CATDIS README FILE

ICCAT Secretariat

[Version 2024.01]

Summary

This document briefly describes the CATDIS files publicly available on the ICCAT webpage (www.iccat.int/en/accesingdb.html). It presents the file formats, structures and content.

The current CATDIS dataset cover the period **1950 to 2022**. It was updated using the latest version of CATDIS estimated during 2023 (years 1950 to 2020) aiming to reflect the changes made to Task 1 nominal catches (T1NC) and Task 2 catch and effort (T2CE) during 2023. The current CATDIS version reflects (relative difference in weight of $\pm 1\%$) the T1NC (as of 2024-01-28) dataset for the 9 species.

Definition

CATDIS is basically an estimation of T1NC (catches in live weight, with both landings and dead discards) for the nine major tuna and tuna like species of ICCAT, stratified in time (trimester) and area (5x5 degree squares). Details on Flag, Fleet, Gear group, Stock and School type (fishing mode of the Purse seiners in tropical fisheries) were also maintained. It assumes that time-space distribution of T2CE partial catch data by fleet and major gear (using on the estimations majorly the T2CE datasets within a range [15%, 100%] of T1NC coverage levels) is representative of the equivalent T1NC overall annual catches distribution in time and area.

File description

All CATDIS files are ASCII text files with comma delimited format (*.csv). They can be opened with any spreadsheet application (MS-EXCEL, LibreOffice CALC, etc.) or other program. In all cases the default field delimiter is "," and none of the text fields have character qualifiers.

Two files are available:

- "cdis5022_ALL.7z": compressed archive containing only one "*.csv" file with all the 9 species (63012 records).
- "cdis5022_bySpecies.7z": compressed archive containing 9 files, one per species. The table below shows the number of records of each species-based file (guide for older EXCEL/CALC versions).

	ALB	BET	BFT	BUM	SAI	SKJ	swo	WHM	YFT	TOTAL
No. records	77293	126691	23815	49864	46043	53420	82416	39651	131819	631012

The files are in compressed formats ("*.7z"). Download and install in your machine the freeware software **7-zip** (www.7-zip.org) which takes care of both compression formats.

Structure

The fields in all files have the following structure:

Field	Туре	Description	Auxiliary Table*
SpeciesCode	string	ICCAT species code	Species
YearC	integer	Calendar Year	
Decade	integer	Decade (natural decades; e.g.: 2000 to 2009)	
PartyName	String	ICCAT Party Name	
FlagName	string	ICCAT Flag Name	Flags
FleetCode	string	ICCAT Fleet code	Fleets
Stock	string	Species related stock or management unit	
GearGrp	string	Gear group	
SchoolType	string	Type of fishing operation (PS only)	School types
Trimester	integer	Time strata (trimester 1, 2, 3, 4)	
SampAreaCode	string	ICCAT sampling area codes (maps: https://www.iccat.int/Data/ICCAT_maps.pdf)	Sampling Areas
QuadID	integer	ICCAT quadrant	Quadrants
Lat5	integer	Latitude of a 5x5 square	
Lon5	integer	Longitude of a 5x5 square	
yLat5ctoid	float	Latitude (decimal degrees) centroid (cartesian) of a 5x5 square	
xLon5ctoid	float	Longitude (decimal degrees) centroid (cartesian) of a 5x5 square	
CWPCode	integer	FAO/CWP areal grid code (https://www.fao.org/cwp-on-fishery-statistics/handbook/general-concepts)	
pID	string	ICCAT code (alfa numeric code) for the 5x5 spatial grid	
Catch_t	float	Nominal catches (tones)	

^{*} Auxiliary table codes can be found on the web (ICCAT coding system: https://www.iccat.int/en/stat_codes.html)

Geographical strata

All CATDIS is standardized in a 5x5 degree square stratification. Upon various user requests, four types of geographical classifications are now available:

- **QuadID, Lat5, Lon5** (ICCAT system): define the corner of the square closest to the origin (Lat=0; Lon=0). Quadrant definitions (QuadID) are: 1=NE; 1=SE; 3=SW; 4=NW.
- **yLat5ctoid/ yLat5ctoid:** centroids (central point) of the 5x5 squares, in decimal degrees (e.g.: Lat = -35.5 equals 35°30" S; Lon = -27.5 equals 27°30" W).
- **pID:** ICCAT code (alfa numeric code) for the 5x5 spatial grid (used in CATDIS only)
- **CWPCode:** FAO-CWP grid system with mask "GQYYXX", where G (grid type) {6 | 5x5, ...); Q (quadrant): {1|NE,2|SE,3|SW,4|NW}; YY (Lat): [0, 90[; XX (Lon): [0, 90[.

The FAO/CWP grid system was added recently (FAO request) aiming to facilitate a smooth inclusion of the CATDIS into the FAO FIRMS Global Atlas (https://www.fao.org/fishery/geoserver/tunaatlas).

For the ICCAT sampling areas (among others like species stock boundaries, ICCAT convention area), the ICCAT Secretariat has also available geographic information system (GIS) data files (shapefile and GeoPackage formats). Please contact the Secretariat (email: STATS info@iccat.int).

Gear group

Gear groups of each species were defined based on its relative importance (in weight) in overall catches by decade. Table below summarizes the gear groups adopted on each species. Code "oth" references all the remainder gears (including the unclassified ones).

	ALB	BET	BFT	BUM	SAI	SKJ	SWO	WHM	YFT
BB (bait boat)	X	Х	Х	Х	Х	Х	Χ	Х	Х
GN (gillnet)	Х			Х	Χ		Х	Χ	
HL (handline)			Χ		Χ				
HP (harpoon)							Х		
LL (longline)	Х	Χ	Χ	X	Χ	Χ	Χ	X	Х
PS (purse seine)	Х	Χ	Χ	Х	Χ	Χ	Х	Χ	Χ
RR (rod & reel)			Χ	Х	Χ			Χ	
TP (trap)			Χ						
TR (troll)	Х		Χ		Χ			X	
TW (trawl)	Х								
oth (others)	Х	Χ	Χ	X	Χ	Χ	Χ	X	Х

Stocks

The word "Stock" is here employed to identify the ICCAT official biological stocks (and also management units) of the major species (www.iccat.int/Data/ICCAT maps.pdf), and also, various species related management units (Mediterranean in all species; for YFT: ATE & ATW). The table below summarizes the Stocks (management units) of each species.

	ALB	BET	BFT	BUM	SAI	SKJ	SWO	WHM	YFT
AT (all Atlantic)		Х		Х				Х	
ATE (Atlantic East)			Χ		Χ	Χ			Χ
ATN (Atlantic North)	X						Χ		
ATS (Atlantic South)	Х						Χ		
ATW (Atlantic West)			Χ		Χ	Χ			Χ
MED (Mediterranean)	Х	Х	Χ	Х	Х	Χ	Χ	Χ	Χ

Other

The ICCAT Secretariat has also available (on explicit request) the detailed association/substitution tables used to estimate CATDIS.

In addition, specific requests involving CATDIS estimations (additional explanations, specific formats, explicit data aggregations, etc.) can be made to the Secretariat (STATS info@iccat.int).