## Roll Z-score for hsapiens Average Z-score shuffled hmm -100100 200-200 -100100 200-200 -1000 100 200 Position around TSS (bp) source — hmm — raw — shuffled Average Z-score 1.0 0.5 0.0 -0.5 -200 -100100 200 Position around TSS (bp) Absolute difference value 0.75 0.50 0.00 - 0.00 Difference between raw and hmm shapes -200 -100100 200 Position around TSS (bp)