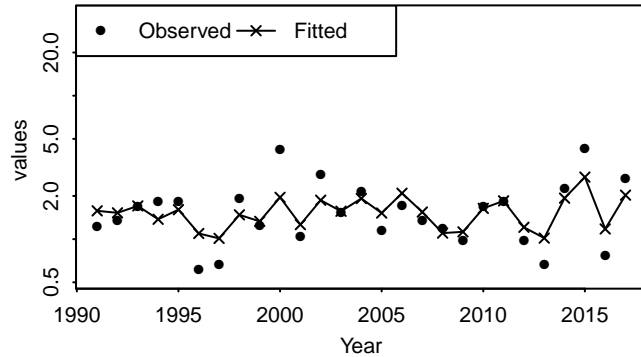
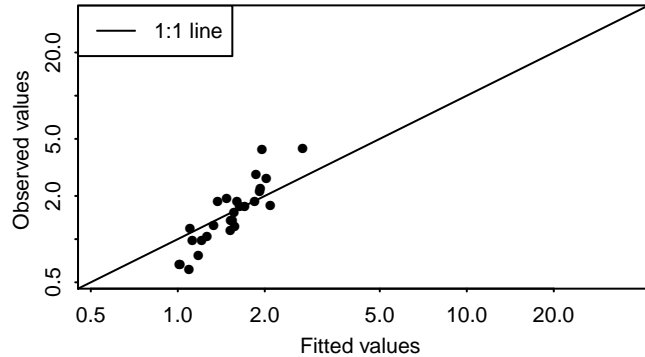


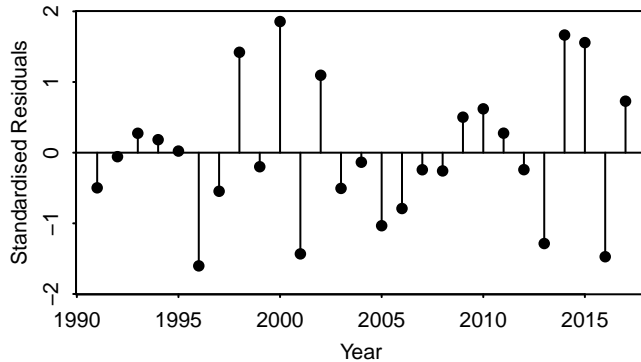
a) Observed and fitted values time series



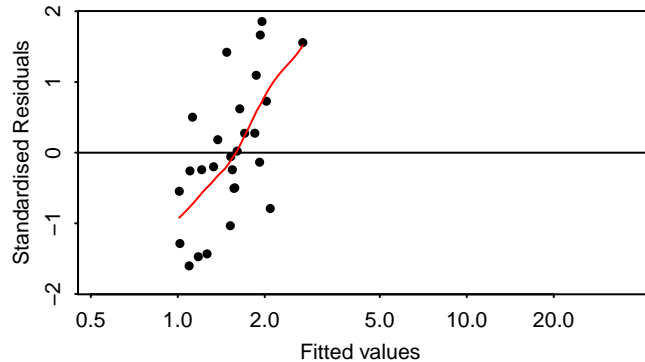
b) Observed vs fitted values



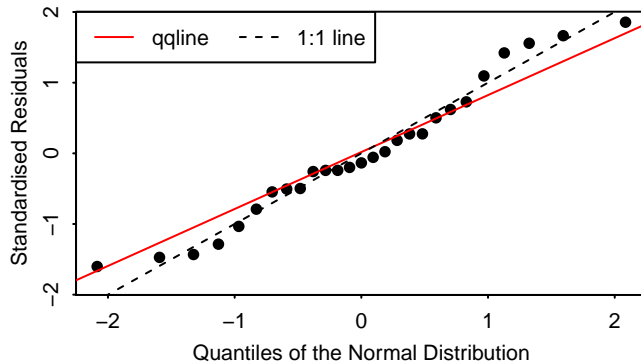
c) Standardised residuals over time



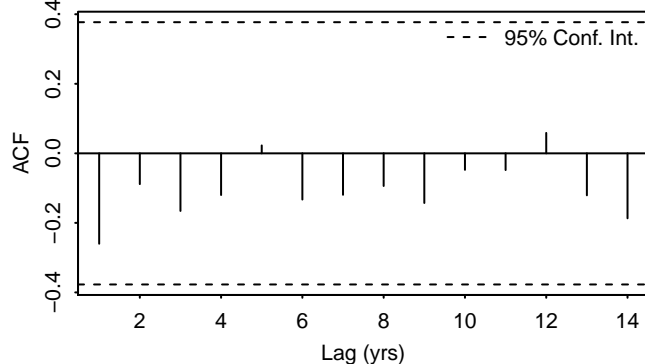
d) Tukey–Anscombe plot



e) Normal Q–Q plot

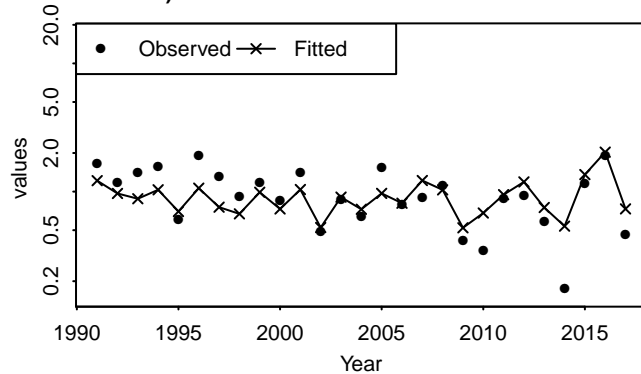


f) Autocorrelation of Residuals

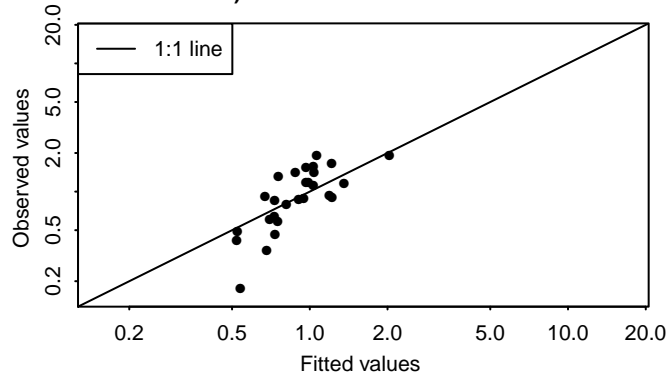


# Turbot in IV pg 9 Diagnostics – BTS–ISIS, age 2

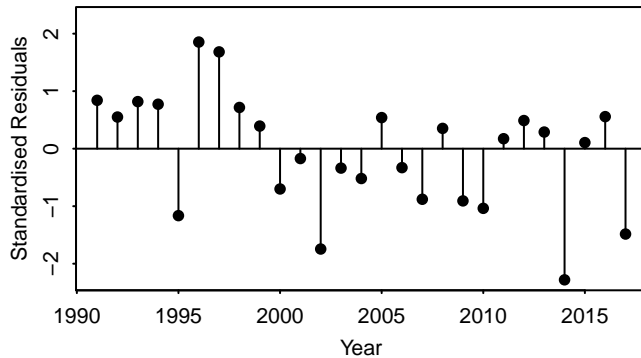
a) Observed and fitted values time series



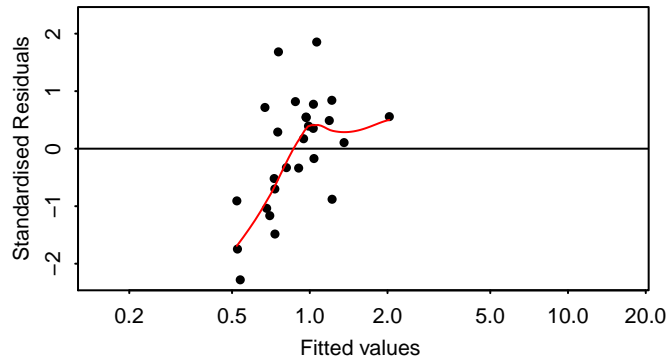
b) Observed vs fitted values



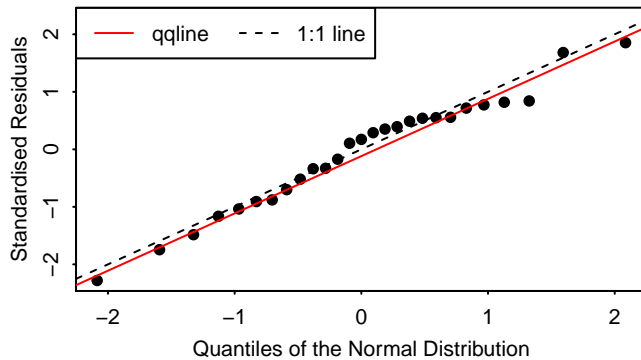
c) Standardised residuals over time



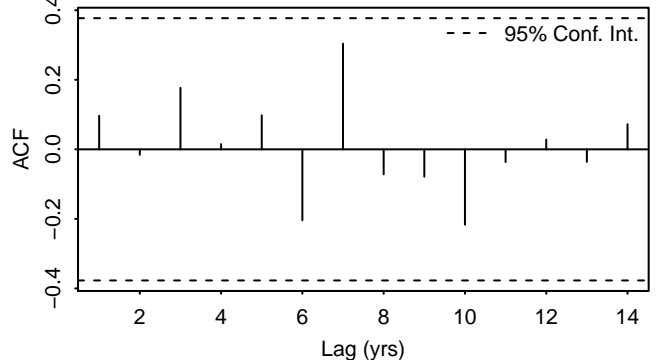
d) Tukey–Anscombe plot



e) Normal Q–Q plot

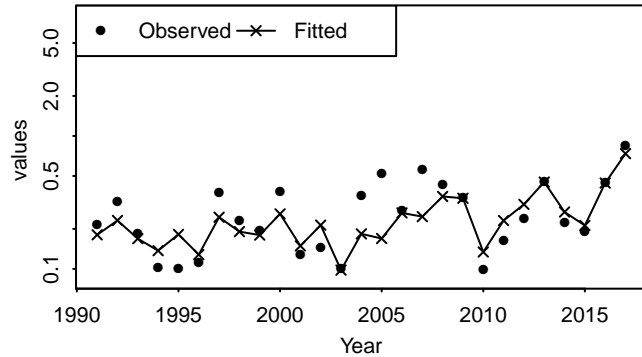


f) Autocorrelation of Residuals

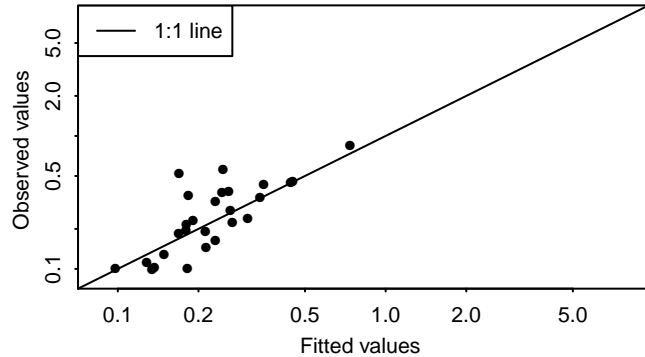


# Turbot in IV pg 9 Diagnostics – BTS–ISIS, age 3

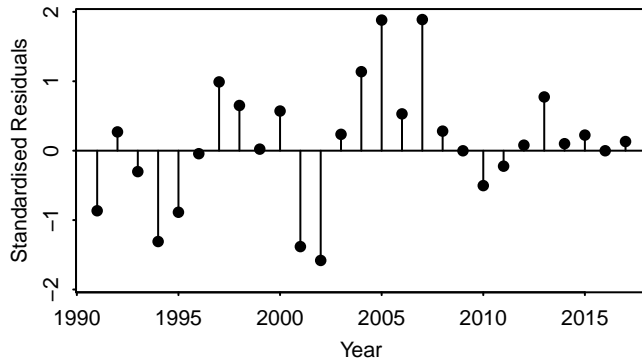
a) Observed and fitted values time series



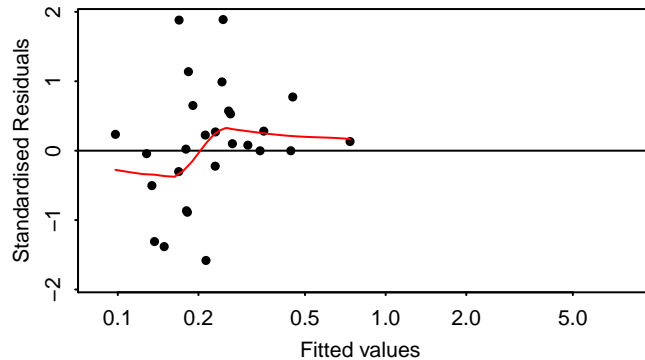
b) Observed vs fitted values



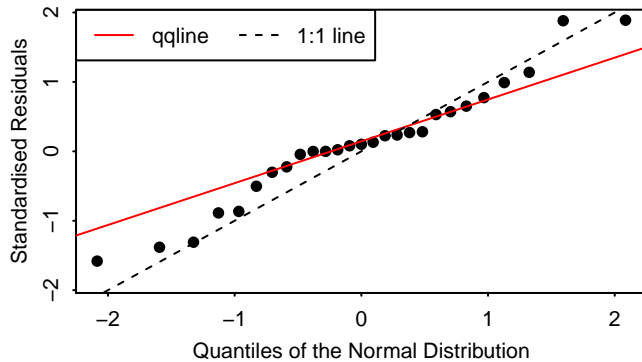
c) Standardised residuals over time



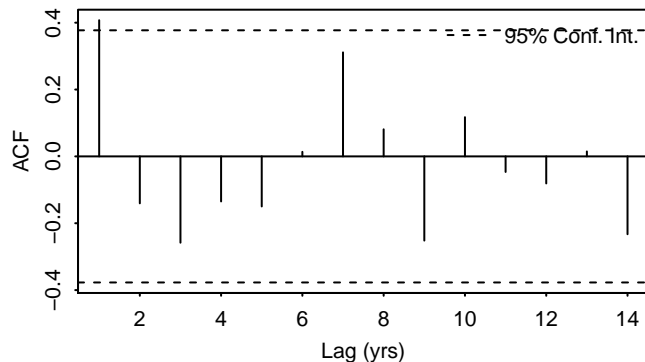
d) Tukey–Anscombe plot



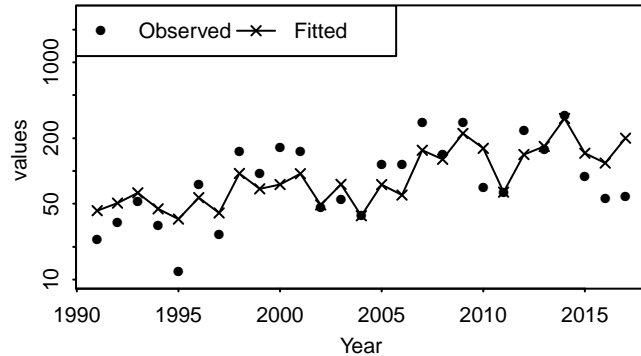
e) Normal Q–Q plot



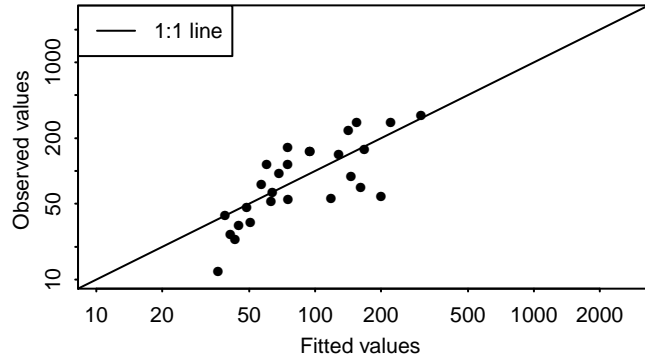
f) Autocorrelation of Residuals



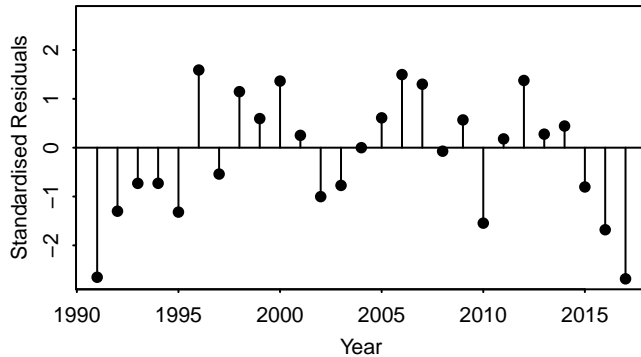
a) Observed and fitted values time series



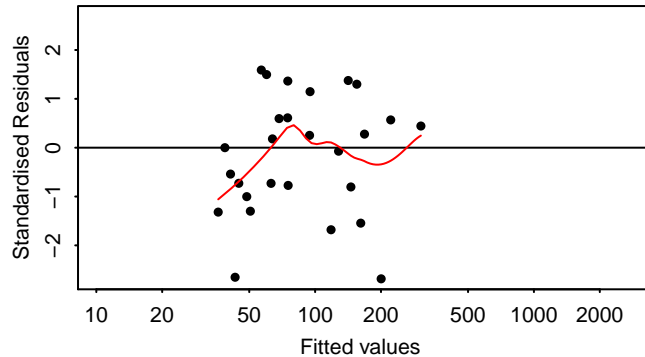
b) Observed vs fitted values



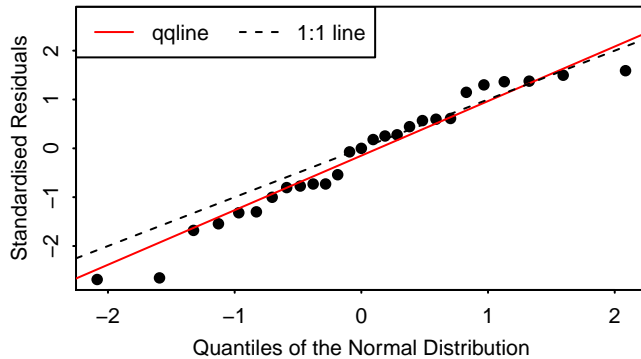
c) Standardised residuals over time



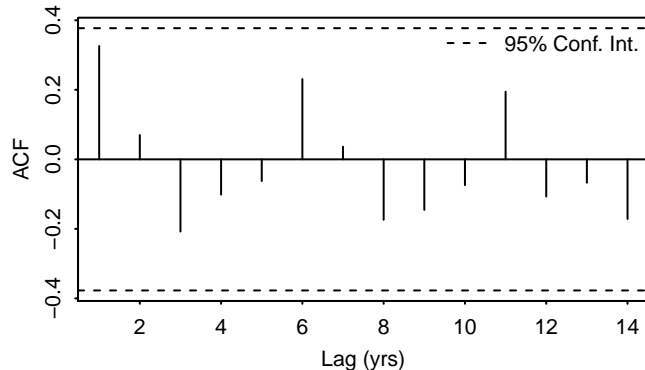
d) Tukey–Anscombe plot



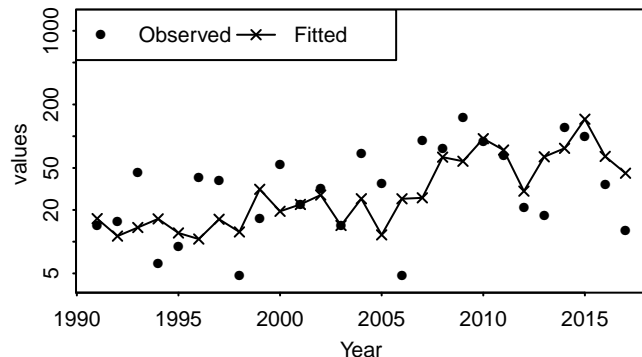
e) Normal Q–Q plot



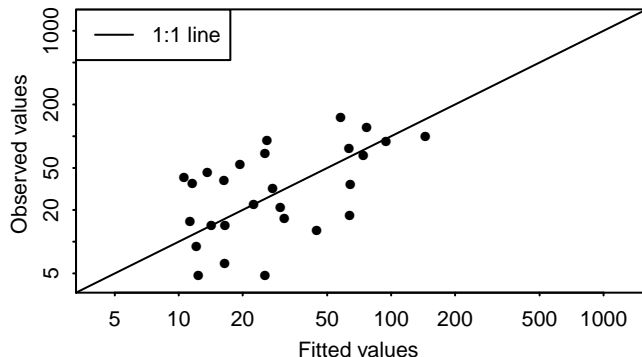
f) Autocorrelation of Residuals



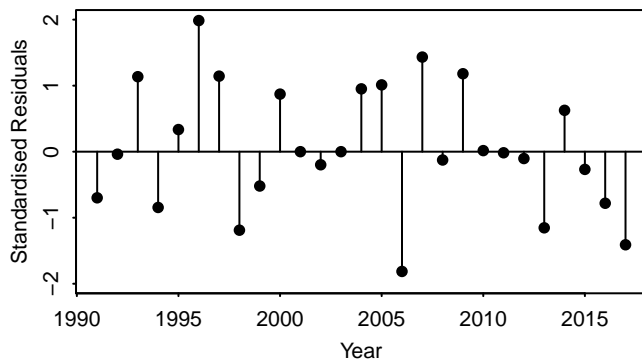
a) Observed and fitted values time series



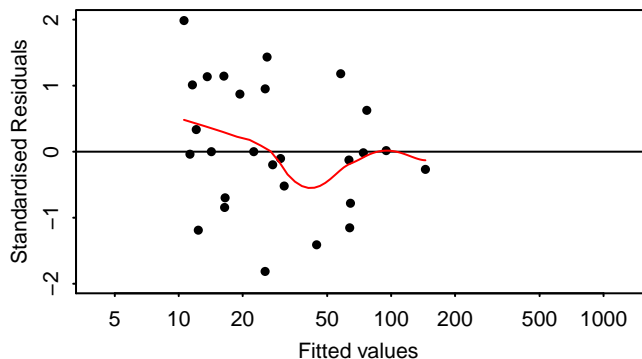
b) Observed vs fitted values



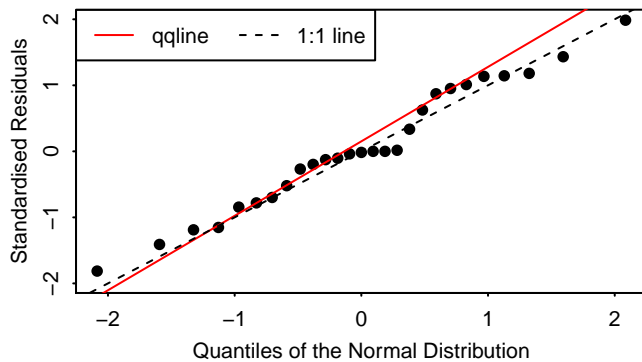
c) Standardised residuals over time



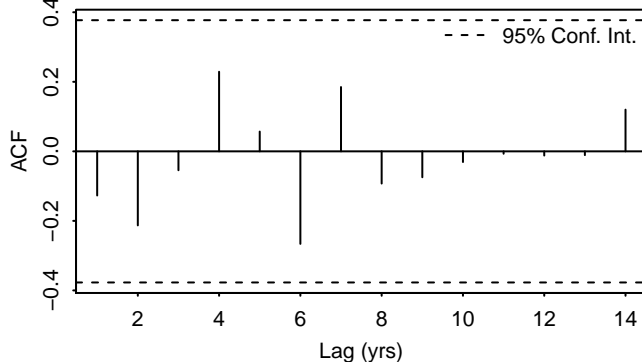
d) Tukey–Anscombe plot



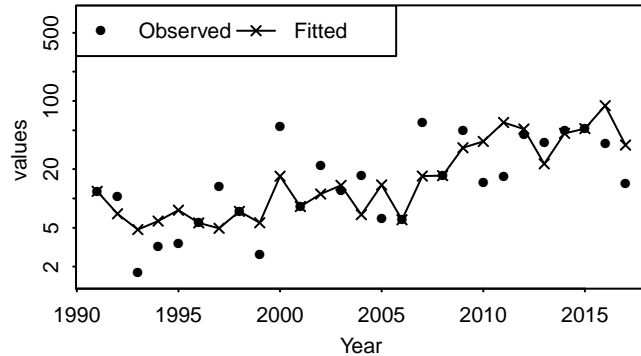
e) Normal Q–Q plot



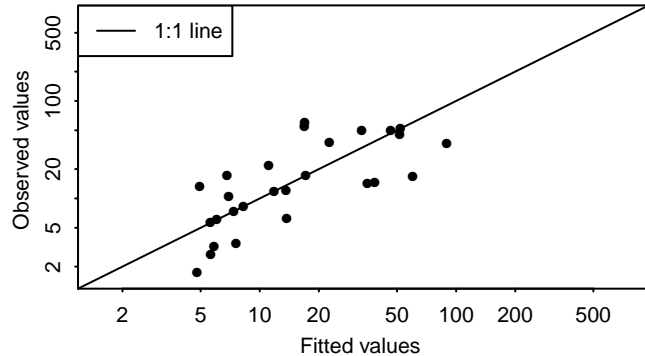
f) Autocorrelation of Residuals



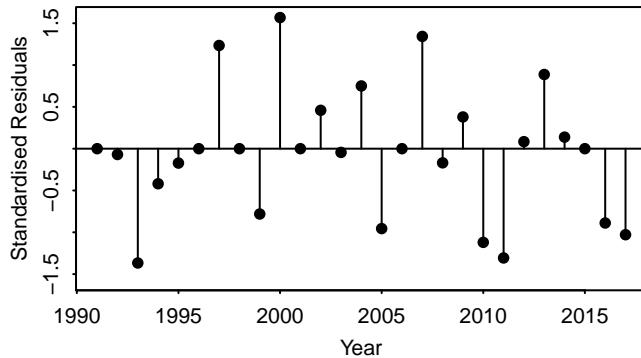
a) Observed and fitted values time series



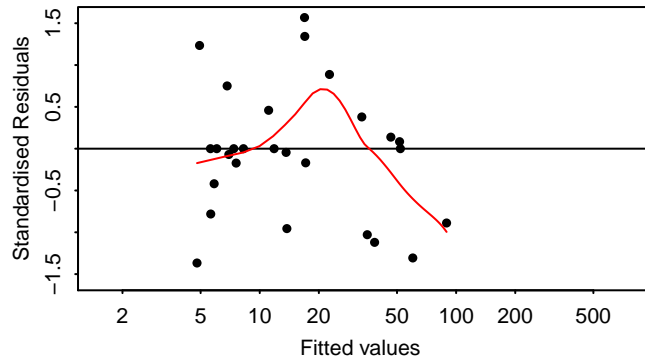
b) Observed vs fitted values



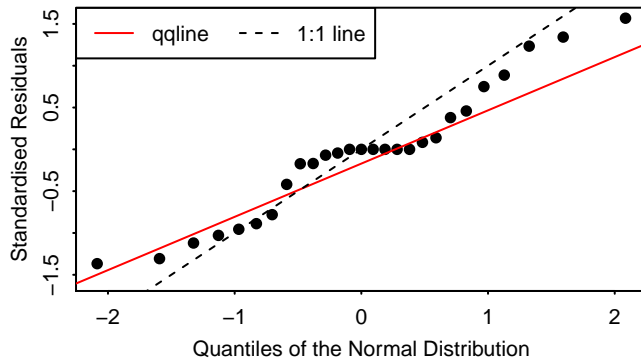
c) Standardised residuals over time



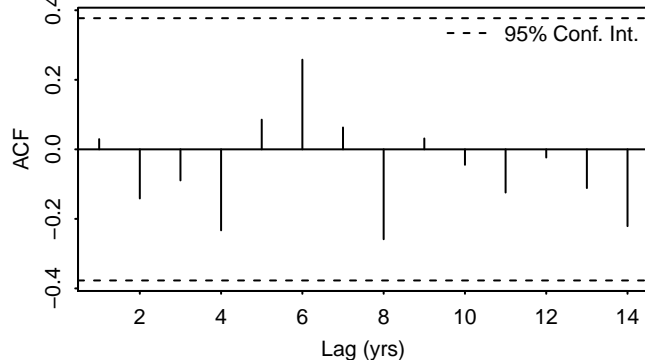
d) Tukey–Anscombe plot



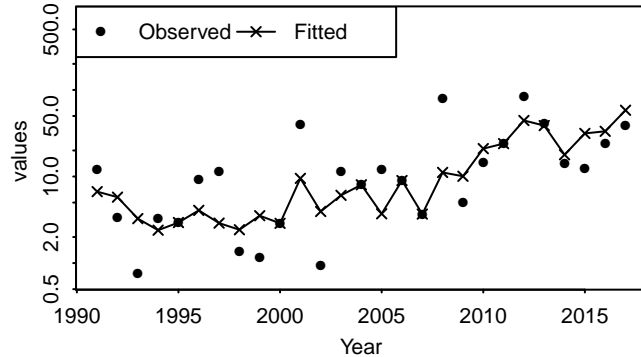
e) Normal Q–Q plot



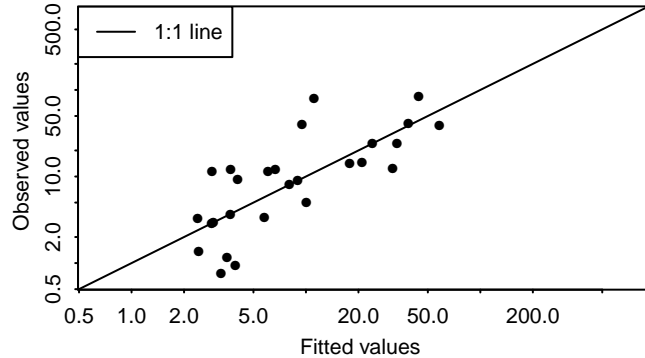
f) Autocorrelation of Residuals



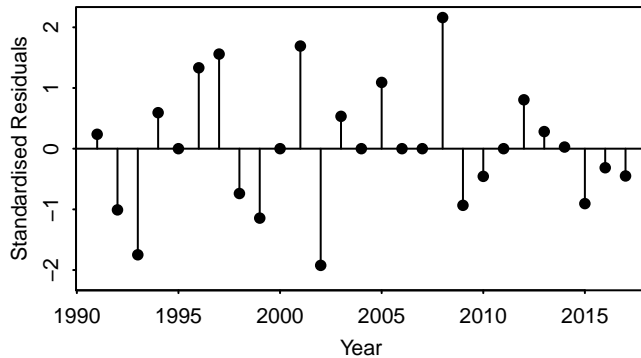
a) Observed and fitted values time series



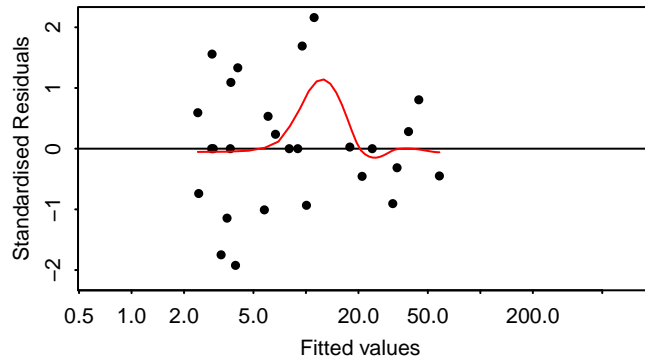
b) Observed vs fitted values



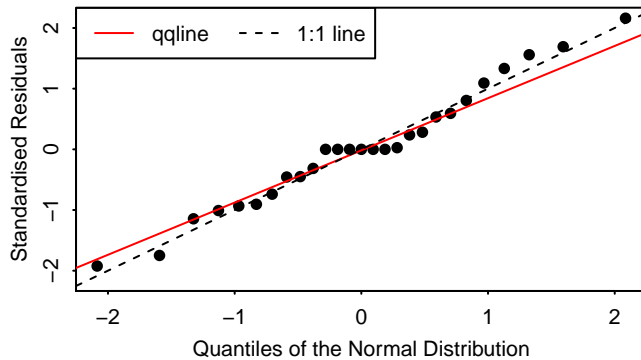
c) Standardised residuals over time



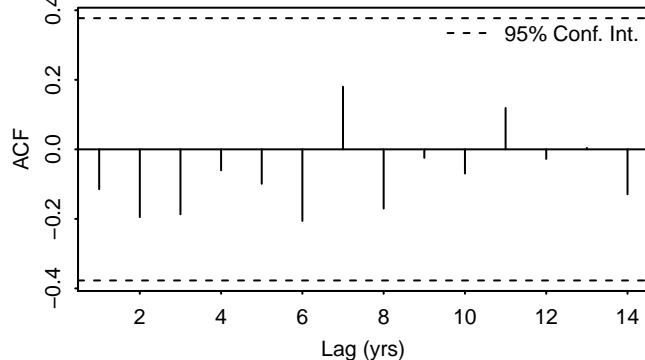
d) Tukey–Anscombe plot



e) Normal Q–Q plot

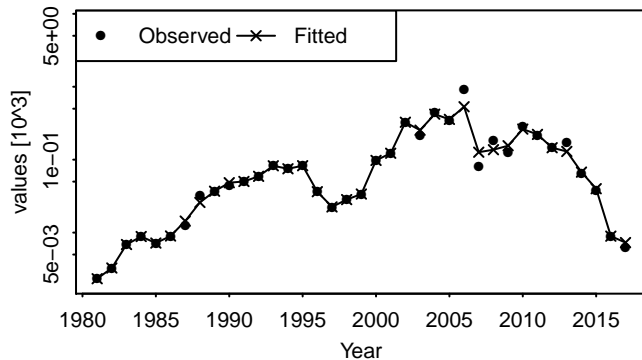


f) Autocorrelation of Residuals

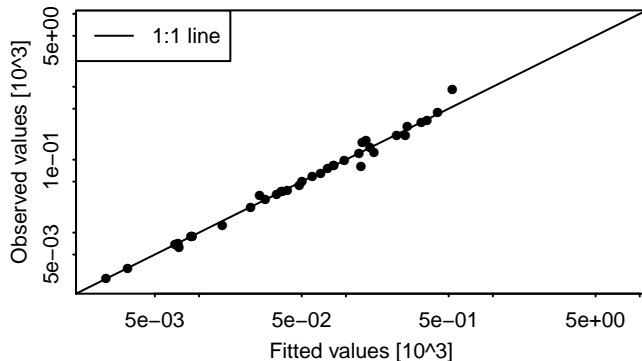


# Turbot in IV pg 9 Diagnostics – catch unique, age 1

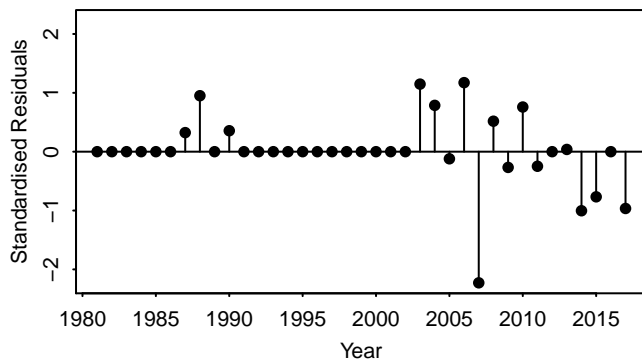
a) Observed and fitted values time series



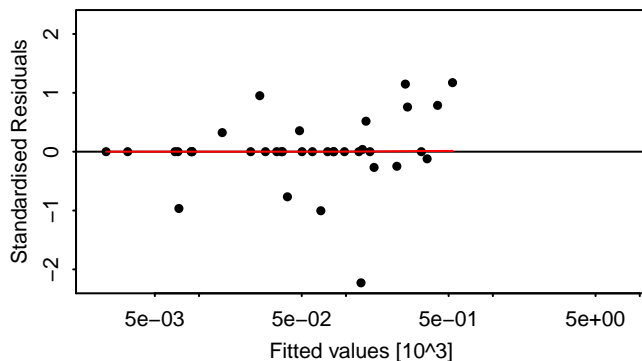
b) Observed vs fitted values



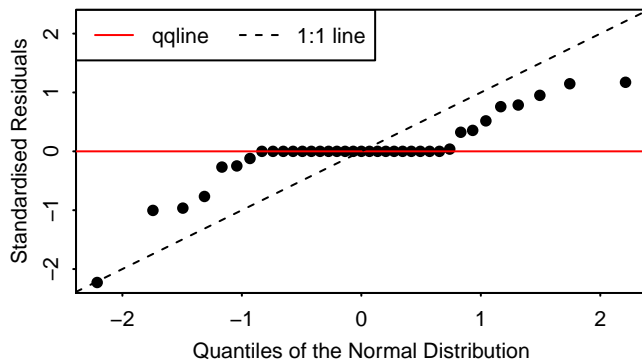
c) Standardised residuals over time



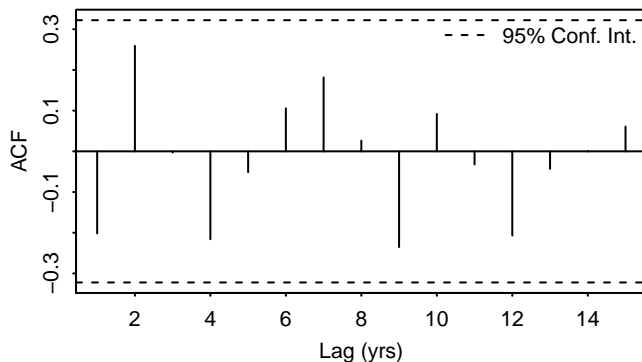
d) Tukey–Anscombe plot



e) Normal Q–Q plot



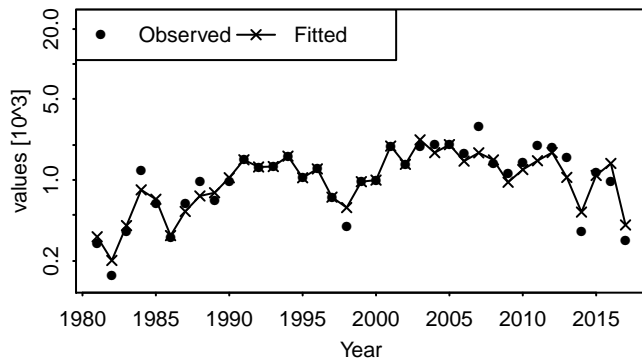
f) Autocorrelation of Residuals



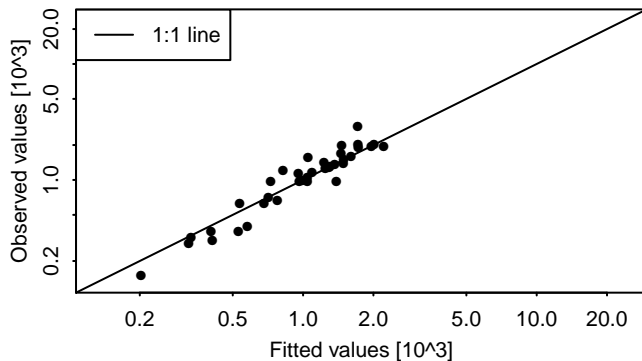


# Turbot in IV pg 9 Diagnostics – catch unique, age 2

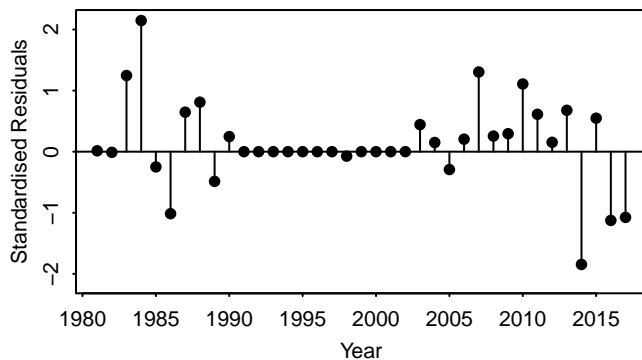
a) Observed and fitted values time series



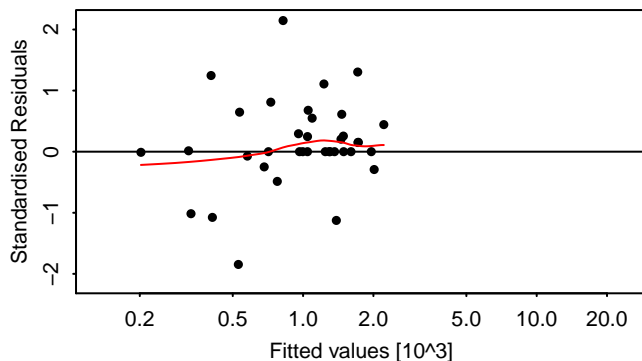
b) Observed vs fitted values



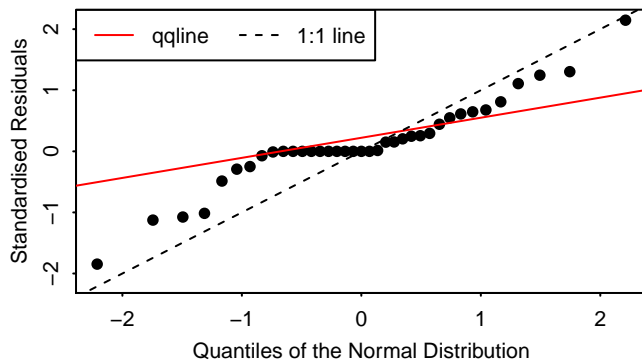
c) Standardised residuals over time



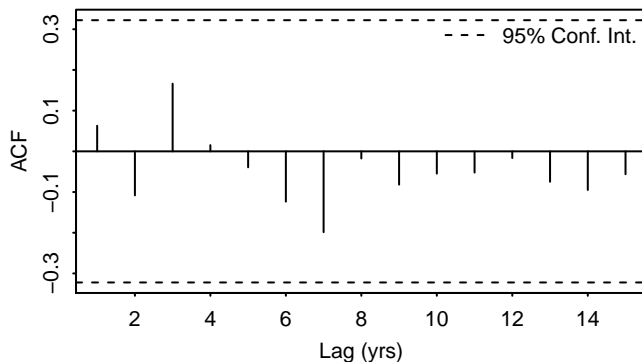
d) Tukey–Anscombe plot



e) Normal Q–Q plot

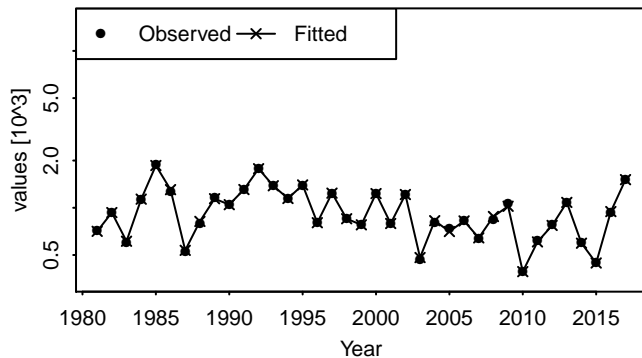


f) Autocorrelation of Residuals

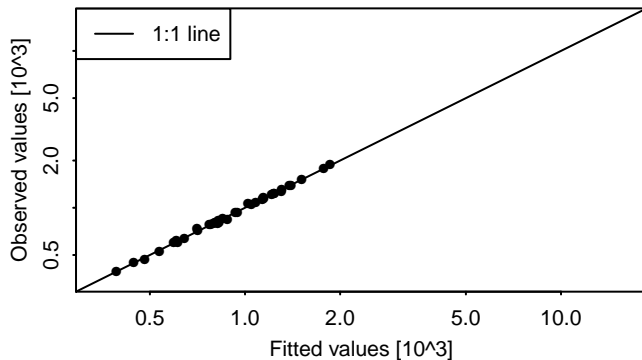


# Turbot in IV pg 9 Diagnostics – catch unique, age 3

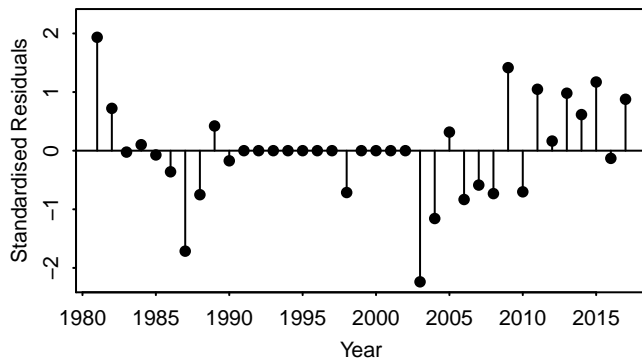
a) Observed and fitted values time series



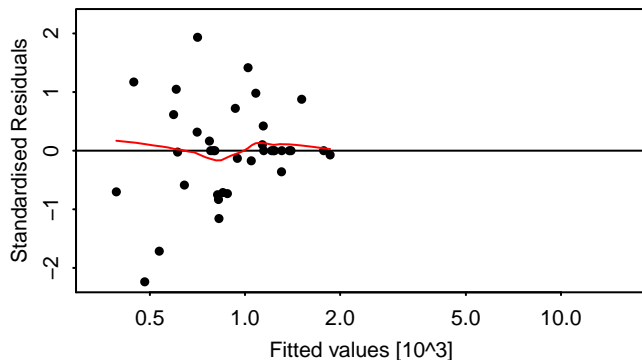
b) Observed vs fitted values



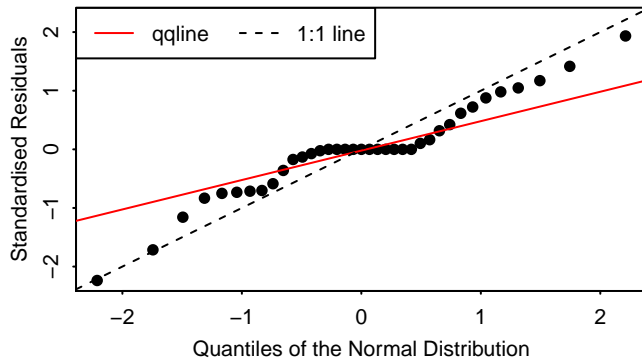
c) Standardised residuals over time



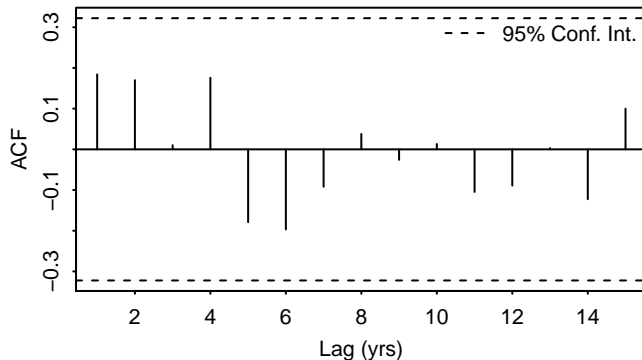
d) Tukey–Anscombe plot



e) Normal Q–Q plot

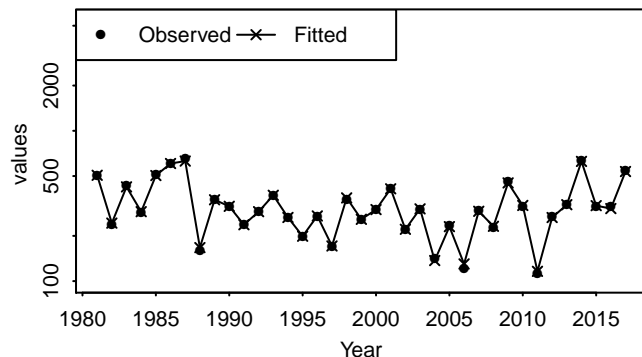


f) Autocorrelation of Residuals

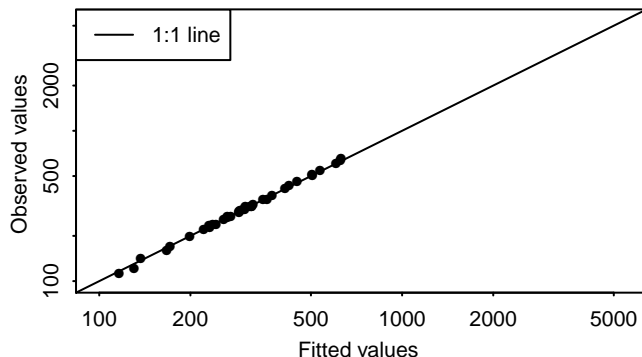


# Turbot in IV pg 9 Diagnostics – catch unique, age 4

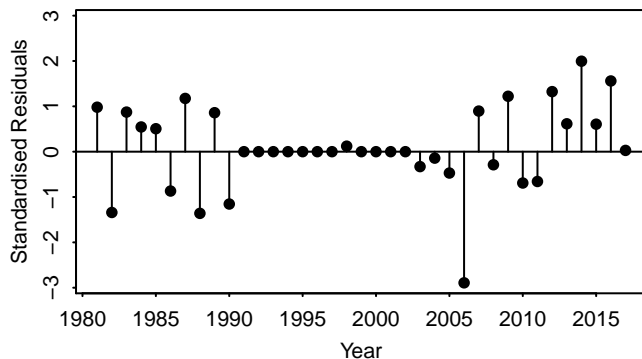
a) Observed and fitted values time series



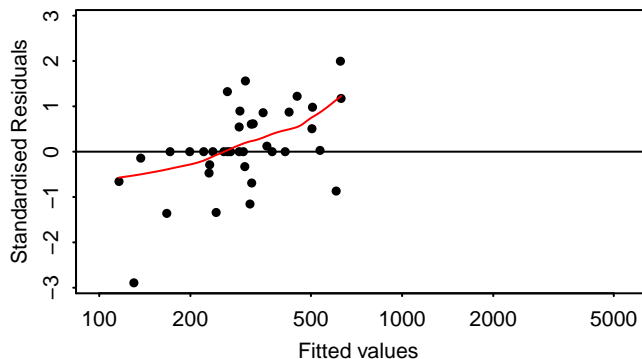
b) Observed vs fitted values



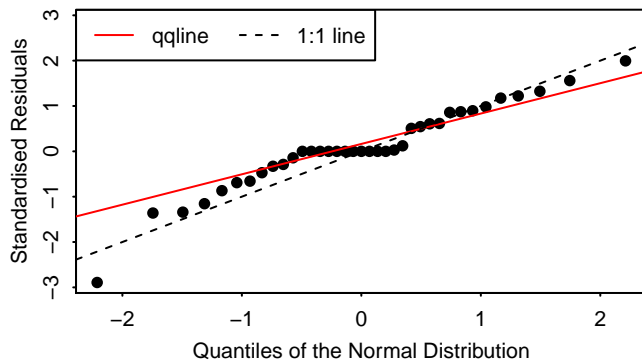
c) Standardised residuals over time



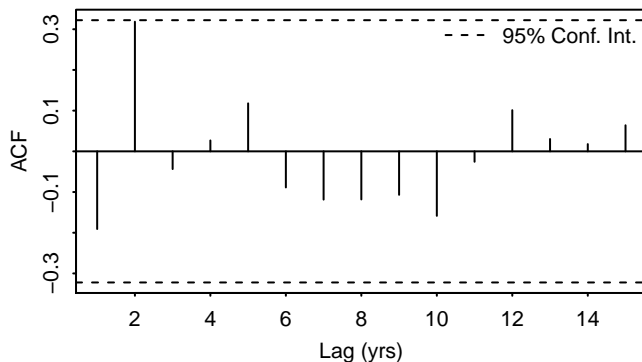
d) Tukey–Anscombe plot



e) Normal Q–Q plot

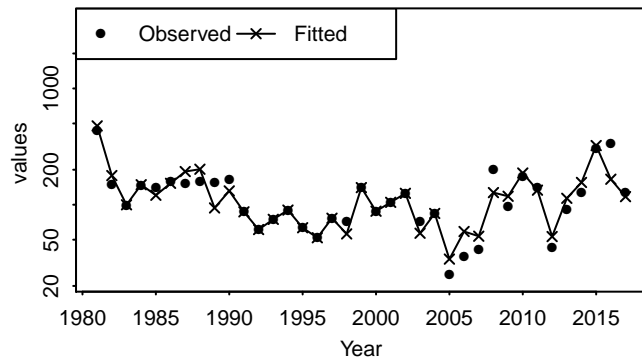


f) Autocorrelation of Residuals

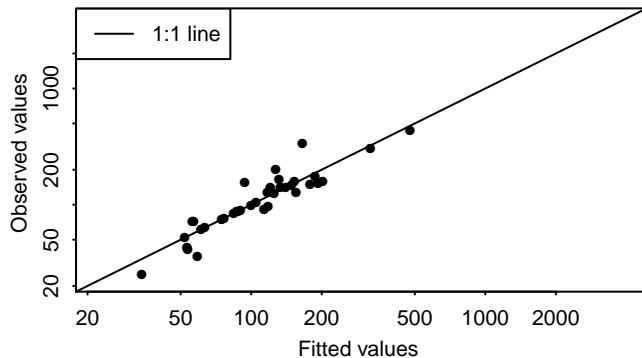


# Turbot in IV pg 9 Diagnostics – catch unique, age 5

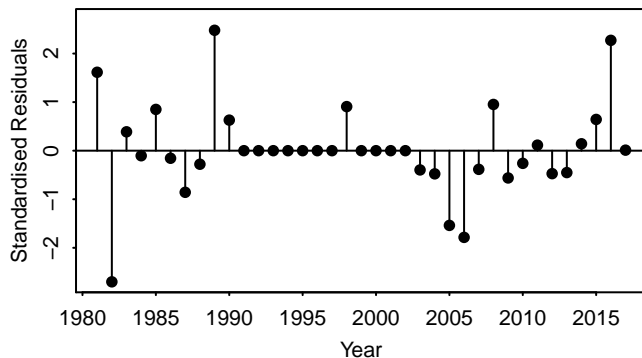
a) Observed and fitted values time series



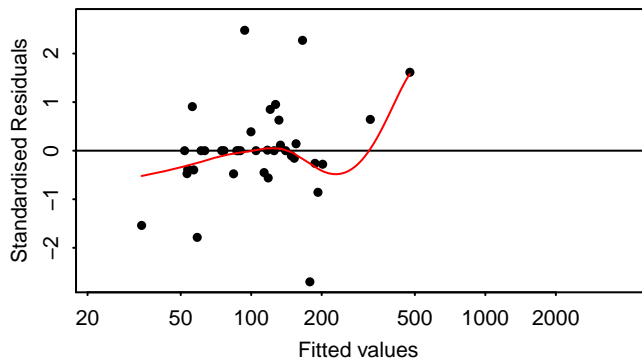
b) Observed vs fitted values



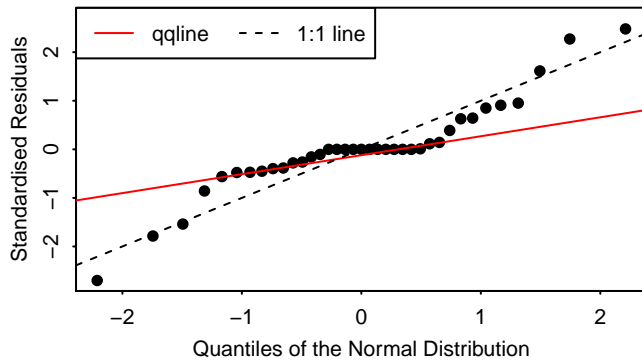
c) Standardised residuals over time



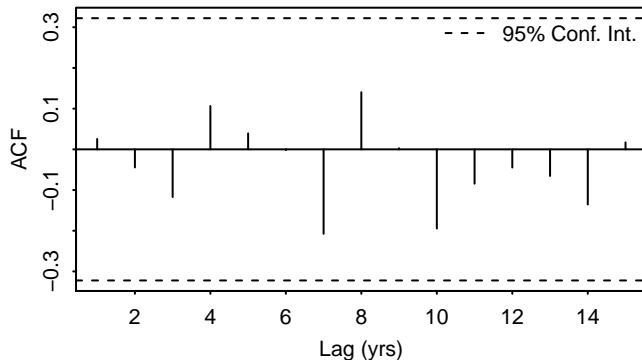
d) Tukey–Anscombe plot



e) Normal Q–Q plot

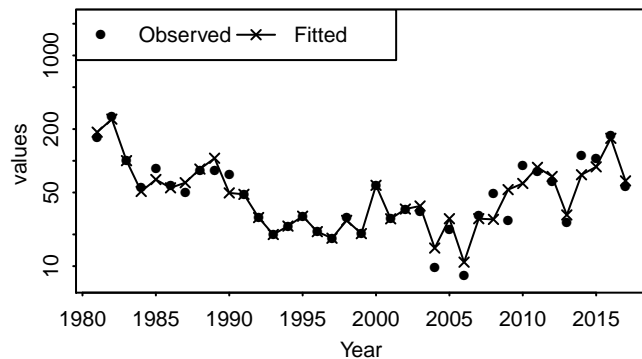


f) Autocorrelation of Residuals

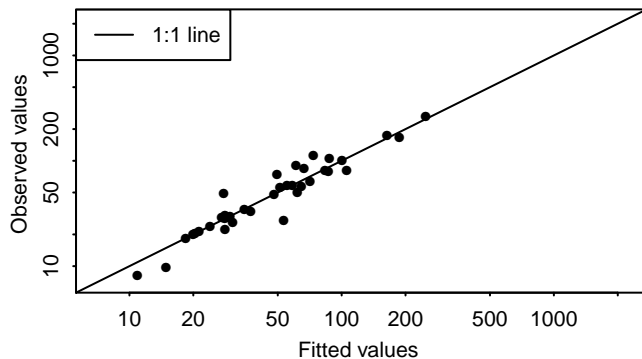


# Turbot in IV pg 9 Diagnostics – catch unique, age 6

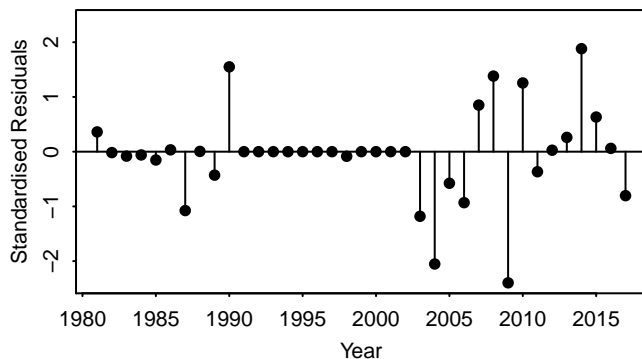
a) Observed and fitted values time series



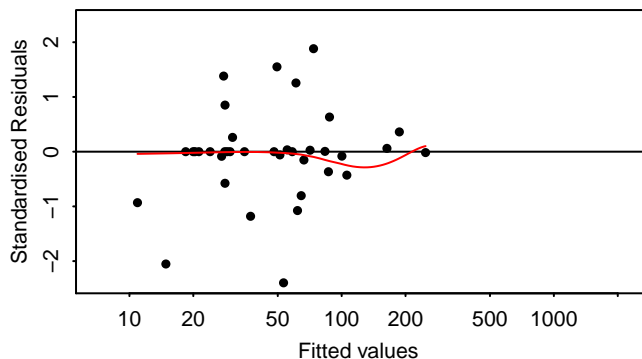
b) Observed vs fitted values



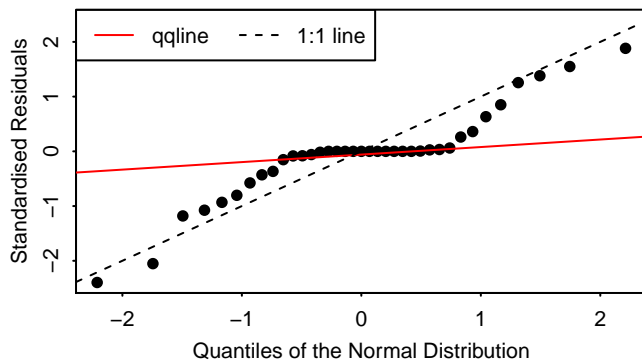
c) Standardised residuals over time



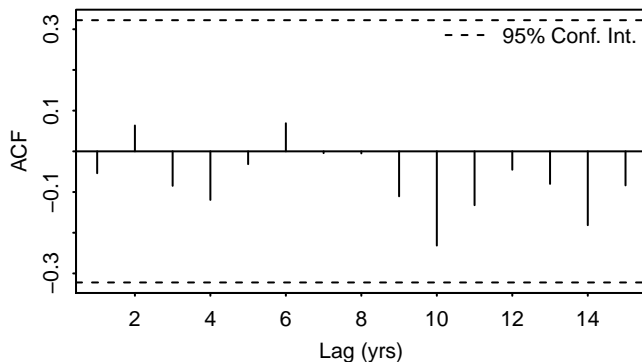
d) Tukey–Anscombe plot



e) Normal Q–Q plot

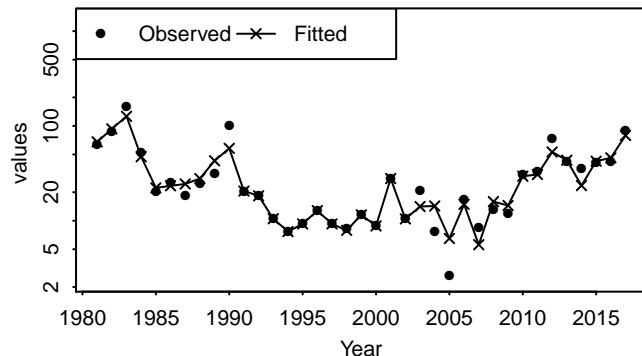


f) Autocorrelation of Residuals

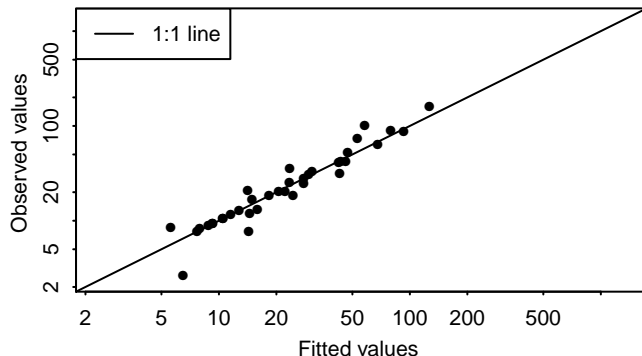


# Turbot in IV pg 9 Diagnostics – catch unique, age 7

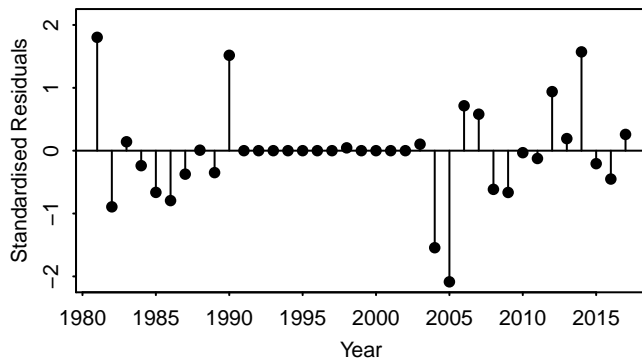
a) Observed and fitted values time series



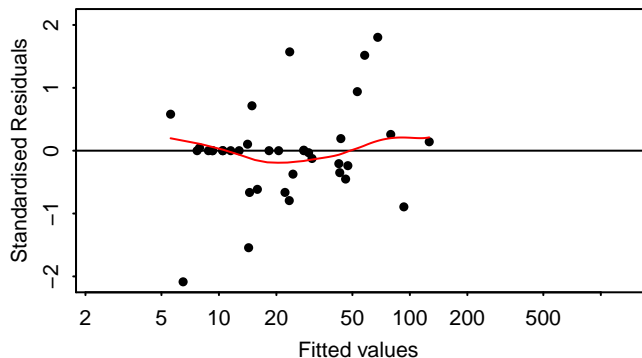
b) Observed vs fitted values



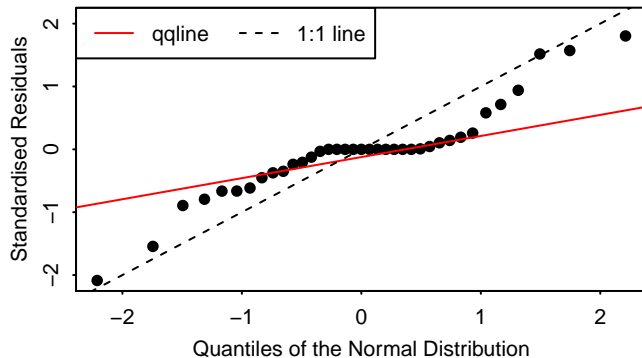
c) Standardised residuals over time



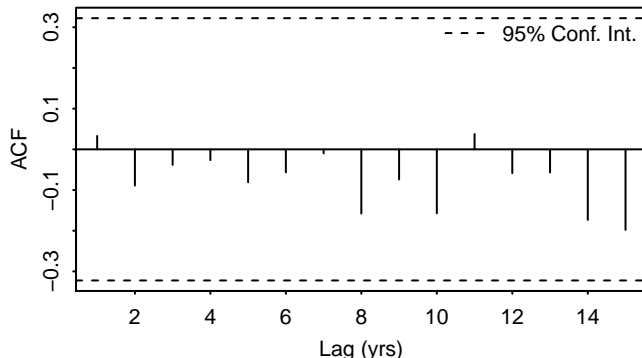
d) Tukey–Anscombe plot



e) Normal Q–Q plot

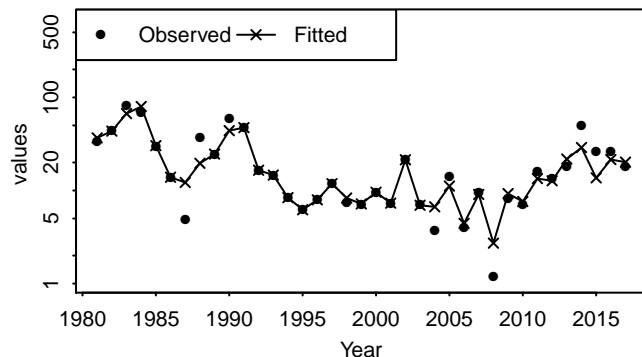


f) Autocorrelation of Residuals

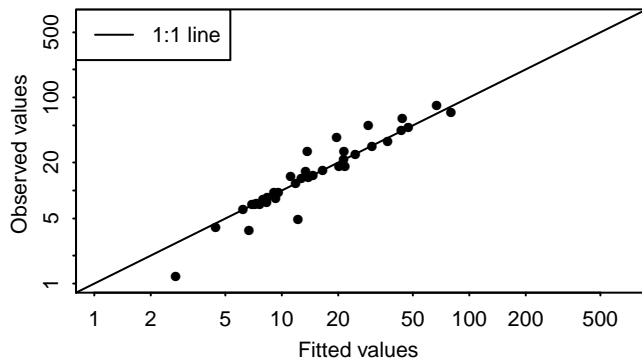


# Turbot in IV pg 9 Diagnostics – catch unique, age 8

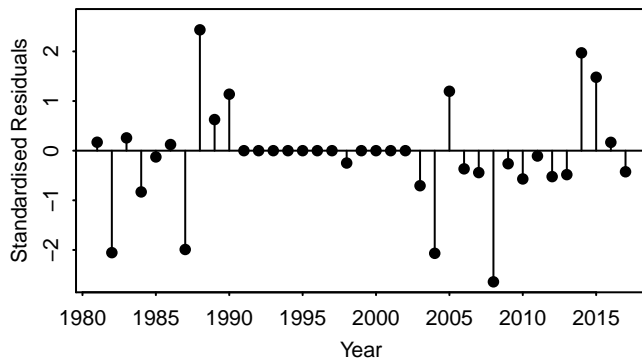
a) Observed and fitted values time series



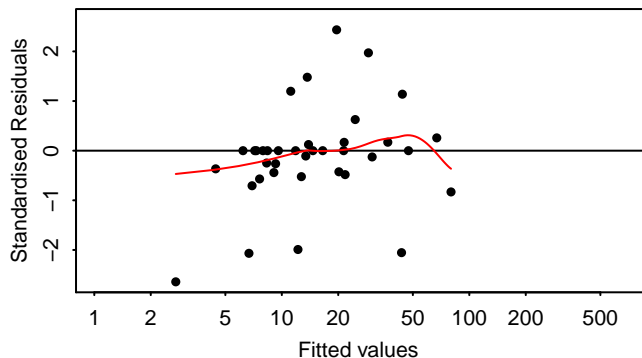
b) Observed vs fitted values



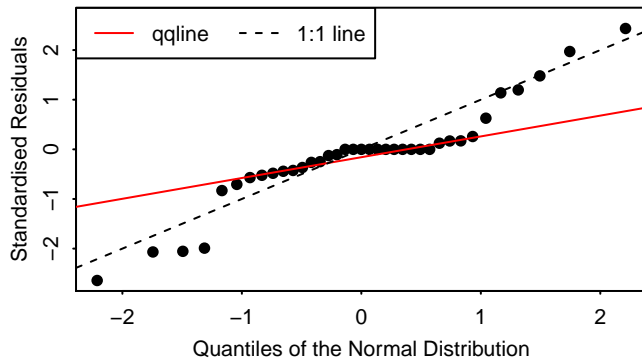
c) Standardised residuals over time



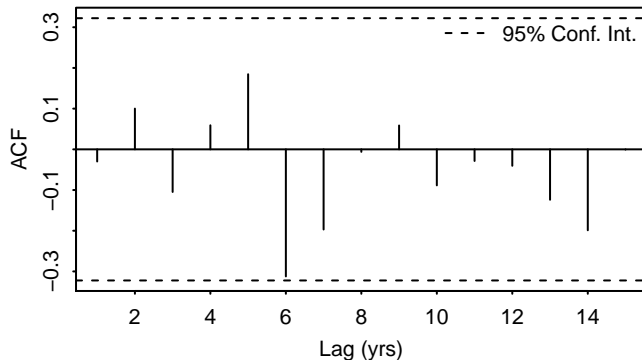
d) Tukey–Anscombe plot



e) Normal Q–Q plot

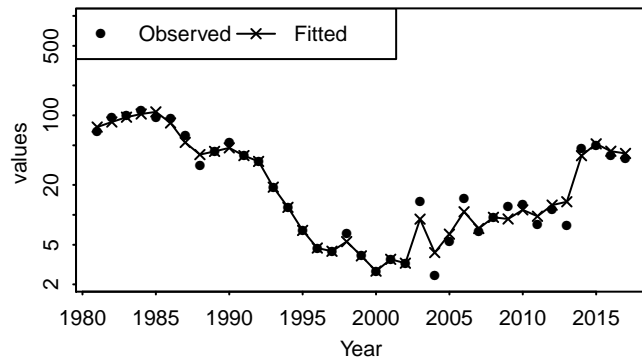


f) Autocorrelation of Residuals

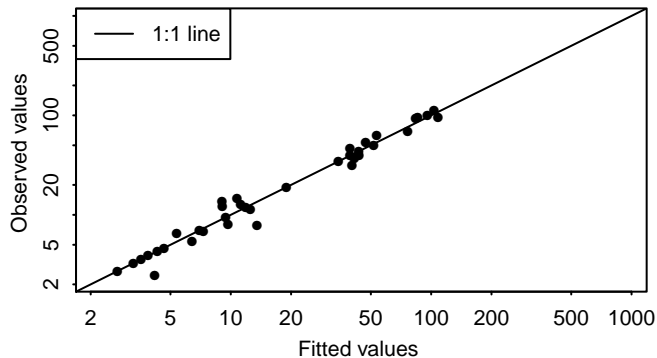


# Turbot in IV pg 9 Diagnostics – catch unique, age 9

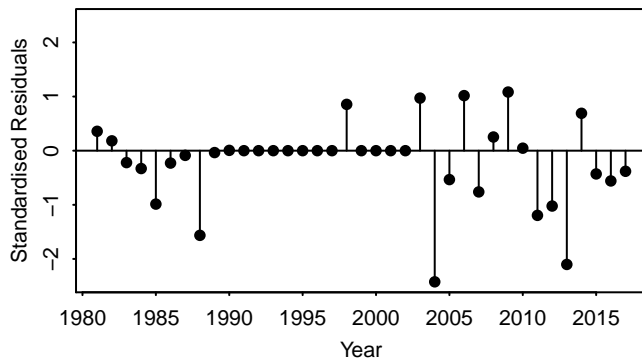
a) Observed and fitted values time series



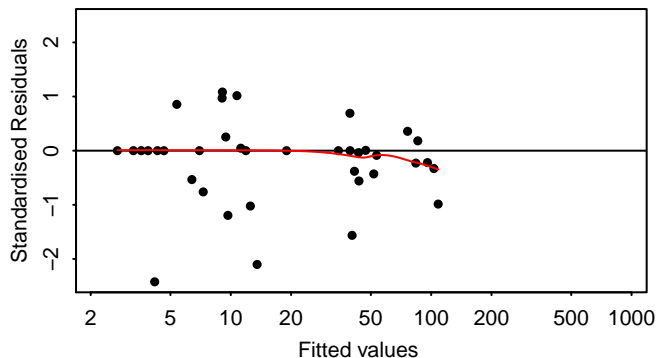
b) Observed vs fitted values



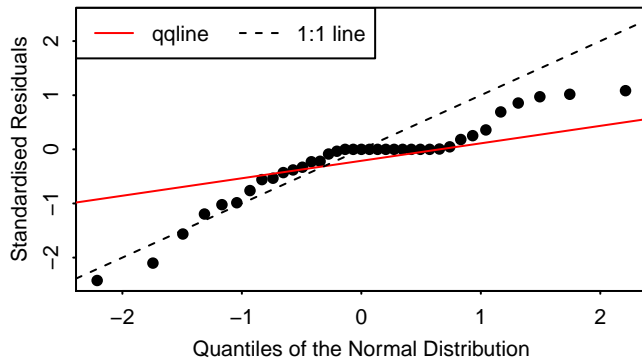
c) Standardised residuals over time



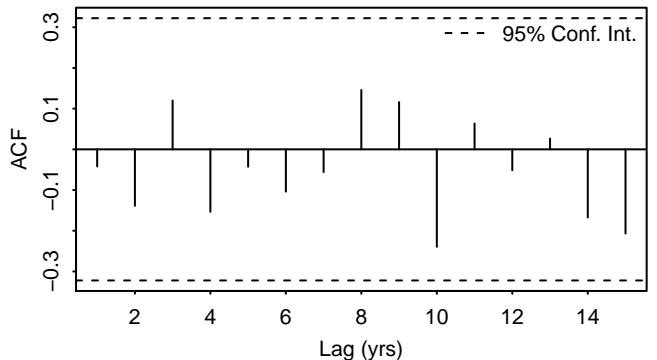
d) Tukey–Anscombe plot



e) Normal Q–Q plot

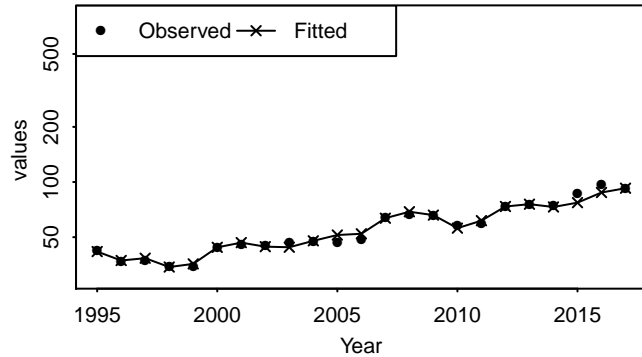


f) Autocorrelation of Residuals

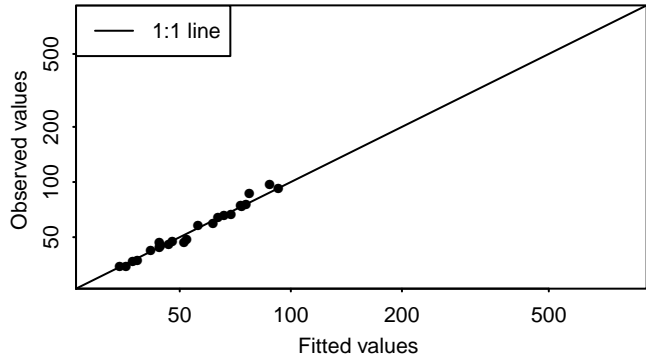




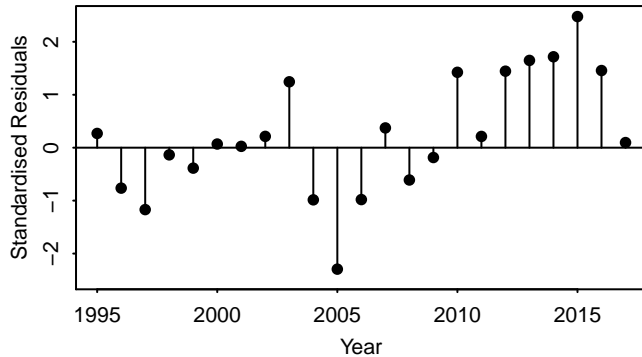
a) Observed and fitted values time series



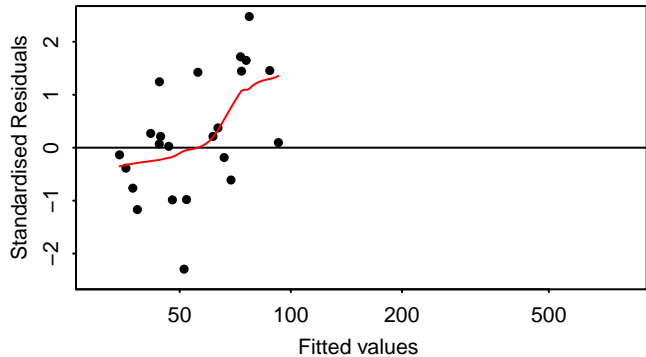
b) Observed vs fitted values



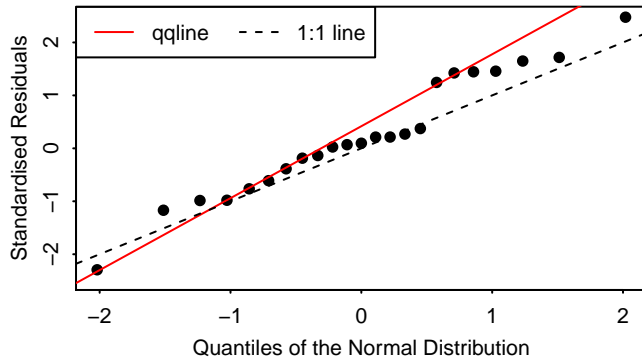
c) Standardised residuals over time



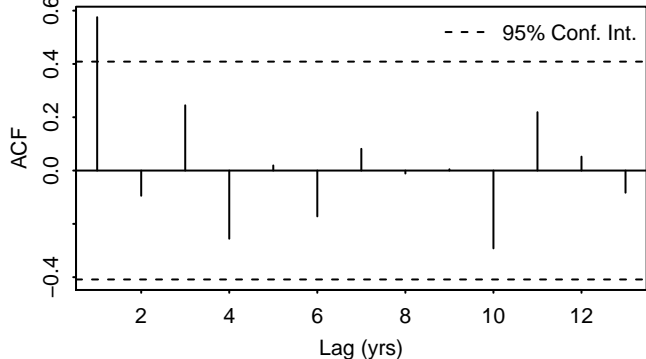
d) Tukey–Anscombe plot



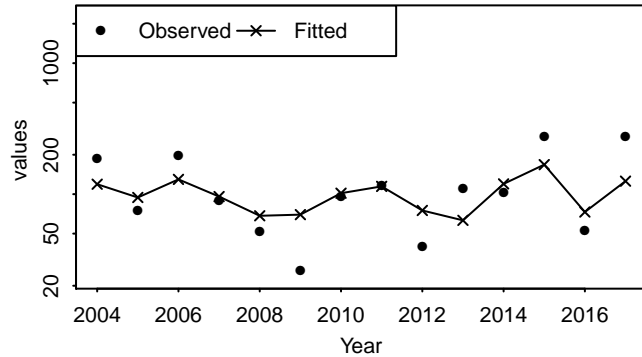
e) Normal Q–Q plot



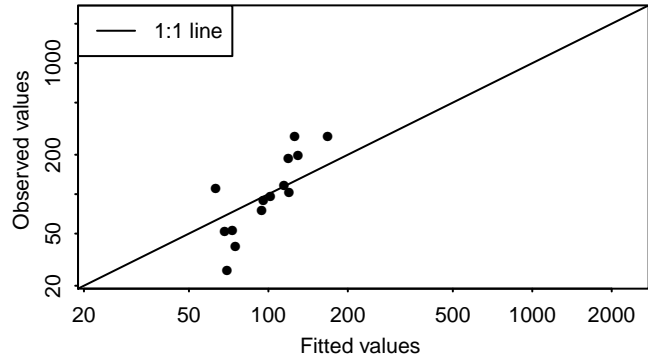
f) Autocorrelation of Residuals



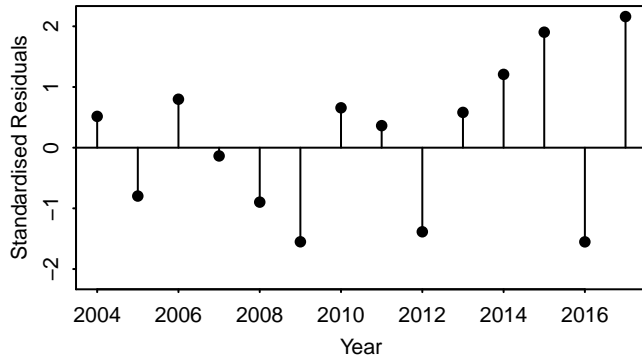
a) Observed and fitted values time series



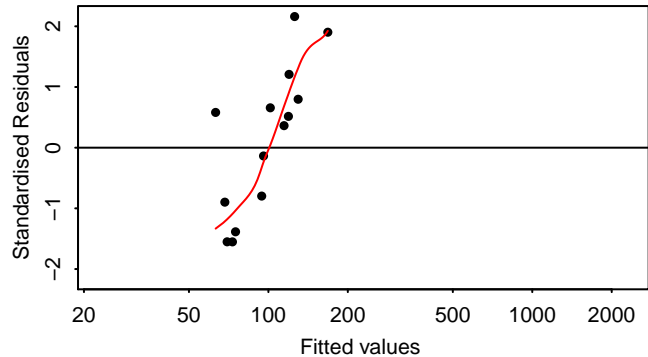
b) Observed vs fitted values



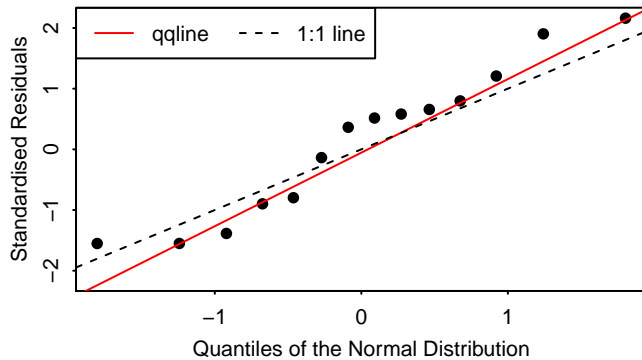
c) Standardised residuals over time



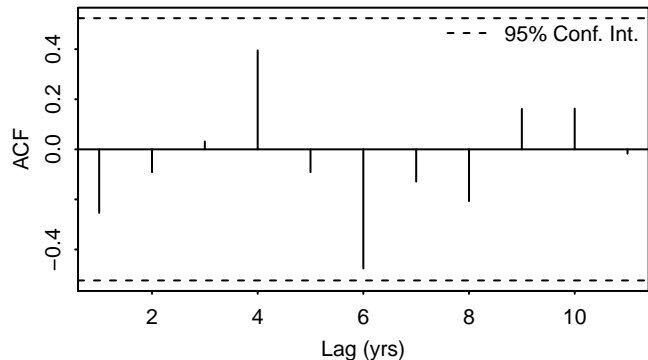
d) Tukey–Anscombe plot



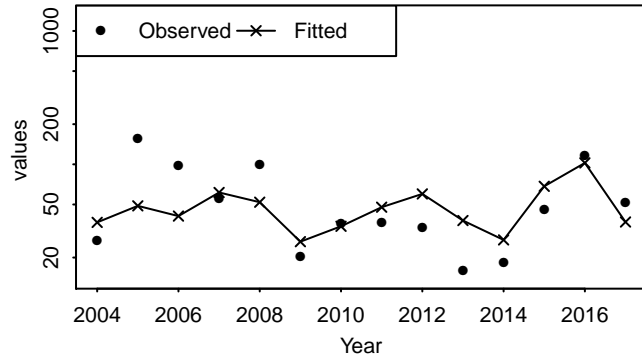
e) Normal Q–Q plot



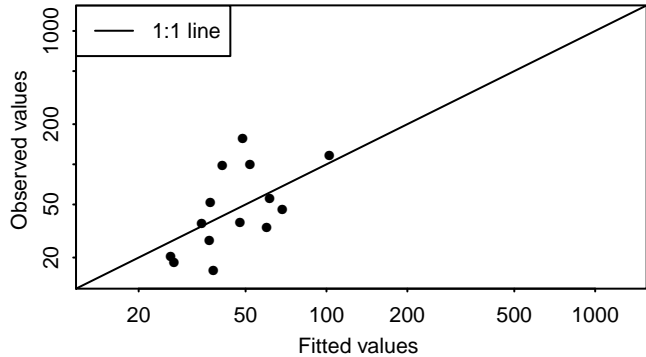
f) Autocorrelation of Residuals



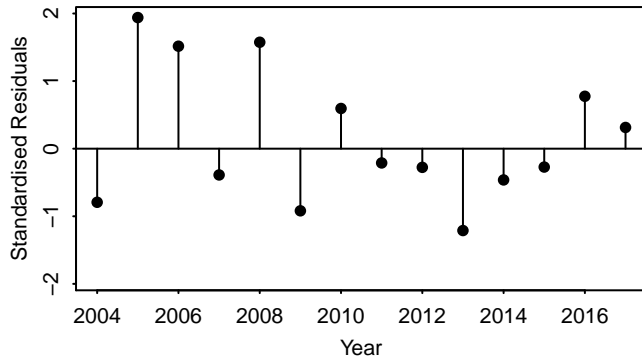
a) Observed and fitted values time series



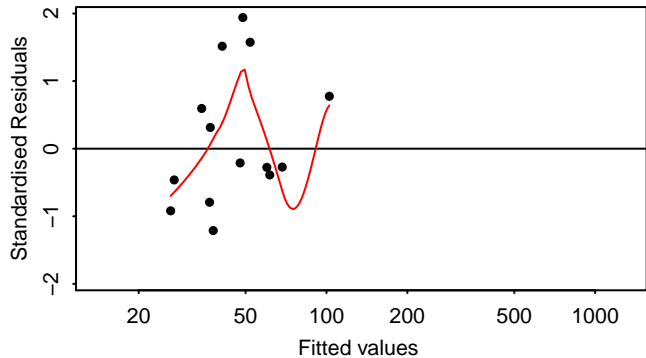
b) Observed vs fitted values



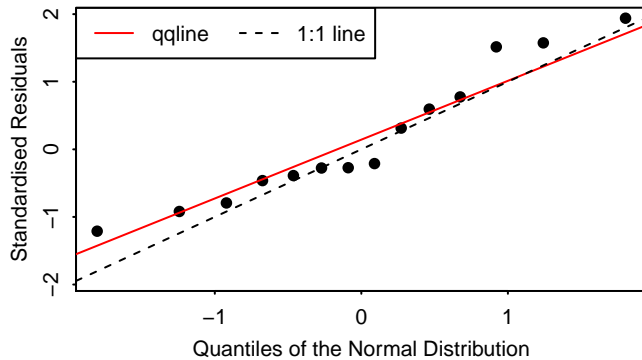
c) Standardised residuals over time



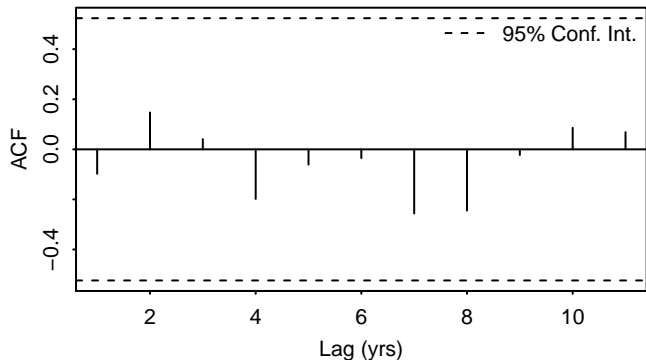
d) Tukey–Anscombe plot



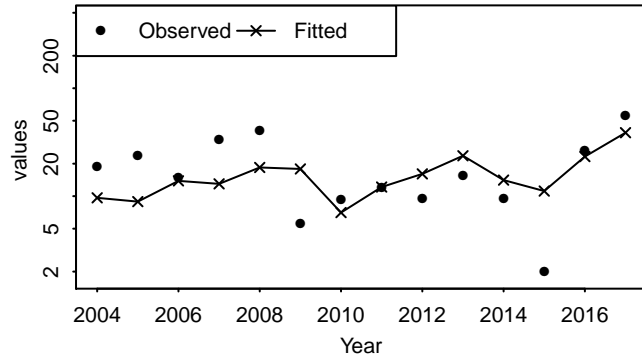
e) Normal Q–Q plot



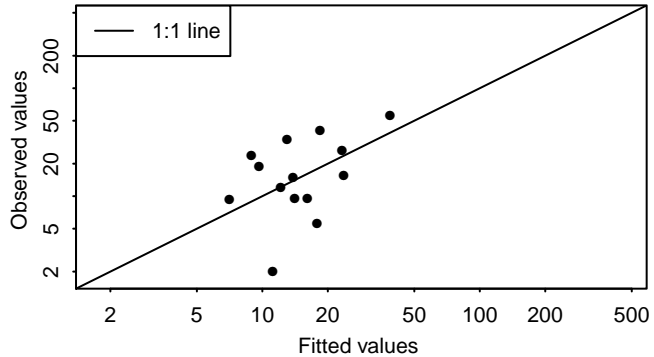
f) Autocorrelation of Residuals



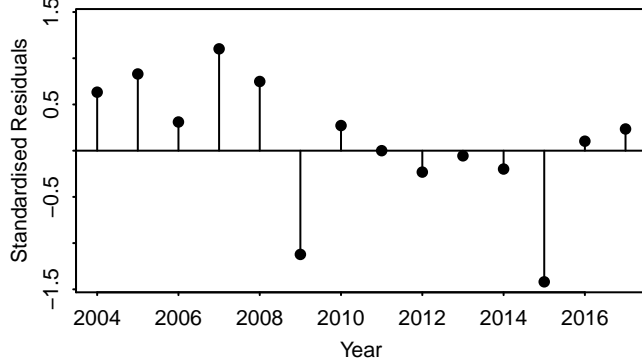
a) Observed and fitted values time series



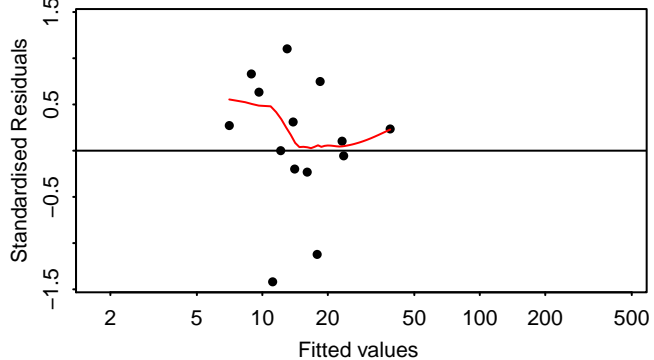
b) Observed vs fitted values



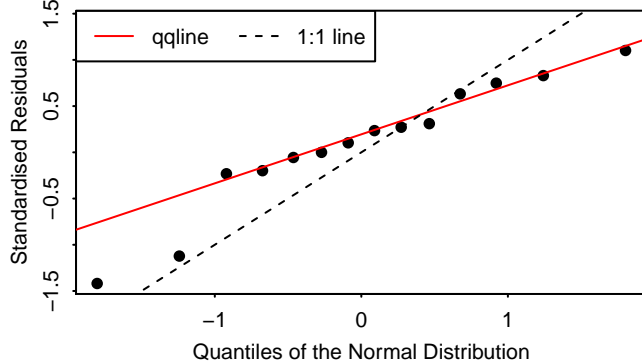
c) Standardised residuals over time



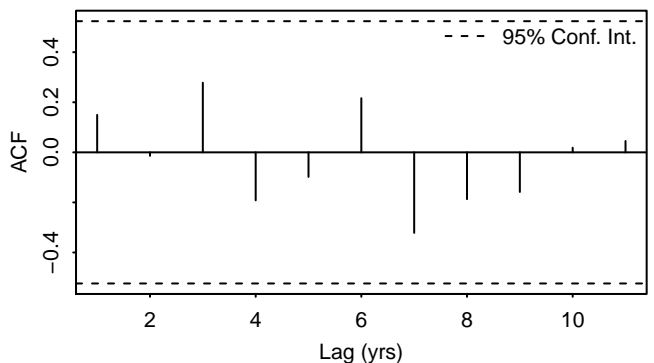
d) Tukey–Anscombe plot



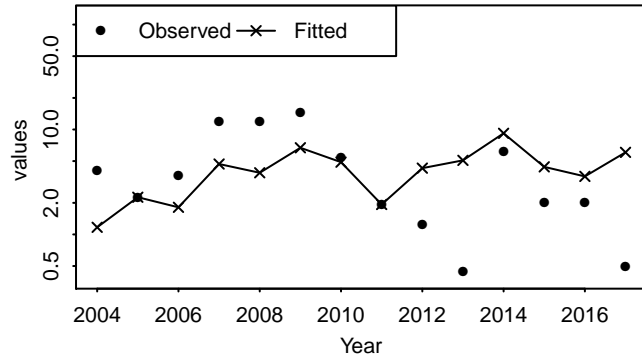
e) Normal Q–Q plot



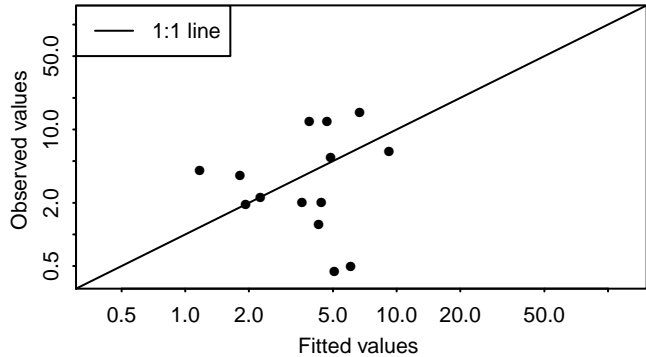
f) Autocorrelation of Residuals



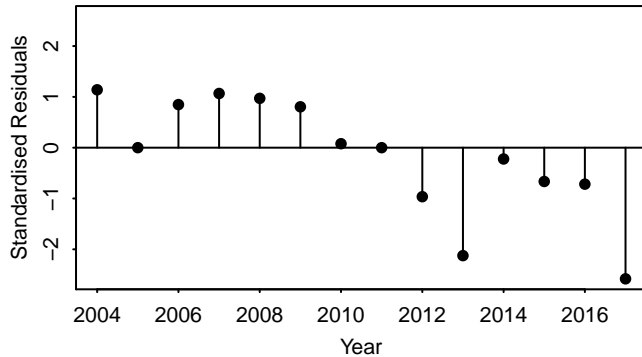
a) Observed and fitted values time series



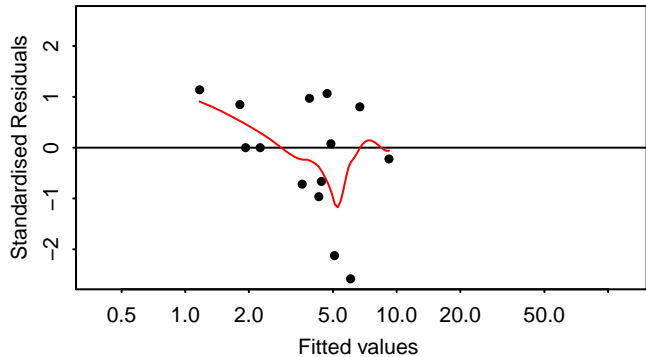
b) Observed vs fitted values



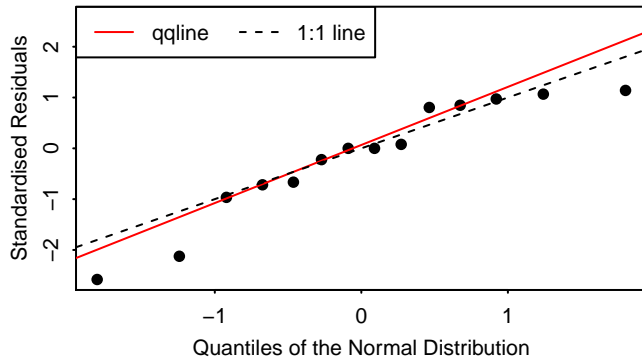
c) Standardised residuals over time



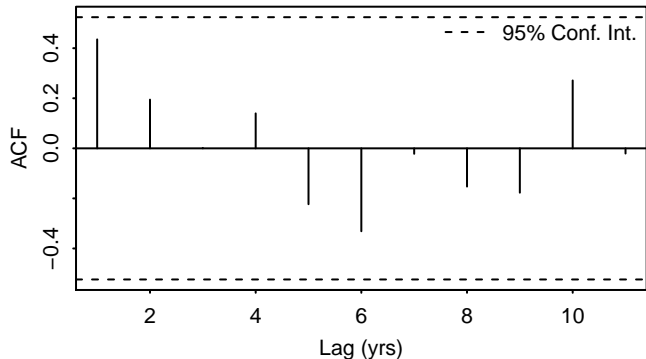
d) Tukey–Anscombe plot



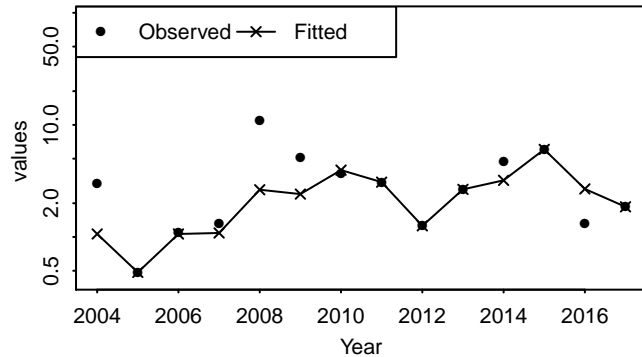
e) Normal Q–Q plot



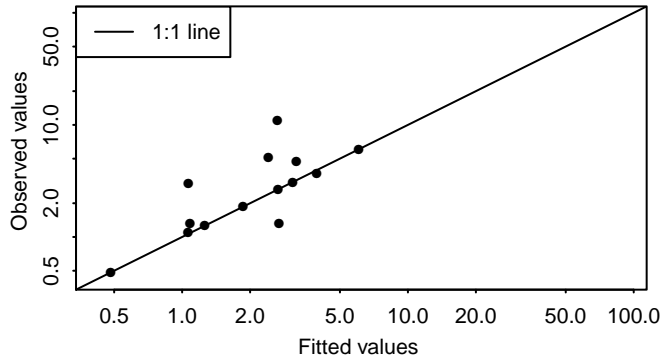
f) Autocorrelation of Residuals



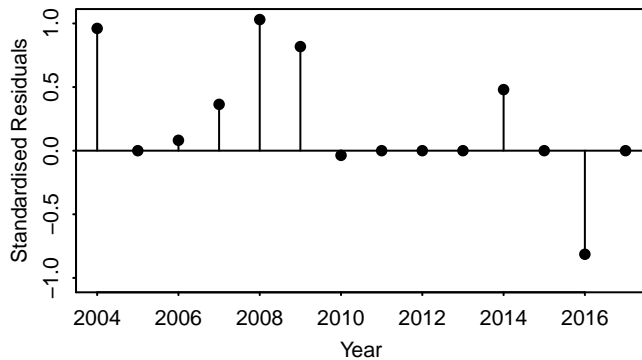
a) Observed and fitted values time series



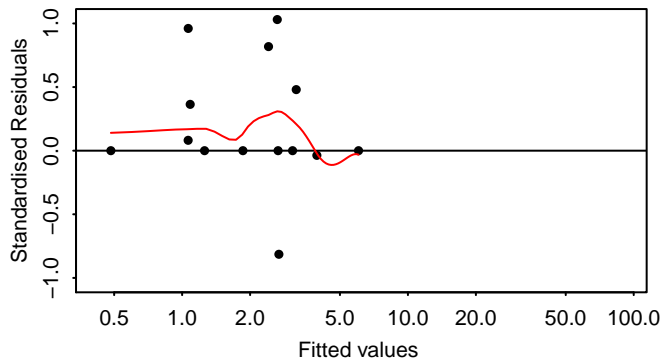
b) Observed vs fitted values



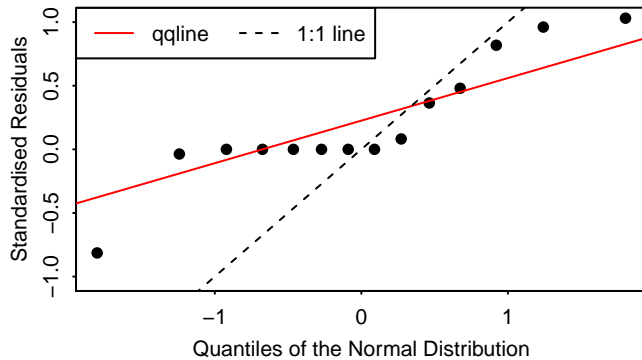
c) Standardised residuals over time



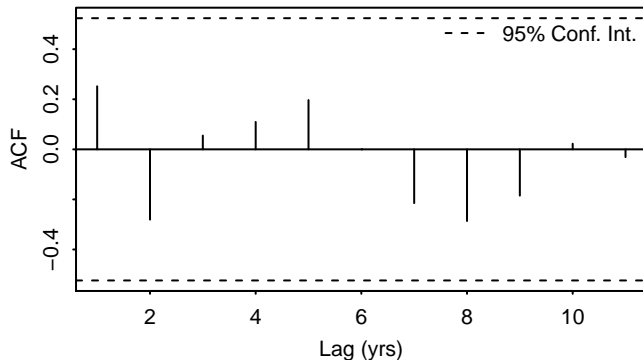
d) Tukey–Anscombe plot



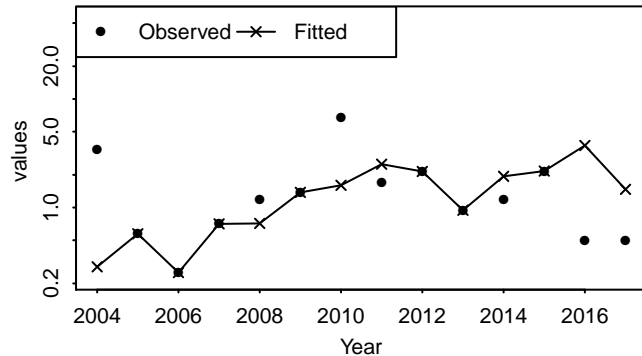
e) Normal Q–Q plot



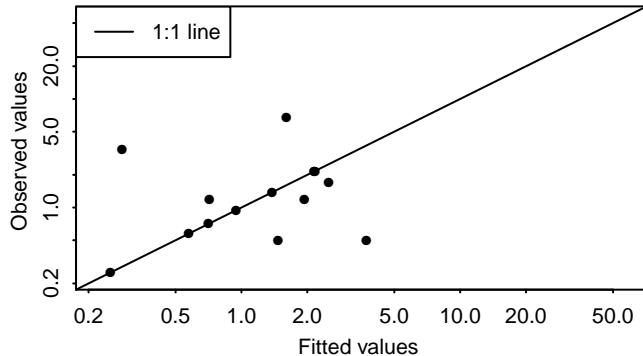
f) Autocorrelation of Residuals



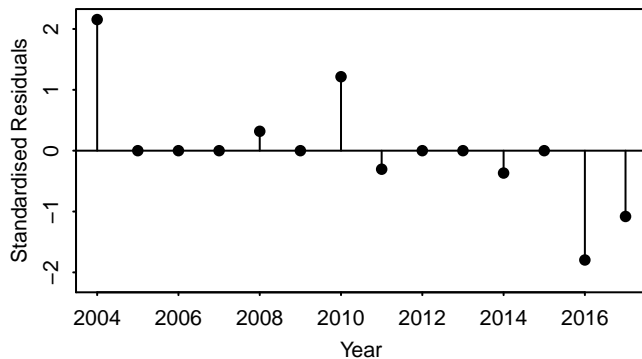
a) Observed and fitted values time series



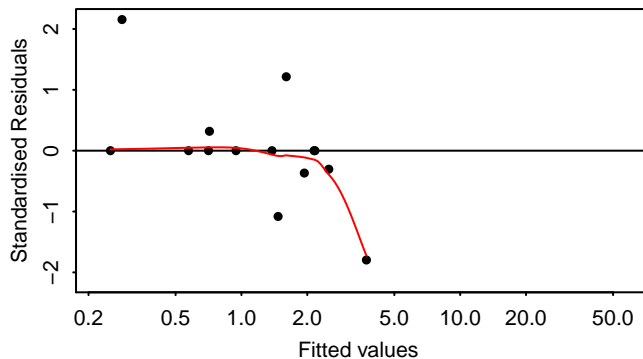
b) Observed vs fitted values



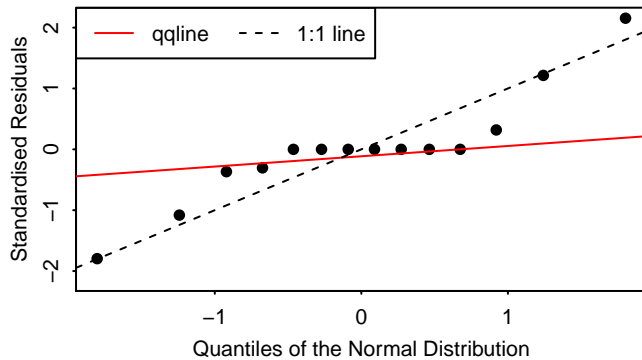
c) Standardised residuals over time



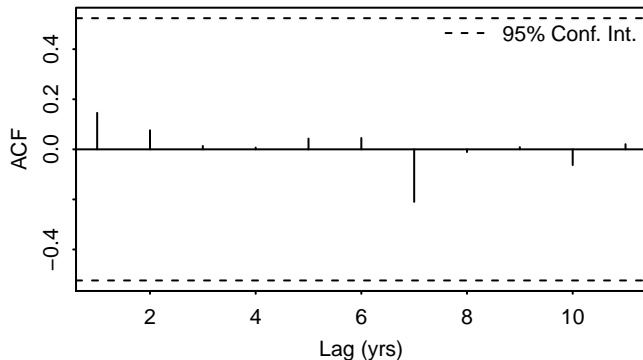
d) Tukey–Anscombe plot



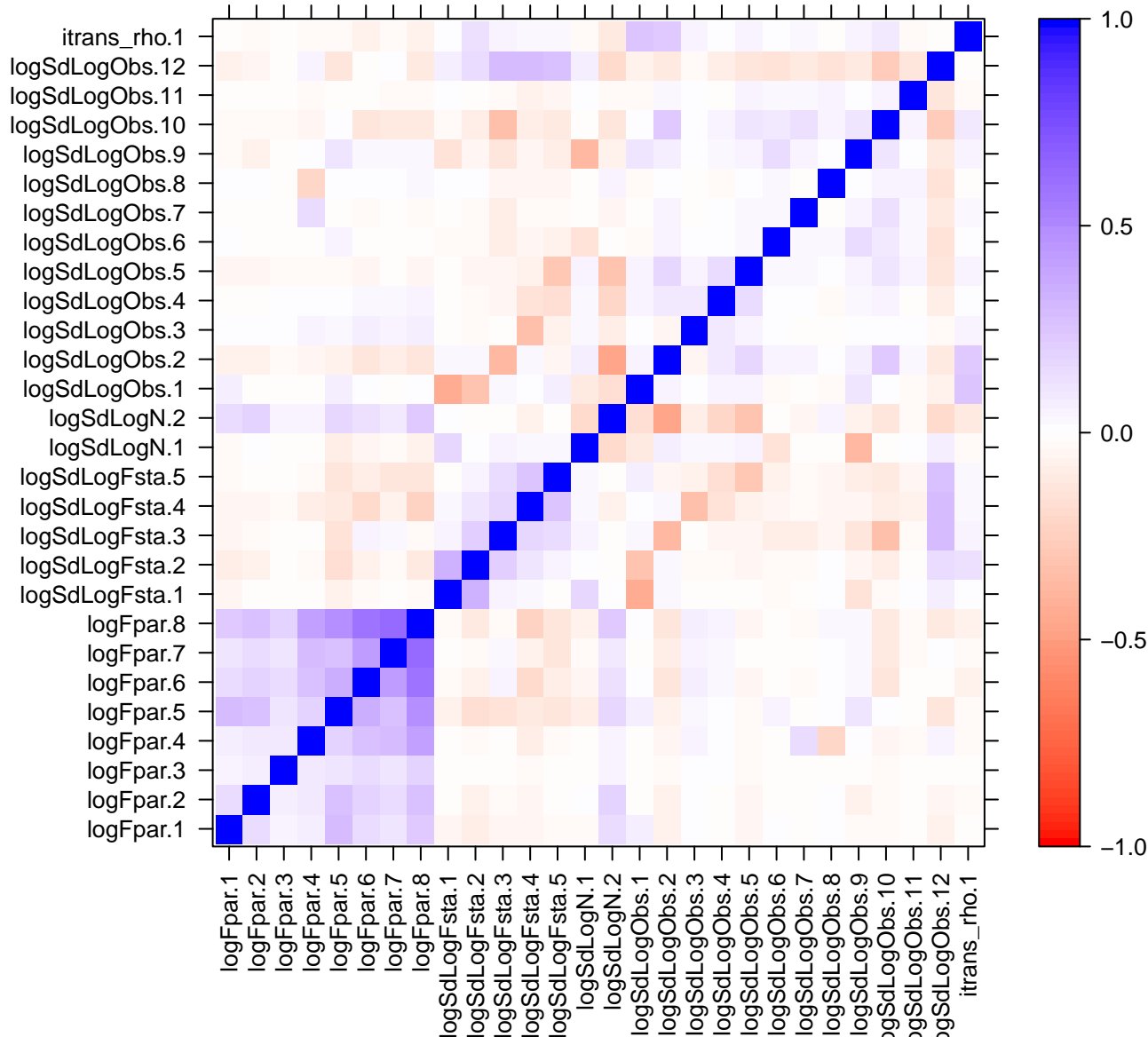
e) Normal Q–Q plot



f) Autocorrelation of Residuals

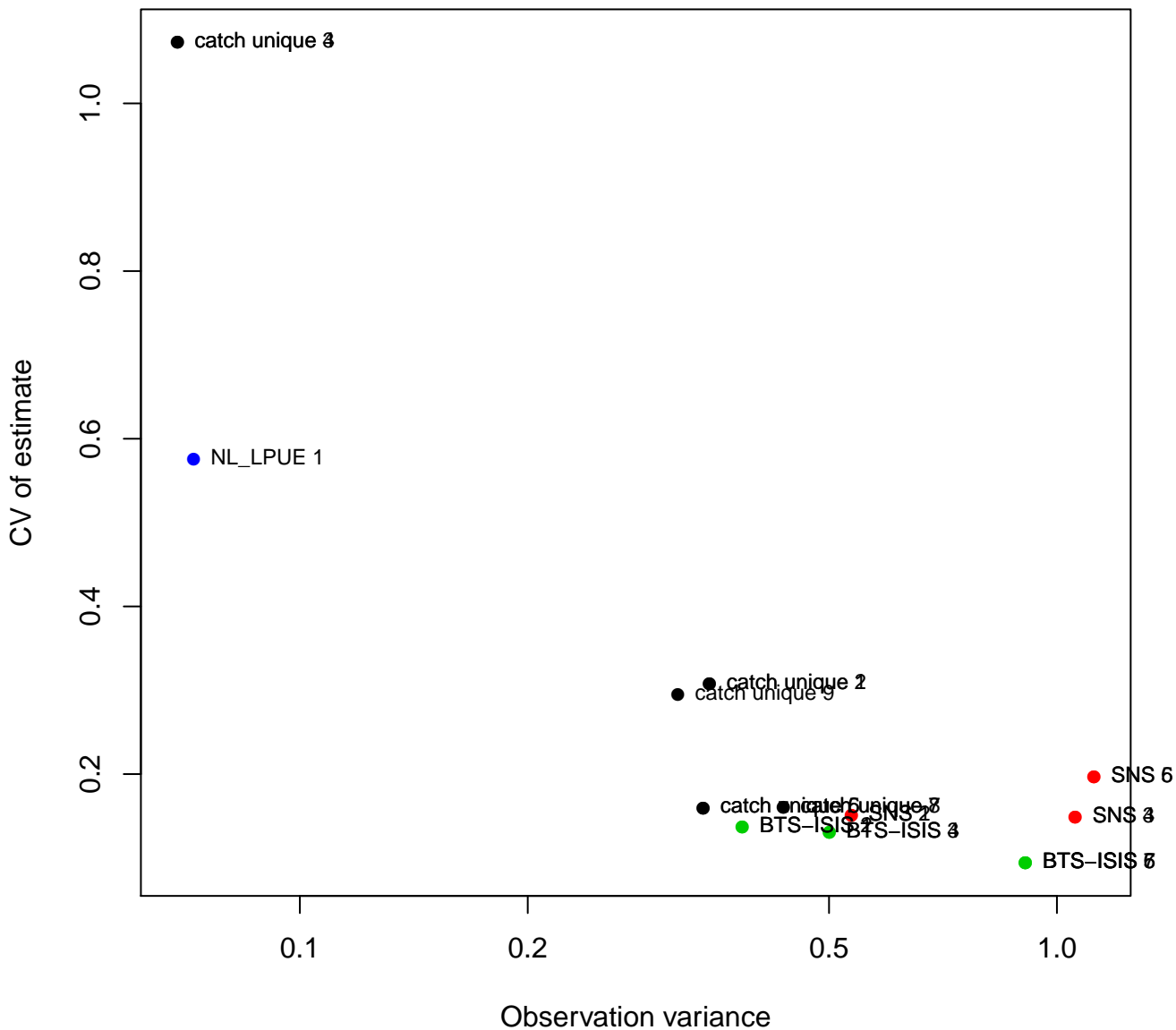


# Turbot in IV pg 9

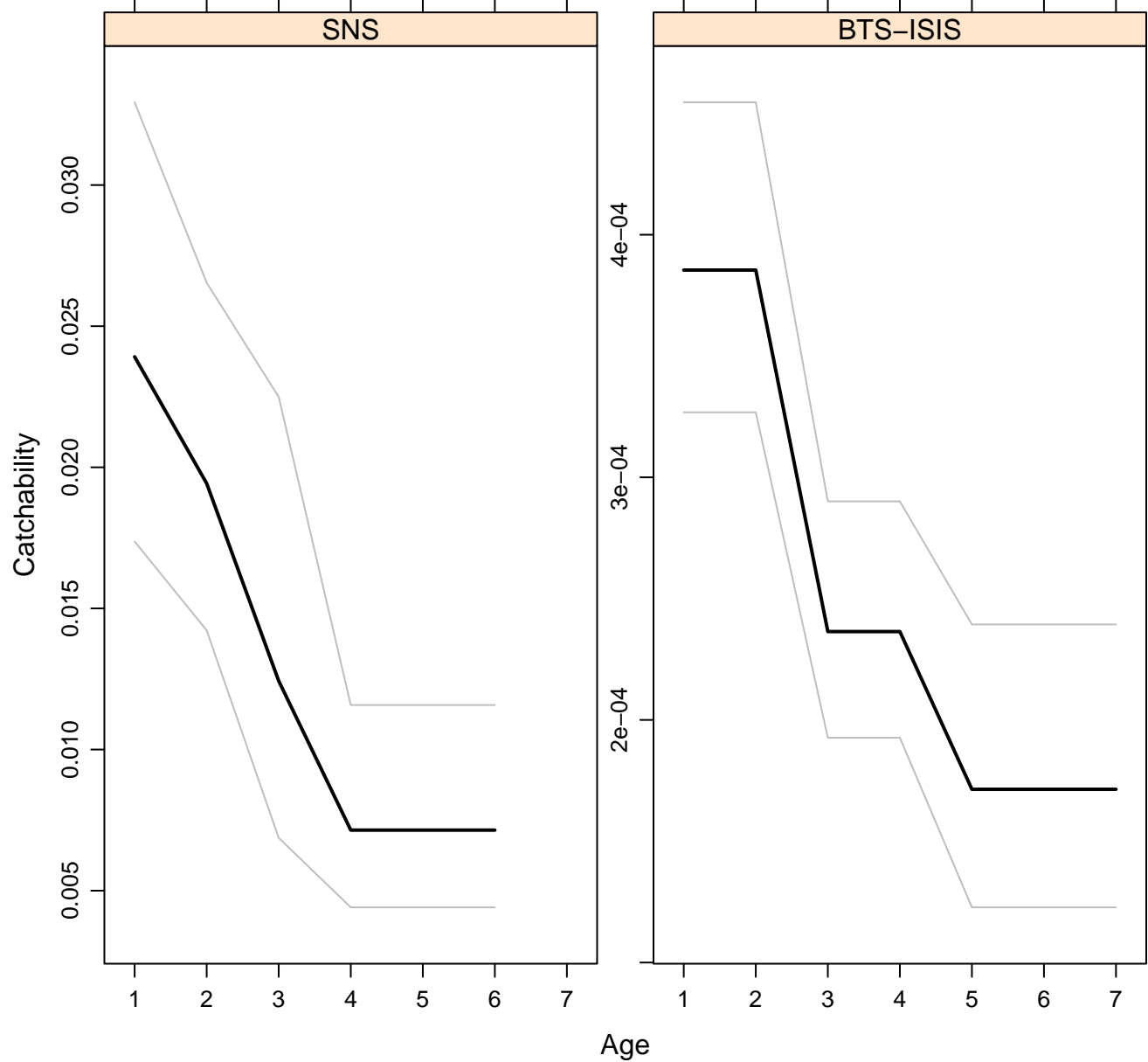




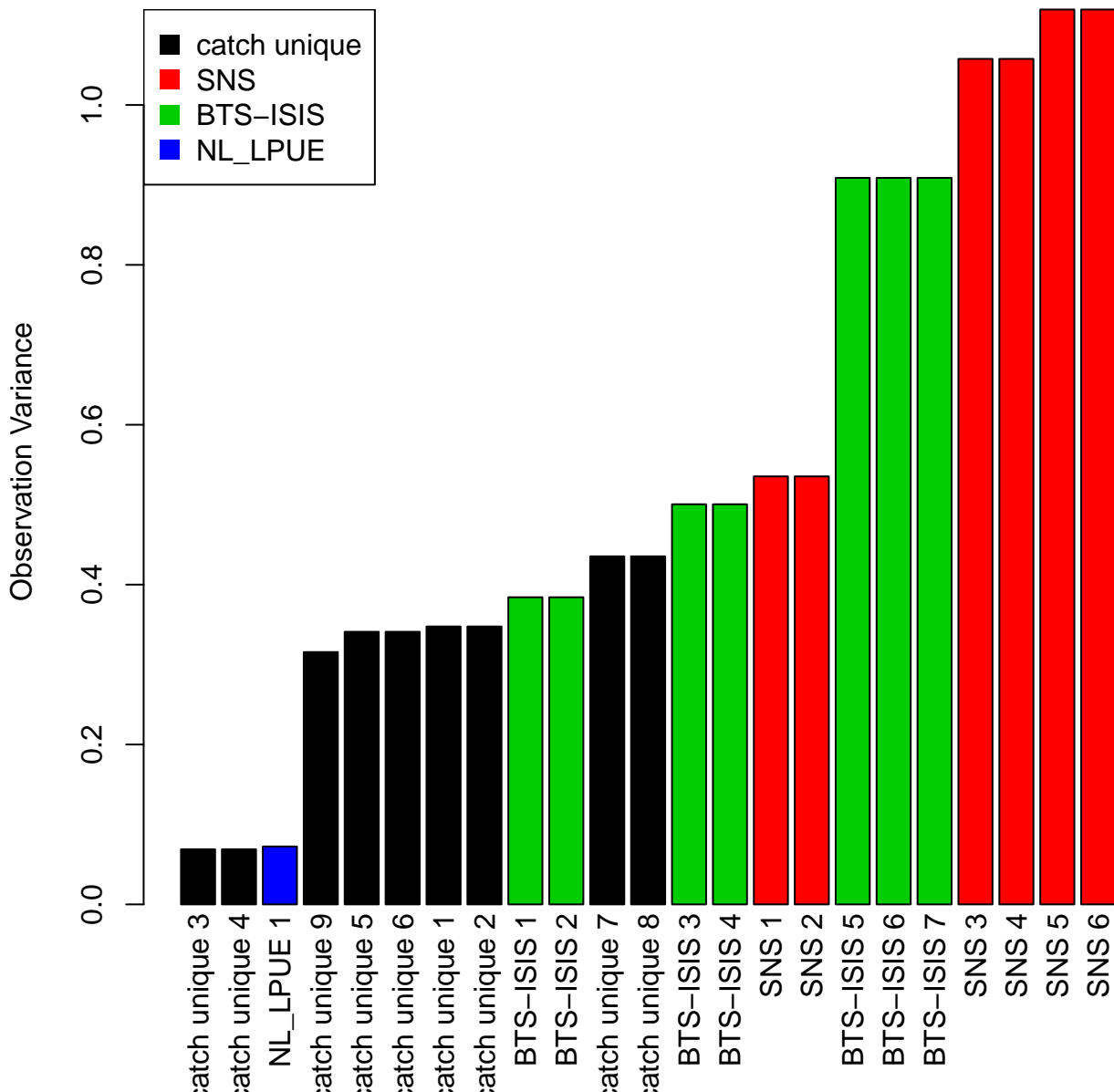
# Observation variance vs uncertainty



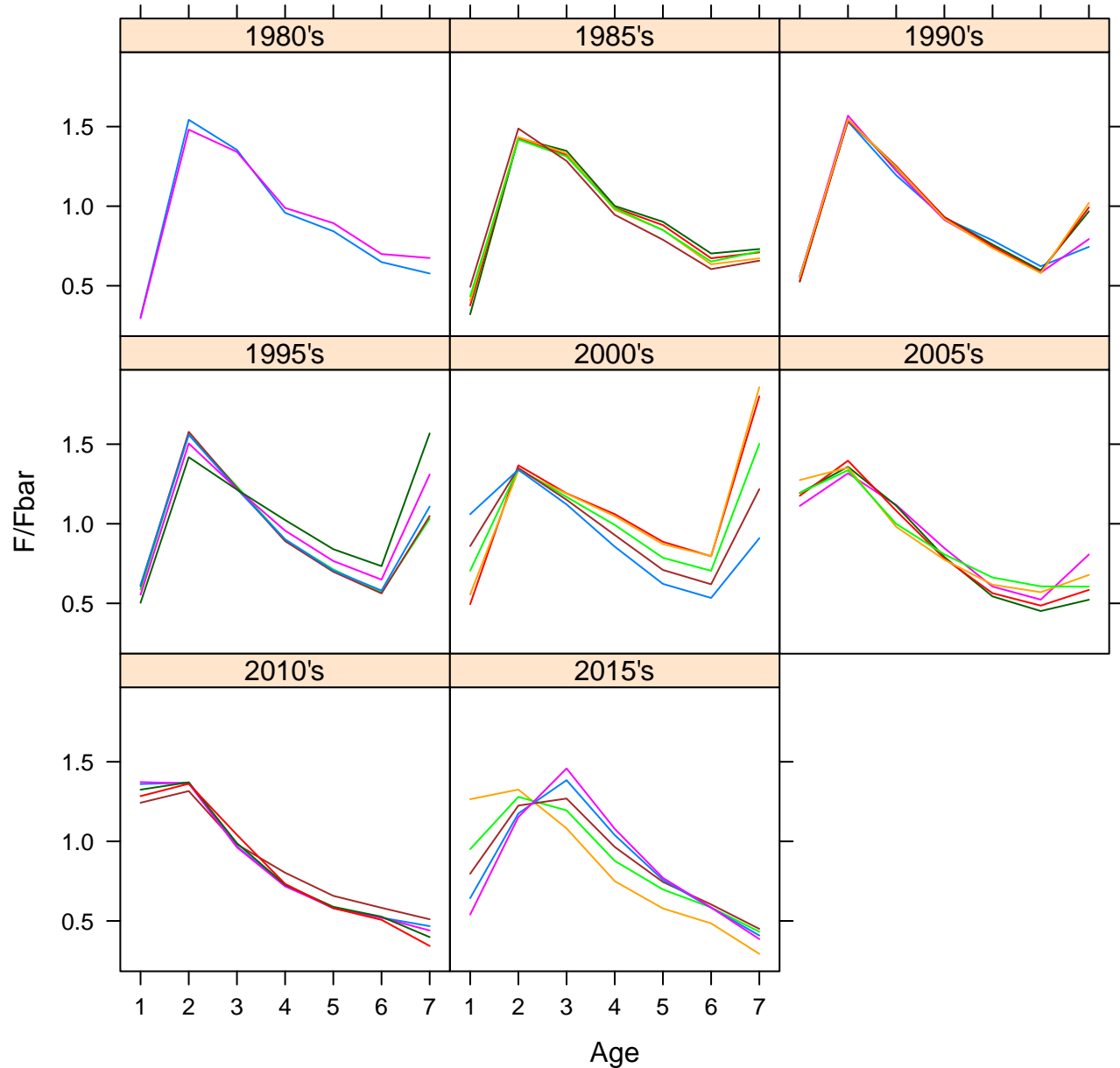
# Survey catchability parameters



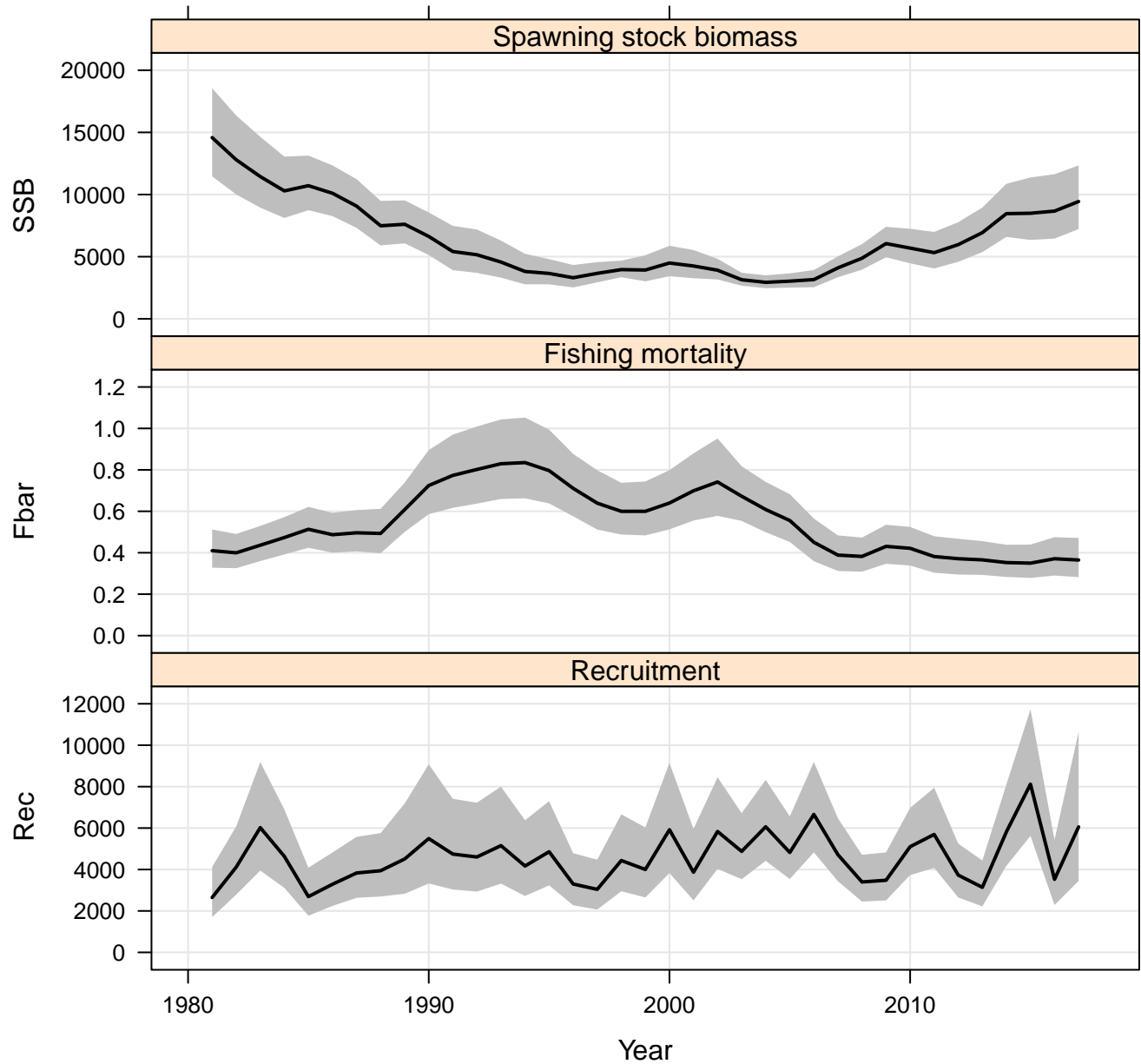
Observation variances by data source



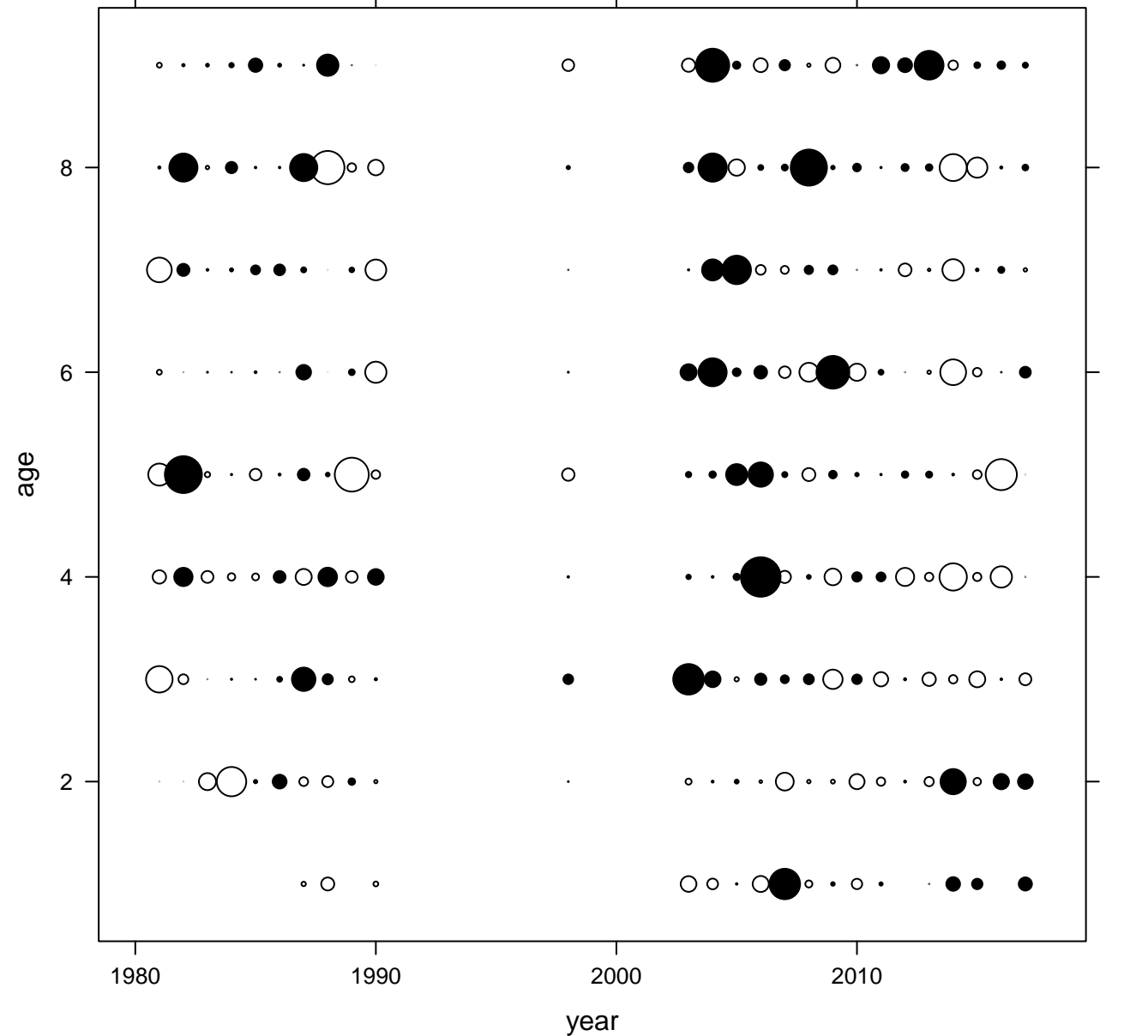
# Selectivity of the Fishery by Pentad



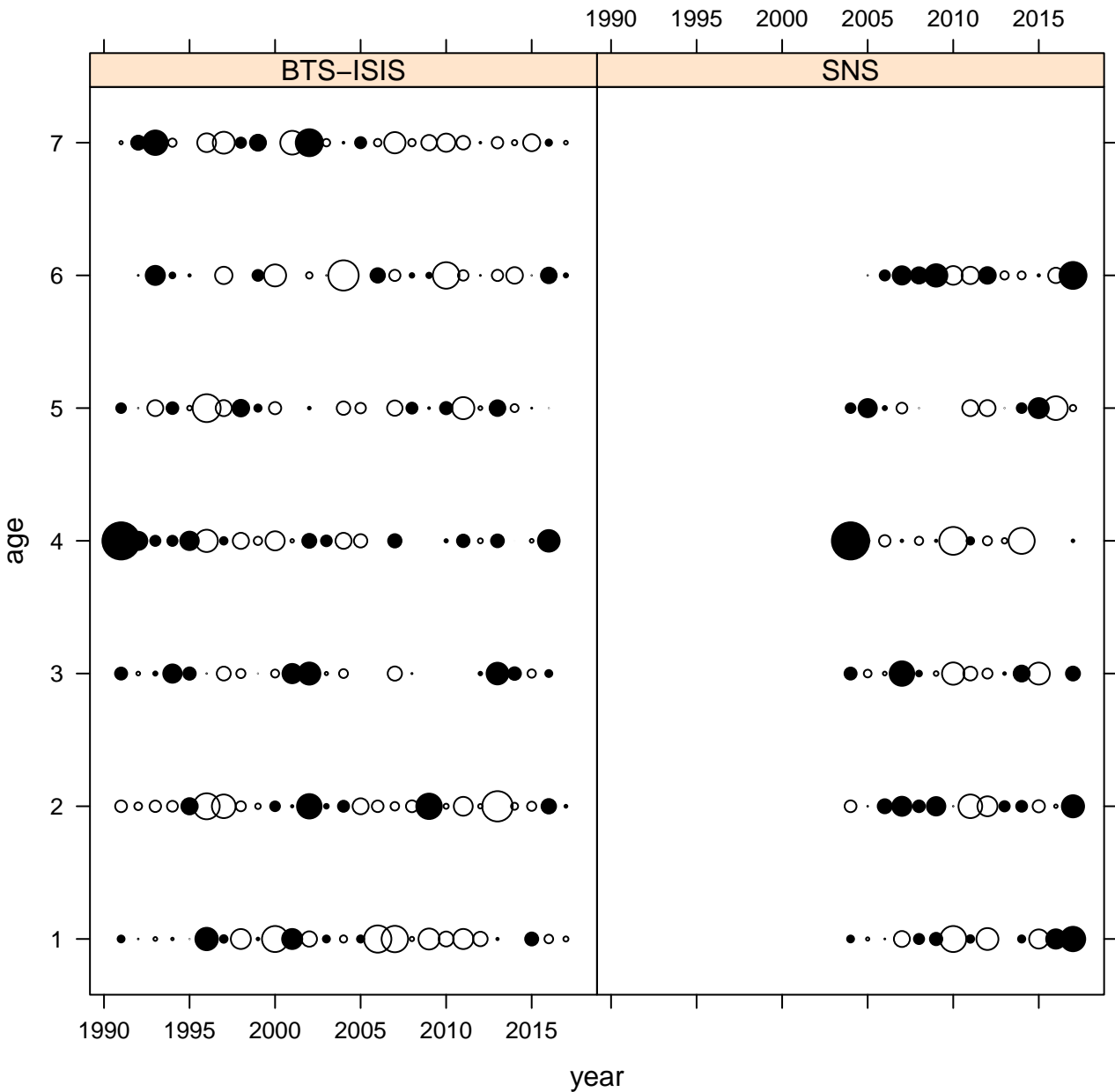
# Turbot in IV pg 9

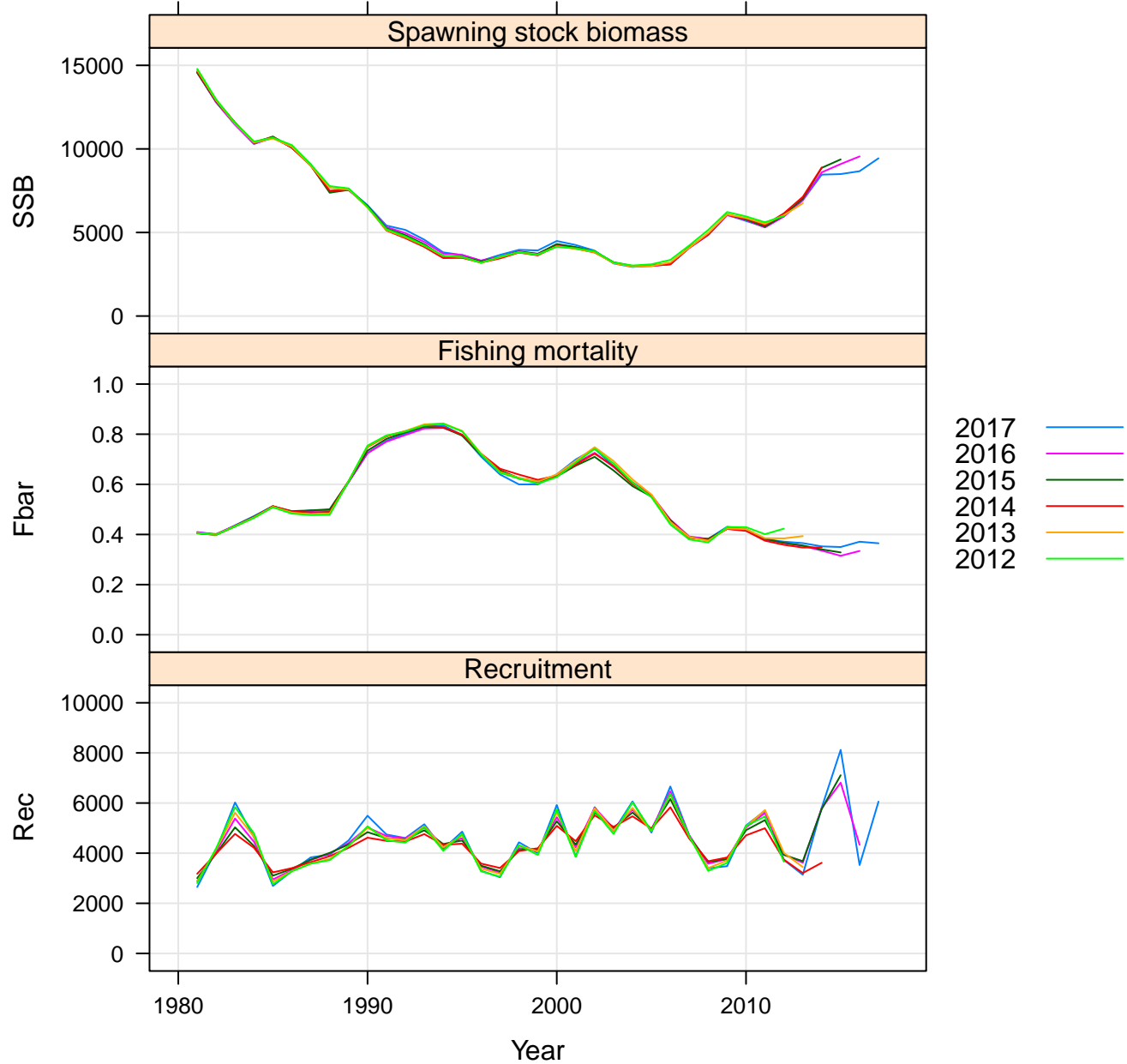


# Residuals by year Catch



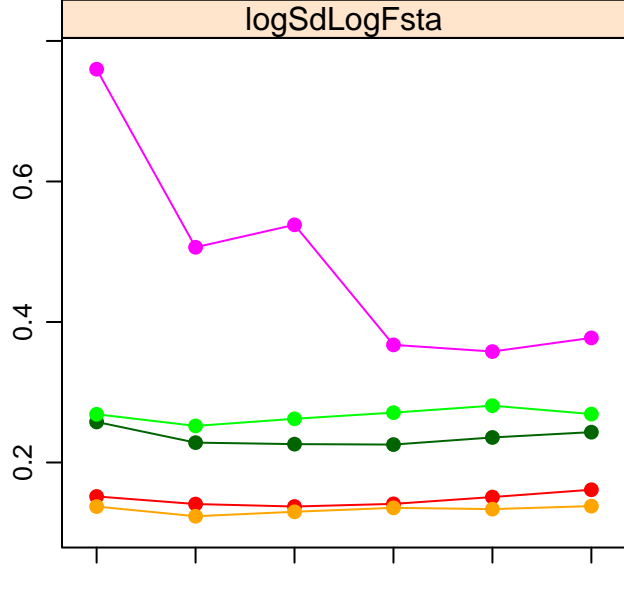
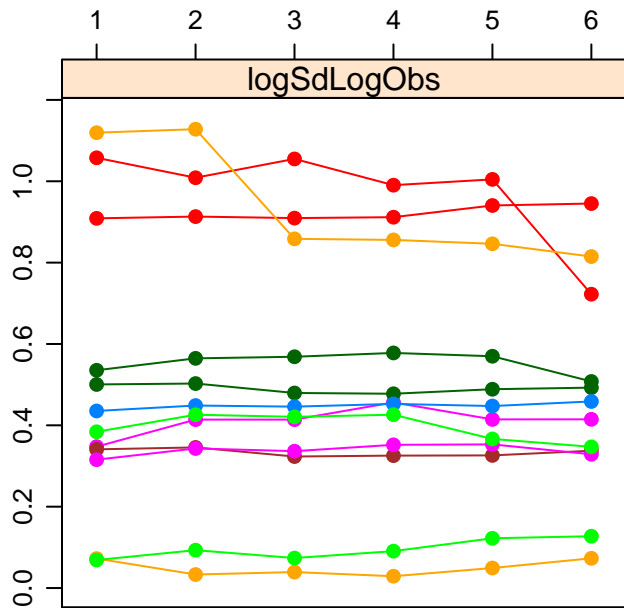
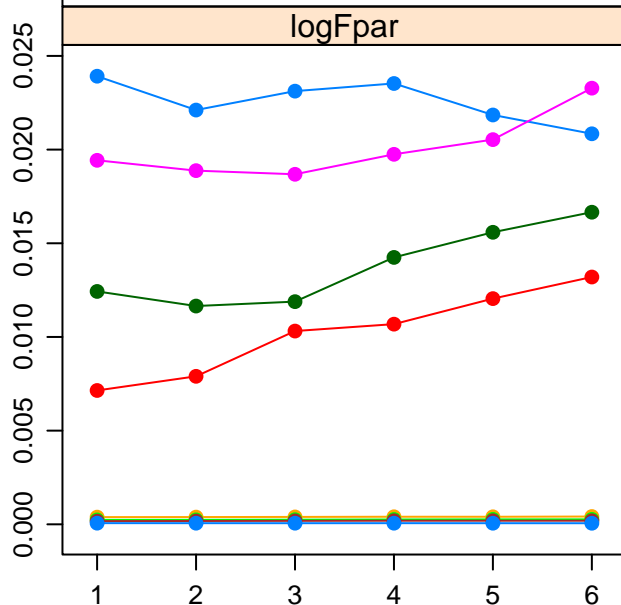
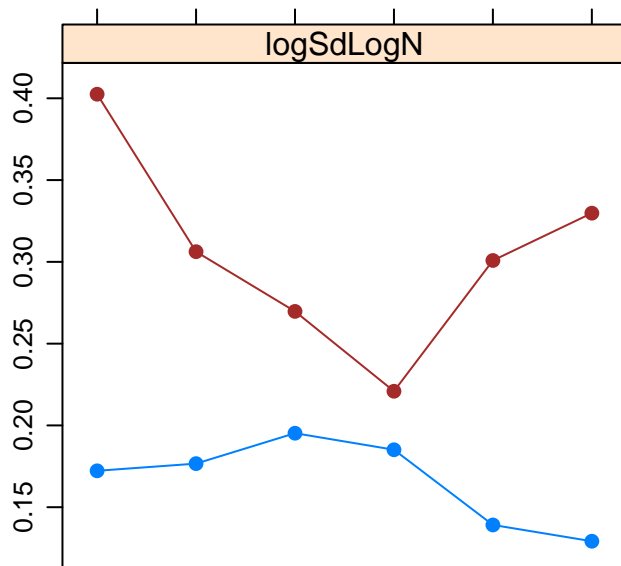
# Residuals by survey





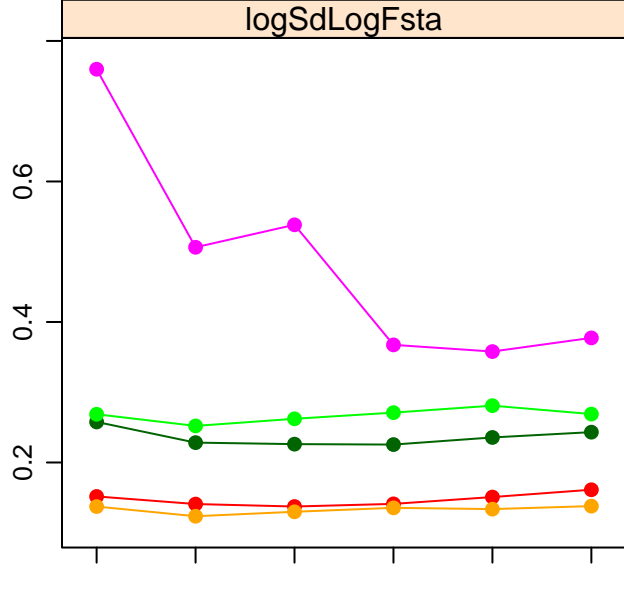
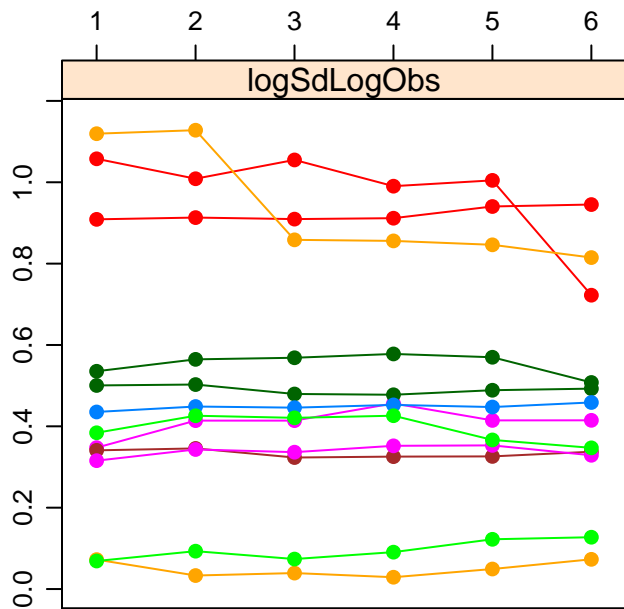
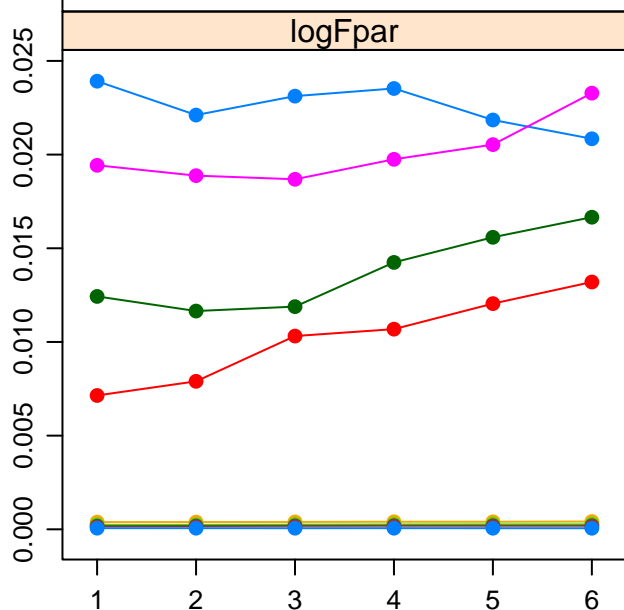
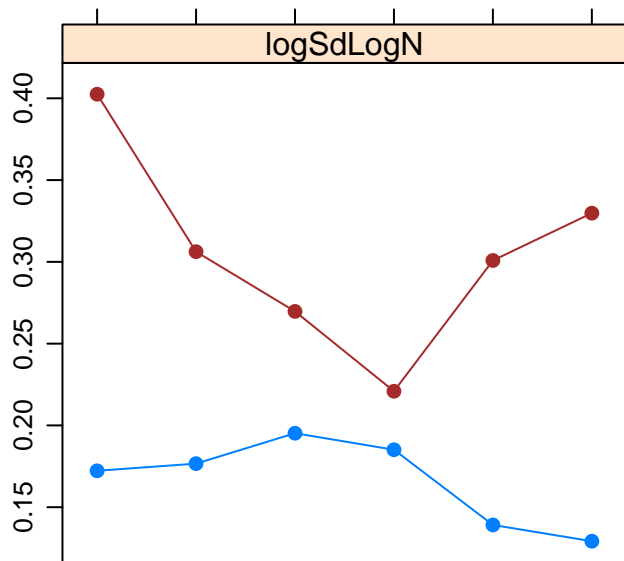


Parameter value



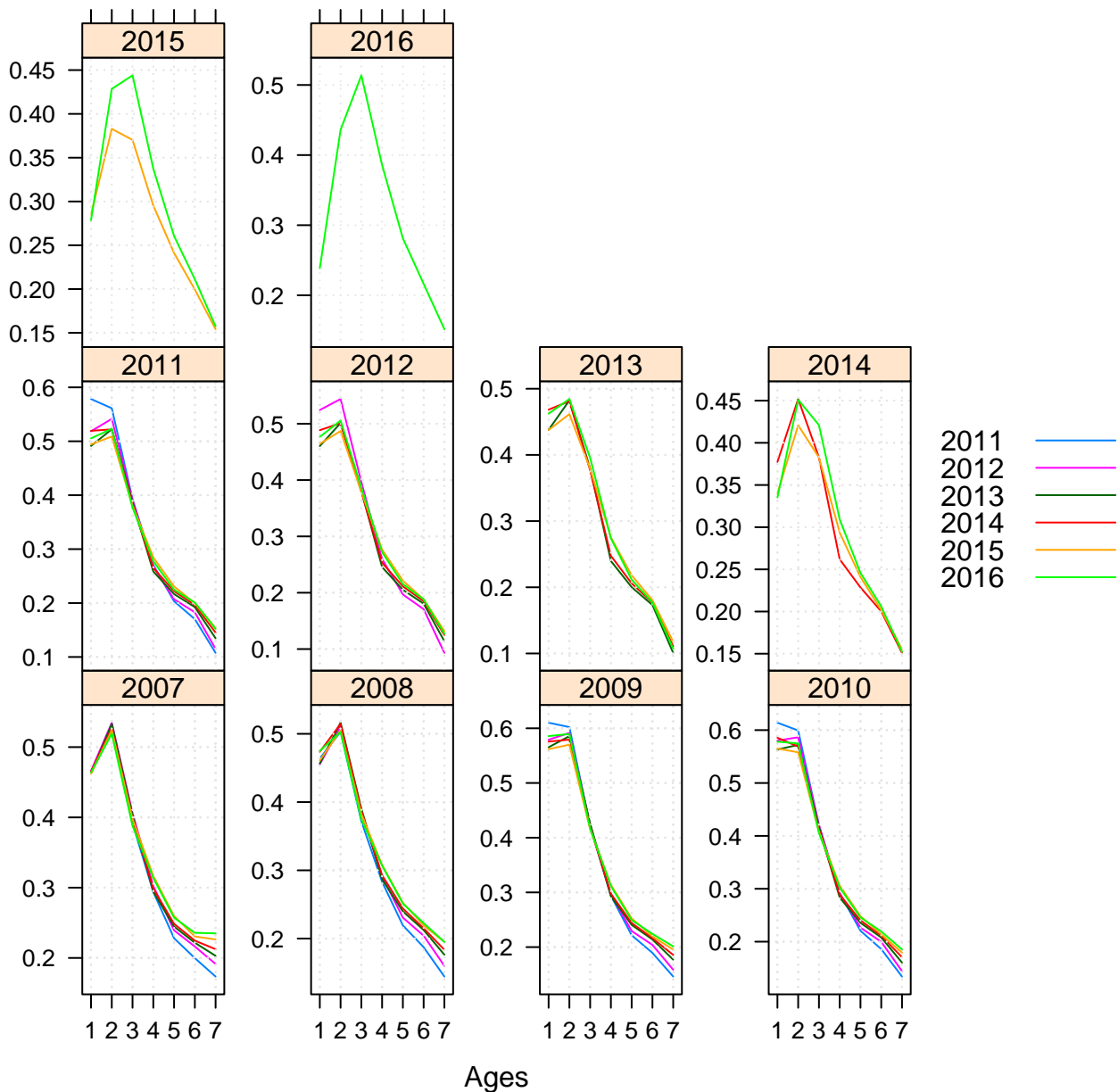
Assessment year

Parameter value



Assessment year

# Retrospective pattern in F at age



# Retrospective pattern in F at age

