- ## File : TripleHair_Param.mat

  Description: File Containing Parameters for the Triple Hair Double Reflector Experiment

  Variables:

  Nx – Number of pixels in the x-direction
  Ny- Number of pixels in the y-direction
  alpha- the angle made by the left mirror with the transducer array (in radians)
  beta- the angle made by the right mirror with the transducer array (in radians)
  cAngle- the acceptance angle each transducer element (in radians)
  ct- the speed of sound in medium (in mm/μs)
  f_rf- Sampling rate of the system (in MHz)
  lines- Number of transducers in the array
  pitch- The pitch of each transducer element in the linear array (in mm)
  pixel_size- The pixel size in the reconstructed image (in mm)
  samples- Number of time samples per A-line.
  x0_img- The x-coordinate of the reconstructed image region (in mm)
  xn – The x-coordinate of the transducer array (in mm)
  y0_img- The y-coordinate of the reconstructed image region (in mm)
  ym_left- The y intercept made by the left mirror (in mm)
  ym_right- The y intercept made by the right mirror (in mm)
  yt- The y-coordinate of the transducer array (in mm)

- ## File : TripleHair_Data.mat

  Description: File Containing Raw Data for the Triple Hair Double Reflector Experiment

  Variables:

  PA_data : A 2D array containing the pressure value for all the transducers for all recorded time points.

- ## File: TripleHair_Recon.mat

  Description: File containing the reconstructed image for the Triple Hair Double Reflector Experiment.

  Variables:

  Reconn_p0: A 2D array of the reconstructed image using Filtered Back Projection algorithm. The pressure value has been normalized to range [-1 1].