**Read me file:**

**University of Southampton – Engineering and the Environment – Maria Valero – mv1n14@soton.ac.uk**

The excel file contains experimental data for the paper. In particular:

**Fig. 3.** Measured vs applied stresses: (a), normal (pressure) and (b), tangential (shear) stresses.

**Fig. 4.** Comparison of measured (solid lines) with applied stresses (dotted lines) as a function of time: (a) test protocol mimicking pressure induced from a fingertip “press” activity, (b) test protocol mimicking vibration sensing, (c) test protocol mimicking shear stresses induced from a fingertip “drag” activity and (d) test protocol mimicking shear stresses induced from a fingertip “rub” activity.

**Fig. 6.** Measured pressure and shear stresses in the press-drag-lift activity described in Fig. 5. Three phases can be distinguished: (I) contact phase, (II) press-drag phase and (III) lift phase.

**Date of data collection:** from February 2016 - July 2016

**Information about geographic location of data collection:** University of Southampton, U.K.

**Date that the file was created:** October 2016