

Development of the CrystalScope suite (John Wheeler's software used to quantify various aspects of EBSD data)

As some historical background, this is what I have used the software suite for as it has grown since 1998. Three Laue groups are not yet implemented but that should not be difficult to do when required.

Updated February 2024.

Crystal system	Cubic		Hexagonal		Trigonal		Tetragonal		Orthorhombic	Monoclinic	Triclinic
	m3m	m3	6/mmm	6/m	-3m	-3	4/mmm	4/m	mmm	2/m	-1
MINERALS TESTED <i>(italics – unpublished)</i>	Garnet, Periclase, β Ti, Au, Fe	<i>Pyrite</i>	α Ti, Mg	-	Quartz, <i>Calcite</i>	-	Zircon, <i>Rutile</i>	-	Olivine, <i>Anhydrite</i>	Amphibole, Omphacite	Plagioclase
Standard pole figs											Albite [1], [2]
Misorientation analysis	Garnet [3], [4], Periclase [9]				Quartz [4]				Olivine [4]		Plagioclase [5]
Boundary lengths					Quartz [7]						
Variant prediction	β Ti [8]		α Ti [8]								
Seismic anisotropy									Olivine [10]		
Weighted Burgers Vector	Periclase [11]		Mg [11], Ti, [17], Ice [19], [20], [27]		Quartz [11], [15]		Zircon [16], [18], [22]		Olivine [23] [25], [28] [29]	Titanite [24]	Plagioclase [21], [26], [28], [29]
Orientation tensor analysis									Olivine [12]		
Time-lapse misorientation	Fe [6], Au [13]		Mg [13]								
Interphase misorientation analysis										Barroisite, omphacite [14]	

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