Slice Timing: Multiband & NIFTI .nii

- **AFNI** can store EPI slice time offsets in the dataset header (*.HEAD)
- **Problem**: Multiband (multi-slice) image acquisition has complicated slice timing/order
  - Not just interleaved: **0 4 1 5 2 6 3 7**
  - Might be instead: **0 2 3 1 0 2 3 1** (multiband 2)
  - Can be hard to read from DICOM files
- **Problem**: The standard NIFTI .nii format cannot store complicated slice timings
  - So programs like *dcm2niix_afni* cannot store this information even if the program can find it in the DICOM files

AFNI and Slice Timing

- I am assuming you have (or can find) the slice timing for your EPI datasets
  - If you are downloading data from some other place, you might not be able to get that timing
  - In that situation, you will just have to skip slice timing correction (*tshift* block in *afni_proc.py*)
- It is possible to make *afni_proc.py* use slice timing that is **not** stored in the dataset header, but it is complicated right now

☛ I plan to make a software change to **AFNI** to make it easier to store the slice timing in the NIFTI file, so *3dTshift* can do good work - DONE