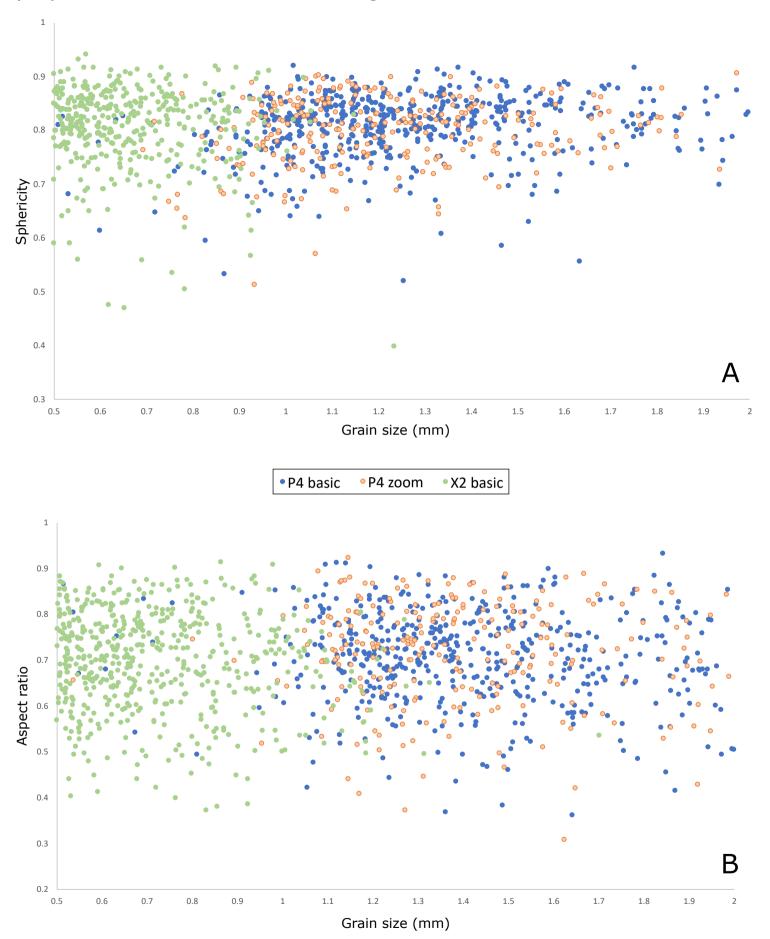
Shape parameters for 1000 random grains from different CAMSIZER cameras



Supplementary figure 2 showing A) sphericity and B) aspect ratio as a function of grain size (in mm) for individual grains measured on a single sample (sample 38). Grains were measured on three different cameras: CAMSIZER P4 basic and zoom cameras (P4 basic and P4 zoom) as well as CAMSIZER X2 basic camera (X2 basic) in the size range 0.5-2 mm. However, samples were sieved at 1 mm with finer grain sizes being measured on CAMSIZER X2 and coarser grain sizes being measured on CAMSIZER P4. Therefore, there is only a slight overlap of the data points between the P4 and X2 cameras in terms of grain size (around 1 mm). Both sphericity and aspect ratio values show the same range for all three cameras across the entire size range even thorugh the cameras have very different resolutions ranging from 173 (P4 basic) over 5,638 (P4 zoom) to 32,054 (X2 basic) pixels/particle at the 1 mm grain size. This shows that shape parameters are not significantly affected by camera resolution and variations of shape data in terms of grain size are related to shape changes of the grains.