Random Walk (Non-Stationary)
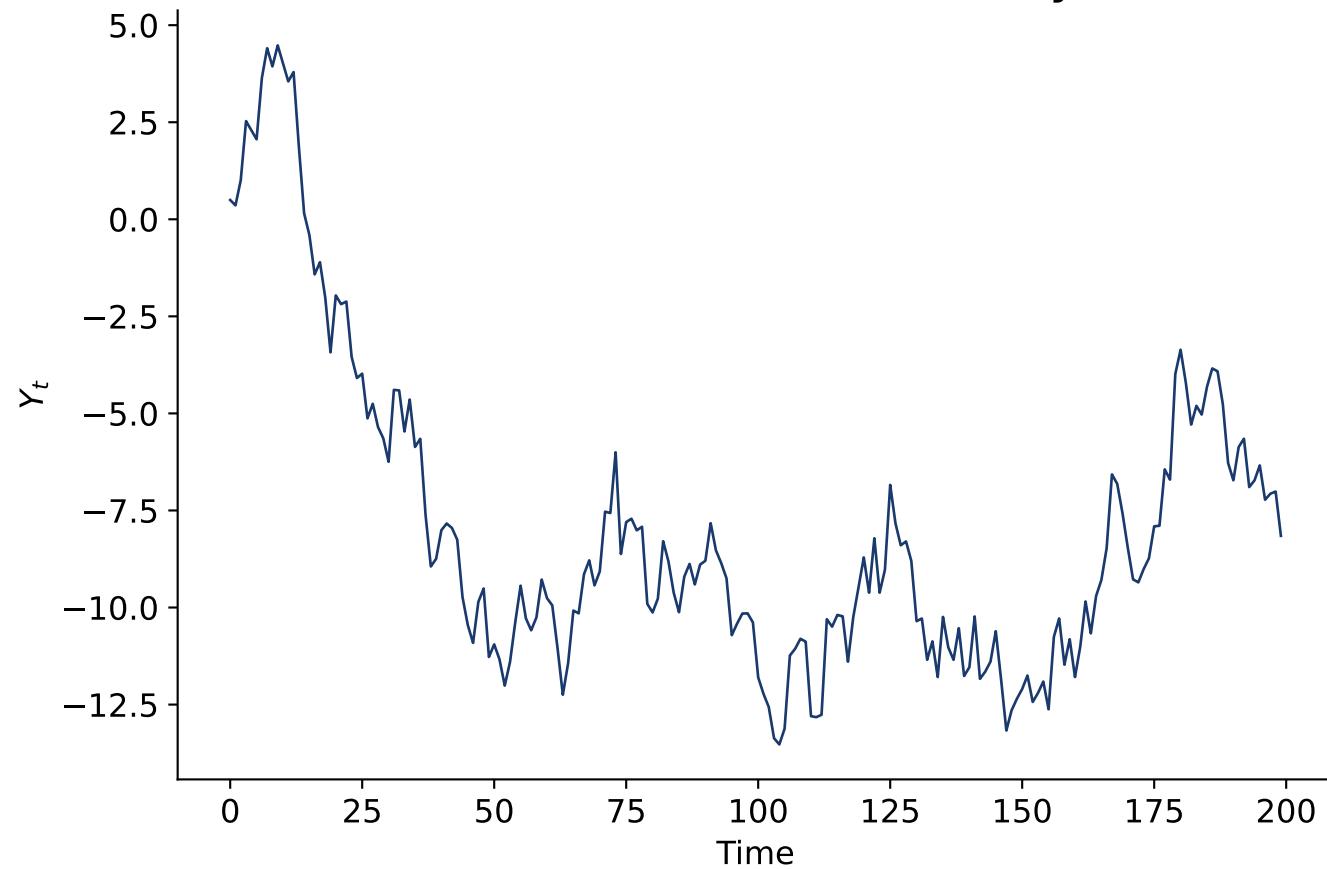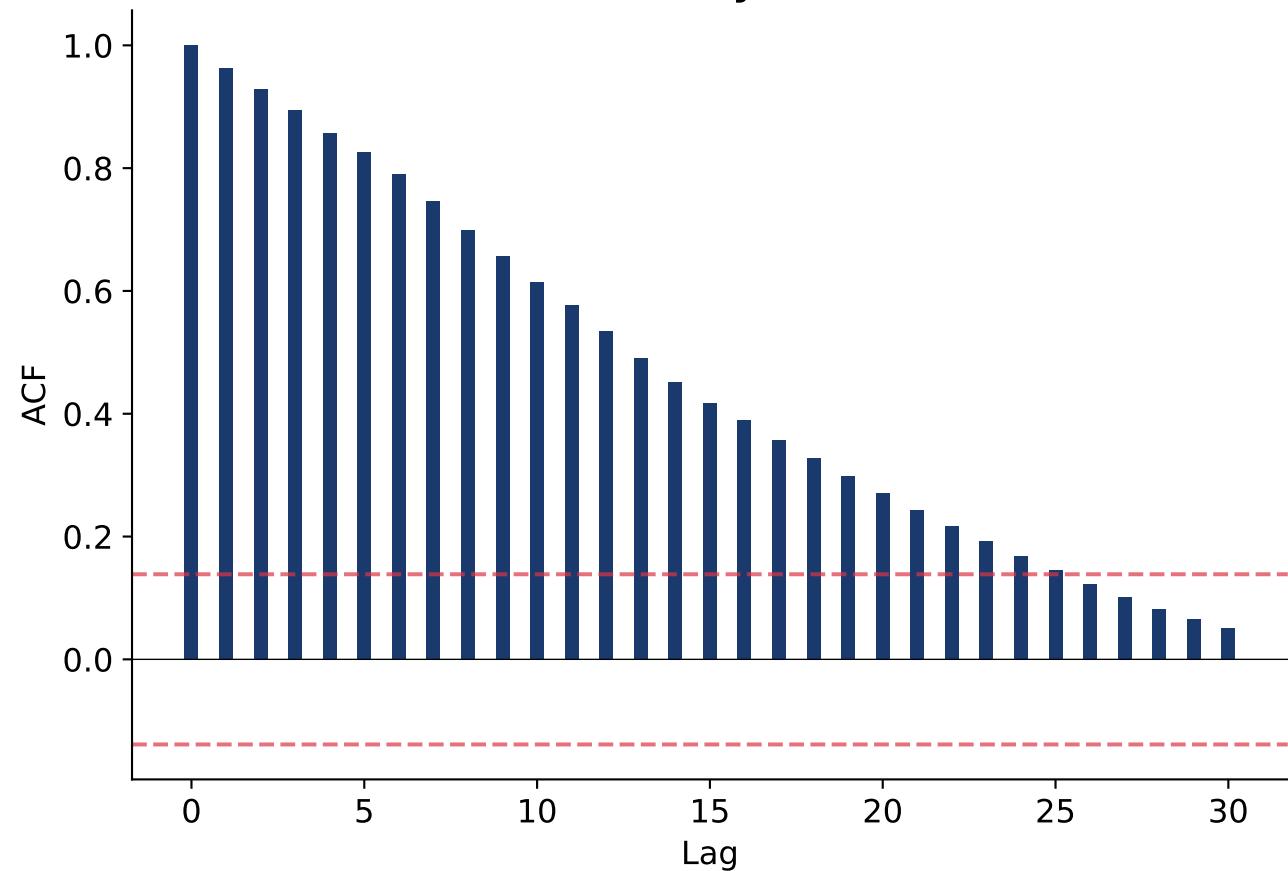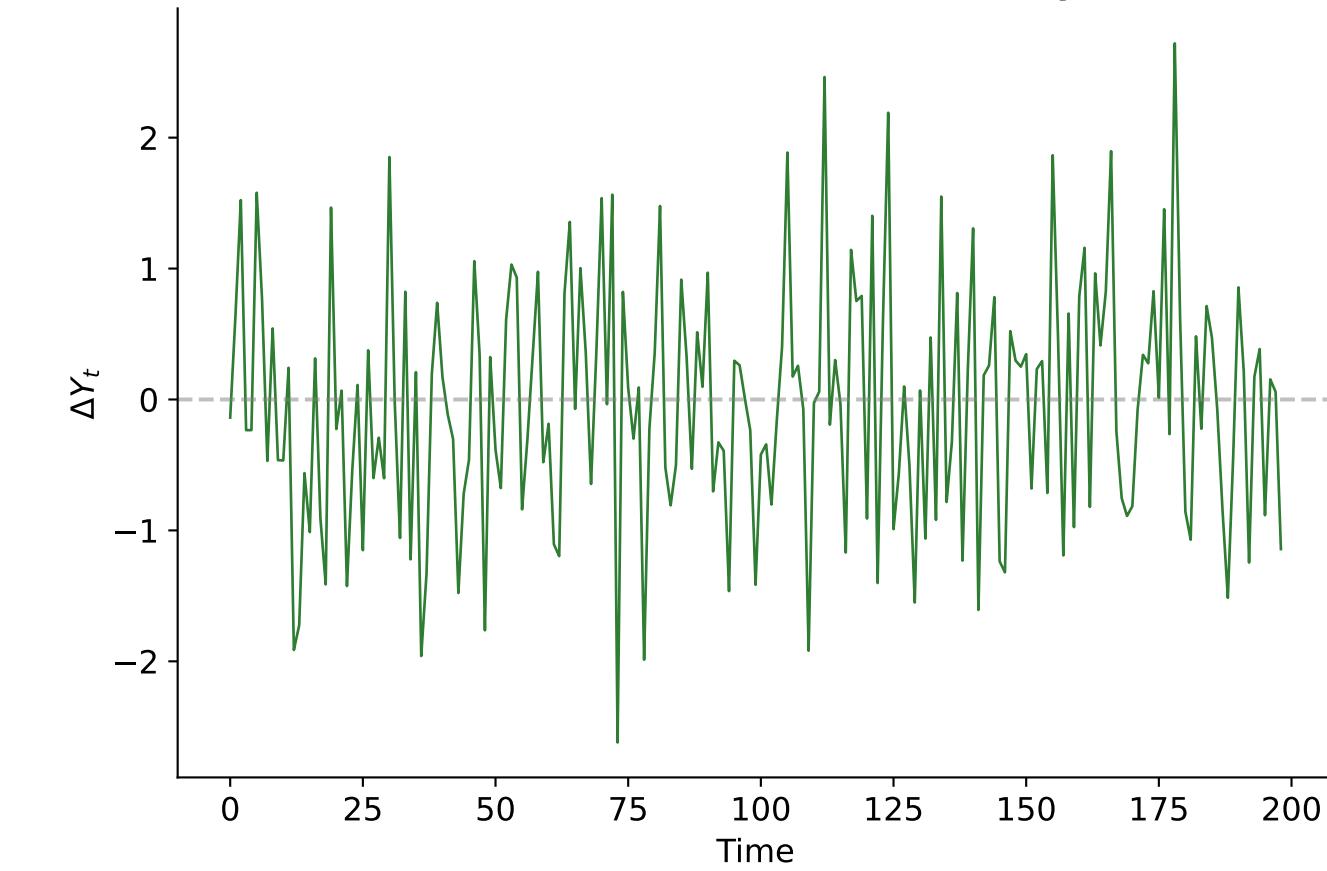
ACF: Slow Decay → Unit Root

First Difference ΔY_t (Stationary)

ACF: Cuts Off → Stationary