Appendix I (page 2) Histograms of forsterite content (Fo mol% = XMgO/(XMgO+XFeO) x100) of the analyzed olivine phenocrysts for the 18 subduction zone samples in Table 6.   All electron microprobe analyses are reported in Appendix H. Histograms do not reflect the entire distribution of olivine phenocryst composition; there was intentional sampling bias to analyze the most Mg-rich (and therefore Ni-rich) olivine crystals in each sample (see text). The black shading indicates the highest 3 mol% Fo of the analyzed olivine population in each sample, which was used to fit the linear relationship between wt% NiO vs. mol% Fo (see Fig. 4).