**Summary**

Raw image and load data are provided for all the tests. Each test consists of normal loading, tangential loading, and normal unloading sections. The data from digital image correlation (DIC) obtained from the raw images are provided. These are processed with MATLAB scripts. Surface texture measurement data for test interfaces are also provided. Further information can be obtained from the manuscript.

**Details**

1. **‘RawImageAndLoad’ folder:**

The raw experimental images and load data corresponding to each test section is provided in respective folders.

1. **'DIC\_Data' folder:**

Raw images were processed by DIC software (DaVis StrainMaster) for each test section. The output files from StrainMaster alongside a load data file and DIC settings information file are provided in respective folders for each test section.

1. **'Matlab\_FinalProcessing' folder:**

The MATLAB codes used to process the DIC Data for each test section are provided, in respective folders

3.1 For processing normal loading and unloading test sections run scripts with prefixes A,B,C,D,E and F (in this order), within the respective folder.

The first script 'A\_LoopFiles' will ask for a name for the test and the location of the DIC data for that test section. Provide the relevant folder found in 'DIC\_Data' folder.

3.2 For processing tangential loading test sections. Run scripts with prefixes A,B1,B2,B3, C1,C2, and C3 (in this order), in the respective folder.

The first script 'A\_LoopFiles' will ask for a name for the test and the folder location of the DIC data for that test section. Provide the relevant folder found in 'DIC\_Data' folder.