Figure 1: **Random effects shrinkage**. ADC estimates obtained from an independent-voxels (Indep) MCMC analysis, compared with those given by the spatial random effects (RE) model, using the signal intensity data taken from the core region of one subject. The independent-voxels ADC estimates are those given by a 2-point (b_{500}, b_{1000}) fit. The lines join the two estimates obtained for each of the 225 individual voxels. The change in ordering among the estimates is attributable to an underlying spatial correlation, and the resulting shrinkage towards the mean of the surrounding voxels. In this regard, the difference between a spatial and exchangeable random effects model is important.