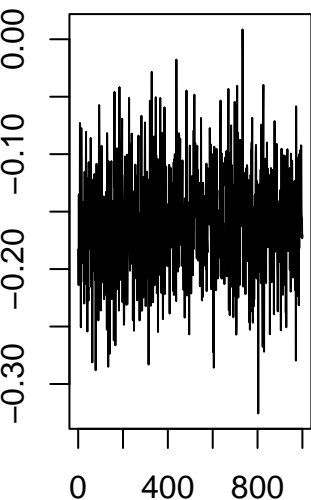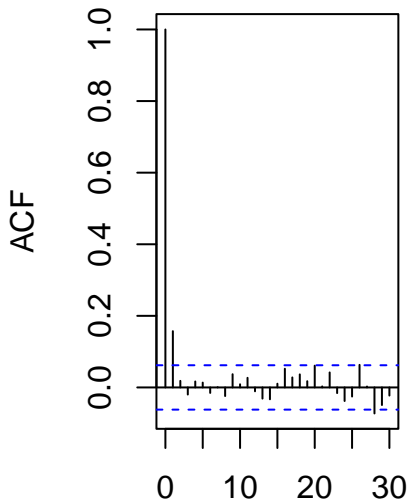**Spatial random effect**   **Effective sample size: 727.**