Figure 14 0 km F-rich silicic magma average F silicic magma 5 km mafic magma **Felsic** upper crust .20 km Higher heat flux; breakdown of F-rich amphibole **Garnet-free mafic** lower crust **Zones with** F-rich Lower heat flux; amphibole F-rich amphibole remain stable during melting 30 km **Garnet-bearing** mafic lower crust -40 km Lithospheric mantle

High flux of mantlederived melts + fluids

Low flux of mantle-

derived melts + fluids