**Indexing Errors**

**Subjects With Non-Standard Gradient Directions**

It is possible to process subjects with a non-standard number of images. This can happen if the data is acquired in a non-standard way or if the scan is not complete.

**Note**: if you are processing a group of subjects and one subject returns an indexing error (typically “Index in position 4 exceeds array bounds”), this might be an indication that the subject has a non-standard number of images. To confirm this, you can look at the bval file or the 4D nifti and count the number of images.

Processing subjects with this issue requires two things:

* Modification to the DKE parameters file
* Manual gradient file creation

Normally, DKE only requires a single gradient file which is created during DKE\_basic.m or DKE\_with\_preproc.m. However, it is not possible to use this single gradient file when you have a non-standard number of images. You will most likely need two gradient files: one to house your B1000 information and one to house your B2000 information.

To manually create the gradients files, you will need to transpose the bvec file and save it as a text file called “gradient\_dke.txt”