Metamorphic evolution and P–T path of the Posada Valley amphibolites: new insights on the Variscan high pressure metamorphism in NE Sardinia, Italy

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Supplementary material

Figure S1. P–T pseudosection (a) and selected compositional isopleths for garnet and plagioclase (b) for the bulk composition of sample U4; P–T pseudosection (c) and selected compositional isopleths for garnet and plagioclase (d) for the bulk composition of sample U4 minus the composition of garnet core+mantle; P–T pseudosection (e) and selected compositional isopleths for amphibole and plagioclase (f) for the bulk composition of re–equilibrated sample U33. Dotted green lines represent amphibole Si (apfu) isopleths calculated with all divalent iron in the bulk composition.

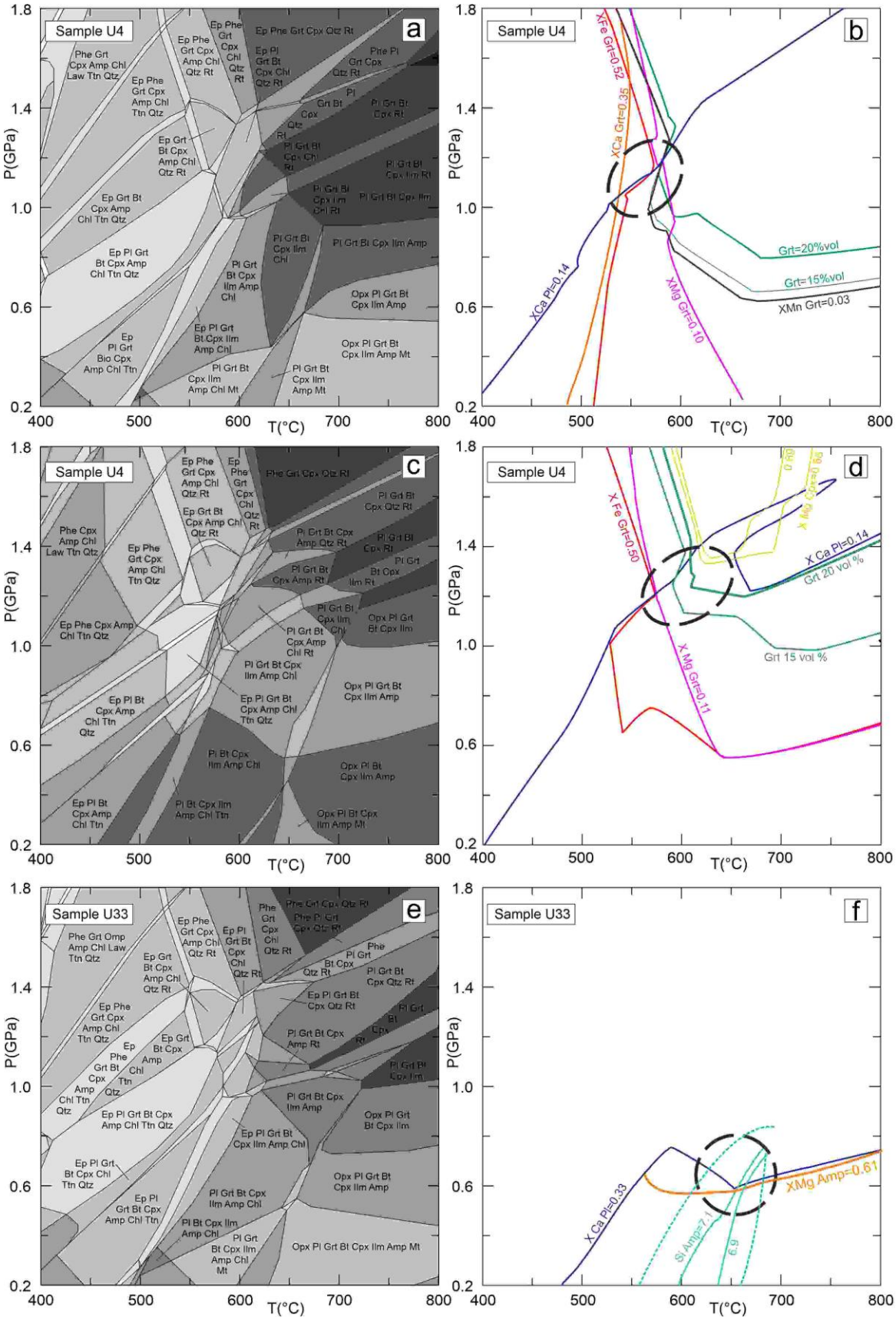

Table S1. Representative microprobe analyses of epidote and titanite from samples U1, U4.

	U1		U4	
	Ep_{1a}	**Ttn_{1a}**	**Ep_{1a}**	**Ttn_{2b}**
SiO_2	39.25	31.15	39.91	30.94
TiO_2	0.27	38.20	0.10	38.18
Al_2O_3	29.30	1.52	32.22	1.54
Fe_2O_3	6.09	0.46	2.64	0.24
MnO	0.01	0.06	0.02	-
MgO	0.05	-	0.04	-
CaO	23.64	28.62	24.59	28.49
H_2O	1.95	-	2.00	-
Total	100.56	100.01	101.52	99.39
oxygen	12.5	5	12.5	5
Si	3.01	1.00	3.00	1.00
Al_{tot}	2.65	0.06	2.85	0.06
Ti	0.02	0.92	0.01	0.93
Fe^{3+}	0.35	0.01	0.15	0.01
Mn	0.00	0.00	0.00	-
Mg	0.01	-	0.00	-
Ca	1.94	0.98	1.98	0.99
H	1.00	-	1.00	-