1. We provided the measured dataset in folder "DWI_SNR_max_dataset." This dataset is available in the following link:

"https://drive.google.com/file/d/1aRyn8uKgGRkIxohs6M7sddUSCdfe3IFZ/view?usp=sharing"

- 2. The measured dataset contains the data recorded at all transducer array elements. The phantom and freshwater measurement data are in subfolders "Phantom_Data" and "Freshwater_Data," respectively.
- 3. The subfolder "Phantom_Data" consists of two subfolders called "Noise_Data" and "Signal_Data." The noise data includes 13 distinct measurement data in the speckle region of the phantom without any transmission. The "Signal Data" subfolder contains three subfolders, called "Anechoic_Cyst_Data," "Pin_Target_Data," and "Speckle_Data." The "Anechoic_Cyst_Data" includes the data obtained from the anechoic cyst region. The "Pin_Target_Data" includes the data obtained from the vertical and horizontal line targets (pin targets). The "Speckle_Data" includes the data obtained from the speckle region of the phantom, where there are no targets. The data measured with diverging wave imaging (DWI), conventional single-focused phased array imaging (CSFI), and synthetic transmit aperture imaging (STAI) methods are in these three subfolders.
- 4. The subfolder "Freshwater_Data" consists of the measured data obtained from the freshwater measurements.
- 5. There are "Read Me" word files in each subfolder where the relevant information on data records is provided.