 5- and 6-methyl isomers along Mts Shegyla, Pollino Majella, Rungwe, Shennongjia, Lautaret-Bauges, Peruvian Andes and Chilean Andes. Data from Mts. Majella and Rungwe were taken from Huguet et al. (2019). Data from Mt. Shennongjia were taken from Wang et al. (2016). Data from Mts. Lautaret-Galibier were taken from Véquaud et al. (under revision).
**Supplementary Figure 2.** PCA between pH and MAAT and 3-OH FAs derived proxies RAN$_{15}$, RAN$_{17}$, RIAN along Mts Rungwe, Pollino, Majella, Shegyla, Shennongjia, Lautaret-Galibier Peruvian Andes and Chilean Andes.