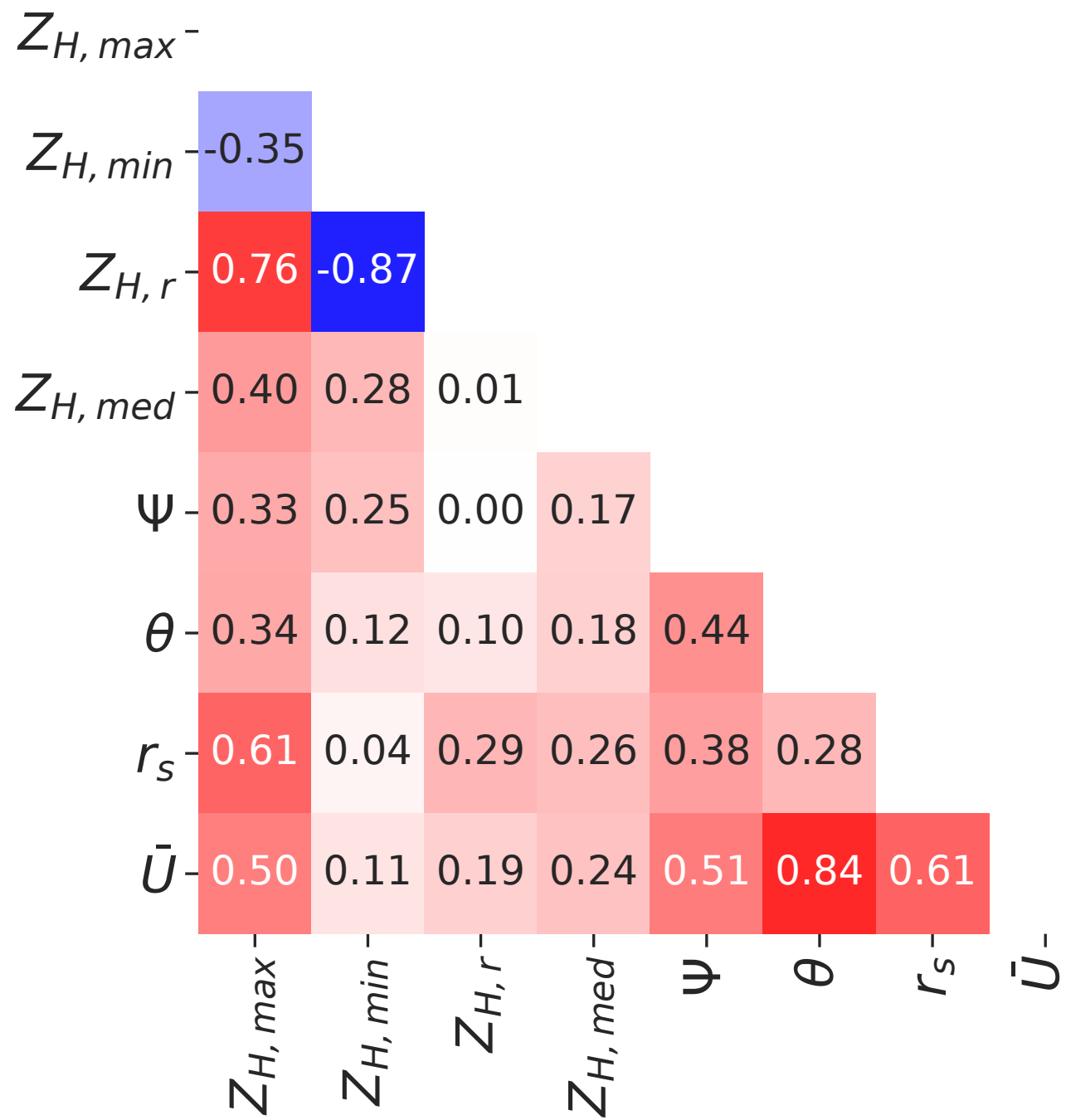


(a) $r_s < 1$ rpm(b) $r_s \geq 1$ rpm