Interactive comment on “A database of plagioclase crystal preferred orientations (CPO) and microstructures – implications for CPO origin, strength, symmetry and seismic anisotropy” by T. Satsukawa et al.

H. Stunitz (Referee)
holger.stunitz@uit.no

Received and published: 23 September 2013

Comments on the manuscript: “A database of plagioclase crystal preferred orientation. . .” by Satsukawa et al.

The manuscript summarizes the crystal preferred orientation (CPO) data of 170 samples, in which the plagioclase CPO was measured. The data appears of very good quality, and it is complemented with systematic seismic anisotropy analysis data. Although the reading of the manuscript does not cause attacks of insomnia, the data is
a unique source of information, and it should definitely be published with only minor technical revision.

Detailed comments:

p. 1194, line 13: omit “strain”

p. 1194, lines 14-15: what is meant by “intrinsic organization resulting from CPO”? This needs clarification or explanation.

p. 1195, line 15: “light- and electron-” instead of “optical and electron-”

p. 1198, line 21: “individual samples” instead of “individual sample”

p. 1207, lines 1,2: The ODF J-indices seem stronger than the pole figure J-indices. Or does the sentence refer to the comparison between the plastic and magmatic samples? This is unclear.

p. 1207, line 4: “widely” instead of “wildly”

P. 1207, lines 8-11: Some of these differences mentioned here are geometrically necessary conditions of the BA indices and how the texture types are defined, so what is the point of this part of the paragraph? Probably this can be omitted.

p. 1210, line 11: “10a” instead of “12a”

p. 1210, line 25: “microstructures” instead of “microstructure”

p. 1222, Table 1: “Oklahoma “ instead of “Oklahoma”

p. 1223, Table 2: “recrystallized” instead of “recristallized”

p. 1239, Table 4: “Oklahoma “ instead of “Oklahoma”

Interactive comment on Solid Earth Discuss., 5, 1191, 2013.