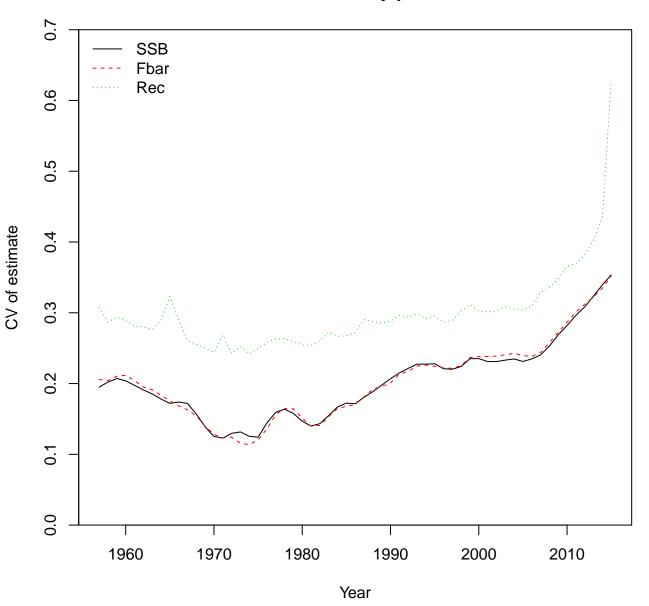


# **Uncertainties of key parameters**



# Survey catchability parameters MS HERAS 2.0 1.5 Catchability 0.5 0.0 2 8 4 6 Age (ring)

Survey catchability parameters WoS HERAS 1.5 0.1 Catchability 0.5 0.0

4

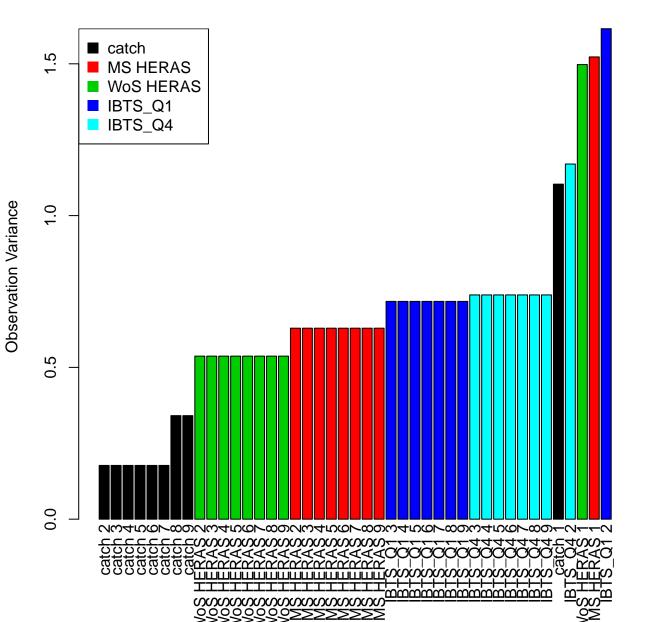
6

Age (ring)

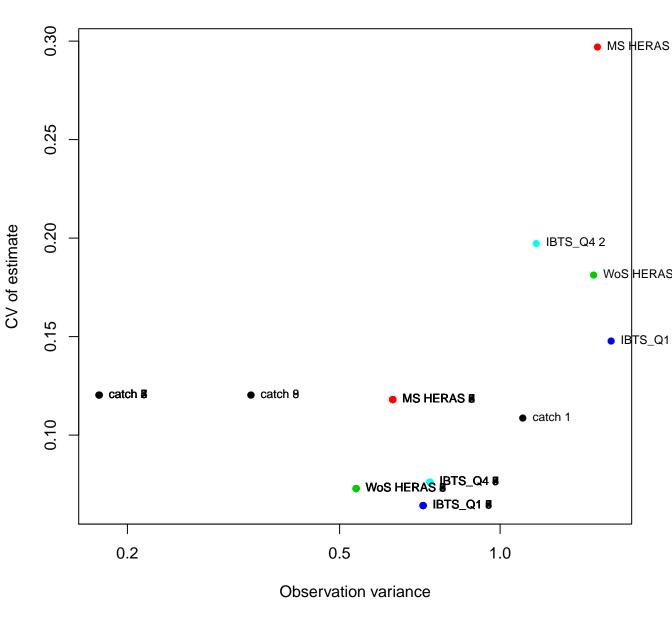
8

2

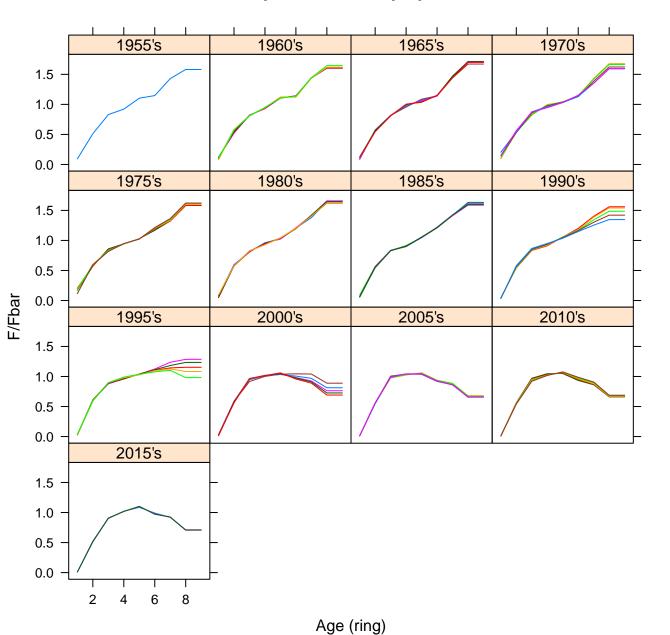
## Observation variances by data source

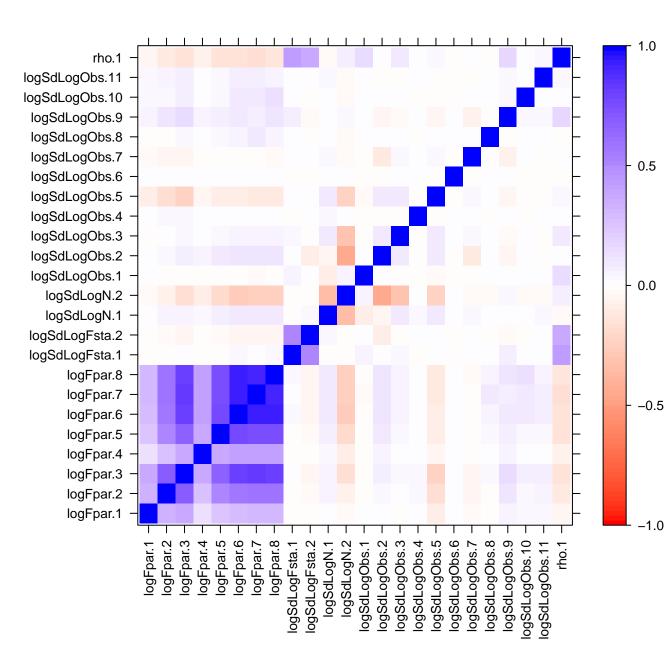


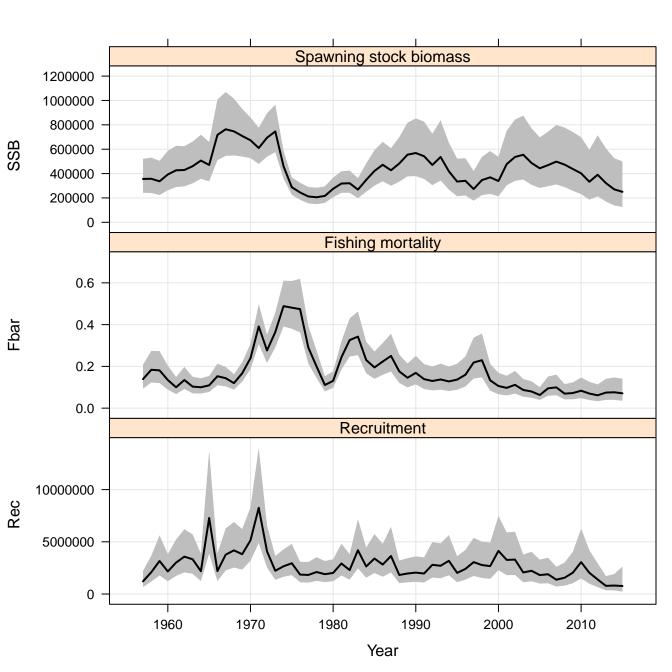
# **Observation variance vs uncertainty**



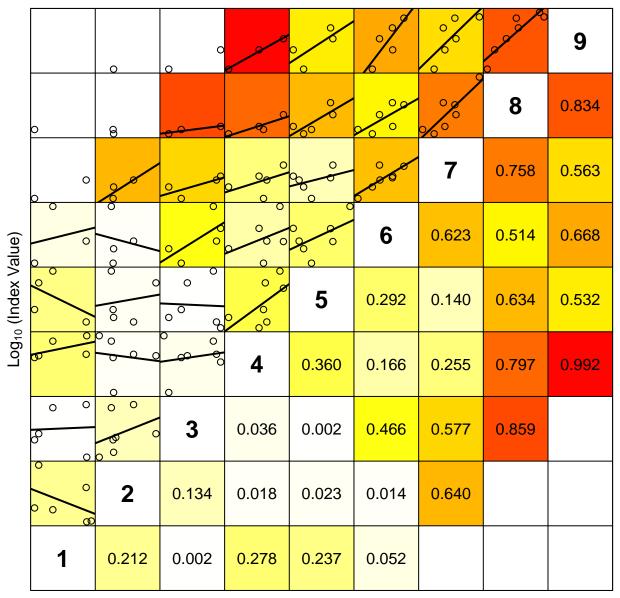
# Selectivity of the Fishery by Period







## **MS HERAS**



Log<sub>10</sub> (Index Value)

# **WoS HERAS**

	9 8c 9 95		00 00 00 00	<b>o</b>	8 8 8 8		0000		9
			0000		9			8	0.277
	0 0 0						7	0.718	0.112
/alne)	80	000				6	0.709	0.460	0.078
Log <sub>10</sub> (Index Value)		00	00		5	0.483	0.400	0.316	0.049
	0 0 0 0 0 0 0			4	0.225	0.083	0.154	0.152	0.004
	\$ 000 000 000 000 000 000 000 000 000 0	° A	3	0.244	0.082	0.078	0.277	0.194	0.001
	<u> </u>	2	0.461	0.177	0.196	0.084	0.326	0.377	0.052
	1	0.003	0.004	0.004	0.241	0.135	0.002	0.074	0.000

Log<sub>10</sub> (Index Value)

# IBTS\_Q1

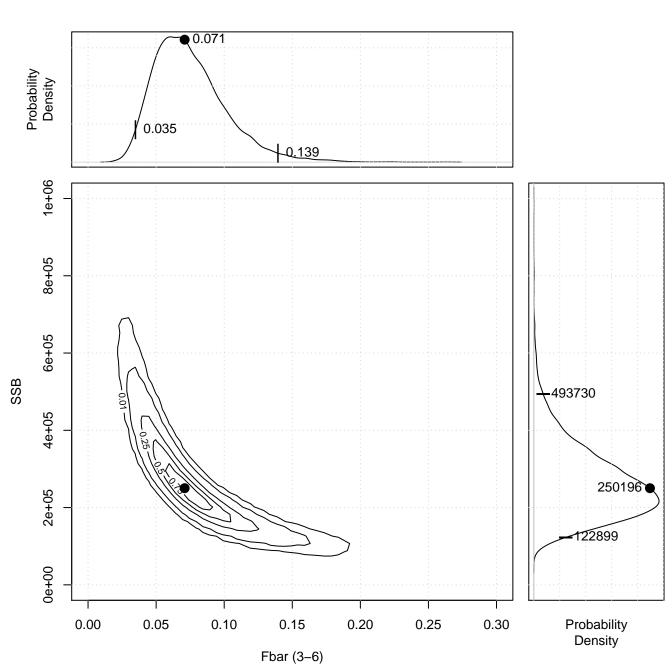
0							9
	0		© 0 0			8	0.464
		000000	08		7	0.447	0.303
<u> </u>				6	0.249	0.310	0.052
			5	0.325	0.199	0.059	0.026
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<b>8</b> 0000	4	0.268	0.481	0.065	0.081	0.067
0 80 0 00 80 0 00 80 0	3	0.000	0.159	0.018	0.000	0.006	0.066
2	0.002	0.000	0.005	0.005	0.054	0.000	0.043

Log<sub>10</sub> (Index Value)

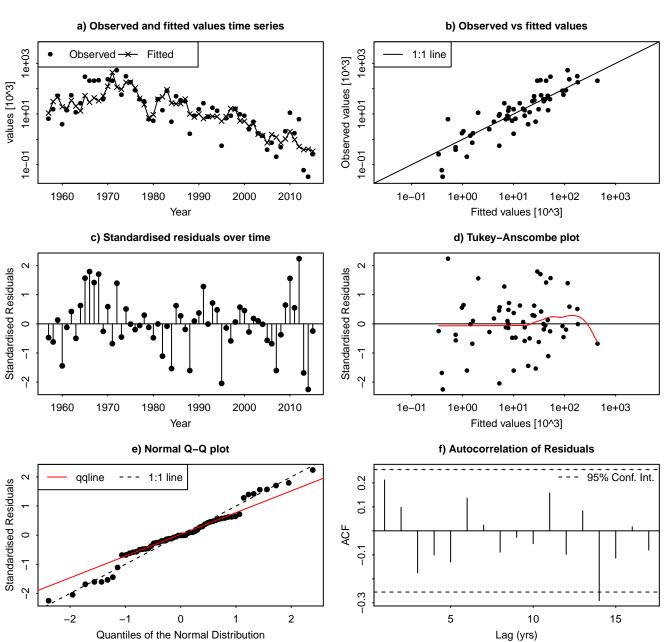
IBTS\_Q4

Log <sub>10</sub> (Index Value)				0000	0000			9
			000000			8000	8	0.070
						7	0.165	0.401
	8 0		0 8	6	0.032	0.221	0.098	
				5	0.001	0.127	0.283	0.001
	8 000		4	0.078	0.049	0.557	0.052	0.242
	000 000 000	3	0.036	0.007	0.180	0.023	0.155	0.229
	2	0.007	0.028	0.295	0.026	0.136	0.030	0.000

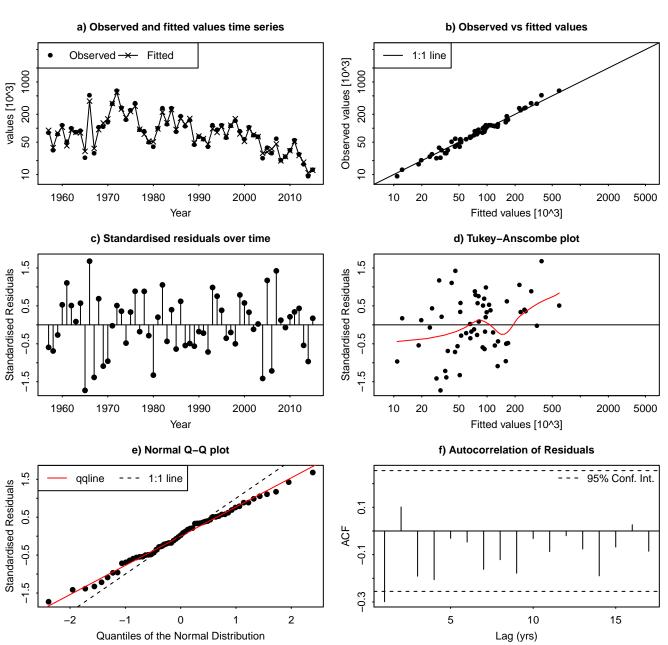
Log<sub>10</sub> (Index Value)

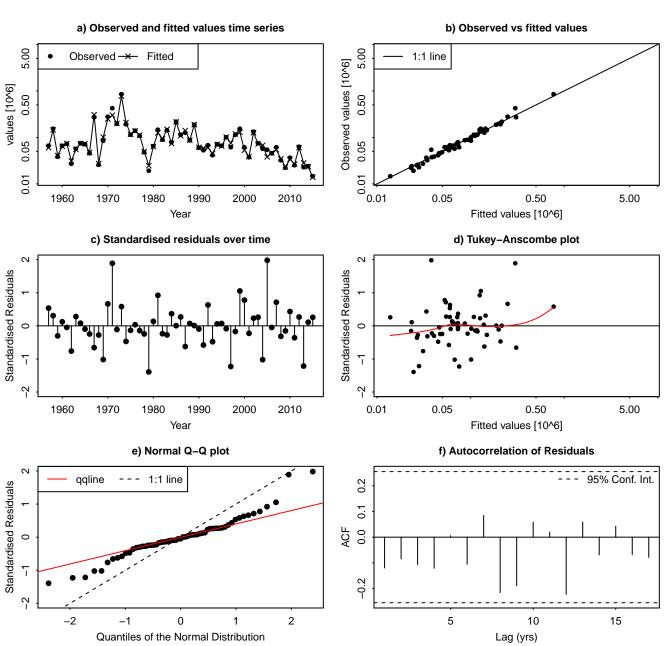


#### Diagnostics - catch, age (ring) 1

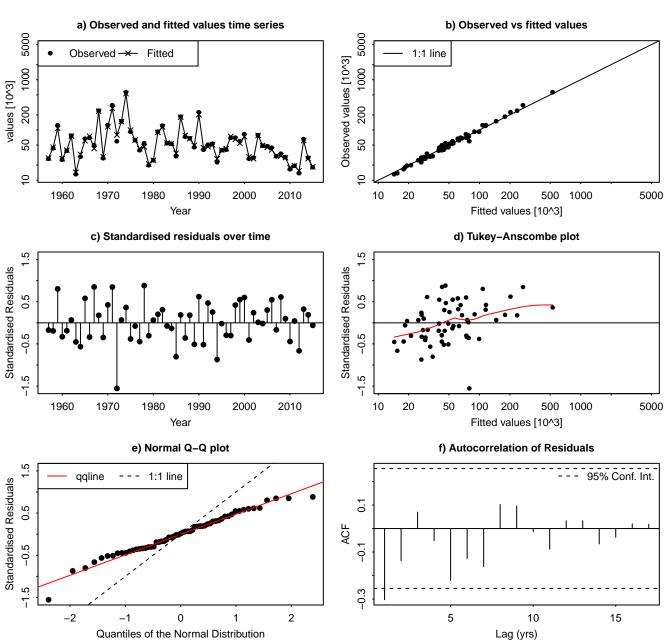


#### Diagnostics - catch, age (ring) 2

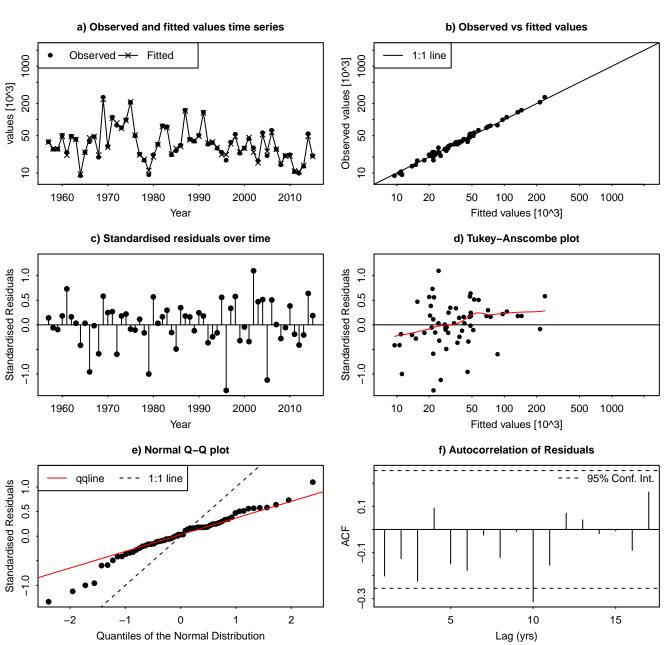




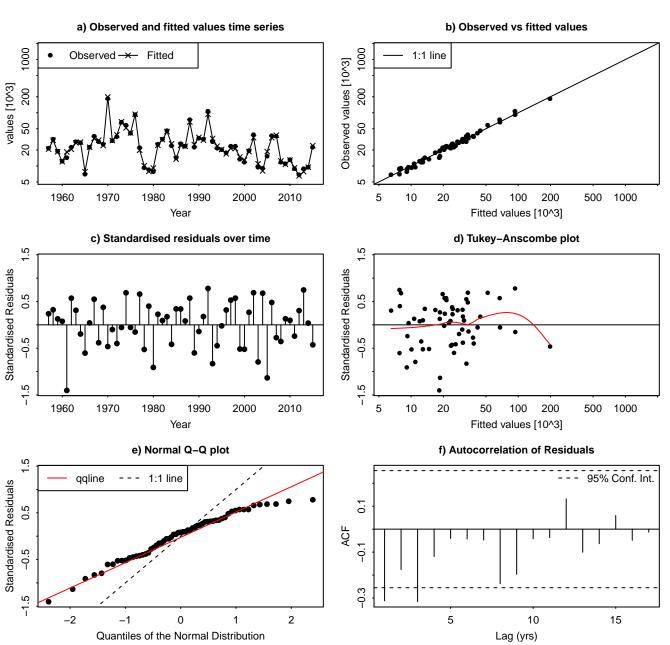
Diagnostics - catch, age (ring) 4



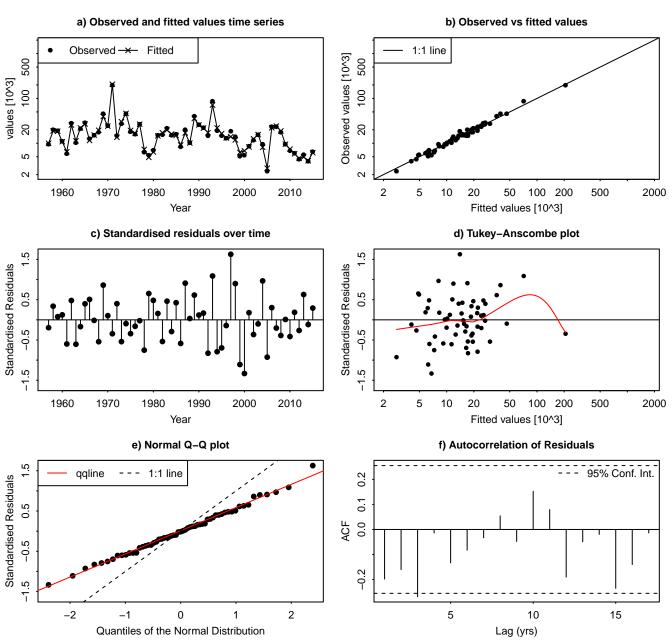
Diagnostics - catch, age (ring) 5

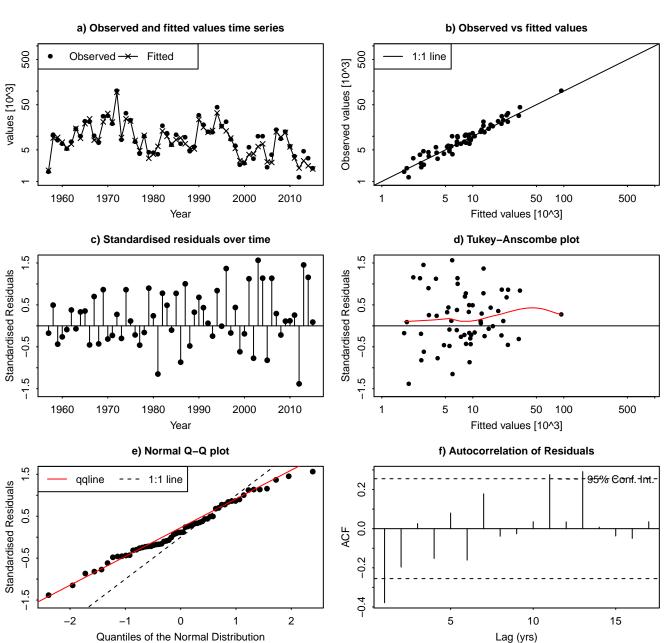


Diagnostics - catch, age (ring) 6

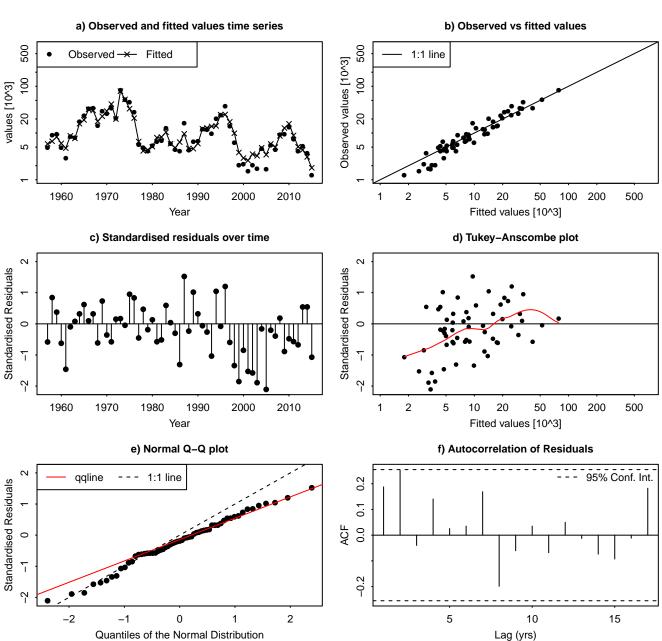


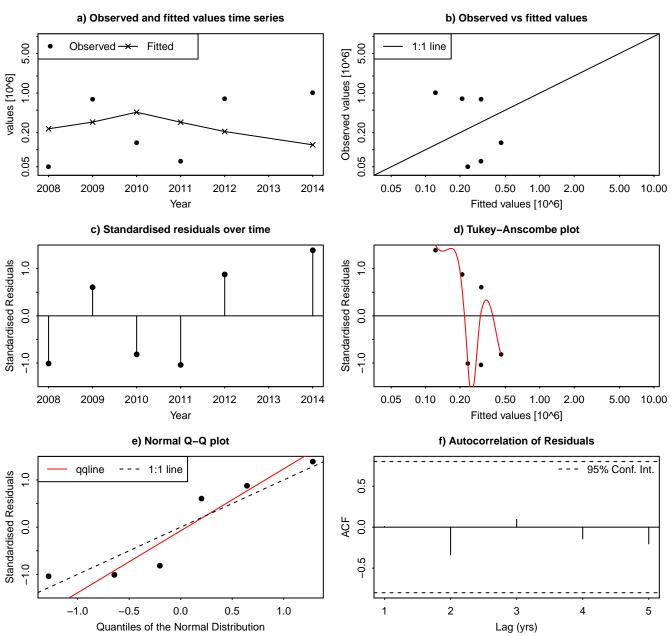
Diagnostics – catch, age (ring) 7

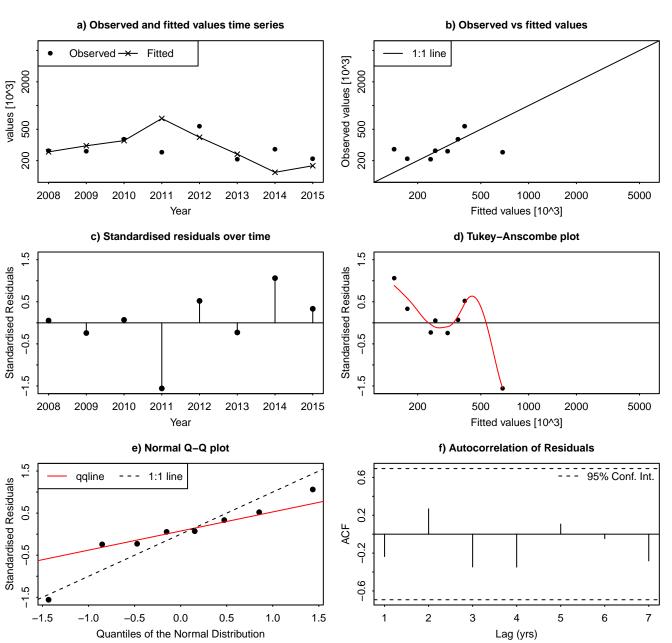


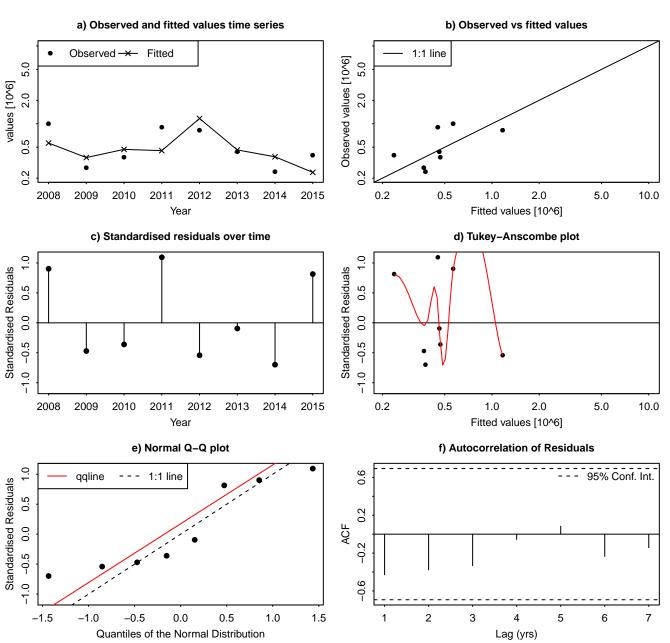


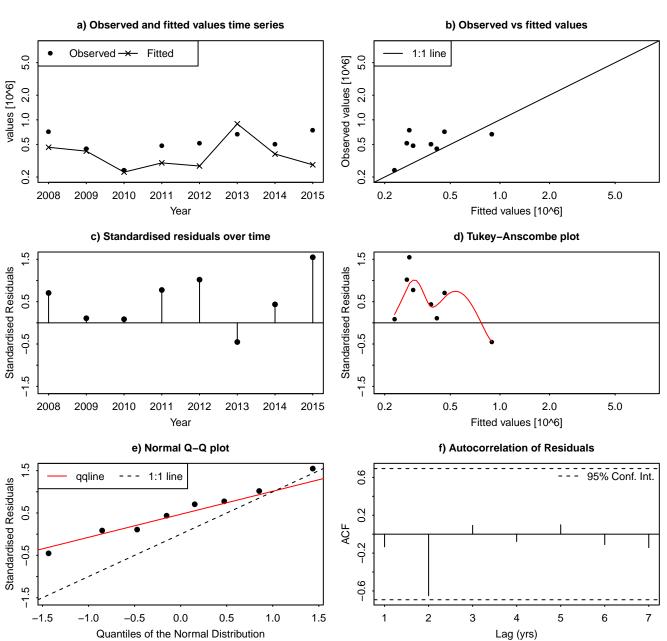
Diagnostics - catch, age (ring) 9

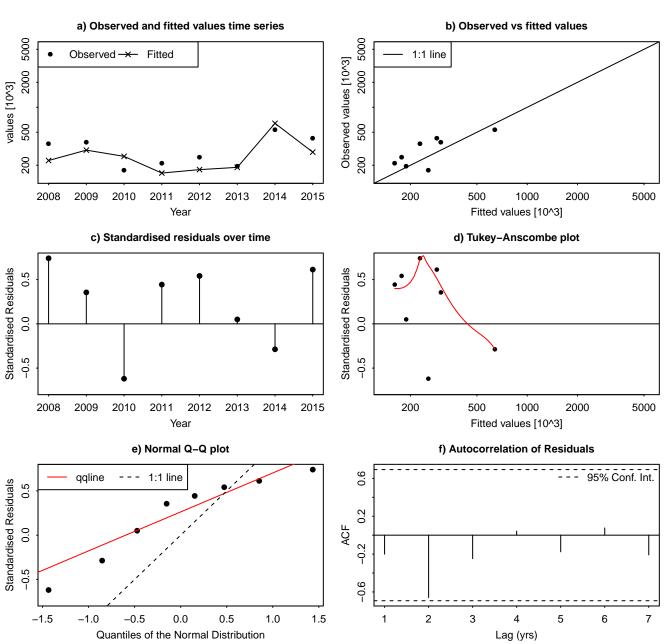


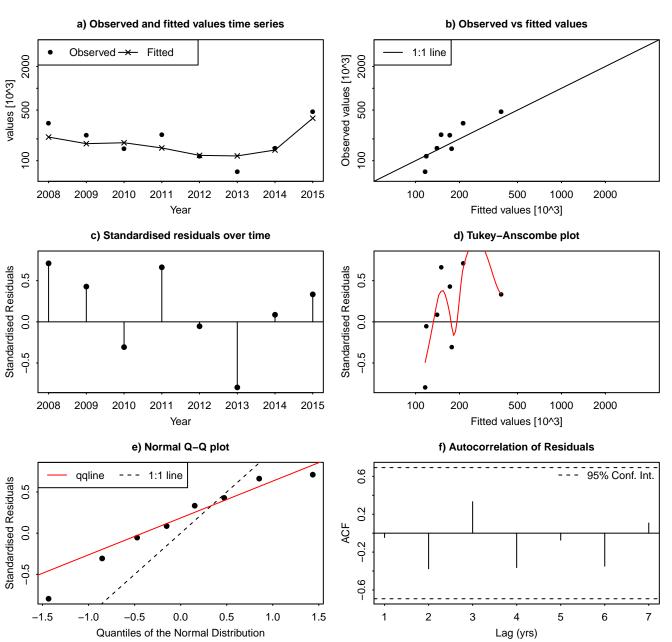


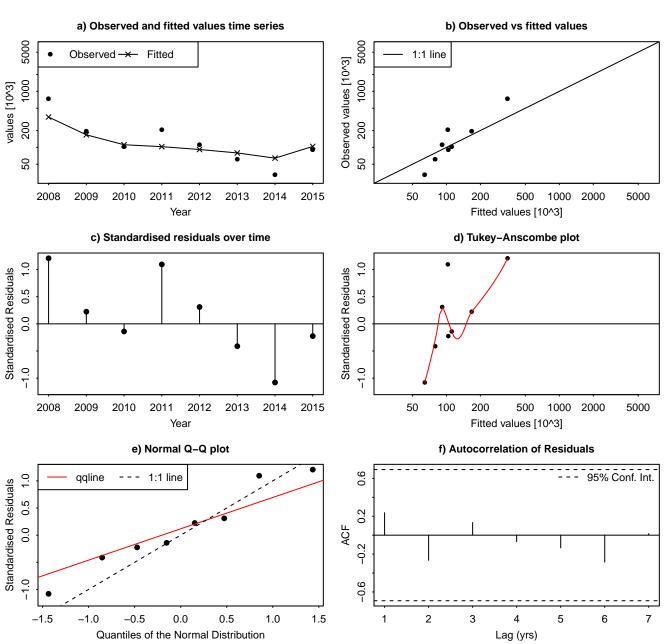


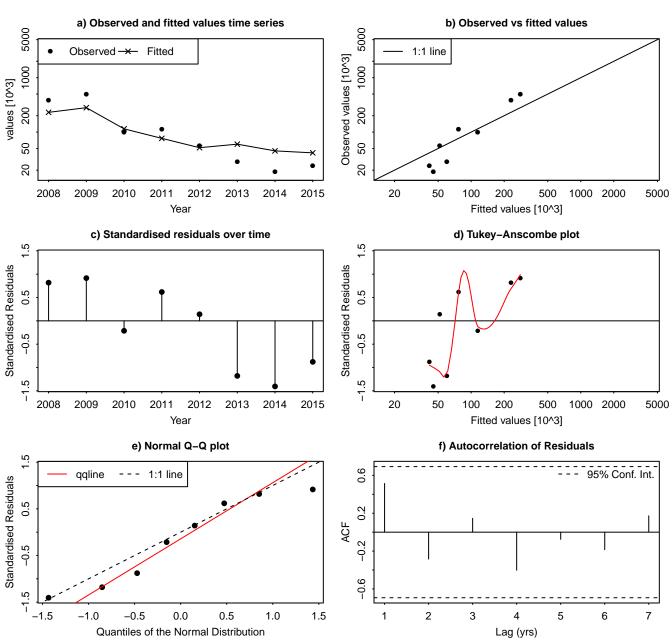


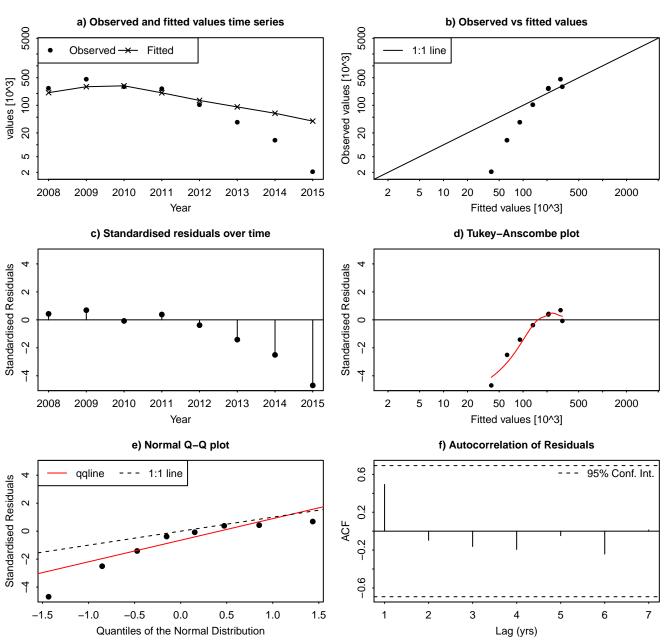


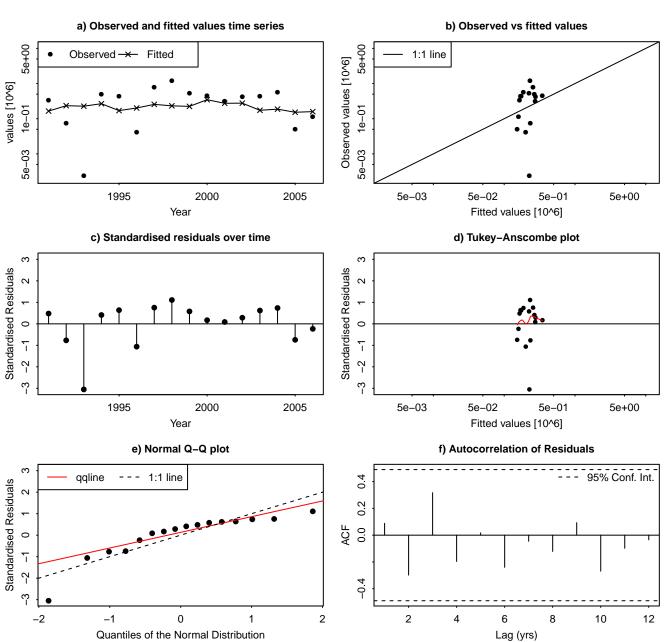


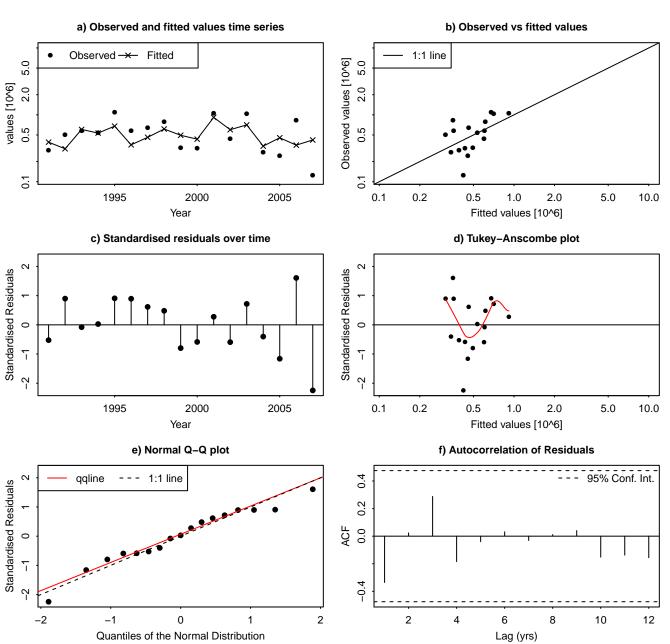


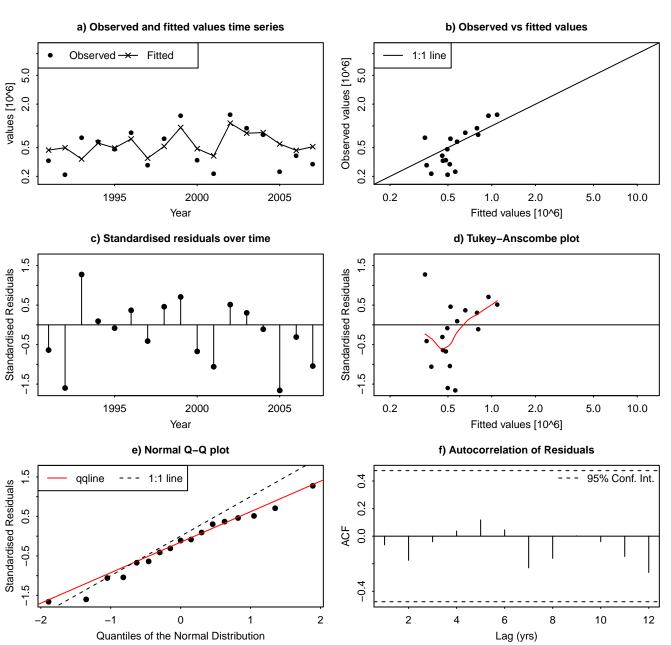


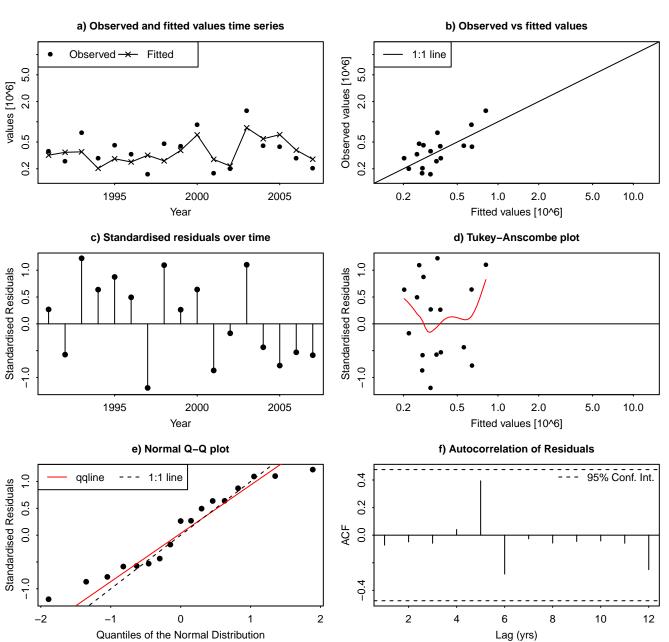


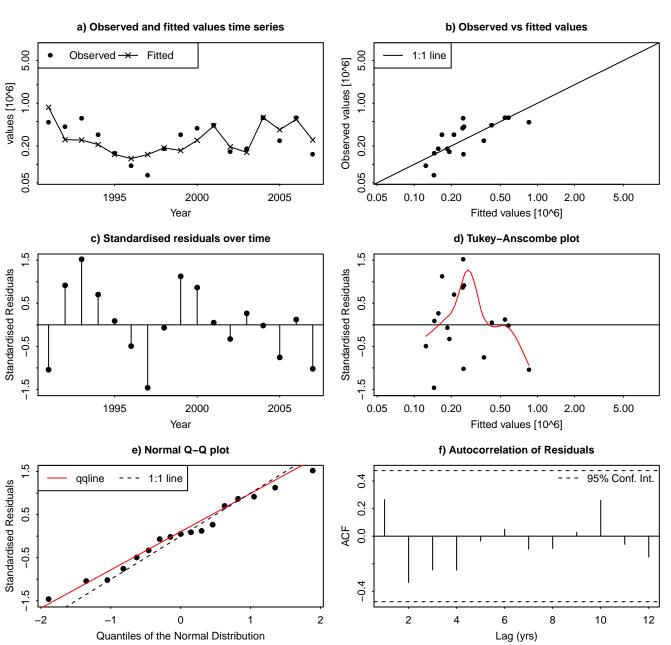


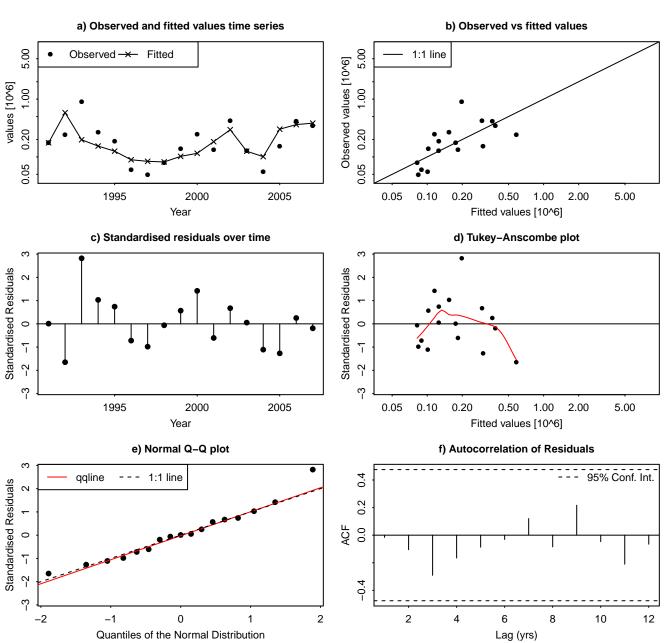


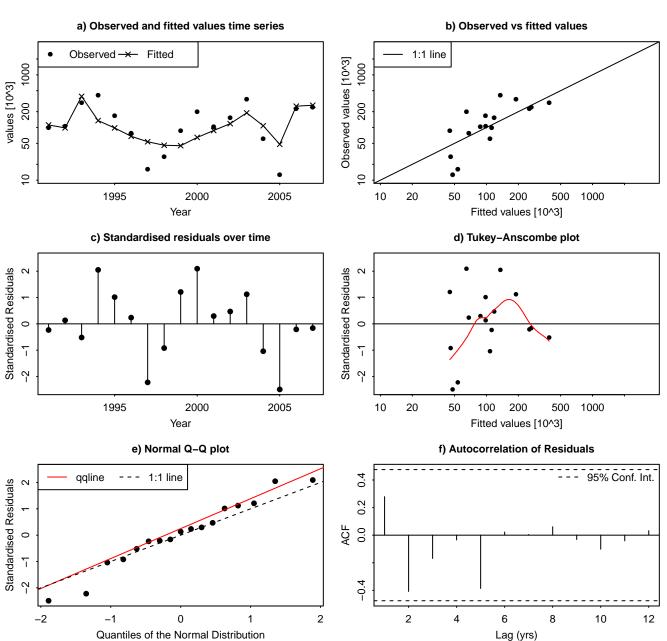


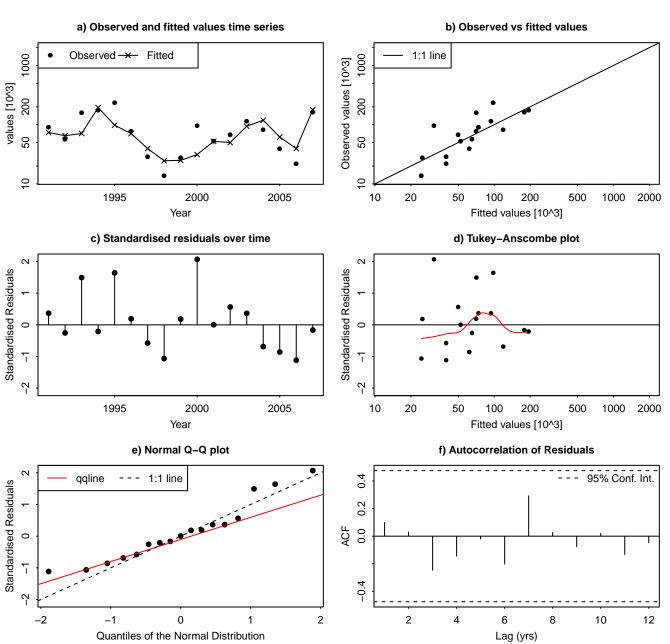




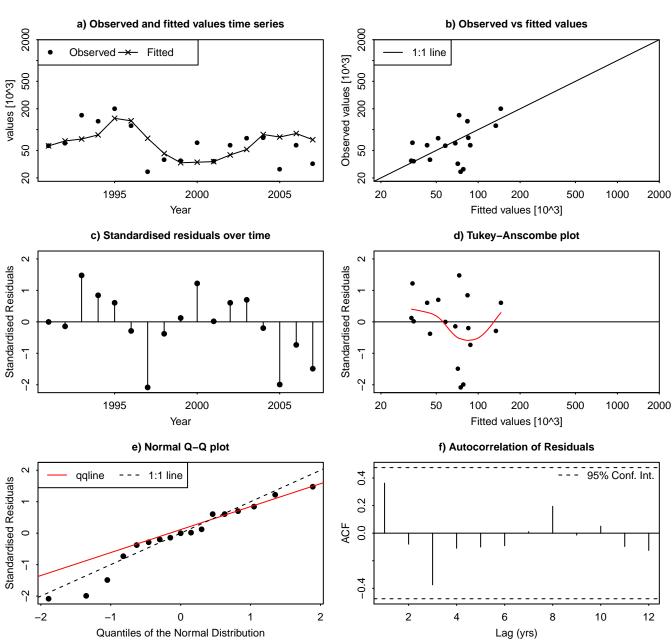


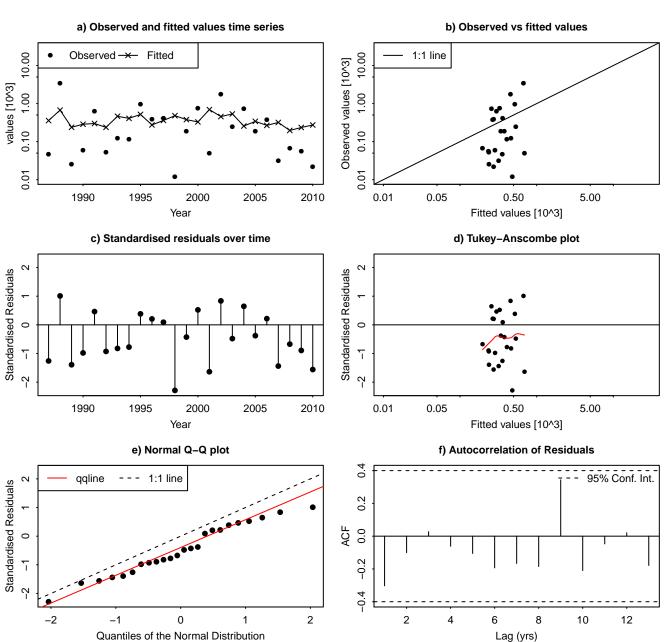


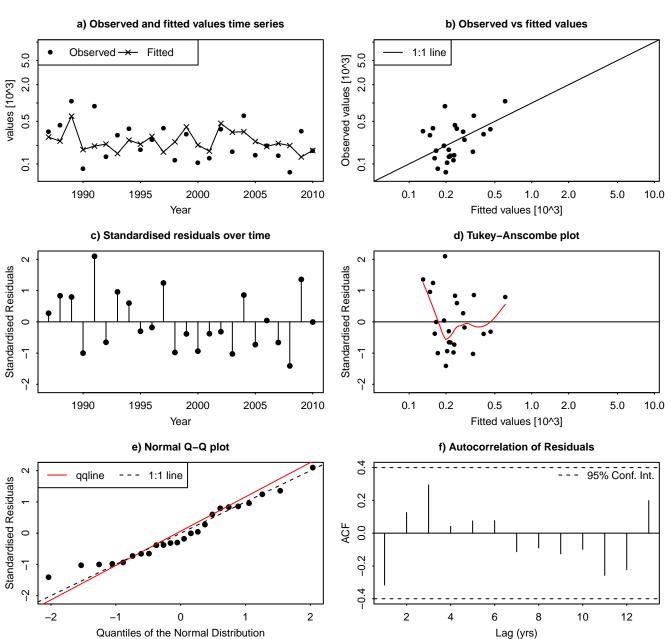


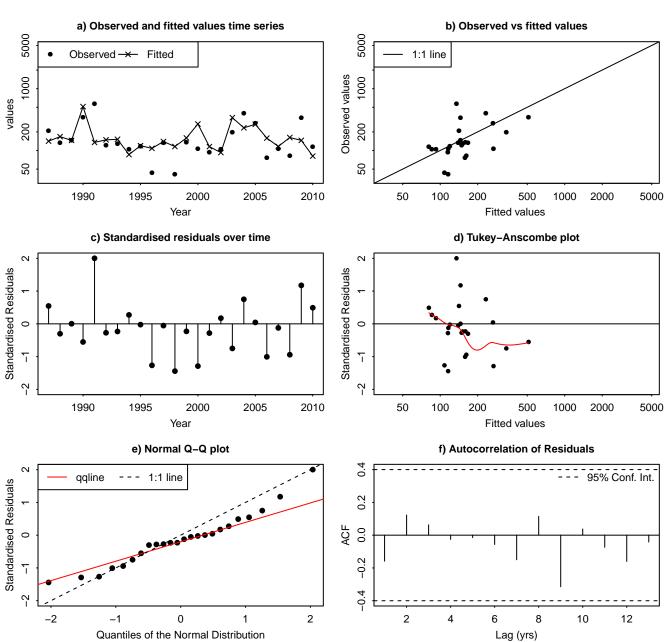


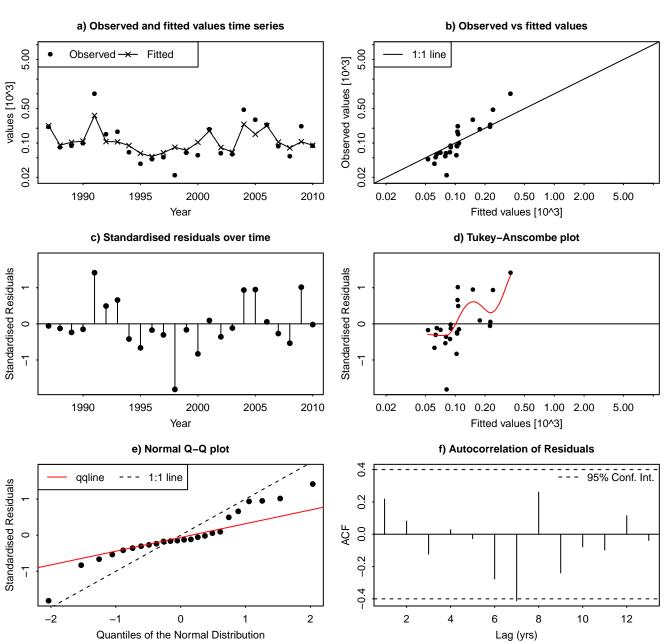
Diagnostics - WoS HERAS, age (ring) 9

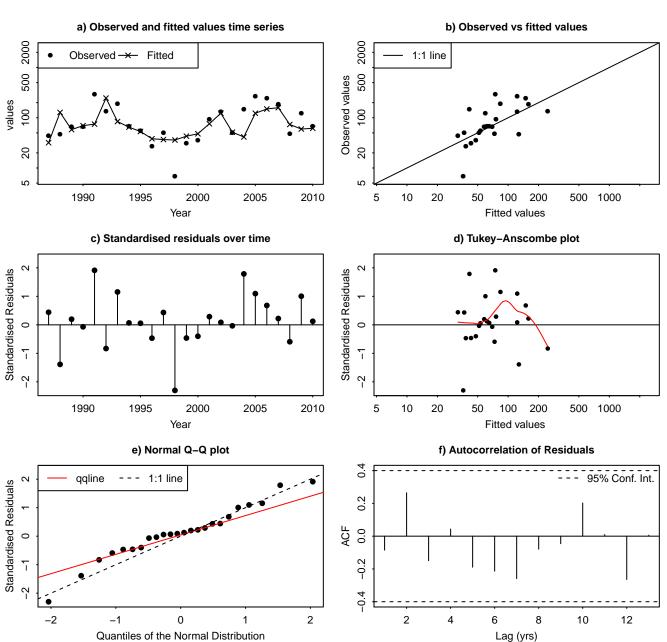


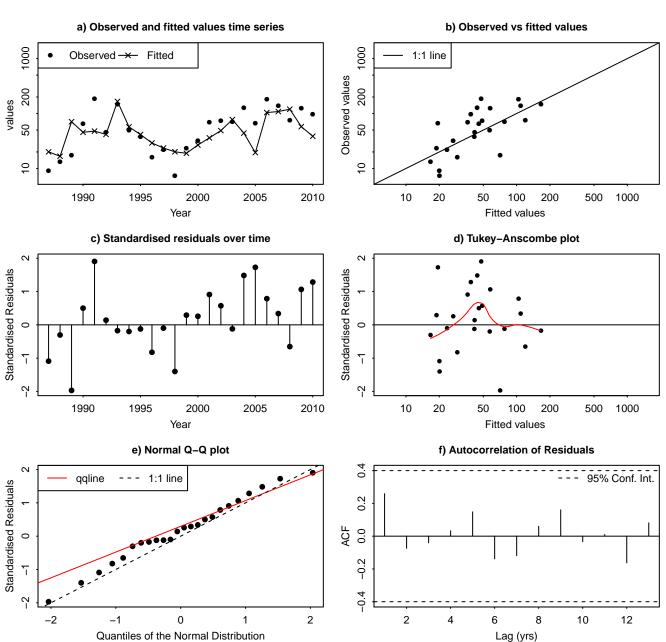


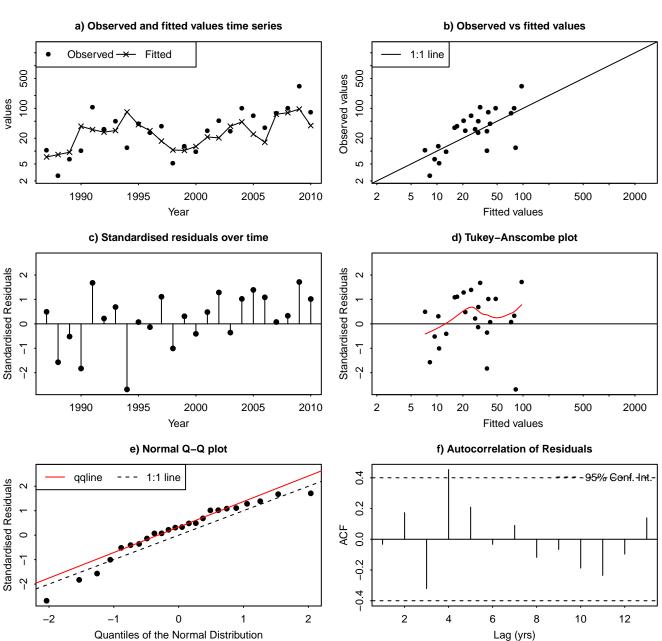




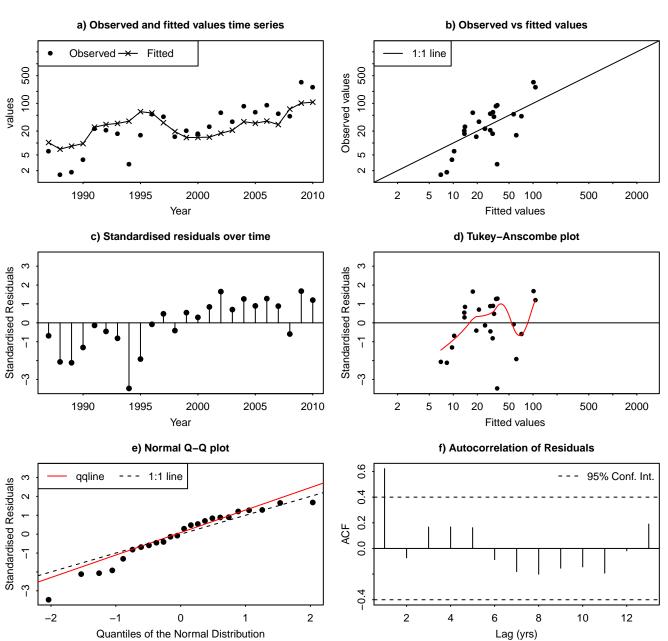


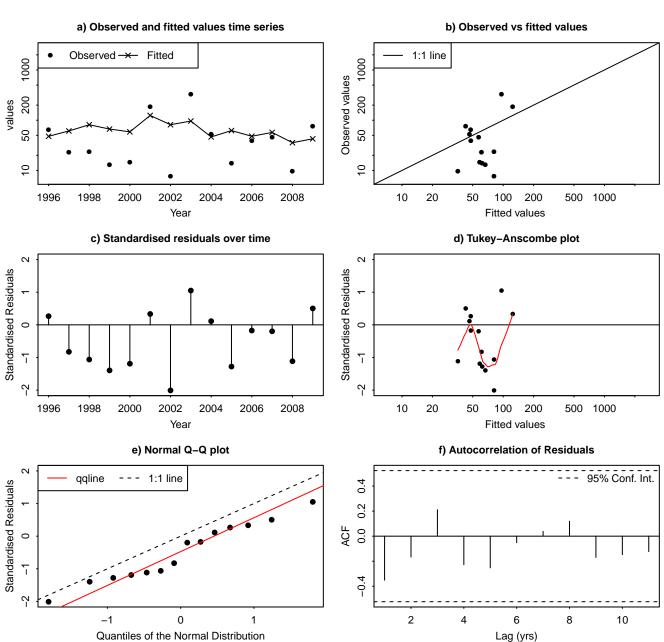




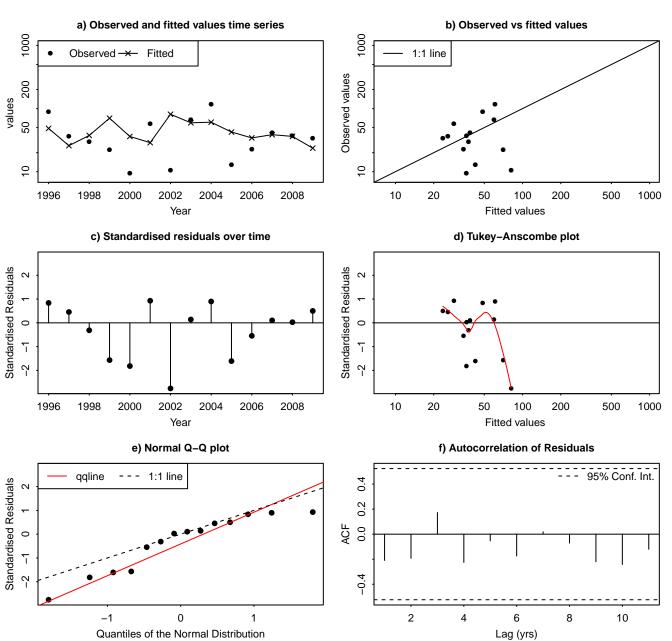


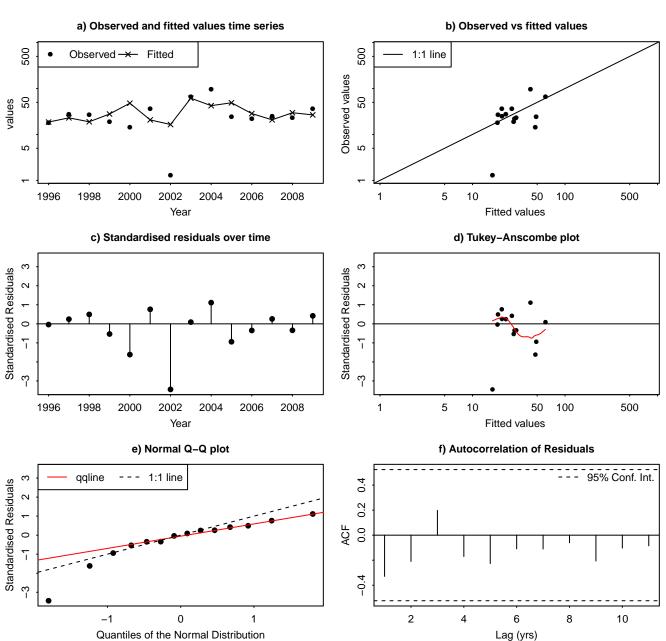
## Diagnostics - IBTS\_Q1, age (ring) 9

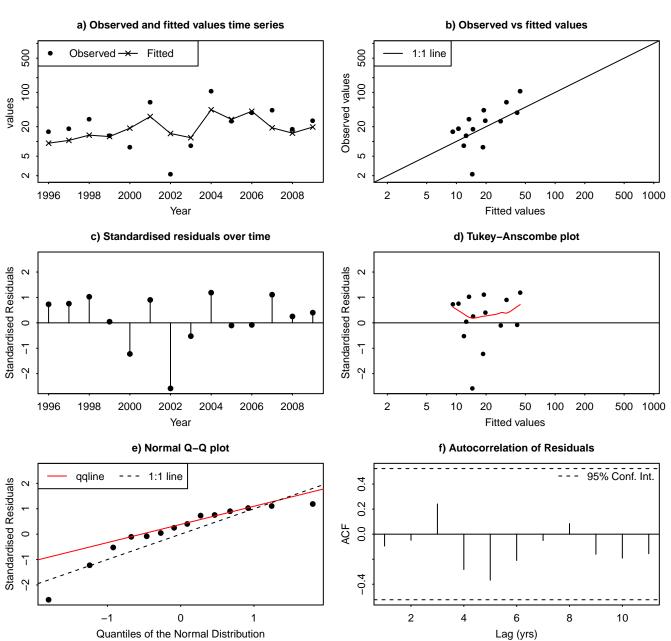


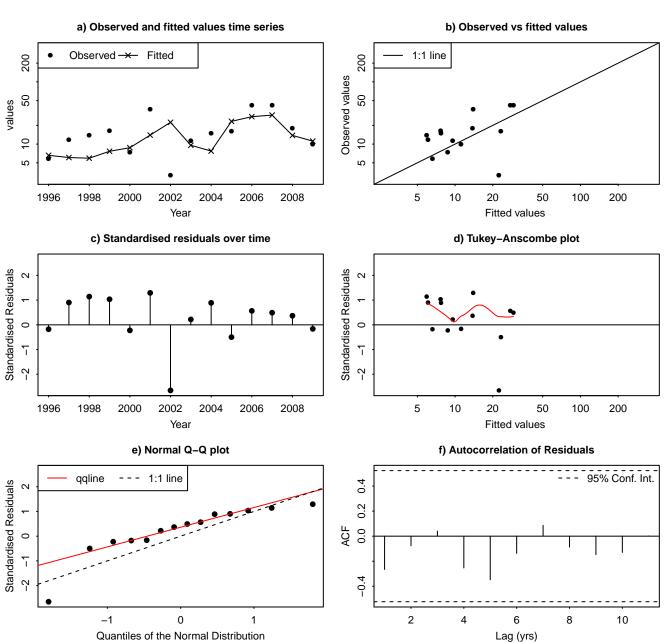


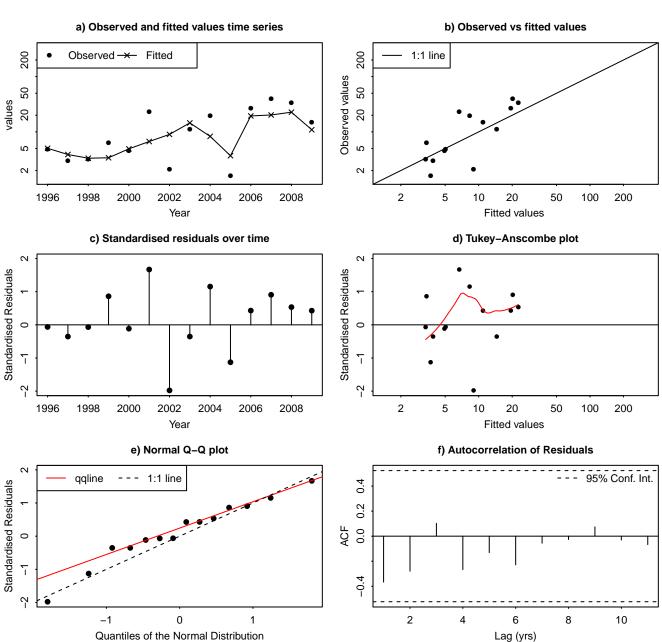
## Diagnostics - IBTS\_Q4, age (ring) 3

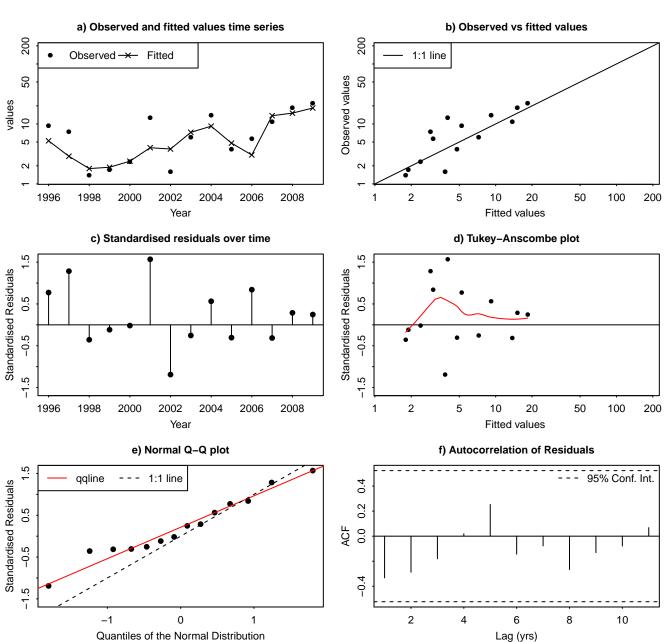












## Diagnostics - IBTS\_Q4, age (ring) 9

