Podiform chromitite as a deep product beneath arc volcanoes

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Podiform chromitites are a common but small member of the Moho transition zone to upper mantle of ophiolites. They occur as dikes or pipes sometimes cutting deformed peridotites, which are usually moderately depleted. The Cr/(Cr + Al) atomic ratio of spinel ranges from 0.2 to 0.7, but is usually around 0.7 to 0.8. These characteristics may suggest that the podiform chromitites were formed by a harzburgite/melt reaction and related process within the upper mantle beneath arc volcanoes.