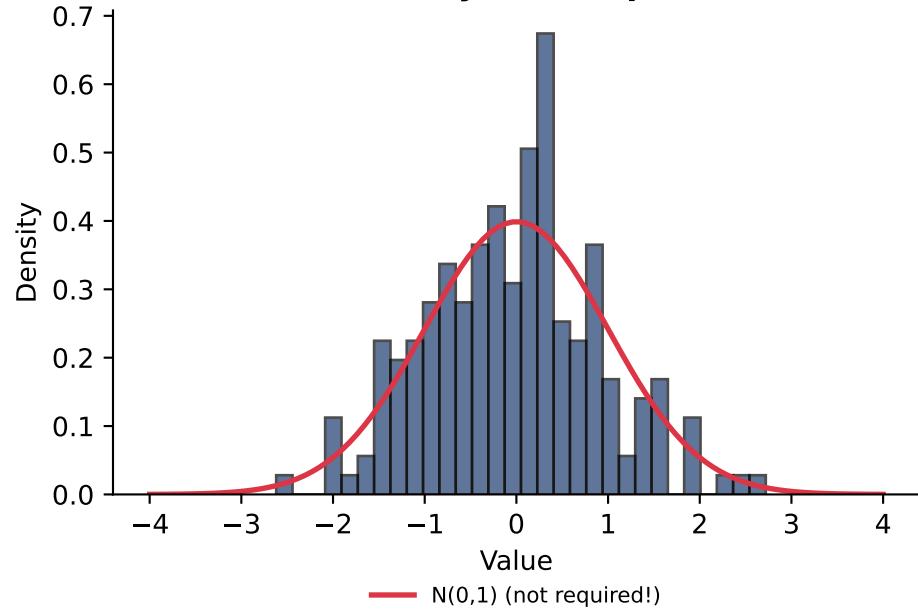
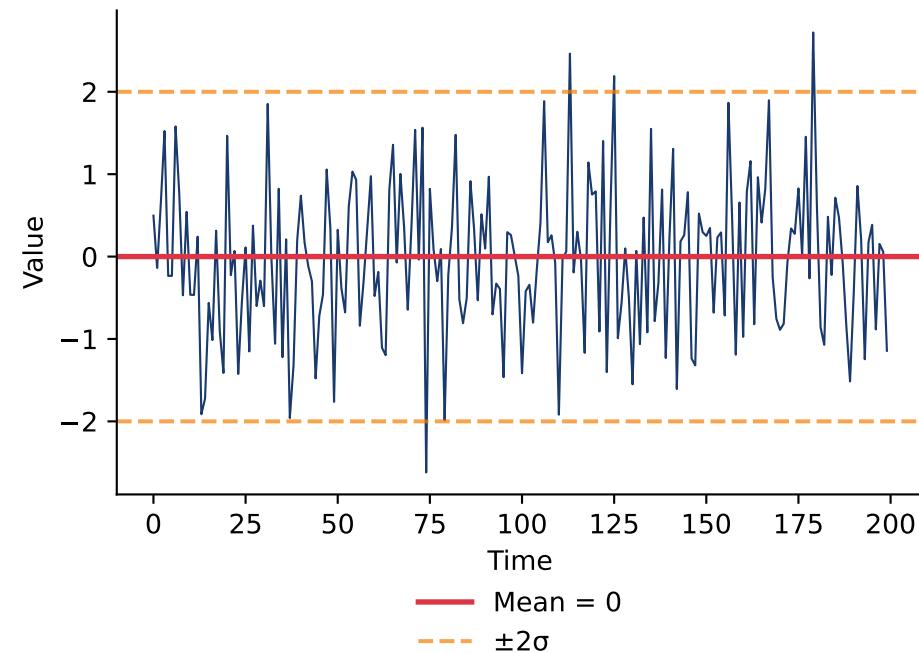


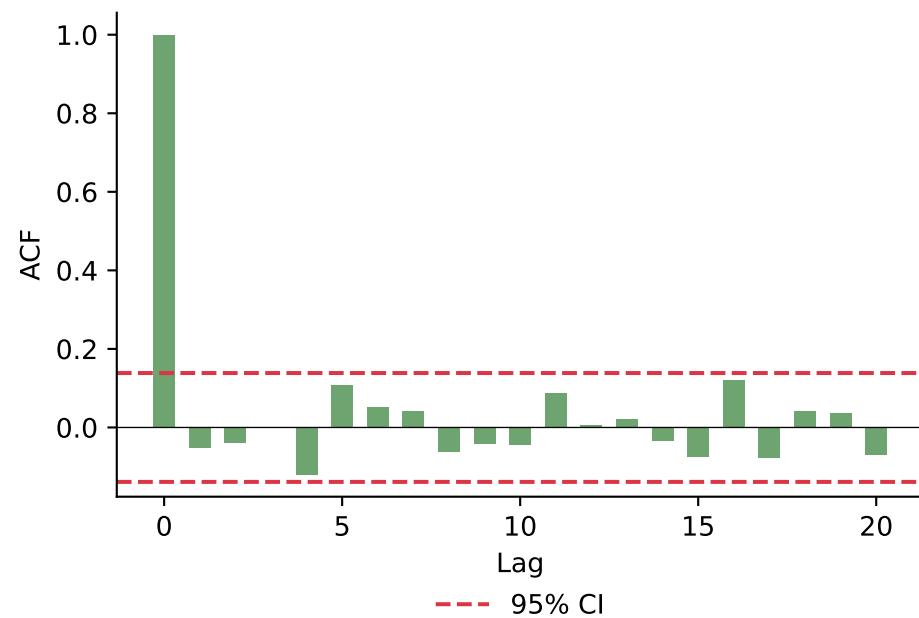
**White Noise:**  $\varepsilon_t \sim WN(0, \sigma^2)$

**Distribution  
(Normality NOT required)**



**ACF: No Autocorrelation**  
 $Cov(\varepsilon_t, \varepsilon_s) = 0$  for  $t \neq s$

**White Noise Properties**



1.  $E[\varepsilon_t] = 0$

**Zero mean**

2.  $Var(\varepsilon_t) = \sigma^2$

**Constant variance**

3.  $Cov(\varepsilon_t, \varepsilon_s) = 0$

**Uncorrelated**

4.  $\varepsilon_t \sim N(0, \sigma^2)$

**NOT required!**