

Table 1\* – History of the structural and metamorphic imprints in the three tested tectonic units.

Tectono-metamorphic units	Mesostructures	Deformation vs. metamorphism	Ages
<b>Texel-Gruppe metapelites and metagranitoids (Upper Austroalpine, Eastern Alps)</b>		<b>pre-D<sub>1</sub> (metapelites)</b> = Kf, Pl, Qtz, Bt, Ms, Rt inclusions in Grt cores	
	<b>D<sub>1</sub></b> = relict foliation and rootless metric folds	<b>syn-D<sub>1</sub> (metapelites)</b> = Qtz, Grt, BtI, MsI, Ilm, Ky	
	<b>D<sub>2</sub></b> = isoclinal folds, S <sub>2</sub> pervasive axial plane foliation, sheath-like folds and mylonitic bands in metapelites, conjugate shear bands in metagranitoids.	<b>syn-D<sub>2</sub> (metapelites)</b> = Qtz, Grt, BtII, MsII, Ilm, St, Pl ± Ky	early-Alpine (AMA = Alpine Mica Ages)
	<b>D<sub>3</sub></b> = regional recumbent fold system reactivating pre-existing fabric elements	<b>syn-D<sub>3</sub> (metapelites)</b> = Qtz, Chl, MsIII, Mrg, green Bt, Ep, Ab-rich Pl	
<b>Metapelites of eastern Orobic Alps (Southalpine Domain, Central Alps)</b>	<b>D<sub>1</sub></b> = rootless, isoclinal folds, S <sub>1</sub> foliation (continuous or discrete crenulation cleavage). Locally a pre-D <sub>1</sub> crenulation cleavage indicates a poly-phase pre-D <sub>2</sub> structural evolution; D <sub>1a</sub> and D <sub>1b</sub> fabric relics occur in metric domains in metapelites, making the walking correlation very difficult.	<b>syn-D<sub>1a</sub> (metapelites)</b> = Cld, BtI, MsI, Grt, Pl, Qtz, Rt ± Ilm	
		<b>syn-D<sub>1b</sub> (metapelites)</b> = St, BtII, MsII, Grt, Pl, Qtz ± Ilm	~ 330 Ma
	<b>D<sub>2</sub></b> = isoclinal and rootless folds, associated with S <sub>2</sub> pervasive foliation, commonly obliterating pre-existing structures, mylonitic in narrow zones in metagranitoids and more rarely in metapelites	<b>syn-D<sub>2</sub> (metapelites)</b> = MsIII, Chl, Ab, Qtz, ± Ep, ± BtIII, ± GrtIII, Ttn	≥ 295 Ma
	<b>D<sub>3</sub></b> and <b>D<sub>4</sub></b> affecting both basement and Permian-Cainozoic covers, Alpine grid of thick-skin thrusts	very-low grade mineral assemblages	Alpine
<b>The Languard Campo metaintrusives and country rocks (Upper Austroalpine, Central Alps)</b>	<b>D<sub>1</sub></b> = S <sub>1</sub> is a composite fabric consisting of spaced or continuous foliations.	<b>syn-D<sub>1a</sub> (metapelites)</b> = St, Bt, Ms, Grt, Pl, Qtz <b>syn-D<sub>1b</sub> (metapelites)</b> = Bt, Sil, Grt, Pl, Kfs, Qtz	pre-Permian
	<b>D<sub>2</sub></b> = the most prominent pre-Alpine fold system and related foliation, syn-Permian intrusives emplacement. S <sub>2</sub> is a crenulation, a differentiated crenulation cleavage and a differentiated or continuous foliation.	<b>syn-D<sub>2</sub> (metapelites)</b> = Grt + Bt + Sil + Pl + Qtz ± Crd + Ilm <b>(diorites igneous assemblage)</b> = AmpI + PII + BtI + Qtz ± Ap ± TtnI ± Mnz ± Zrn ± Ilm ± Mag <b>(granitoids igneous assemblage)</b> = PII + KfsI + BtI + Qtz ± Ap ± TtnI ± Aln	260-280 Ma
	<b>D<sub>3</sub></b> = metre to kilometre scale folds, locally associated with a differentiated axial plane foliation in country rocks; in Permian metaintrusives, strain partitioning strongly influences D <sub>3</sub> fabric evolution, from coronitic (preserved igneous textures) to mylonitic, where S <sub>3</sub> is a continuous foliation.	<b>syn-D<sub>3</sub> (metadiorites)</b> = AmpII + PIII + MsI + Zo/Czo + Grt + Qtz ± Mg-Chl ± Ilm <b>syn-D<sub>3</sub> (metagranitoids)</b> = PIII + MsI + Zo/Czo + Grt + AmpII + Qtz ± Ilm/Ttn	early-Alpine
	<b>D<sub>4</sub></b> = open to tight folds, locally a differentiated axial plane foliation (S <sub>4</sub> ) of continuous type (where S <sub>3</sub> is more evolved) both in metaintrusives and country rocks.	<b>syn-D<sub>4</sub> (metadiorites)</b> = AmpIII + Ab + MsII + Ep + Chl + Qtz ± BtII + Ttn <b>syn-D<sub>3</sub> (metagranitoids)</b> = Chl + MsII + Ep + Ab + Qtz ± BtII	≥ 78 Ma
	<b>D<sub>5</sub></b> = S <sub>5</sub> differentiated foliation occurring in few narrow bands	greenschist facies mineral assemblages	