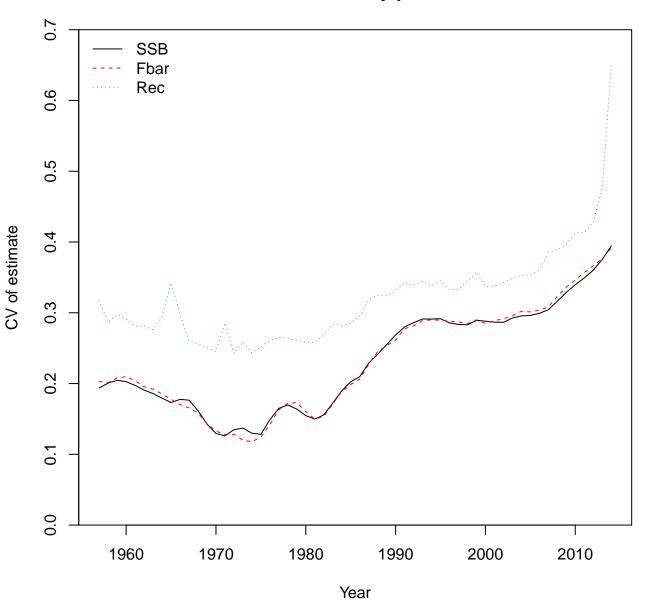


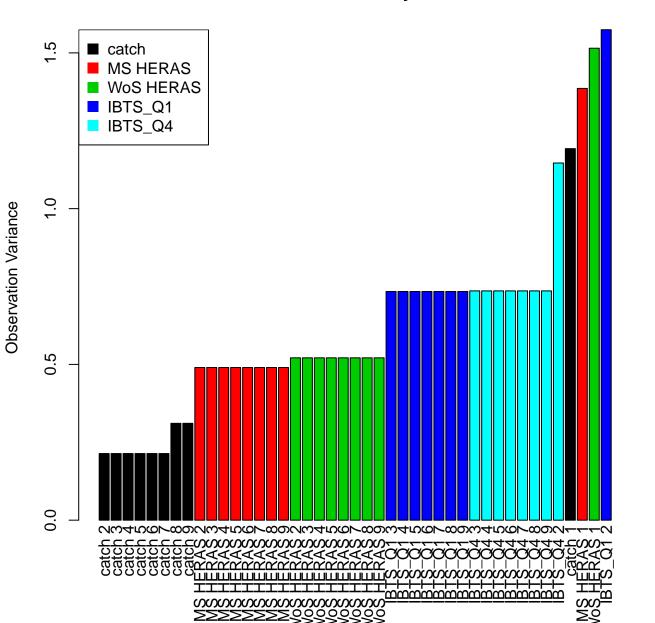
Uncertainties of key parameters



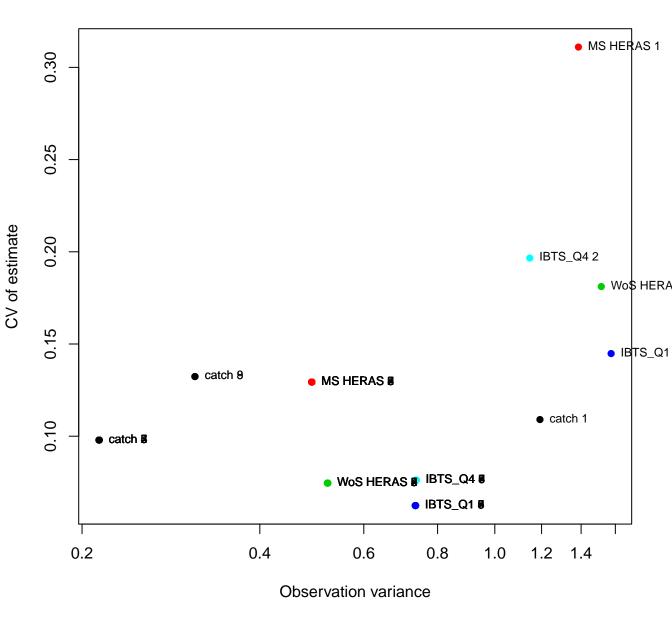
Survey catchability parameters MS HERAS 1.5 Catchability 0.5 0.0 2 8 4 6 Age (ring)

Survey catchability parameters WoS HERAS 1.2 1.0 0.8 Catchability 9.0 0.4 0.2 0.0 2 8 4 6 Age (ring)

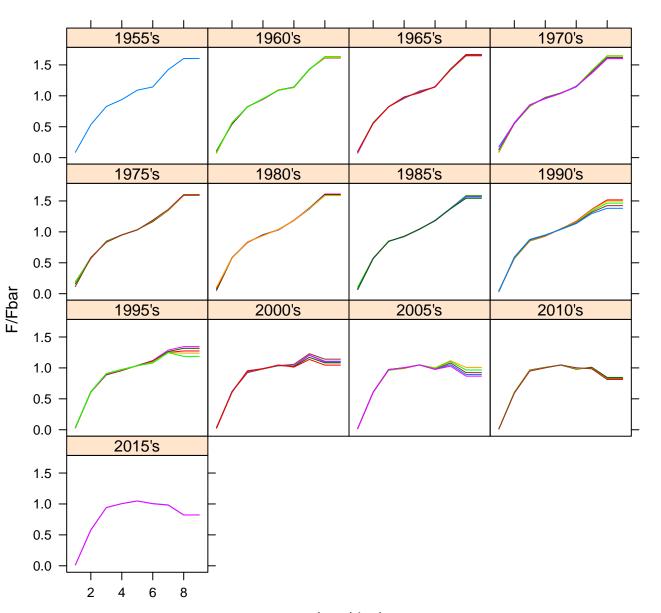
Observation variances by data source



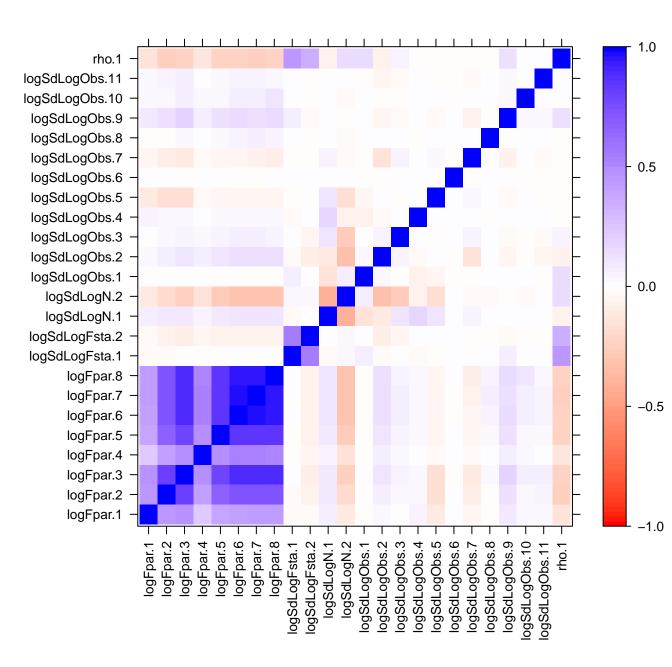
Observation variance vs uncertainty

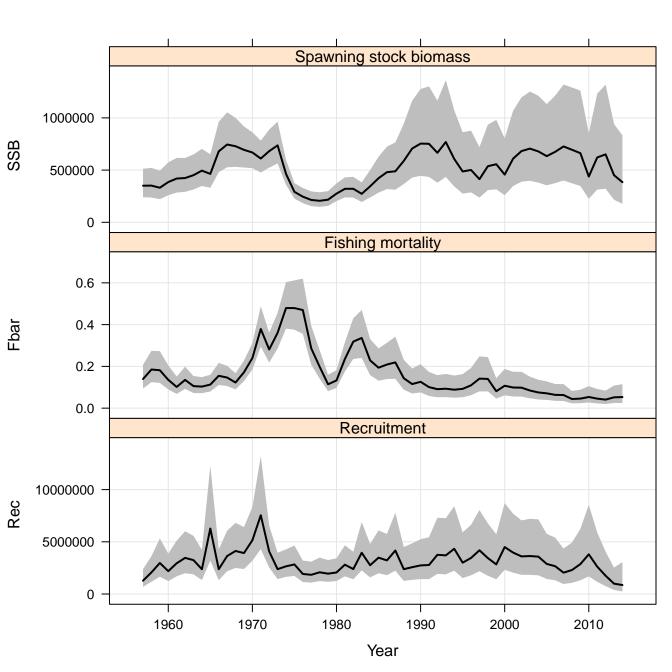


Selectivity of the Fishery by Period

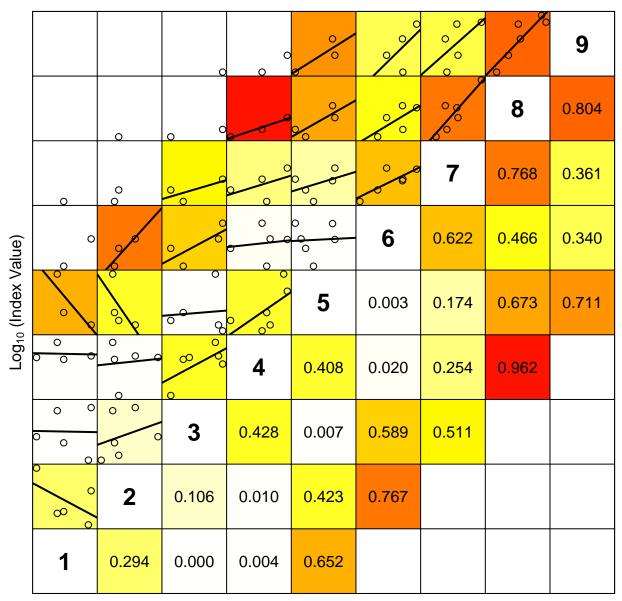


Age (ring)





MS HERAS



Log₁₀ (Index Value)

WoS HERAS

	9 8c 9 95		00 00 00 00	o	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 ₁₀ (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

Log₁₀ (Index Value)

IBTS_Q1

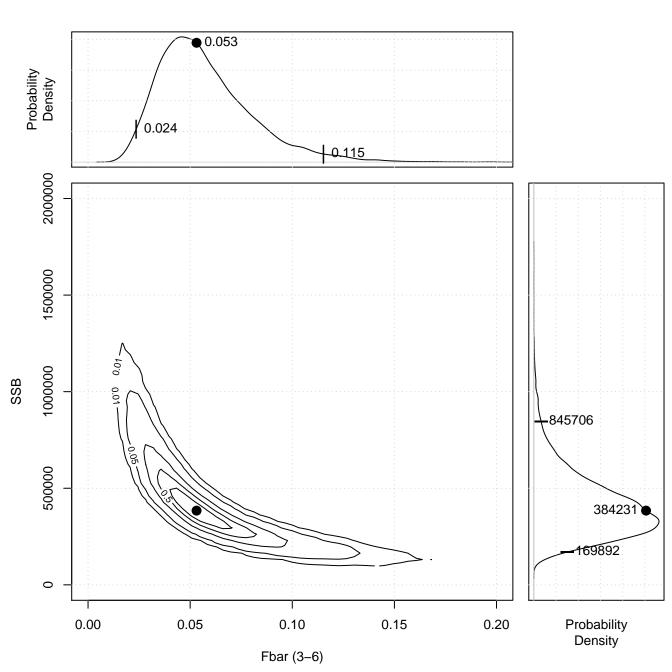
	0						9
	0		0000			8	0.485
			0000		7	0.460	0.398
ex Value)		© 000000000000000000000000000000000000		6	0.321	0.393	0.130
Log ₁₀ (Index Value)	000		5	0.327	0.269	0.125	0.095
		4	0.236	0.486	0.077	0.094	0.073
6 600 0 0 600 0 0 600 0		0.005	0.147	0.019	0.000	0.031	0.024
2	0.001	0.000	0.006	0.004	0.034	0.000	0.050

Log₁₀ (Index Value)

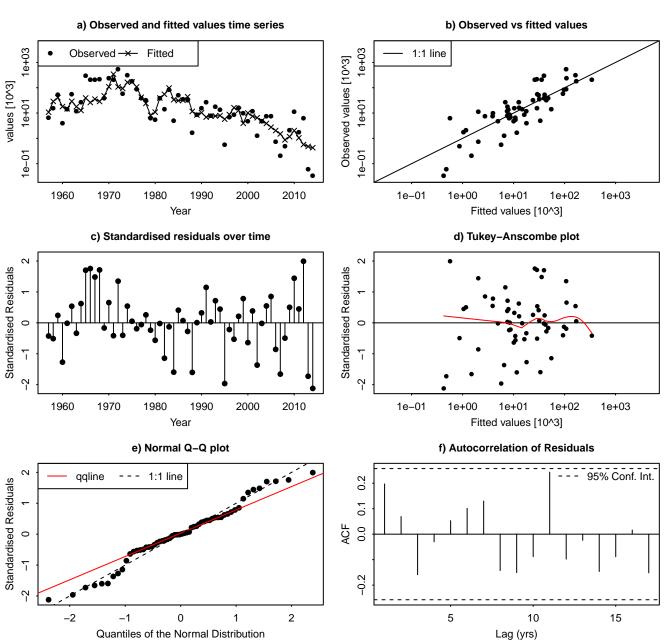
IBTS_Q4

Log ₁₀ (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

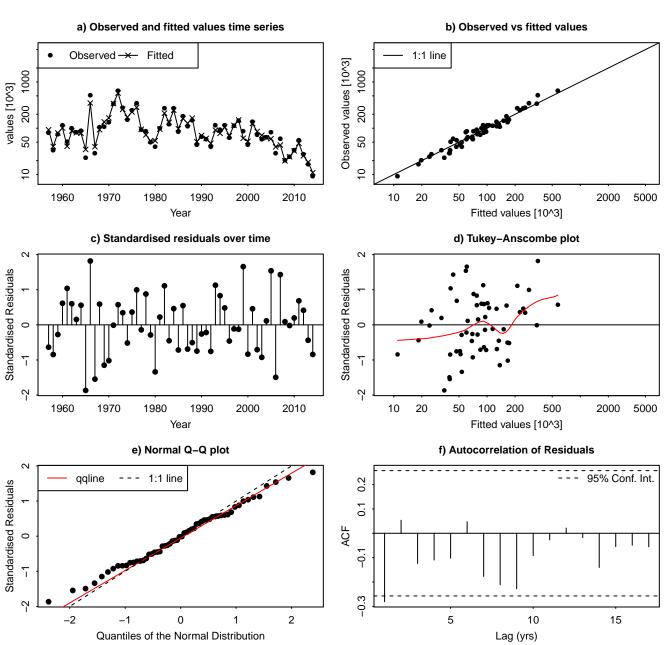
Log₁₀ (Index Value)

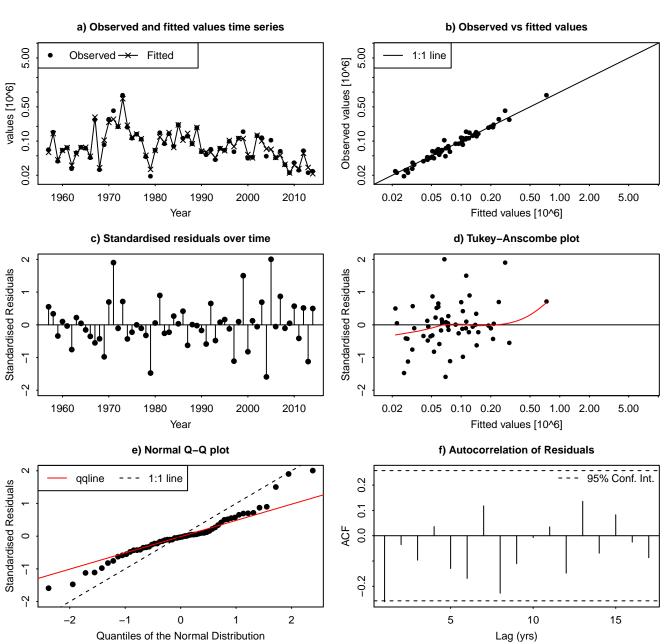


Diagnostics - catch, age (ring) 1

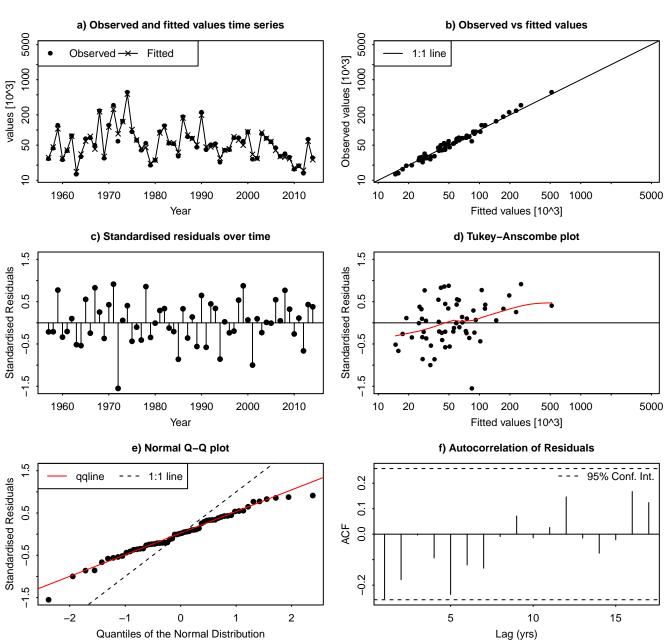


Diagnostics - catch, age (ring) 2

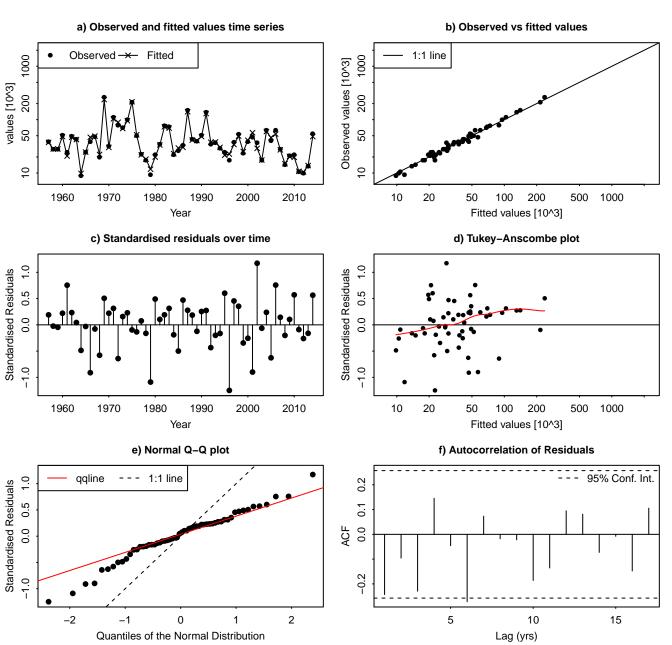




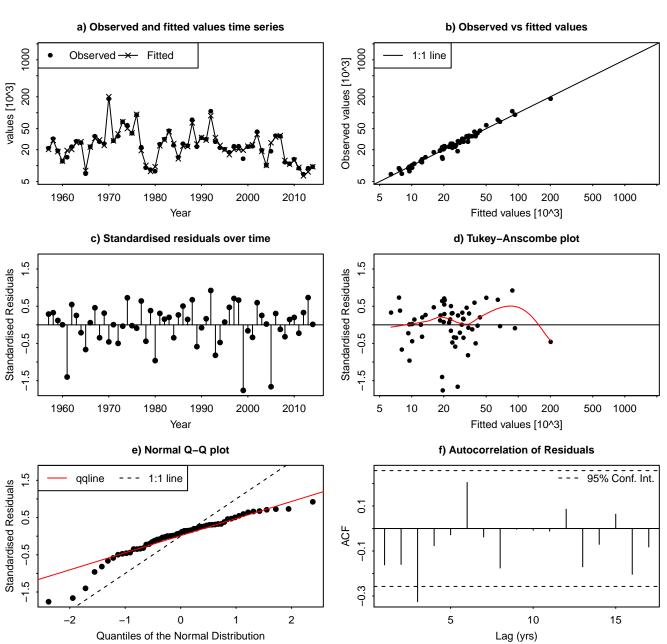
Diagnostics - catch, age (ring) 4



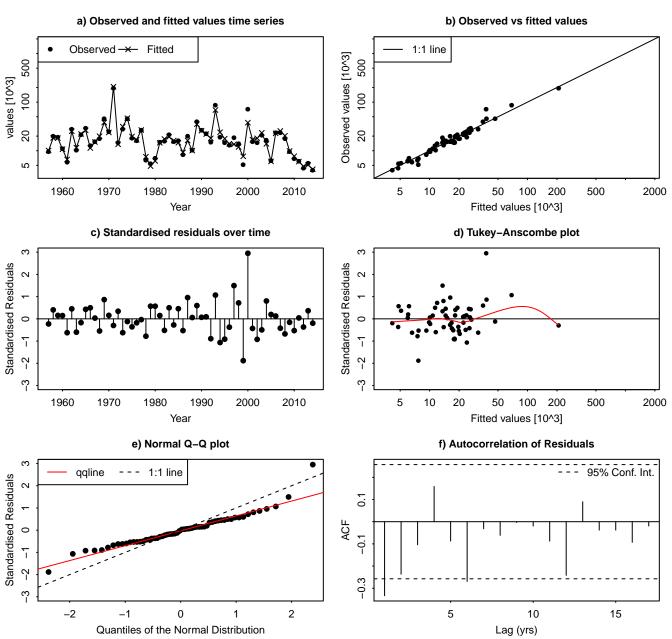
Diagnostics - catch, age (ring) 5



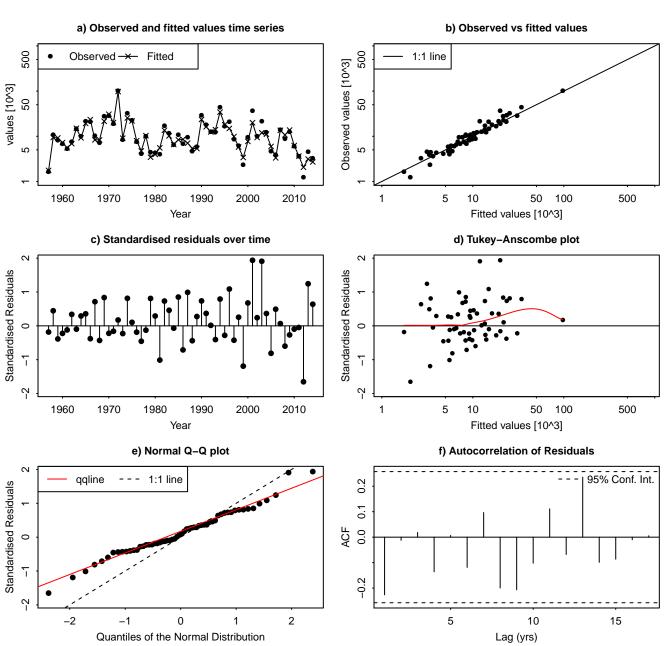
Diagnostics - catch, age (ring) 6



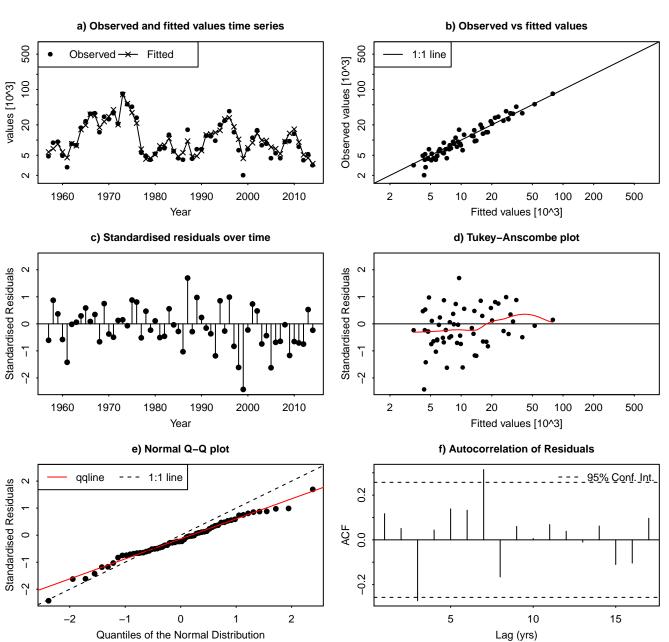
Diagnostics – catch, age (ring) 7



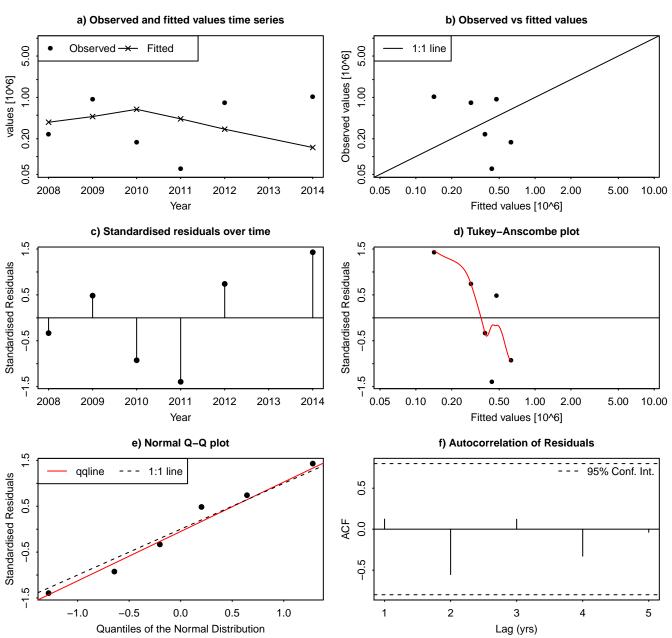
Diagnostics - catch, age (ring) 8

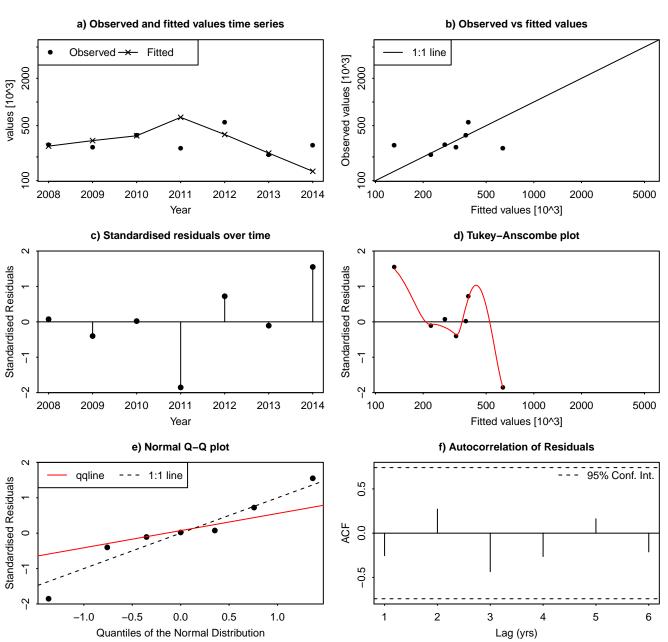


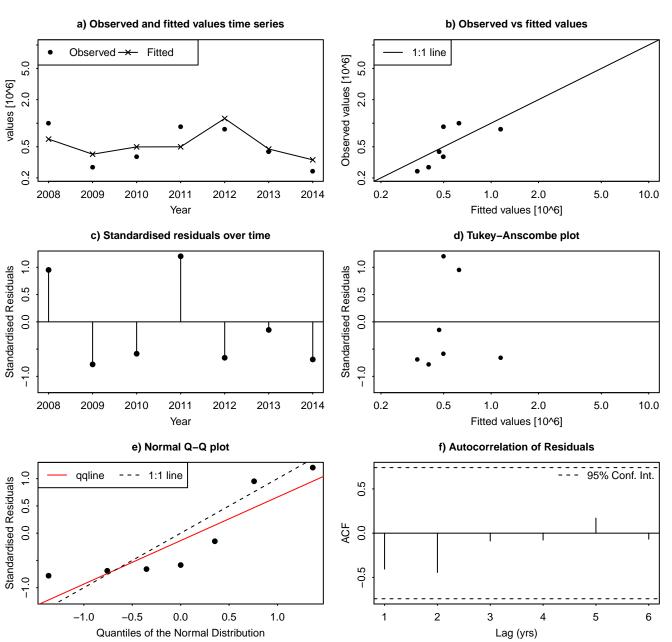
Diagnostics - catch, age (ring) 9

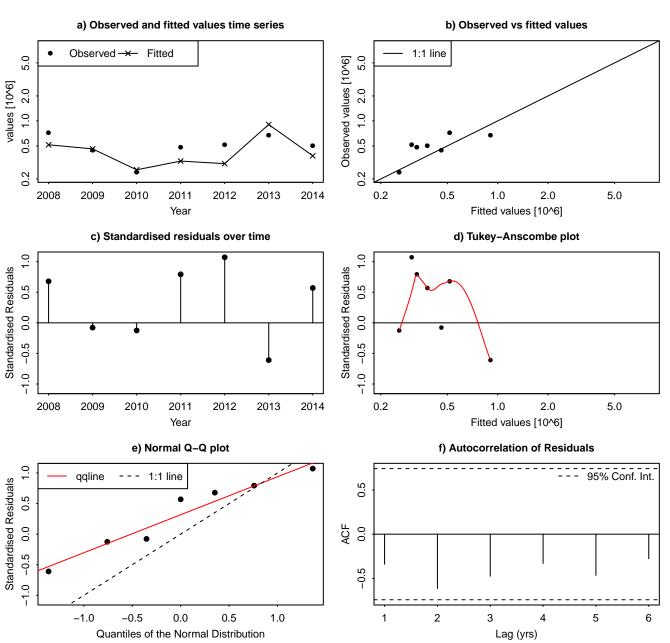


Diagnostics – MS HERAS, age (ring) 1

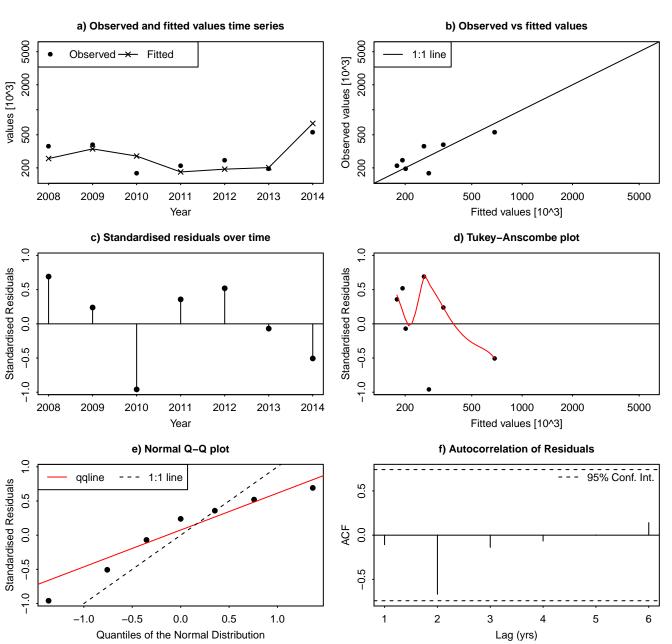




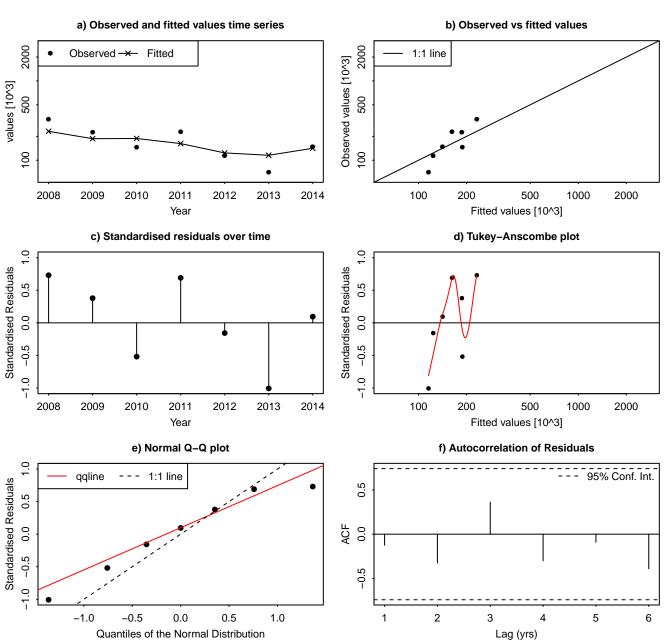




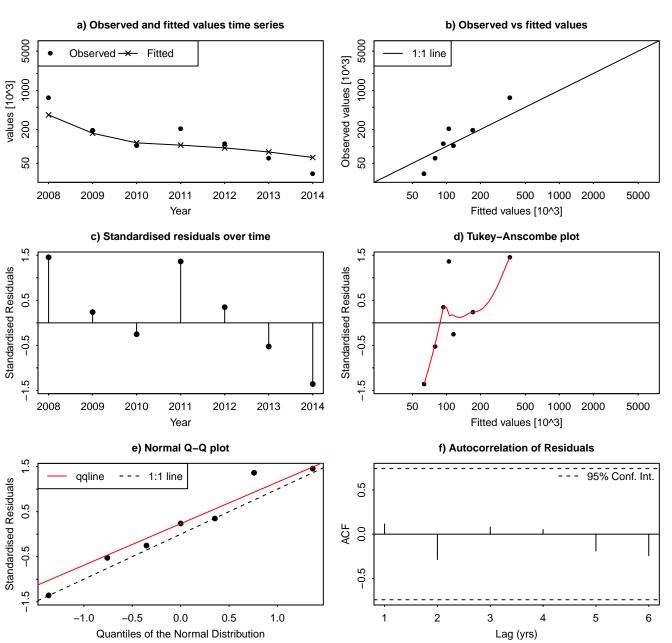
Diagnostics - MS HERAS, age (ring) 5



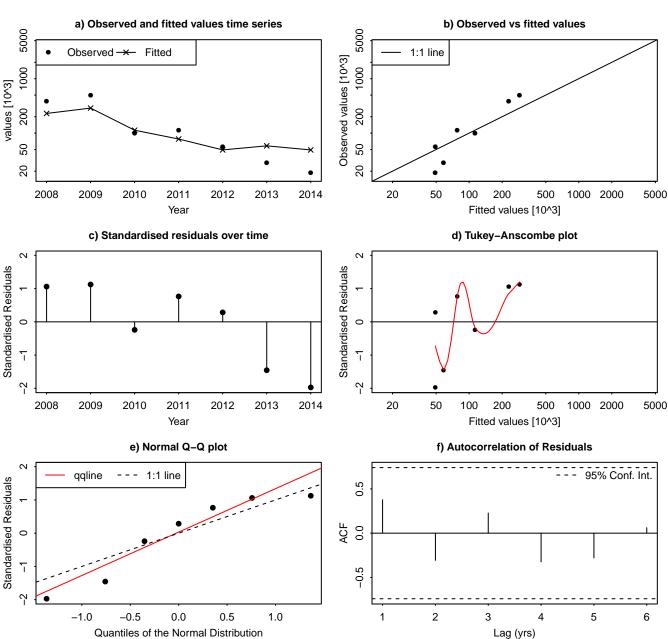
Diagnostics - MS HERAS, age (ring) 6



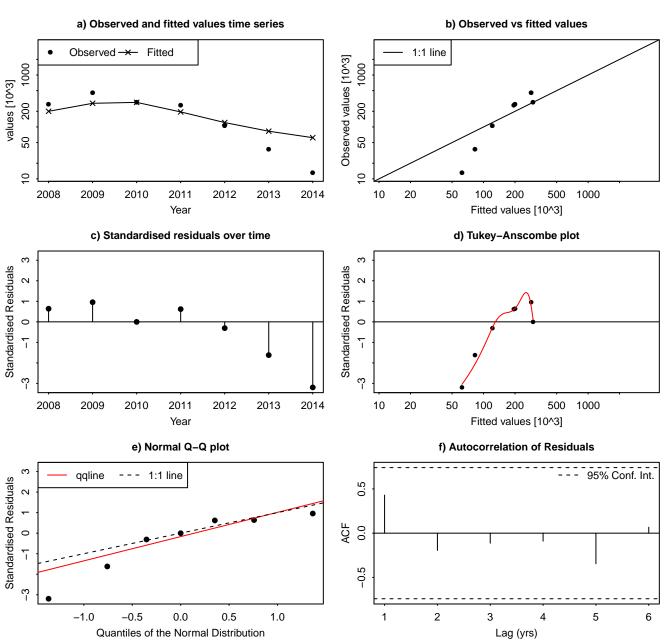
Diagnostics - MS HERAS, age (ring) 7

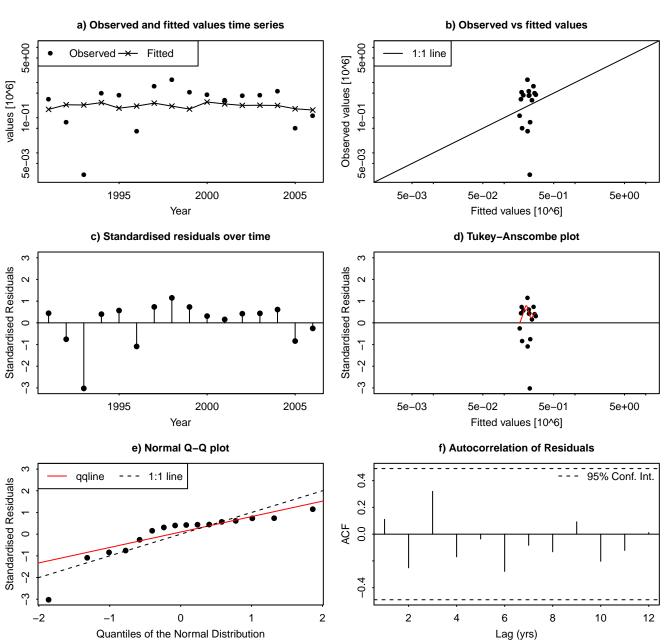


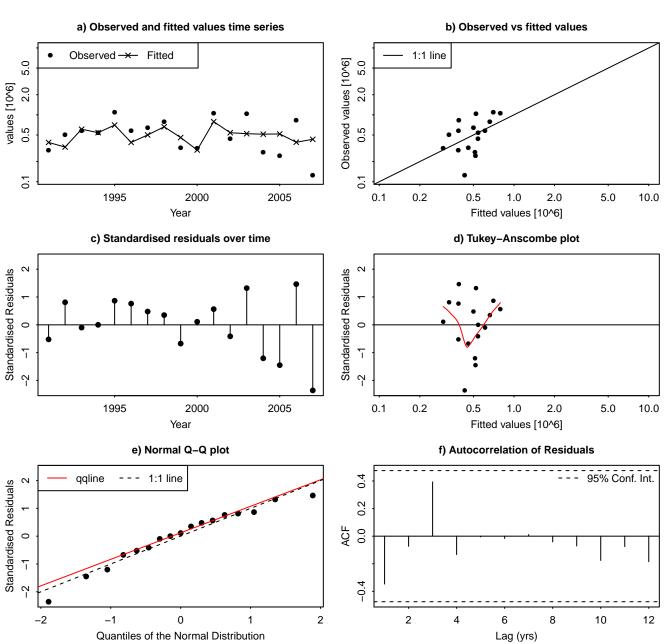
Diagnostics – MS HERAS, age (ring) 8

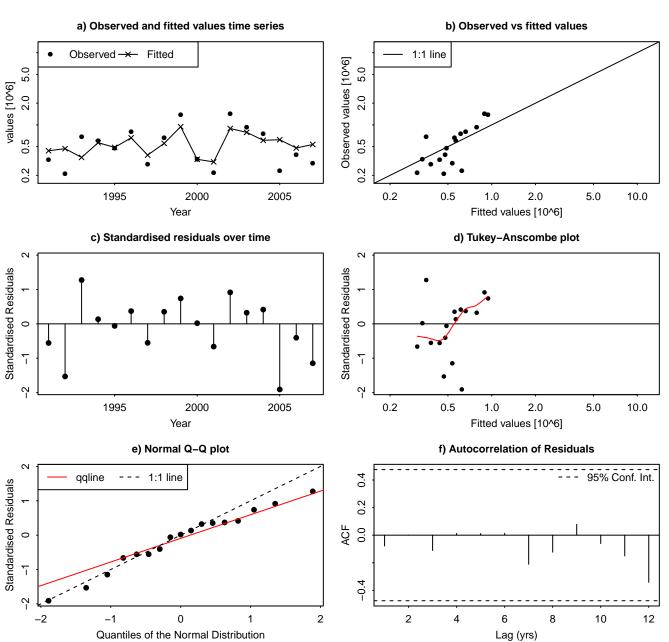


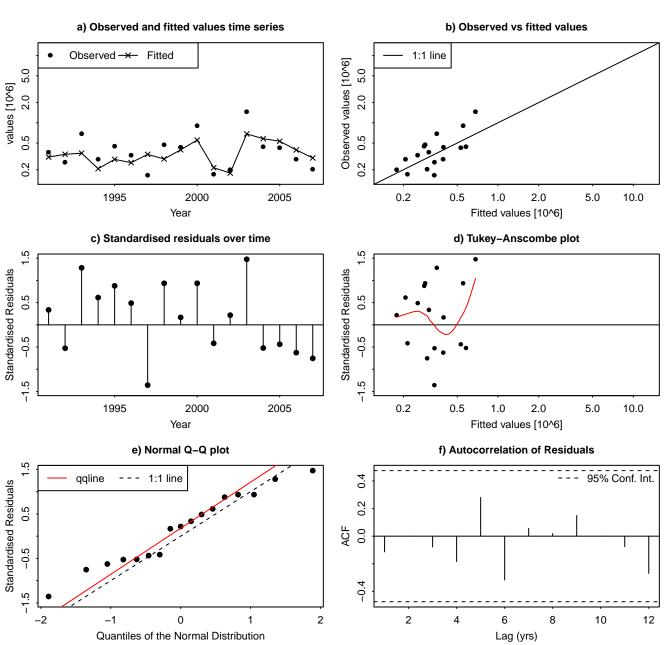
Diagnostics – MS HERAS, age (ring) 9

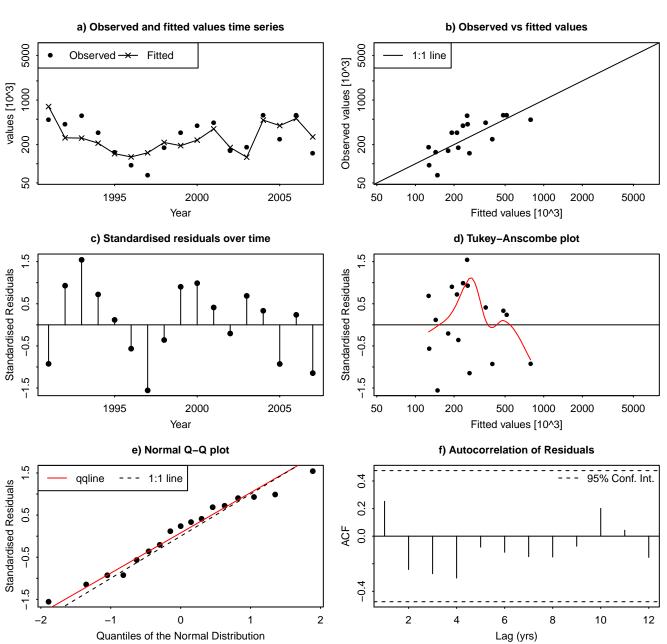


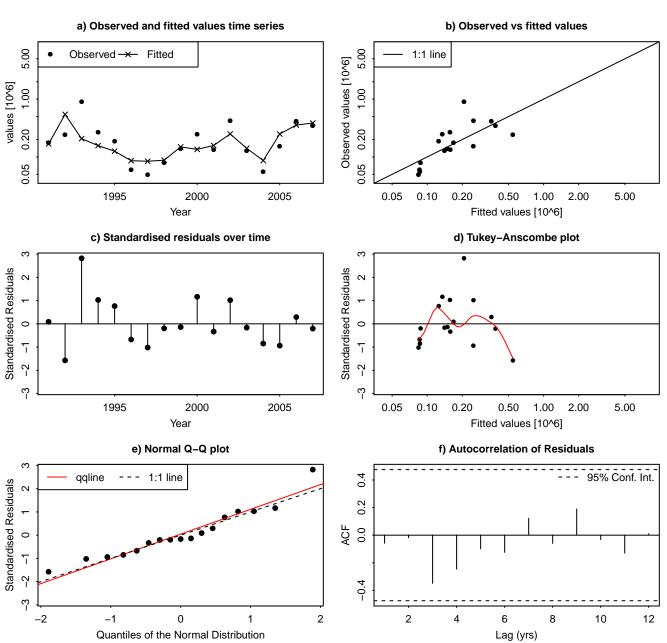


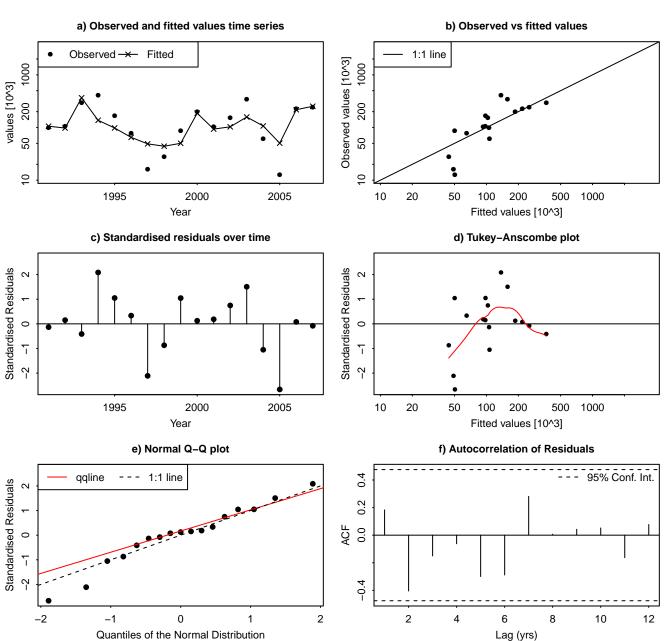


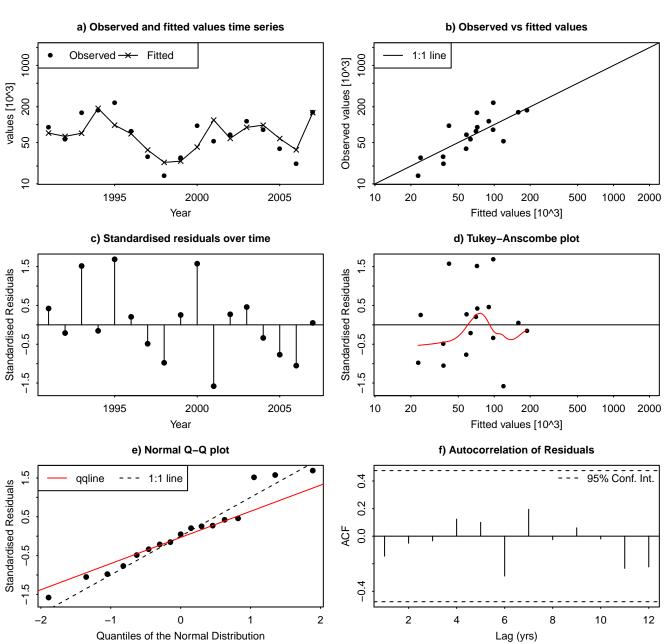




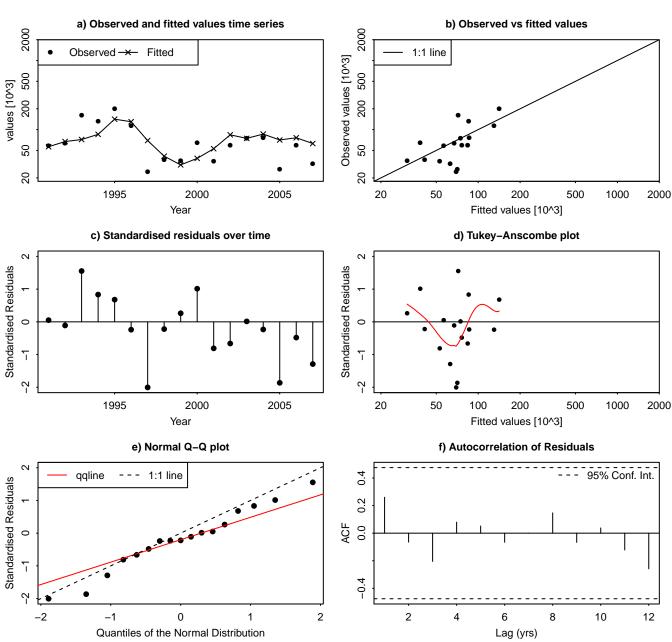


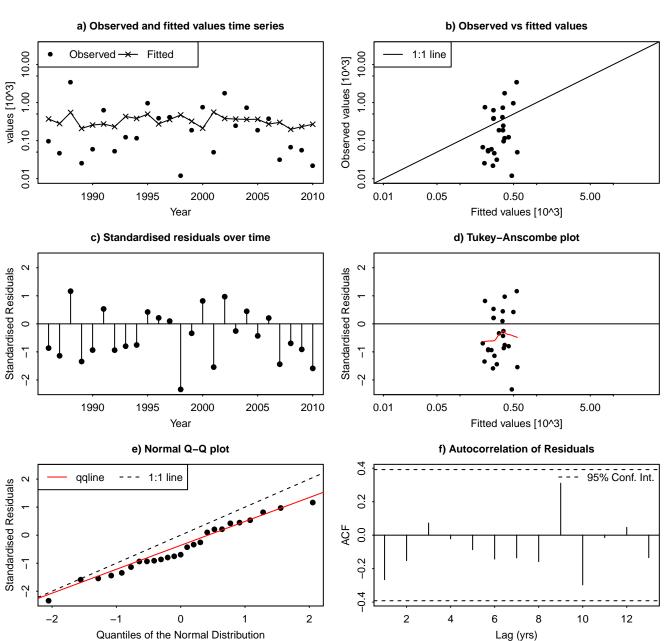


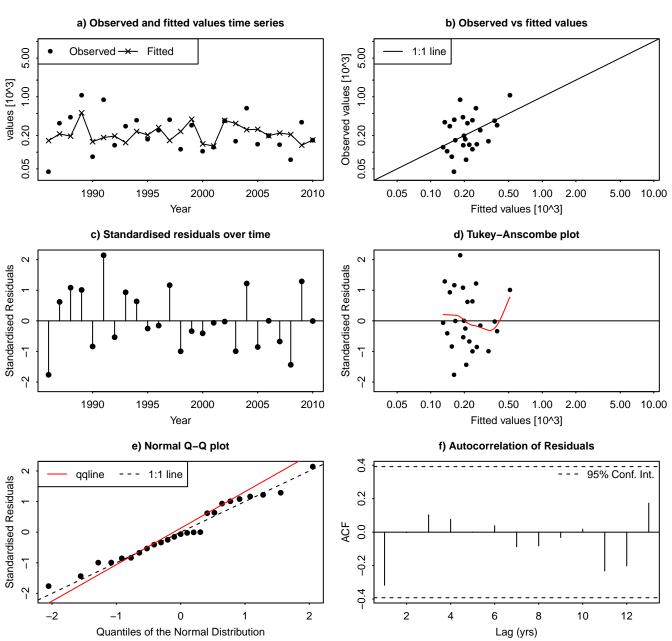


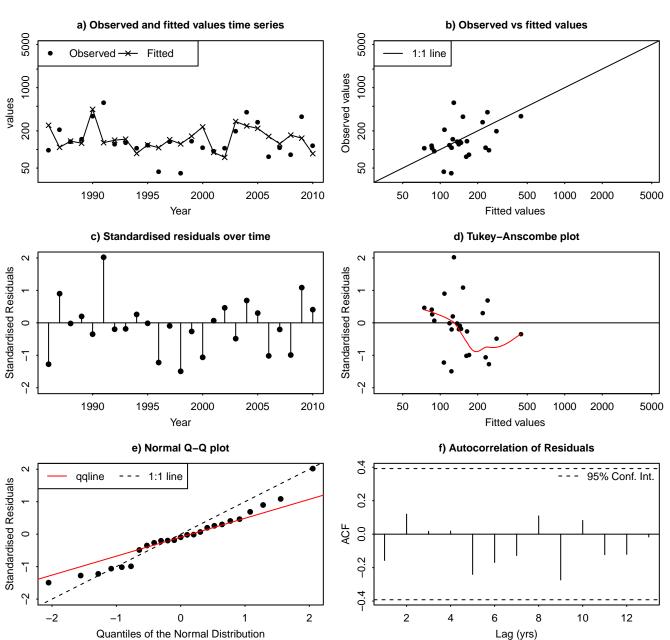


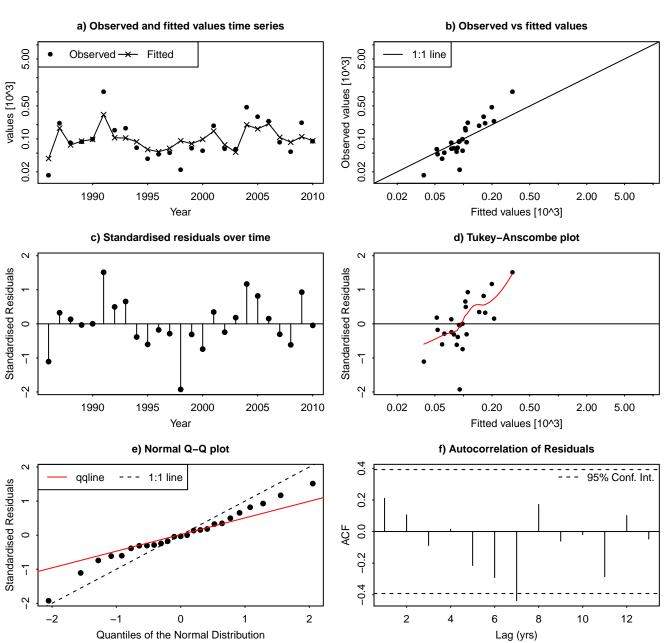
Diagnostics - WoS HERAS, age (ring) 9

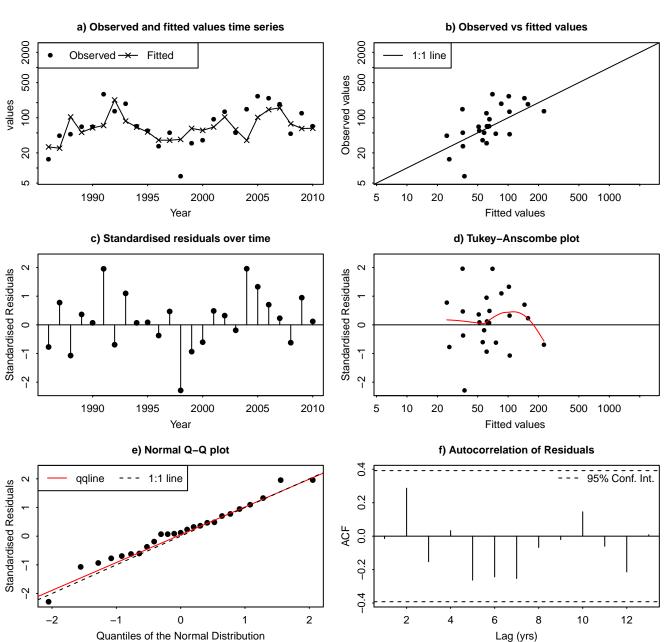


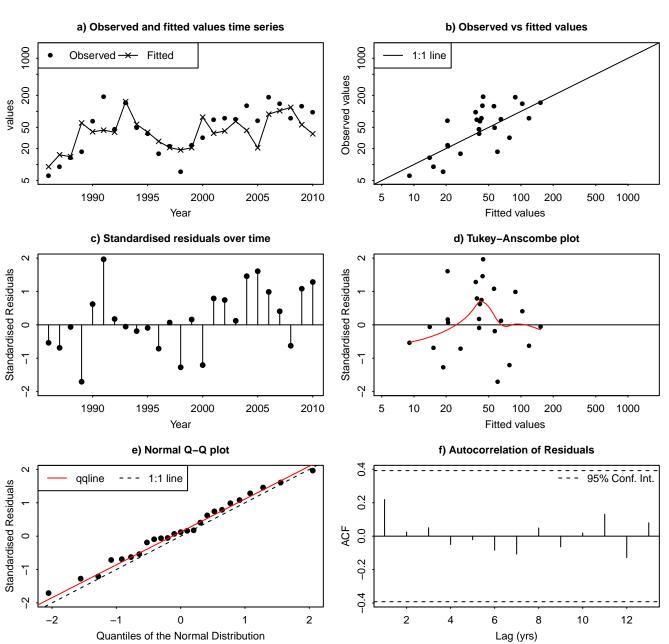


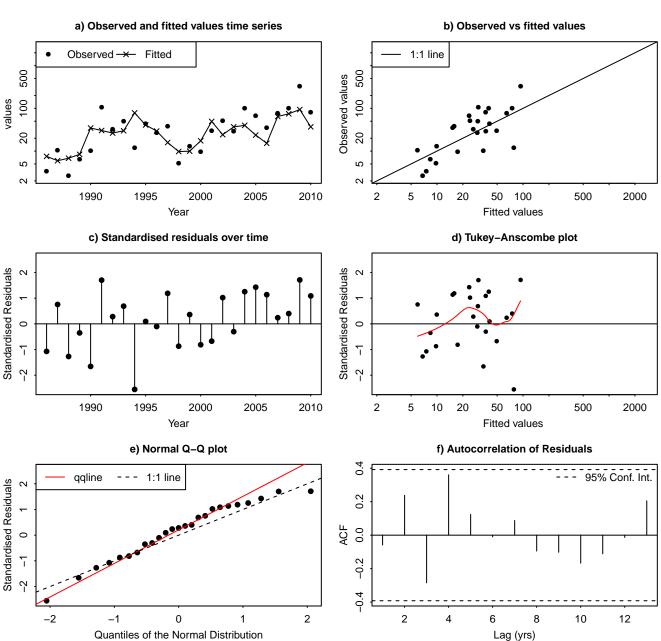




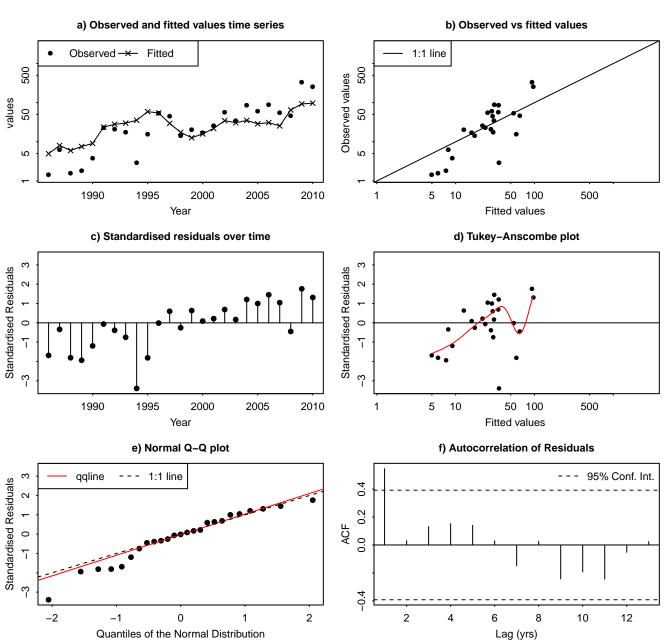


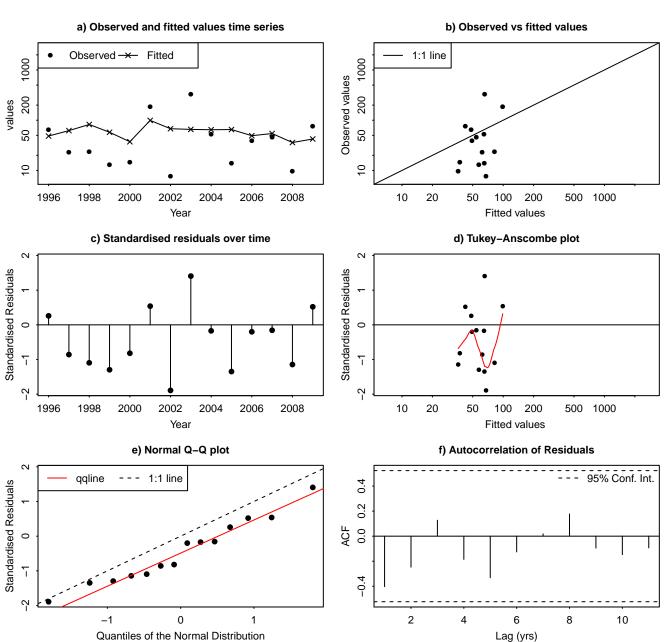


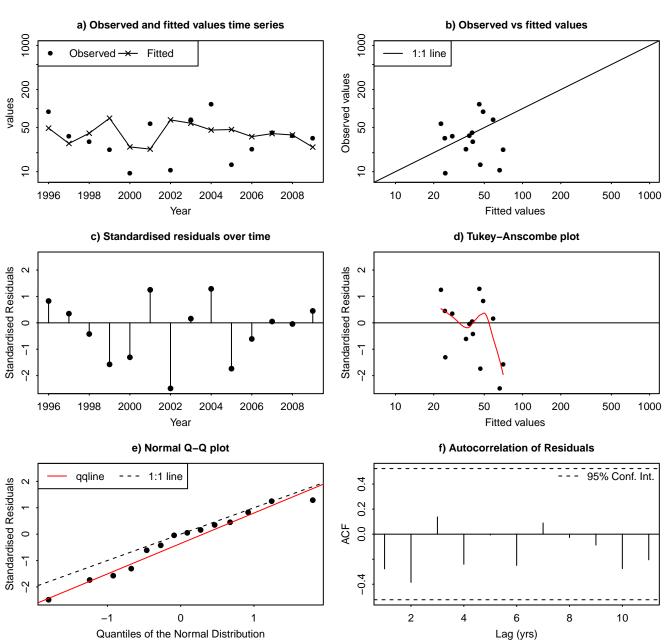


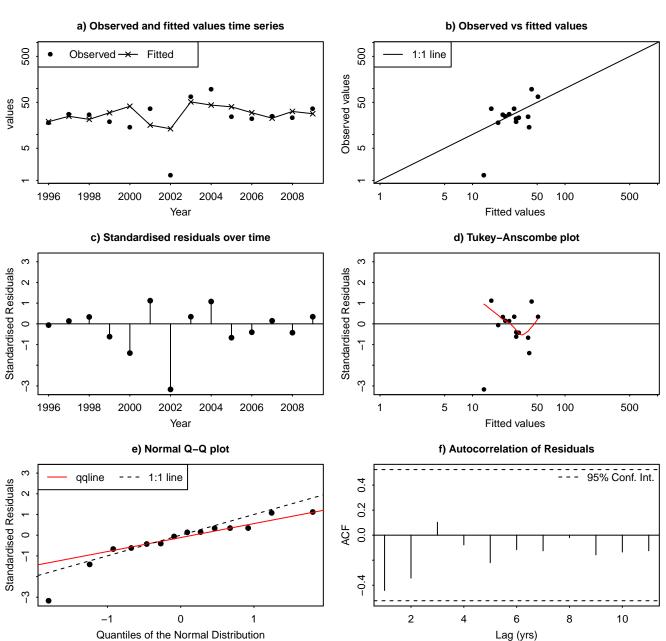


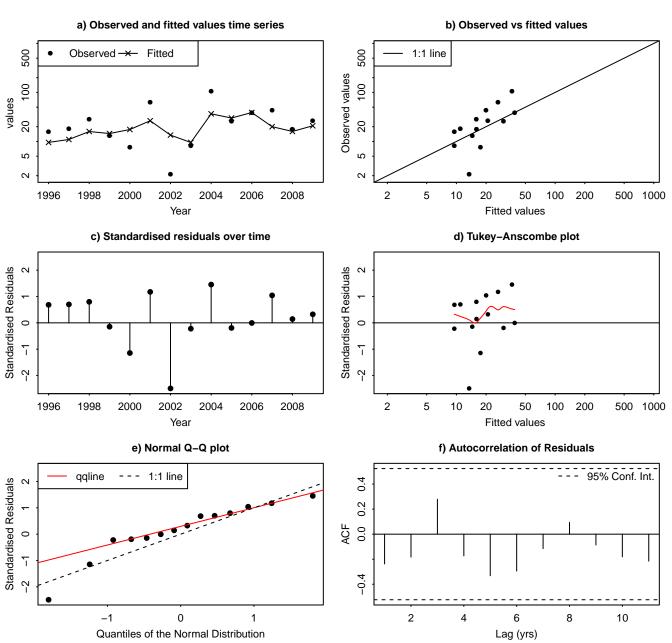
Diagnostics - IBTS_Q1, age (ring) 9

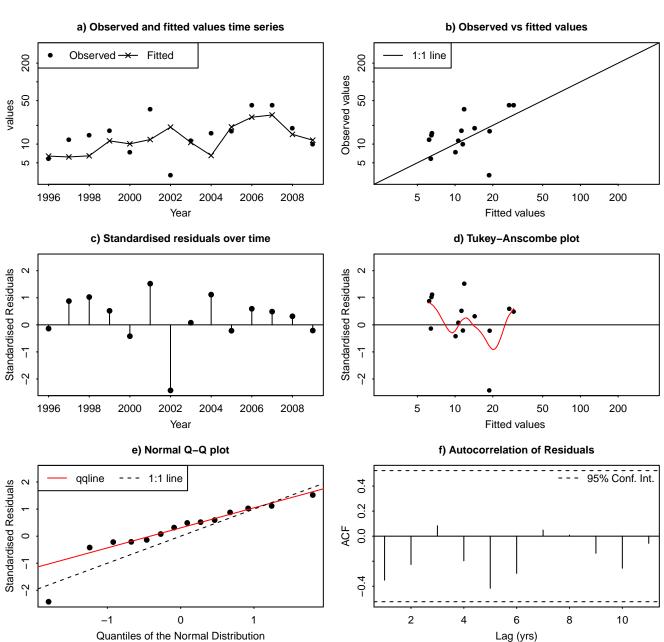


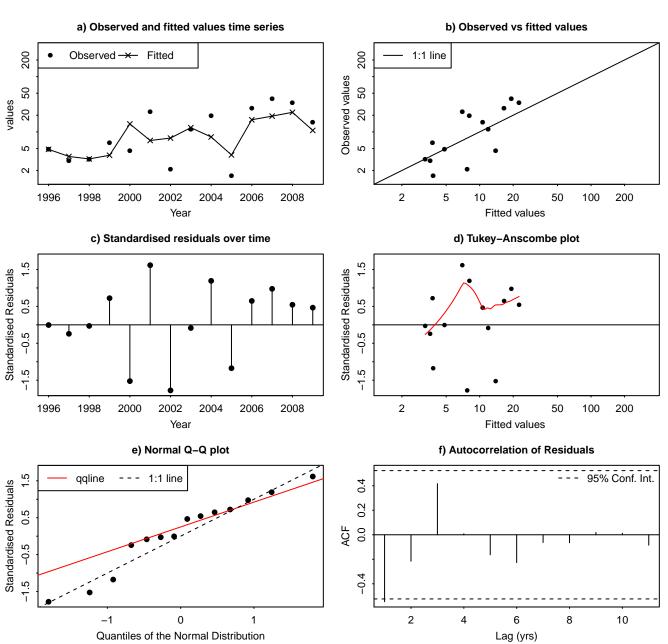


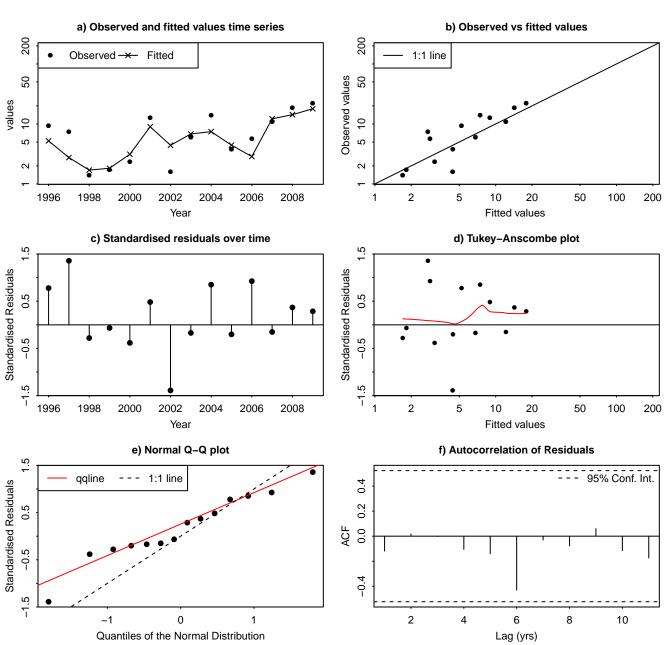












Diagnostics - IBTS_Q4, age (ring) 9

