Aligning Grain and Mica

[A] Zircon grain from the Fish Canyon Tuff with an apparently even distribution of fission tracks and therefore uranium (u18z, 26, g91)

[B] Image of the same zircon grain from the corresponding mica (image here has been rotated 180 degrees so that it corresponds to the grain above). Note two things. First, the grain shows zonation of uranium because the center part of the grain has a relatively low track density. Second, the edges of the grain are indistinct and do not correspond exactly to the exposed grain edges. This is due to the fact that induced tracks are derived from the entire grain, not just the exposed surface.