**Lecture 19 – Momentum exchange**

The following graph shows the measured joint probability density between vertical wind fluctuations w’ and horizontal wind fluctuations u’ in the surface layer (2 m above ground). The percentages in each corner show the fraction of the total number of measured values that fall into the corresponding quadrant (quarter of graph)



1. Label which quadrant shows ‘sweeps’ and which one ‘ejections’.
2. What can you say about the sign of in this situation? What does this tell you about the direction of momentum transfer in the surface layer?
3. In what range do you expect ruw?