

Source/Melting conditions	Type of magmas	Context
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Mantle	Dry peridotite	$z < 50$ $F > 20$	Thol. Basalts → plagiogranites <i>MORB, OIT, CFB, IAT</i>	Thol	Subduction, Mid-ocean ridge, intraplate
		$50 < z < 100$ $F \approx 5-10$	Alk. Basalts <i>OIB</i>	Alk	Intraplate (Oc.)
		$100 < z < 150$ $F < 5$	Basanites	Alk	Continental rift, Intraplate (cont.)
		$z > 150$ $F < 5$	Kimberlites etc.	Alk	Intraplate (cont.)
	"Wet" peridotite	Amphibole-bearing	B/BA → A → D → R (I type granites)	CA	Subduction
		Phlogopite-bearing	Alkali basalt → Rhyolites ("shoshonites")	Alk	Subduction

Crust	Continental	Upper	Sediments	S-type granites / rhyolites	(CA)	Collision
			Granitoids	I-type granites / rhyolites	(CA)	Collision
		Lower	Felsic	A-type granites / rhyolites	Alk	Intraplate (cont.), continental rift, post-collision
			Mafic	Diorites & Tonalites → Plagiogranites (= trondhjemites)	CA	Subduction, collision
	Oceanic					
			Amphibolites	Tonalites → Plagiogranites (= trondhjemites)	CA	Subduction

"→" means differentiates to, and denotes a magmatic series

Alk = alkaline

Thol = Tholeiitic

CA = Calc-alkaline