

$$r = \frac{\sum_{i=1}^{N_t} (s_B(t_i) - \hat{s}_B) (A(t_i) - \hat{A})}{\sqrt{\sum_{i=1}^{N_t} (s_B(t_i) - \hat{s}_B)^2} \sqrt{\sum_{i=1}^{N_t} (A(t_i) - \hat{A})^2}}$$