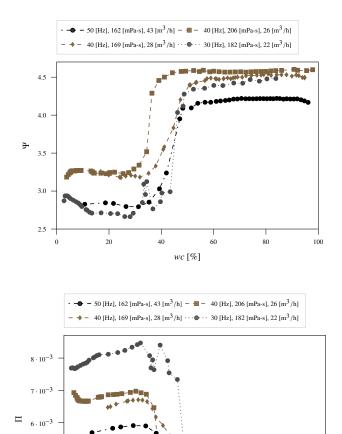


Figure 1: Sensors Distribution.



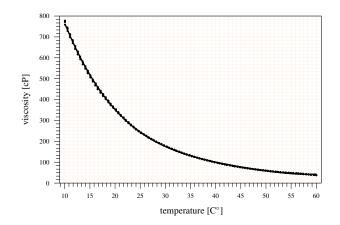
 $5\cdot 10^{-3}$

 $4 \cdot 10^{-3}$

20

40

wc [%]



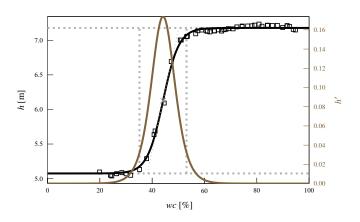


Figure 2: 40 [Hz], 169 [mPa-s], 28 [m³/h]

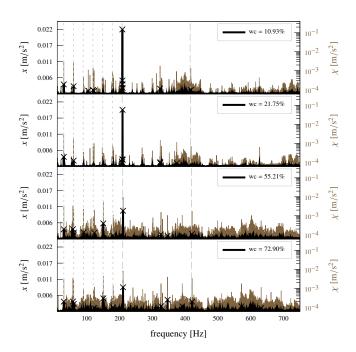
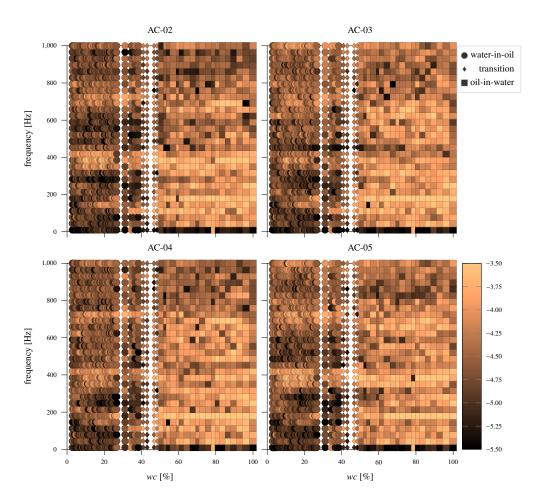


Figure 4: AC-04 0-750 Hz

100



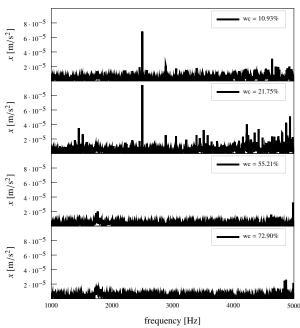


Figure 5: AC-01Z 1-5kHz

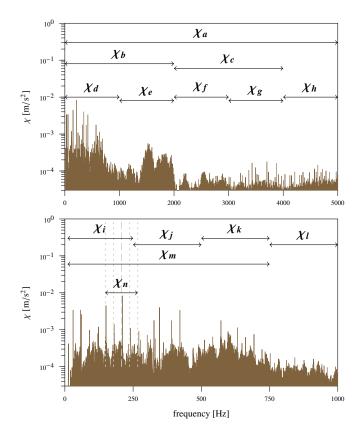


Figure 6: Analysis ranges AC-04 sensor at 72.9% water cut

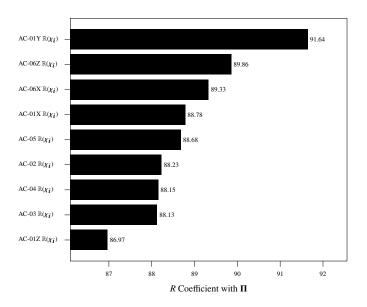


Figure 7: Pearson correlation with the dimensionless torque

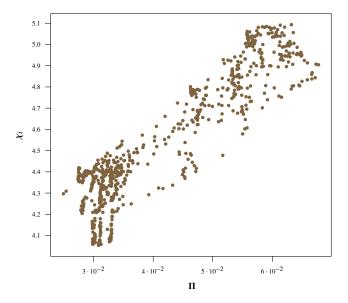


Figure 8: Dimensionless torque vs rms of fft between 0 - 250 Hz for AC-01Y sensor

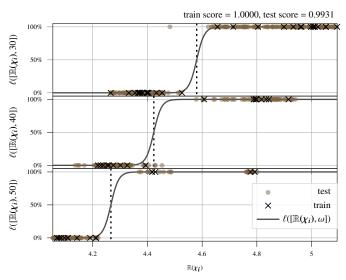
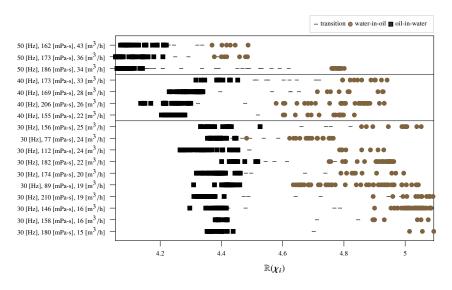
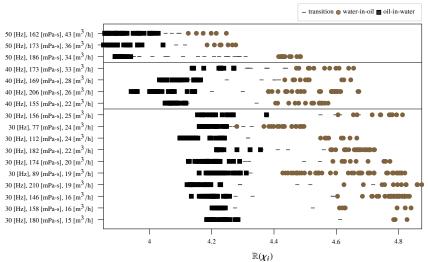


Figure 9: AC-01Y





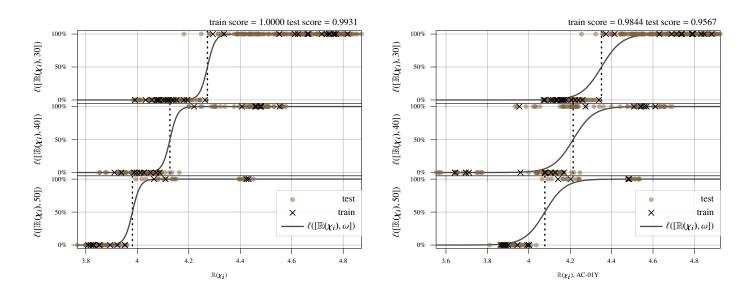


Figure 10: AC-04 Figure 11: AC-06Y

