				ensitivity analyses models.	
path	Description	Model name	Object		
model/2013_SST	2013 Assessment SS3.24	13.sq	SS 3.24		
				0. Transition	
model/2013_SST_SSV3_30_21	2023 Assessment SS3.30-fixed catchability	23.sq.fixQ	SS 3.30.21	Item 0.0	
model/Sensitivity_Anal/0.1_Bridging_models/23.sq.fix	13.sq assessment (SS V3.30.32) - All param fixed	23.sq.fix	All Param fixed	Item 0.1	
model/Sensitivity_Anal/0.1_Bridging_models/23.sq.floatQ	13.sq assessment (SS V3.30.21) - Param estimated as before but Q floating	23.sq.floatQ	Floating Q		
model/Sensitivity_Anal/0.1_Bridging_models/23.sq.est	13.sq assessment (SS V3.30.21) - All param estimated	23.sq.est	All Param estimated		
model/Sensitivity_Anal/0.2_Update_Data/1_23.land.update	23.sq.floatQ + landings updated	23.land.update	Update landings		
model/Sensitivity_Anal/0.2_Update_Data/2_23.disc.update	23.land.update + discards updated	23.disc.update	Updates discard rates		
model/Sensitivity_Anal/0.2_Update_Data/3_23.surv_geo.update	23.disc.update + geo Indices	23.surv_geo.update	Update survey geostat indices		
model/Sensitivity_Anal/0.2_Update_Data/4_23.lcs_survey.update	23.surv_geo.update + Surv Lcs	23.lcs_survey.update	Update survey length comps		
model/Sensitivity_Anal/0.2_Update_Data/5_23.lcs_fisheries.update	23.lcs_survey.update + Fisheries Lcs	23.lcs_fisheries.update	Update fisheries length comps	Item 0.2	
model/Sensitivity_Anal/0.2_Update_Data/6_23.disc_weight.update	23.lcs_fisheries.update + Discard weight updated	23.disc_weight.update	Update discard mean weights	nem v.2	
model/Sensitivity_Anal/0.2_Update_Data/7_23.growth.update	23.disc_weight.update + growth updated	23.growth.update	Update growth		
model/Sensitivity_Anal/0.2_Update_Data/8_23.maturity.update	23.growth.update + maturity updated	23.maturity.update	Update maturity		
model/Sensitivity_Anal/0.2_Update_Data/9_23.fecundity.update	23.maturity.update + fecundity updated	23.fecundity.update	Update fecundity		
model/Sensitivity_Anal/0.2_Update_Data/10_23.mortality.update	23.fecundity.update + mortality updated	23.mortality.update	Update natural mortality		
				1. Landings	
model/Sensitivity_Anal/1.1_Landings_Sensitivity/1_23.land.hist_impute	Use imputed historical landings	23.land.hist_impute	Imputed historical landings		
model/Sensitivity_Anal/1.1_Landings_Sensitivity/2_23.land.2013	Use 2013 assesssment landings	23.land.2013	2013 assessment landings	Item 1.1 ———	
model/Sensitivity_Anal/1.2_Landings_ashop/1_23.landings.ashop	23.model.francis_2 + ASHOP catches	23.landings.ashop	ASHOP Catches	Item 1.2	
model/Sensitivity_Anal/1.3_Landings_4fleet/1_23.landings.4fleet	Base Model + 4 commercial fleets	23.landings.4fleet	23.landings.4fleet	Item 1.3	
				3. Surveys	
model/Sensitivity_Anal/3.1_surveys_Sensitivity/1_23.surveys.gamvln	23.model.francis_2 with lognormal error structure in geostatistical abundance indices	23.surveys.gamvln 2	gamma vs ln error	Item 3.1	
model/Sensitivity_Anal/3.2_surveys2_Sensitivity/1_23.surveys.db	base model w/ design-based indices	23.surveys.db	MB vs DB indices	Item 3.2	
model/Sensitivity_Anal/3.3_surveys3_Sensitivity/3_23.surveys.notriennial	3 fleet 1 survey model structure	23.surveys.notriennial	No Triennial Survey	Item 3.3	
model/Sensitivity_Anal/3.3_surveys3_Sensitivity/2_23.surveys.extaSDwcgbts	base model with an additional SD paramter estimated for WCGBTS	23.surveys.extaSDwcgbts	extra SD on WCGBTS		
model/Sensitivity_Anal/3.3_surveys3_Sensitivity/1_23.surveys.useslope	3 fleet 4 survey model structure	23.surveys.useslope	2 survey vs 4 survey structure		
				4. Biological Info	
model/Sensitivity_Anal/4.1_Growth_Sensitivity/2_23.growth.low	23.model.francis_2 + low growth	23.growth.low	Growth Sensitivity Low		
model/Sensitivity_Anal/4.1_Growth_Sensitivity/1_23.growth.high	23.model.francis_2 + high growth	23.growth.high	Growth Sensitivity High	Item 4.1	
model/Sensitivity_Anal/4.2_Maturity_Sensitivity/2_23.maturity.mix_curve	23.model.francis_2 + intermediate maturity curve	23.maturity.mix_curve	Intermediate maturity curve		
,	·	23.maturity.pgcurve	PG maturity	Item 4.2 ———	
model/Sensitivity_Anal/4.2_Maturity_Sensitivity/1_23.maturity.pgcurve	23.model.francis_2 + PG maturity	ZUIII di di li v. Dacai vi.		Item 4.3	

23.model.recdevs_termYear + inityear change

23.model.recdevs_steep + biaspars updated

23.model.fleetstruct_5 + new Francis weights

23.mortality.update + termyear change

23.model.recdevs_initYear + h=0.72

survey timing = -1

Fix warnings

blk Trawl 89

blk Trawl mid10

blk Trawl 89-mid10

blk Trawl 89-mid10-19

blk Trawl 89-mid10 NonTrawl 05-13

23.blkret.T3 + 3 Time Blocks

23.blkret.T3 + 1 Time Block

23.blkret.T3 + 2 Time Blocks

base blksel 2003

base blksel 2011

base blksel 2003+2011

blkretT3 blksel 2003

blkretT3 blksel 2011

DMN length comps

blkretT3 blksel 2003+2011

blkretT3 blksel 2003+2011+2019

23.model.francis_2 + M fixed at 0.045

23.model.francis_2 + M fixed at 0.05

base blksel 2003+2011+2019

blk Trawl 89-mid10 NonTrawl 05-13-17

francis weighting part 2

simple settlement event

remove small sample sizes

sex-specific survey selectivity

change Trawl_N selectivity pars

change other fleet selectivity pars

model/Sensitivity_Anal/5.1_Explore_RecDevs/2_23.model.recdevs_initYear

model/Sensitivity_Anal/5.1_Explore_RecDevs/1_23.model.recdevs_termYear

model/Sensitivity_Anal/5.1_Explore_RecDevs/3_23.model.recdevs_steep

model/Sensitivity_Anal/5.1_Explore_RecDevs/4_23.model.recdevs_bias

model/Sensitivity_Anal/5.4_SS_Model_Warnings/1_23.model.survey_timing

model/Sensitivity_Anal/5.5_Improve_LC_Fits/1_23.model.sample_sizes

model/Sensitivity_Anal/5.5_Improve_LC_Fits/4_23.model.improve_other

model/Sensitivity_Anal/5.5_Improve_LC_Fits/3_23.model.improve_trawln

model/Sensitivity_Anal/5.8_Francis_Reweighting_2/1_23.model.francis_2

model/Sensitivity_Anal/5.9_Retention_Selectivity_Sensitivity/1_23.blkret.T1

model/Sensitivity_Anal/5.9_Retention_Selectivity_Sensitivity/2_23.blkret.T2

model/Sensitivity_Anal/5.9_Retention_Selectivity_Sensitivity/3_23.blkret.T3

model/Sensitivity_Anal/5.9_Retention_Selectivity_Sensitivity/4_23.blkret.T4

model/Sensitivity_Anal/5.9_Retention_Selectivity_Sensitivity/5_23.blkret.T3.NT1

model/Sensitivity_Anal/5.9_Retention_Selectivity_Sensitivity/6_23.blkret.T3.NT2

model/Sensitivity_Anal/5.10_Prior_Selectivity_Sensitivity/3_23.slx.Prior.3Blk

model/Sensitivity_Anal/5.10_Prior_Selectivity_Sensitivity/1_23.slx.Prior.1Blk

model/Sensitivity_Anal/5.10_Prior_Selectivity_Sensitivity/2_23.slx.Prior.2Blk

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/1_23.blksel.T1

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/2_23.blksel.T2

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/3_23.blksel.T3

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/4_23.blksel.T4

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/5_23.blkret.T3.blksel.T1

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/6_23.blkret.T3.blksel.T2

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/7_23.blkret.T3.blksel.T3

model/Sensitivity_Anal/5.11_Selectivity_Sensitivity/8_23.blkret.T3.blksel.T4

model/Sensitivity_Anal/STAR_Panel/5.13_Request_3/1_23.STAR.Panel.M.045

model/Sensitivity_Anal/STAR_Panel/5.13_Request_3/2_23.STAR.Panel.M.05

model/Sensitivity_Anal/5.12_Dirichlet_Multinomial/1_23.dmn

model/Sensitivity_Anal/5.7_Fix_Warnings/1_23.fix_warnings

model/Sensitivity_Anal/5.4_SS_Model_Warnings/2_23.model.settlement_events

model/Sensitivity_Anal/5.5_Improve_LC_Fits/2_23.model.sexed_survey_selectivity

update recdevs 1996 model/Sensitivity_Anal/5.6_Update_Recdevs_Inityear/1_23.model.recdevs_inityear_1996

model/Sensitivity_Anal/5.3_Francis_Reweighting/1_23.model.francis

Update Initial RecDev Year

S-R Steepness

Survey Timing

Sex-Specific Survey Selectivity 23.model.sexed_survey_selectivity

Settlement Events

Improve Other LC Fits

Improve Trawl_N LC Fit

Modify recdev init year

Francis Reweighting 2

Fix warnings

blk Trawl 89

blk Trawl mid10

blk Trawl 89-mid10

blk Trawl 89-mid10-19

Prior on Selectivity - 3 Blks

Prior on Selectivity - 1 Blk

Prior on Selectivity - 2 Blks

base blksel 2003

base blksel 2011

base blksel 2003+2011

blkretT3 blksel 2003

blkretT3 blksel 2011

Fix M at 0.045

Fix M at 0.05

blkretT3 blksel 2003+2011

blkretT3 blksel 2003+2011+2019

Dirichlet Multinomial Length Comps

base blksel 2003+2011+2019

blk Trawl 89-mid10 NonTrawl 05-13

blk Trawl 89-mid10 NonTrawl 05-13-17

Remove small sample size LCs

Bias Adjustment Years

Francis Reweighting

Update Terminal RecDev Year

Item 5.1

Item 5.3

Item 5.4

Item 5.5

Item 5.6

Item 5.7

Item 5.8

Item 5.9

Item 5.10

Item 5.11

Item 5.12

Item 5.13

23.model.recdevs_initYear

23.model.recdevs_termYear

23.model.recdevs_steep

23.model.recdevs_bias

23.model.survey_timing

23.model.sample_sizes

23.model.improve_other

23.model.improve_trawln

23.fix_warnings

23.blkret.T1

23.blkret.T2

23.blkret.T3

23.blkret.T4

23.blkret.T3.NT1

23.blkret.T3.NT2

23.slx.Prior.3Blk

23.slx.Prior.1Blk

23.slx.Prior.2Blk

23.blksel.T1

23.blksel.T2

23.blksel.T3

23.blksel.T4

23.blkret.T3.blksel.T1

23.blkret.T3.blksel.T2

23.blkret.T3.blksel.T3

23.blkret.T3.blksel.T4

23.STAR.Panel.M.045

23.STAR.Panel.M.05

23.dmn

23.model.francis_2

23.model.recdevs_inityear_1996

23.model.settlement_events

23.model.francis