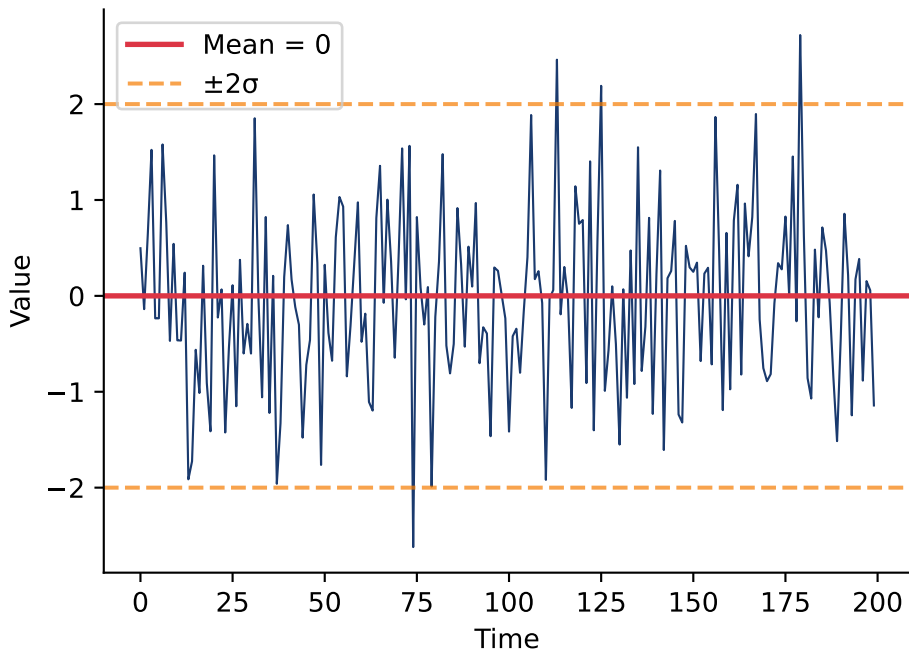
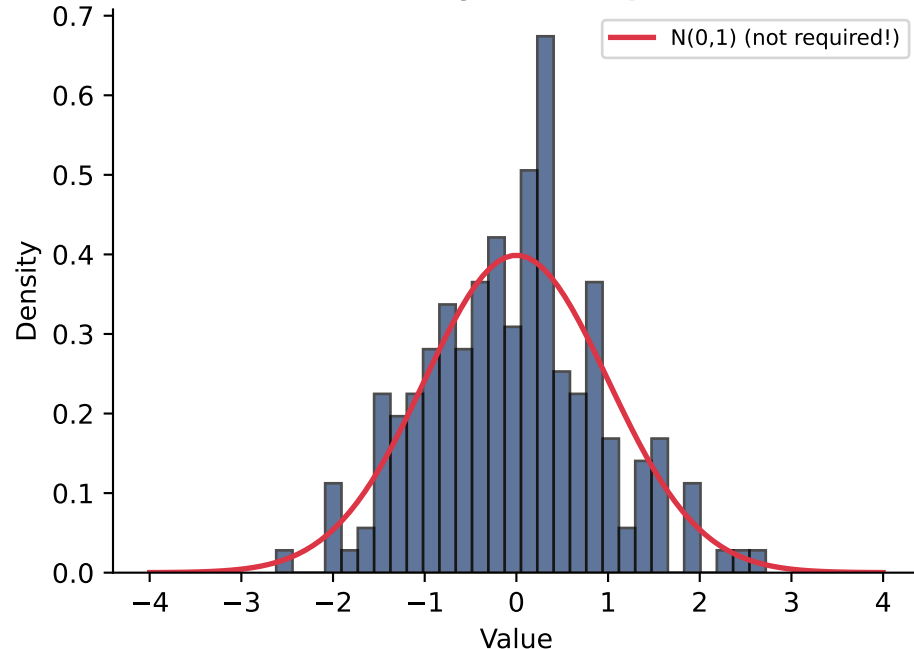


**White Noise:  $\varepsilon_t \sim WN(0, \sigma^2)$**

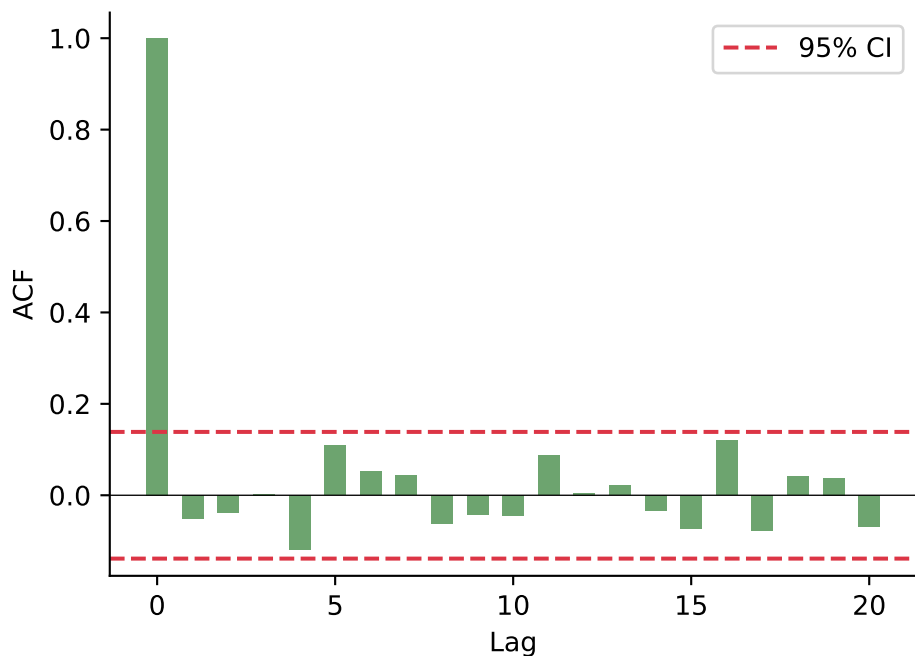


**Distribution  
(Normality NOT required)**



**ACF: No Autocorrelation**

$$\text{Cov}(\varepsilon_t, \varepsilon_s) = 0 \text{ for } t \neq s$$



**White Noise Properties**

1.  $E[\varepsilon_t] = 0$  **Zero mean**
2.  $\text{Var}(\varepsilon_t) = \sigma^2$  **Constant variance**
3.  $\text{Cov}(\varepsilon_t, \varepsilon_s) = 0$  **Uncorrelated**
4.  $\varepsilon_t \sim N(0, \sigma^2)$  **NOT required!**