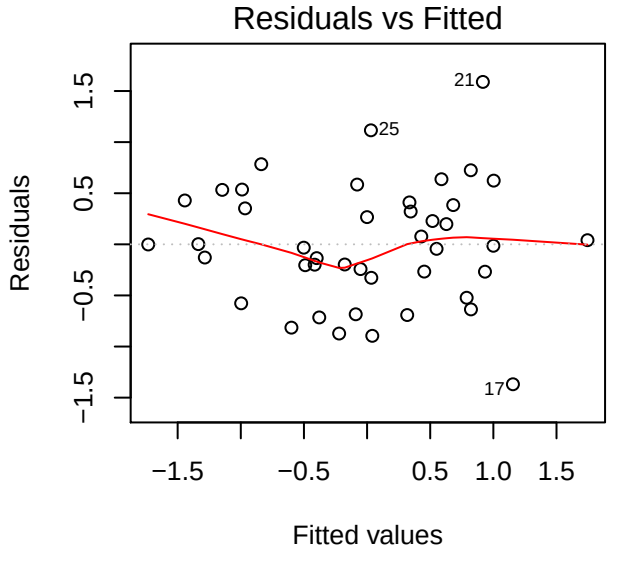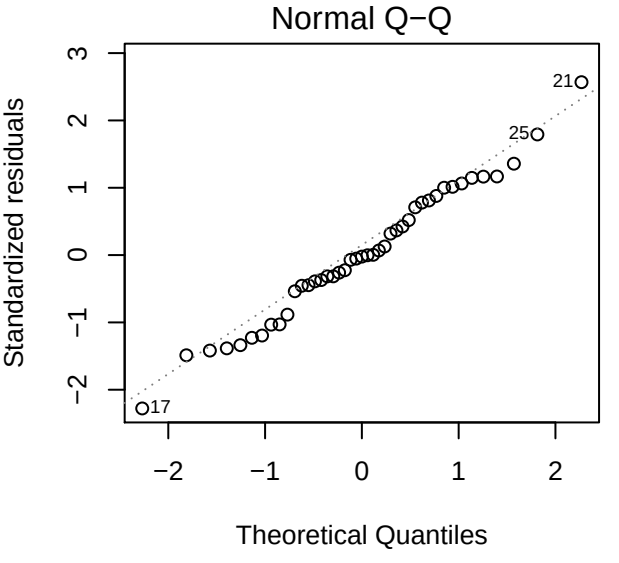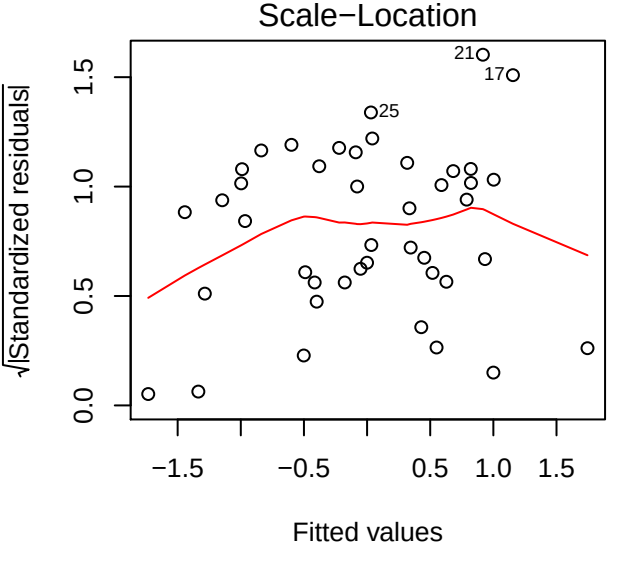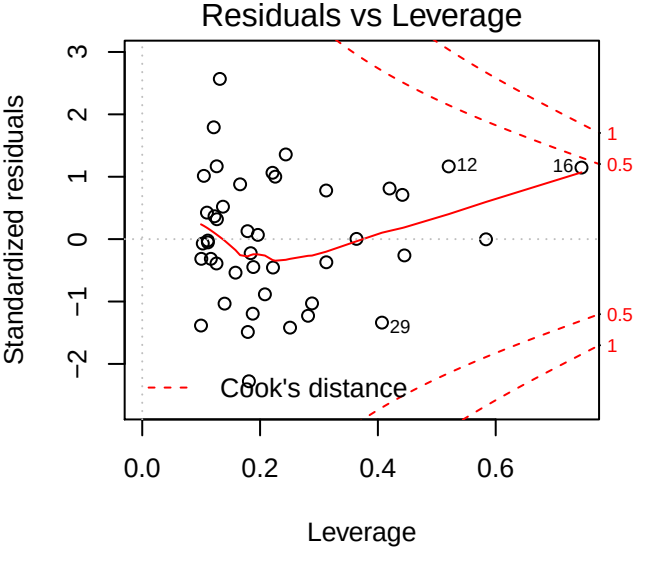Pattern Model