#

# April 5 -7, 2022

#

# Nick extracted the CAE data for me on April 6 2022

# Extraction is with VB program CAE data under the tab Data dump files

# the data extracted are for the options: NOT frozen and Lat/Lon

# Extracting length frequency data (VB program Length frequency II (may 16 2008) which is under the tab Cleridy data files)

Extract the length frequency data for YFT, SKJ & BET into one centimeter bins, with additional fields.

Notes:

Length bins run from 0 cm (<1.0 cm.) to 200 cm.

The final length bin contains the number of measurements >= 201 cm.

June 2014: Added separate file LengthMMyyyy.txt containing individual length measurements in millimeters.

Sep. 2014: Added gear field and Baitboat, Recreational LF data.

Files created in Y:\Observer\Data\Common\Cleridy:

LengthFreq2000-2021.txt

LengthMM2000-2021.txt

Run time: 6 minutes, 43 seconds

LengthFreqyyyy.txt

TripNo

WellSampleNo

SampleNo

VesNo

Flag

Class

Gear

SetType

YearFirstSet

MoDaFirstSet

NumDaysToFillWell

NumSets

LatCenter

LonCenter

MaxSetDistance

NumLengthsMeasured

Sorted(Y/N)

SampleArea

CanneryCode

SampleMethod

FieldStaffMeasurer

FieldStaffCounter

StratumCode

Lat5LowerRight

Lon5LowerRight

Sqr1

TotMTCatchAllSpp

Species

SampleSize

FishCount

FishCountEst

TotalPBFCount

AvgWt

EstCatchWt

EstNumOfFish

PcntOfTotalCatch

TotMTYftSkjBet

SizeLower

SizeUpper

WellSectionLF

WellSectionCount

Columns 41-241:

len bins 0-200 cm.

Column 242: len>=201 cm.

LengthMMyyyy.txt

TripNo

WellSampleNo

SampleNo

Species

Length (mm)

#

# Extracting prorated unloadings data (VB program Get prorated UnLoad (June 11 2014) under tab Cleridy data files)

# used the NOT frozen option

Create a file with prorated unloading data.

Notes:

Data sources are the Unload tables and the CatchTotalOtherGears table.

Only gears 1 and 2 (LP and PS) are included.

Files created in Y:\Observer\Data\Common\Cleridy:

Unloading2000-2021.txt

Run time: 0 minutes, 42 seconds

Unloading.txt

Year

Gear

Flag

YFT

SKJ

BET

PBF

ALB

BKJ

BZX

#

# ----------------------------------- The rest is all in R -------------------------------------

#

#

# Making necessary changes to functions, working in function workspace

# load latest function workspace

load("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/spp comp\_R functions\_V3.RData")

# loading new substitution matrices (1st column is area needing substitute; remaining columns give substitutes, in order of preference from 1st choice in column 2 to last choice in the last column)

area.substitution.mat.SKJ.DEL.SAC2022<-as.matrix(read.csv("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/area\_substitution\_matrix\_SKJ\_DEL\_SAC 2022.csv",header=F))

area.substitution.mat.SKJ.UNA.SAC2022<-as.matrix(read.csv("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/area\_substitution\_matrix\_SKJ\_UNA\_SAC 2022.csv",header=F))

area.substitution.mat.SKJ.FLT.SAC2022<-as.matrix(read.csv("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/area\_substitution\_matrix\_SKJ\_FLT\_SAC 2022.csv",header=F))

# check that each row has all areas (assuming all areas are viable substitutes for other areas)

apply(area.substitution.mat.SKJ.UNA.SAC2022,1,sum)

apply(area.substitution.mat.SKJ.DEL.SAC2022,1,sum)

apply(area.substitution.mat.SKJ.FLT.SAC2022,1,sum)

# add new strata to functions (and activate one of the stratifications)

fix(create.strat.flg.f)

fix(create.fishery.flg.f)

# revised grow/srhink increments per Mark to +/- 2cm

grow.increments.2cmSKJ.betyftskj<-grow.increments.betyftskj

grow.increments.2cmSKJ.betyftskj[18:71,2,3]<-2

grow.increments.2cmSKJ.betyftskj[18:71,3,3]<-(-2)

# save changes

save.image("C:\\Users\\clennert\\Documents\\R\\poststratification[\\CL](file:///\\CL) programs\_stock assessment[\\spp](file:///\\spp) comp programs\_from 2000[\\spp](file:///\\spp) comp\_R functions\_V3.RData")

#

#

# Now, working in an empty R workspace, get species comp catch estimates

# attach function workspace

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/spp comp\_R functions\_V3.RData",pos=2)

# load and process input data that were extracted from IATTC databases wiht VB programs

get.VB.output.new.V2.f("Unloading2000-2021.txt","CAE-LatLon2000-2021.txt","LengthMM2000-2021.txt","LengthFreq2000-2021.txt",2000,2021)

# I usually check the above by running summary() on each data frame to check the contents

# (eg presence of NAs, unnamed columns, range of years, lat/lon in EPO, etc)

# get well-level estimates of catch composition (clearly this should be put in a loop... ;-(( )

well.estimates.2000<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2000,],lfmm.20002021)

well.estimates.2001<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2001,],lfmm.20002021)

well.estimates.2002<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2002,],lfmm.20002021)

well.estimates.2003<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2003,],lfmm.20002021)

well.estimates.2004<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2004,],lfmm.20002021)

well.estimates.2005<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2005,],lfmm.20002021)

well.estimates.2006<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2006,],lfmm.20002021)

well.estimates.2007<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2007,],lfmm.20002021)

well.estimates.2008<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2008,],lfmm.20002021)

well.estimates.2009<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2009,],lfmm.20002021)

well.estimates.2010<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2010,],lfmm.20002021)

well.estimates.2011<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2011,],lfmm.20002021)

well.estimates.2012<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2012,],lfmm.20002021)

well.estimates.2013<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2013,],lfmm.20002021)

well.estimates.2014<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2014,],lfmm.20002021)

well.estimates.2015<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2015,],lfmm.20002021)

well.estimates.2016<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2016,],lfmm.20002021)

well.estimates.2017<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2017,],lfmm.20002021)

well.estimates.2018<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2018,],lfmm.20002021)

well.estimates.2019<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2019,],lfmm.20002021)

well.estimates.2020<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2020,],lfmm.20002021)

well.estimates.2021<-well.estimates.f(lfgrpd.20002021[lfgrpd.20002021$year.firstset==2021,],lfmm.20002021)

# save these files becaues they are not dependent on fishery defns; can use for other strats

save.image("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/base files\_2000-2021.RData")

#

# The runs over set type could clearly be put in a loop but I've been to lazy to do that ... :-(

#

#

# Running SKJ OBJ

# NOTE: FIRST OPEN FUNCTION WORKSPACE IN SEPARATE R SESSION AND MAKE SURE THAT CREATE.STRAT.FLG.F AND CREATE.FISHERY.FLG.F HAVE CORRECT STRATA ACTIVE!

# fix(create.strat.flg.f)

# fix(create.fishery.flg.f)

# Then in a new, empty workspace:

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/spp comp\_R functions\_V3.RData",pos=2)

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/base files\_2000-2021.RData",pos=3)

cae.stratflg.20002021<-create.strat.flg.f(cae.20002021$latc5,cae.20002021$lonc5,is.lwrght=F,cae.20002021$month,cae.20002021$setype,cae.20002021$class)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

# NOTE TO MYSELF: NOW CHECK STRATA again you twit!

table(cae.20002021$latc5,cae.stratflg.20002021$area,exclude=NULL)

table(cae.20002021$lonc5,cae.stratflg.20002021$area,exclude=NULL)

# NOTE: first need to edit code below for number of areas and their boundaries

plot(cae.20002021$lonc5,cae.20002021$latc5)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==1],cae.20002021$latc5[cae.stratflg.20002021$area==1],col=2,pch=2)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==2],cae.20002021$latc5[cae.stratflg.20002021$area==2],col=3,pch=3)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==3],cae.20002021$latc5[cae.stratflg.20002021$area==3],col=4,pch=4)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==4],cae.20002021$latc5[cae.stratflg.20002021$area==4],col=5,pch=5)

abline(v=(-100))

abline(v=(-120))

abline(h=(-10))

# table below shows areas versus fisheries

table(cae.stratflg.20002021$area,cae.stratflg.20002021$fishery.areagear,exclude=NULL)

lfgrpd.stratflg.20002021<-create.strat.flg.f(lfgrpd.20002021$lat.5deg,lfgrpd.20002021$lon.5deg,is.lwrght=T,floor(lfgrpd.20002021$moda/100),lfgrpd.20002021$setype,lfgrpd.20002021$class)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2000,2,well.estimates.2000,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

# DO FINAL CHECK ON STRATIFICATION

tmpcl<-create.fishery.flg.f(totunlds.bystrat.2000$str.defns)

table(totunlds.bystrat.2000$str.defns$area,tmpcl$fishery.areagear,exclude=NULL)

rm(tmpcl)

fishery.estimates.2000<-fishery.estimates.f(stratum.estimates.2000.withsamps,stratum.estimates.2000.NOsamps,2000)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2001,2,well.estimates.2001,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "WARNING: there are one or more strata with well samples but no CAE data"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2001<-fishery.estimates.f(stratum.estimates.2001.withsamps,stratum.estimates.2001.NOsamps,2001)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2002,2,well.estimates.2002,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2002<-fishery.estimates.f(stratum.estimates.2002.withsamps,stratum.estimates.2002.NOsamps,2002)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2003,2,well.estimates.2003,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2003<-fishery.estimates.f(stratum.estimates.2003.withsamps,stratum.estimates.2003.NOsamps,2003)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2004,2,well.estimates.2004,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2004<-fishery.estimates.f(stratum.estimates.2004.withsamps,stratum.estimates.2004.NOsamps,2004)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2005,2,well.estimates.2005,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2005<-fishery.estimates.f(stratum.estimates.2005.withsamps,stratum.estimates.2005.NOsamps,2005)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2006,2,well.estimates.2006,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2006<-fishery.estimates.f(stratum.estimates.2006.withsamps,stratum.estimates.2006.NOsamps,2006)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2007,2,well.estimates.2007,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2007<-fishery.estimates.f(stratum.estimates.2007.withsamps,stratum.estimates.2007.NOsamps,2007)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2008,2,well.estimates.2008,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2008<-fishery.estimates.f(stratum.estimates.2008.withsamps,stratum.estimates.2008.NOsamps,2008)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2009,2,well.estimates.2009,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2009<-fishery.estimates.f(stratum.estimates.2009.withsamps,stratum.estimates.2009.NOsamps,2009)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2010,2,well.estimates.2010,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2010<-fishery.estimates.f(stratum.estimates.2010.withsamps,stratum.estimates.2010.NOsamps,2010)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2011,2,well.estimates.2011,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2011<-fishery.estimates.f(stratum.estimates.2011.withsamps,stratum.estimates.2011.NOsamps,2011)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2012,2,well.estimates.2012,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2012<-fishery.estimates.f(stratum.estimates.2012.withsamps,stratum.estimates.2012.NOsamps,2012)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2013,2,well.estimates.2013,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2013<-fishery.estimates.f(stratum.estimates.2013.withsamps,stratum.estimates.2013.NOsamps,2013)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2014,2,well.estimates.2014,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2014<-fishery.estimates.f(stratum.estimates.2014.withsamps,stratum.estimates.2014.NOsamps,2014)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2015,2,well.estimates.2015,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2015<-fishery.estimates.f(stratum.estimates.2015.withsamps,stratum.estimates.2015.NOsamps,2015)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2016,2,well.estimates.2016,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2016<-fishery.estimates.f(stratum.estimates.2016.withsamps,stratum.estimates.2016.NOsamps,2016)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2017,2,well.estimates.2017,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2017<-fishery.estimates.f(stratum.estimates.2017.withsamps,stratum.estimates.2017.NOsamps,2017)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2018,2,well.estimates.2018,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2018<-fishery.estimates.f(stratum.estimates.2018.withsamps,stratum.estimates.2018.NOsamps,2018)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2019,2,well.estimates.2019,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2019<-fishery.estimates.f(stratum.estimates.2019.withsamps,stratum.estimates.2019.NOsamps,2019)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2020,2,well.estimates.2020,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

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[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

fishery.estimates.2020<-fishery.estimates.f(stratum.estimates.2020.withsamps,stratum.estimates.2020.NOsamps,2020)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2021,2,well.estimates.2021,area.substitution.mat.SKJ.FLT.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for OBJ"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for OBJ"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

fishery.estimates.2021<-fishery.estimates.f(stratum.estimates.2021.withsamps,stratum.estimates.2021.NOsamps,2021)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for OBJ (DP and UN largely junk)"

# save output

save.image("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/full files\_SKJ\_OBJ\_2000-2021\_Mark assessment SAC 2022.RData")

save(list=objects(pat="fishery.estimates"),file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_OBJ\_Mark assessment SAC 2022\_fishery estimates only\_2000-2021.RData")

#

# --------------------

#

#

# Running SKJ UNA

# NOTE: FIRST OPEN FUNCTION WORKSPACE IN SEPARATE R SESSION AND MAKE SURE THAT CREATE.STRAT.FLG.F AND CREATE.FISHERY.FLG.F HAVE CORRECT STRATA **ACTIVE**!

# fix(create.strat.flg.f)

# fix(create.fishery.flg.f)

# Then in a new, empty workspace:

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/spp comp\_R functions\_V3.RData",pos=2)

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/base files\_2000-2021.RData",pos=3)

cae.stratflg.20002021<-create.strat.flg.f(cae.20002021$latc5,cae.20002021$lonc5,is.lwrght=F,cae.20002021$month,cae.20002021$setype,cae.20002021$class)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

# NOTE TO MYSELF: NOW CHECK STRATA again you twit!

table(cae.20002021$latc5,cae.stratflg.20002021$area,exclude=NULL)

table(cae.20002021$lonc5,cae.stratflg.20002021$area,exclude=NULL)

# NOTE: first need to edit code below for number of areas and their boundaries

plot(cae.20002021$lonc5,cae.20002021$latc5)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==1],cae.20002021$latc5[cae.stratflg.20002021$area==1],col=2,pch=2)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==2],cae.20002021$latc5[cae.stratflg.20002021$area==2],col=3,pch=3)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==3],cae.20002021$latc5[cae.stratflg.20002021$area==3],col=4,pch=4)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==4],cae.20002021$latc5[cae.stratflg.20002021$area==4],col=5,pch=5)

# abline(v=(-100))

# abline(v=(-120))

# abline(h=(-10))

# table below shows areas versus fisheries

table(cae.stratflg.20002021$area,cae.stratflg.20002021$fishery.areagear,exclude=NULL)

lfgrpd.stratflg.20002021<-create.strat.flg.f(lfgrpd.20002021$lat.5deg,lfgrpd.20002021$lon.5deg,is.lwrght=T,floor(lfgrpd.20002021$moda/100),lfgrpd.20002021$setype,lfgrpd.20002021$class)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

# NOTE that the area substitution matrix used is different

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2000,2,well.estimates.2000,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

# DO FINAL CHECK ON STRATIFICATION

tmpcl<-create.fishery.flg.f(totunlds.bystrat.2000$str.defns)

table(totunlds.bystrat.2000$str.defns$area,tmpcl$fishery.areagear,exclude=NULL)

rm(tmpcl)

fishery.estimates.2000<-fishery.estimates.f(stratum.estimates.2000.withsamps,stratum.estimates.2000.NOsamps,2000)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2001,2,well.estimates.2001,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "WARNING: there are one or more strata with well samples but no CAE data"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2001<-fishery.estimates.f(stratum.estimates.2001.withsamps,stratum.estimates.2001.NOsamps,2001)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2002,2,well.estimates.2002,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2002<-fishery.estimates.f(stratum.estimates.2002.withsamps,stratum.estimates.2002.NOsamps,2002)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2003,2,well.estimates.2003,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2003<-fishery.estimates.f(stratum.estimates.2003.withsamps,stratum.estimates.2003.NOsamps,2003)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2004,2,well.estimates.2004,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2004<-fishery.estimates.f(stratum.estimates.2004.withsamps,stratum.estimates.2004.NOsamps,2004)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2005,2,well.estimates.2005,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2005<-fishery.estimates.f(stratum.estimates.2005.withsamps,stratum.estimates.2005.NOsamps,2005)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2006,2,well.estimates.2006,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2006<-fishery.estimates.f(stratum.estimates.2006.withsamps,stratum.estimates.2006.NOsamps,2006)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2007,2,well.estimates.2007,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2007<-fishery.estimates.f(stratum.estimates.2007.withsamps,stratum.estimates.2007.NOsamps,2007)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2008,2,well.estimates.2008,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2008<-fishery.estimates.f(stratum.estimates.2008.withsamps,stratum.estimates.2008.NOsamps,2008)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2009,2,well.estimates.2009,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2009<-fishery.estimates.f(stratum.estimates.2009.withsamps,stratum.estimates.2009.NOsamps,2009)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2010,2,well.estimates.2010,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2010<-fishery.estimates.f(stratum.estimates.2010.withsamps,stratum.estimates.2010.NOsamps,2010)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2011,2,well.estimates.2011,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2011<-fishery.estimates.f(stratum.estimates.2011.withsamps,stratum.estimates.2011.NOsamps,2011)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2012,2,well.estimates.2012,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2012<-fishery.estimates.f(stratum.estimates.2012.withsamps,stratum.estimates.2012.NOsamps,2012)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2013,2,well.estimates.2013,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2013<-fishery.estimates.f(stratum.estimates.2013.withsamps,stratum.estimates.2013.NOsamps,2013)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2014,2,well.estimates.2014,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2014<-fishery.estimates.f(stratum.estimates.2014.withsamps,stratum.estimates.2014.NOsamps,2014)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2015,2,well.estimates.2015,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2015<-fishery.estimates.f(stratum.estimates.2015.withsamps,stratum.estimates.2015.NOsamps,2015)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2016,2,well.estimates.2016,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2016<-fishery.estimates.f(stratum.estimates.2016.withsamps,stratum.estimates.2016.NOsamps,2016)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2017,2,well.estimates.2017,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2017<-fishery.estimates.f(stratum.estimates.2017.withsamps,stratum.estimates.2017.NOsamps,2017)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2018,2,well.estimates.2018,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2018<-fishery.estimates.f(stratum.estimates.2018.withsamps,stratum.estimates.2018.NOsamps,2018)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2019,2,well.estimates.2019,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2019<-fishery.estimates.f(stratum.estimates.2019.withsamps,stratum.estimates.2019.NOsamps,2019)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2020,2,well.estimates.2020,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

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[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

fishery.estimates.2020<-fishery.estimates.f(stratum.estimates.2020.withsamps,stratum.estimates.2020.NOsamps,2020)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2021,2,well.estimates.2021,area.substitution.mat.SKJ.UNA.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for UNA"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for UNA"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

fishery.estimates.2021<-fishery.estimates.f(stratum.estimates.2021.withsamps,stratum.estimates.2021.NOsamps,2021)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for UNA (DP and FO largely junk)"

# save output

save.image("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/full files\_SKJ\_UNA\_2000-2021\_Mark assessment SAC 2022.RData")

save(list=objects(pat="fishery.estimates"),file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_UNA\_Mark assessment SAC 2022\_fishery estimates only\_2000-2021.RData")

#

#

#

# Running SKJ DEL

# NOTE: FIRST OPEN FUNCTION WORKSPACE IN SEPARATE R SESSION AND MAKE SURE THAT CREATE.STRAT.FLG.F AND CREATE.FISHERY.FLG.F HAVE CORRECT STRATA **ACTIVE**!

# fix(create.strat.flg.f)

# fix(create.fishery.flg.f)

# Then in a new, empty workspace:

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/spp comp\_R functions\_V3.RData",pos=2)

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/base files\_2000-2021.RData",pos=3)

cae.stratflg.20002021<-create.strat.flg.f(cae.20002021$latc5,cae.20002021$lonc5,is.lwrght=F,cae.20002021$month,cae.20002021$setype,cae.20002021$class)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

# NOTE TO MYSELF: NOW CHECK STRATA again you twit!

table(cae.20002021$latc5,cae.stratflg.20002021$area,exclude=NULL)

table(cae.20002021$lonc5,cae.stratflg.20002021$area,exclude=NULL)

# NOTE: first need to edit code below for number of areas and their boundaries

plot(cae.20002021$lonc5,cae.20002021$latc5)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==1],cae.20002021$latc5[cae.stratflg.20002021$area==1],col=2,pch=2)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==2],cae.20002021$latc5[cae.stratflg.20002021$area==2],col=3,pch=3)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==3],cae.20002021$latc5[cae.stratflg.20002021$area==3],col=4,pch=4)

points(cae.20002021$lonc5[cae.stratflg.20002021$area==4],cae.20002021$latc5[cae.stratflg.20002021$area==4],col=5,pch=5)

# abline(v=(-100))

# abline(v=(-120))

# abline(h=(-10))

# table below shows areas versus fisheries

table(cae.stratflg.20002021$area,cae.stratflg.20002021$fishery.areagear,exclude=NULL)

lfgrpd.stratflg.20002021<-create.strat.flg.f(lfgrpd.20002021$lat.5deg,lfgrpd.20002021$lon.5deg,is.lwrght=T,floor(lfgrpd.20002021$moda/100),lfgrpd.20002021$setype,lfgrpd.20002021$class)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

# NOTE that the area substitution matrix used is different

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2000,2,well.estimates.2000,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

# DO FINAL CHECK ON STRATIFICATION

tmpcl<-create.fishery.flg.f(totunlds.bystrat.2000$str.defns)

table(totunlds.bystrat.2000$str.defns$area,tmpcl$fishery.areagear,exclude=NULL)

rm(tmpcl)

fishery.estimates.2000<-fishery.estimates.f(stratum.estimates.2000.withsamps,stratum.estimates.2000.NOsamps,2000)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2001,2,well.estimates.2001,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "WARNING: there are one or more strata with well samples but no CAE data"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2001<-fishery.estimates.f(stratum.estimates.2001.withsamps,stratum.estimates.2001.NOsamps,2001)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2002,2,well.estimates.2002,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2002<-fishery.estimates.f(stratum.estimates.2002.withsamps,stratum.estimates.2002.NOsamps,2002)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2003,2,well.estimates.2003,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2003<-fishery.estimates.f(stratum.estimates.2003.withsamps,stratum.estimates.2003.NOsamps,2003)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2004,2,well.estimates.2004,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2004<-fishery.estimates.f(stratum.estimates.2004.withsamps,stratum.estimates.2004.NOsamps,2004)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2005,2,well.estimates.2005,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2005<-fishery.estimates.f(stratum.estimates.2005.withsamps,stratum.estimates.2005.NOsamps,2005)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2006,2,well.estimates.2006,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2006<-fishery.estimates.f(stratum.estimates.2006.withsamps,stratum.estimates.2006.NOsamps,2006)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2007,2,well.estimates.2007,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2007<-fishery.estimates.f(stratum.estimates.2007.withsamps,stratum.estimates.2007.NOsamps,2007)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2008,2,well.estimates.2008,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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fishery.estimates.2008<-fishery.estimates.f(stratum.estimates.2008.withsamps,stratum.estimates.2008.NOsamps,2008)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2009,2,well.estimates.2009,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

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fishery.estimates.2009<-fishery.estimates.f(stratum.estimates.2009.withsamps,stratum.estimates.2009.NOsamps,2009)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2010,2,well.estimates.2010,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

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fishery.estimates.2010<-fishery.estimates.f(stratum.estimates.2010.withsamps,stratum.estimates.2010.NOsamps,2010)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2011,2,well.estimates.2011,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

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fishery.estimates.2011<-fishery.estimates.f(stratum.estimates.2011.withsamps,stratum.estimates.2011.NOsamps,2011)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

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[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2012<-fishery.estimates.f(stratum.estimates.2012.withsamps,stratum.estimates.2012.NOsamps,2012)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

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[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2013<-fishery.estimates.f(stratum.estimates.2013.withsamps,stratum.estimates.2013.NOsamps,2013)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2014<-fishery.estimates.f(stratum.estimates.2014.withsamps,stratum.estimates.2014.NOsamps,2014)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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fishery.estimates.2015<-fishery.estimates.f(stratum.estimates.2015.withsamps,stratum.estimates.2015.NOsamps,2015)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2016<-fishery.estimates.f(stratum.estimates.2016.withsamps,stratum.estimates.2016.NOsamps,2016)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2017,2,well.estimates.2017,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2017<-fishery.estimates.f(stratum.estimates.2017.withsamps,stratum.estimates.2017.NOsamps,2017)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2018<-fishery.estimates.f(stratum.estimates.2018.withsamps,stratum.estimates.2018.NOsamps,2018)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2019,2,well.estimates.2019,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

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[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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fishery.estimates.2019<-fishery.estimates.f(stratum.estimates.2019.withsamps,stratum.estimates.2019.NOsamps,2019)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

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[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "WARNING: Reached step (4) in get.sub.f looking for substitute; please tell CL"

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fishery.estimates.2020<-fishery.estimates.f(stratum.estimates.2020.withsamps,stratum.estimates.2020.NOsamps,2020)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

get.catch.estimates.V3.f(cae.20002021,cae.stratflg.20002021,total.unlds.20002021,lfgrpd.20002021,lfgrpd.stratflg.20002021,lfmm.20002021,2021,2,well.estimates.2021,area.substitution.mat.SKJ.DEL.SAC2022,grow.increments.2cmSKJ.betyftskj)

[1] "\*\*\* Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using catch stratification: SKJ Mark assessment 2022 for DEL"

[1] "Using fishery stratification: SKJ Mark assessment 2022 for DEL"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

fishery.estimates.2021<-fishery.estimates.f(stratum.estimates.2021.withsamps,stratum.estimates.2021.NOsamps,2021)

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

[1] "\*\*\* create.fishery.flg.f: Please edit first to make sure stratum definitions are correct \*\*\*"

[1] "Using fishery stratification: SKJ SAC 2022 for DEL (FO and UN largely junk)"

# save output

save.image("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/full files\_SKJ\_DEL\_2000-2021\_Mark assessment SAC 2022.RData")

save(list=objects(pat="fishery.estimates"),file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_DEL\_Mark assessment SAC 2022\_fishery estimates only\_2000-2021.RData")

#

# --------------------------------------------------------------------------------------

# Format catch and size comps output for SKJ only

attach("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/spp comp\_R functions.RData",pos=2)

attach("C:\\Users\\clennert\\Documents\\R\\poststratification\\CL programs\_stock assessment\\spp comp programs\_from 2000\\current\_estimates\\full files\_SKJ\_DEL\_2000-2021\_Mark assessment SAC 2022.RData",pos=3)

skj.DPcatch.20002021<-format.catch.output.f(2000,2021,"DP",5,c("A1","A2"))

skj.DPcomps.20002021<-format.sizecomps.output.f(2000,2021,"DP",3)

detach(pos=3)

attach("C:\\Users\\clennert\\Documents\\R\\poststratification\\CL programs\_stock assessment\\spp comp programs\_from 2000\\current\_estimates\\full files\_SKJ\_UNA\_2000-2021\_Mark assessment SAC 2022.RData",pos=3)

skj.UNcatch.20002021<-format.catch.output.f(2000,2021,"UN",5,c("A1","A2","A3","A4"))

skj.UNcomps.20002021<-format.sizecomps.output.f(2000,2021,"UN",3)

detach(pos=3)

attach("C:\\Users\\clennert\\Documents\\R\\poststratification\\CL programs\_stock assessment\\spp comp programs\_from 2000\\current\_estimates\\full files\_SKJ\_OBJ\_2000-2021\_Mark assessment SAC 2022.RData",pos=3)

skj.FOcatch.20002021<-format.catch.output.f(2000,2021,"FO",5,c("A1","A2","A3","A4"))

skj.FOcomps.20002021<-format.sizecomps.output.f(2000,2021,"FO",3)

save.image("/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_formatted\_2000-2021\_Mark assessment SAC 2022.RData")

#

# ------------------------

#

write.csv(skj.DPcatch.20002021,file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_DOLPHIN CATCH\_FORMATTED\_2000-2021\_Mark assessment SAC 2022.csv")

write.csv(skj.DPcomps.20002021,file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_DOLPHIN COMPS\_FORMATTED\_2000-2021\_Mark assessment SAC 2022.csv")

write.csv(skj.UNcatch.20002021,file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_UNASSOCIATED CATCH\_FORMATTED\_2000-2021\_Mark assessment SAC 2022.csv")

write.csv(skj.UNcomps.20002021,file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_UNASSOCIATED COMPS\_FORMATTED\_2000-2021\_Mark assessment SAC 2022.csv")

write.csv(skj.FOcatch.20002021,file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_FLOATING-OBJECT CATCH\_FORMATTED\_2000-2021\_Mark assessment SAC 2022.csv")

write.csv(skj.FOcomps.20002021,file="/Users/clennert/Documents/R/poststratification/CL programs\_stock assessment/spp comp programs\_from 2000/current\_estimates/SKJ\_FLOATING-OBJECT COMPS\_FORMATTED\_2000-2021\_Mark assessment SAC 2022.csv")