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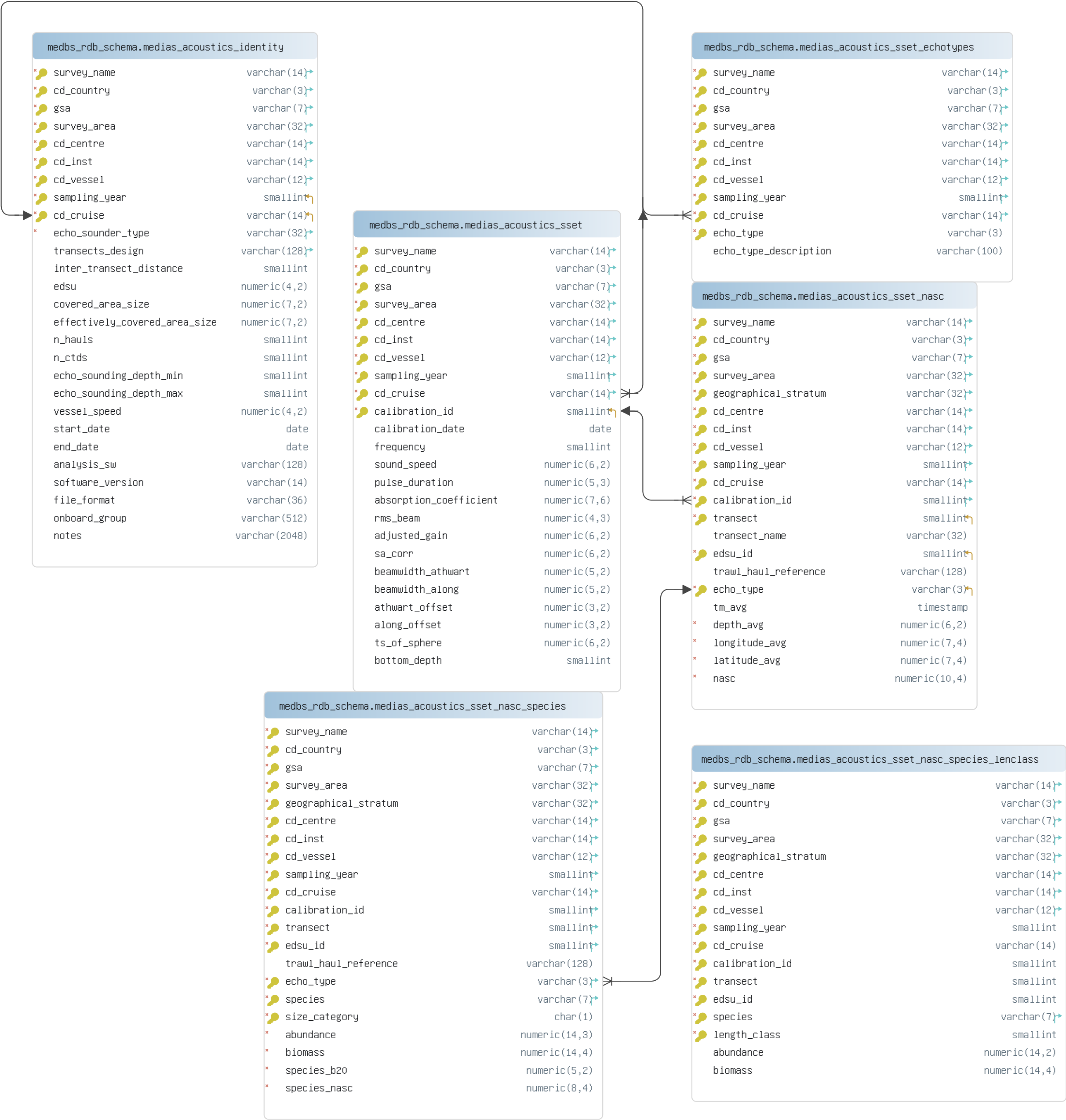
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MEDIAS acoustics

Table medbs_rdb_schema.medias_acoustics_identity			
Idx	Name	Data Type	Description
MEDIAS acoustics survey identity Tags:			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS) Tags:
* PK	cd_country	varchar(3)	Country ISO 3166 international standard Tags:
* PK	gsa	varchar(7)	GFCM Geographical subarea Tags:
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast) Tags:
* PK	cd_centre	varchar(14)	Research center code Tags:
* PK	cd_inst	varchar(14)	Research institute code Tags:
* PK	cd_vessel	varchar(12)	Vessel code. Additional information is provided in the parametric table p_research_vessel Tags:
* PK	sampling_year	smallint	Sampling year Tags:
* PK	cd_cruise	varchar(14)	Cruise code Tags:
*	echo_sounder_type	varchar(32)	Echo sounder type Tags:
	transects_design	varchar(128)	Transects design Tags:
	inter_transect_distance	smallint	Inter-transect distance (NM), will be filled where transect is parallel/zig zag (not mand.) Tags:
	edsu	numeric(4,2)	EDSU: the Elementary Distance Sampling Unit used for acoustic integration (nmi). E.g. 1 = by 1 nmi, 0.54 by 0.54 nmi, etc. Tags:
	covered_area_size	numeric(7,2)	Size of area to be covered (NM2/km2) Tags:
	effectively_covered_area_size	numeric(7,2)	Size of area effectively covered (NM2/km2) Tags:
	n_hauls	smallint	Number of hauls (auto filled) Tags:
	n_ctds	smallint	Number of CTDs (auto filled) Tags:
	echo_sounding_depth_min	smallint	Echo sounding depth (min, m), auto calculated from NASC Tags:
	echo_sounding_depth_max	smallint	Echo sounding depth (max, m) recording, auto calculated from NASC Tags:
	vessel_speed	numeric(4,2)	Speed of research vessel (kt) during acoustic sampling Tags:
	start_date	date	Starting date of survey Tags:
	end_date	date	Ending date of survey Tags:
	analysis_sw	varchar(128)	Software for analysis Tags:
	software_version	varchar(14)	Software version Tags:
	file_format	varchar(36)	Acoustic data storage format. This can be 'raw' or 'hac' for current systems, and any of: 'raw', 'hac', 'ek5', 'BI500', 'ek6', 'dt4' if we include historical data. Tags:
	onboard_group	varchar(512)	Onboard group Tags:

Table medbs_rdb_schema.medias_acoustics_identity

notes	varchar(2048)	Notes Tags:
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Indexes

Type	Name	On	Description
Pk	medias_acoustics_identity_pk_y	survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise	Tags:

Foreign Keys

Type	Name	On	Description
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		Tags:
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		Tags:
	echosounder_fk\$e_echosounder (echo_sounder_type) ref e_echosounder (echo_sounder)		Tags:
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		Tags:
	medias_acoustics_identity_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		Tags:
	survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)		Tags:
	survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)		Tags:
	transects_design_fk\$p_medias_transect_design (transects_design) ref p_medias_transect_design (transect_design)		Tags:
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		Tags:

Constraints

Name	Definition	Description
chk_covered_area_size	covered_area_size >= (100)::numeric) AND (covered_area_size <= (99999)::numeric	Tags:
chk_echo_sounding_depth_max	(echo_sounding_depth_max >= 10) AND (echo_sounding_depth_max <= 1500)) OR (echo_sounding_depth_max = '-1'::integer	Tags:
chk_echo_sounding_depth_min	(echo_sounding_depth_min >= 10) AND (echo_sounding_depth_min <= 1500)) OR (echo_sounding_depth_min = '-1'::integer	Tags:
chk_edsu	edsu >= 0.1) AND (edsu <= (5)::numeric	Tags:
chk_effectively_covered_area_size	effectively_covered_area_size >= (100)::numeric) AND (effectively_covered_area_size <= (99999)::numeric	Tags:
chk_analysis_sw	analysis_sw)::text = ANY (ARRAY[('MOVIES3D'::character_varying)::text, ('Echoview'::character_varying)::text, ('MOVIES'::character_varying)::text])	Tags:

Table medbs_rdb_schema.medias_acoustics_identity

chk_inter_transect_distance	(inter_transect_distance >= 5) AND (inter_transect_distance <= 12)) OR (inter_transect_distance = '-1'::integer	Tags:
chk_n_ctds	((n_ctds >= 1) AND (n_ctds <= 999)) OR NULL::boolean	Tags:
chk_n_hauls	((n_hauls >= 1) AND (n_hauls <= 999)) OR NULL::boolean	Tags:
chk_vessel_speed	(vessel_speed)::double precision >= (5)::double precision) AND ((vessel_speed)::double precision <= (10)::double precision	Tags:
chk_file_format	(file_format)::text ~* '^ (raw hac ek5 ek6 dt4 BI500) (- (raw hac ek5 ek6 dt4 BI500))*\$'::text	Tags:

Table medbs_rdb_schema.medias_acoustics_sset

Idx	Name	Data Type	Description
Hydro Acoustic SubSet (calibration) Tags:			
* Pk	survey_name	varchar(14)	Survey name (e.g. MEDIAS) Tags:
* Pk	cd_country	varchar(3)	Country ISO 3166 international standard Tags:
* Pk	gsa	varchar(7)	GFCM Geographical subarea Tags:
* Pk	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast) Tags:
* Pk	cd_centre	varchar(14)	Research center code Tags:
* Pk	cd_inst	varchar(14)	Research institute code Tags:
* Pk	cd_vessel	varchar(12)	Vessel Tags:
* Pk	sampling_year	smallint	Sampling year Tags:
* Pk	cd_cruise	varchar(14)	Cruise code Tags:
* Pk	calibration_id	smallint	The echosounder calibration identification code (e.g. 1, 2). Used to associate acoustic integration data in other tables with the specific instrument calibration applied during data collection & analysis. Tags:
	calibration_date	date	Calibration date (dd/mm/yyyy) Tags:
	frequency	smallint	Acoustic pulse frequency used for calibration and data acquisition (kHz). Typically 38 kHz for biomass surveys. Additional frequencies might be calibrated for auxiliary purposes during echogram scrutinization (e.g. echotrace identification and/or plankton filtering) Tags:
	sound_speed	numeric(6,2)	Value of the speed of sound (m/s) calculated during calibration Tags:
	pulse_duration	numeric(5,3)	Acoustic pulse duration used for calibration and data acquisition (ms), e.g. 1.024, 0.512 Tags:
	absorption_coefficient	numeric(7,6)	Value of the acoustic absorption coefficient alpha (dB/m) calculated during calibration Tags:

Table medbs_rdb_schema.medias_acoustics_sset

rms_beam	numeric(4,3)	The root-mean-square (RMS) error (dB) between measurements taken during calibration, and the adjusted acoustic beam model, e.g. 0.02, 0.1 Tags:
adjusted_gain	numeric(6,2)	The adjusted transducer gain (dB) as a result of the calibration procedure Tags:
sa_corr	numeric(6,2)	Sa correction (dB). This value is estimated during calibration and represents the correction required to the Sv constant to harmonize the TS and NASC measurements Tags:
beamwidth_athwart	numeric(5,2)	The 3 dB beamwidth angle (deg) in the athwartship direction, as calculated during calibration, e.g. 6.8 Tags:
beamwidth_along	numeric(5,2)	The 3 dB beamwidth angle (deg) in the alongship direction, as calculated during calibration, e.g. 6.8 Tags:
athwart_offset	numeric(3,2)	The beam offset angle (deg) in the athwartship direction, as calculated during calibration, e.g. 0.1, 0.2 Tags:
along_offset	numeric(3,2)	The beam offset angle (deg) in the alongtship direction, as calculated during calibration, e.g. 0.1, 0.2 Tags:
ts_of_sphere	numeric(6,2)	Target Strength (TS) of calibration sphere (dB re 1 m ²) at distance of 1 m, e.g. - 33.5 Tags:
bottom_depth	smallint	Sea bottom depth at the calibration location (m), e.g. 25 Tags:

Indexes

Type	Name	On	Description
Pk	medias_acoustics_sset_pkey	survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id	Tags:

Foreign Keys

Type	Name	On	Description
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		Tags:
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		Tags:
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		Tags:
	fk_sset\$identity (survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise) ref medias_acoustics_identity (survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise)		Tags:
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		Tags:
	medias_acoustics_sset_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		Tags:
	survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)		Tags:
	survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)		Tags:

Constraints

Name	Definition	Description
chk_adjusted_gain	adjusted_gain >= (1)::numeric) AND (adjusted_gain <= (9999)::numeric	Tags:

Table medbs_rdb_schema.medias_acoustics_sset

chk_along_offset	along_offset >= (- (1)::numeric)) AND (along_offset <= (1)::numeric	Tags:
chk_athwart_offset	athwart_offset >= (- (1)::numeric)) AND (athwart_offset <= (1)::numeric	Tags:
chk_beamwidth_along	beamwidth_along >= (5)::numeric) AND (beamwidth_along <= (12)::numeric	Tags:
chk_beamwidth_athwart	beamwidth_athwart >= (5)::numeric) AND (beamwidth_athwart <= (12)::numeric	Tags:
chk_absorption_coefficient	absorption_coefficient >= (0)::numeric) AND (absorption_coefficient <= (1)::numeric	Tags:
chk_calibration_id	calibration_id >= 1) AND (calibration_id <= 10	Tags:
chk_rms	rms_beam >= (0)::numeric) AND (rms_beam <= (1)::numeric	Tags:
chk_sa_corr	sa_corr >= ('- 2'::integer)::numeric) AND (sa_corr <= (2)::numeric	Tags:
chk_sound_speed	sound_speed >= (1400)::numeric) AND (sound_speed <= (1600)::numeric	Tags:
chk_ts_of_sphere	ts_of_sphere <= '- 20.0'::numeric) AND (ts_of_sphere >= '- 70.0'::numeric	Tags:
chk_bottom_depth	(bottom_depth)::numeric >= (5)::numeric) AND ((bottom_depth)::numeri c <= (200)::numeric	Tags:
chk_frequency	frequency = ANY (ARRAY[38, 70, 120, 200])	Tags:
chk_pulse_duration	pulse_duration >= (0)::numeric) AND (pulse_duration <= (2)::numeric	Tags:

Table medbs_rdb_schema.medias_acoustics_sset_echotypes

Idx	Name	Data Type	Description
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS) Tags:
* PK	cd_country	varchar(3)	Country ISO 3166 international standard Tags:
* PK	gsa	varchar(7)	GFCM Geographical subarea Tags:
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast) Tags:
* PK	cd_centre	varchar(14)	Research center code Tags:
* PK	cd_inst	varchar(14)	Research institute code Tags:
* PK	cd_vessel	varchar(12)	Vessel Tags:
* PK	sampling_year	smallint	Sampling year Tags:

Table medbs_rdb_schema.medias_acoustics_sset_echotypes

* PK	cd_cruise	varchar(14)	Cruise code Tags:
* PK	echo_type	varchar(3)	Tags:
	echo_type_description	varchar(100)	Tags:

Indexes

Type	Name	On	Description
Pk	medias_acoustics_sset_echotypes_pkey	survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, echo_type	Tags:

Foreign Keys

Type	Name	On	Description
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		Tags:
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		Tags:
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		Tags:
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		Tags:
	medias_acoustics_sset_echotype_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		Tags:
	survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)		Tags:
	survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)		Tags:
	acoustic_echotypes_fk\$acoustics_identity (survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise) ref medias_acoustics_identity (survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise)		Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc

Idx	Name	Data Type	Description
Hydro Acoustic: Nautical Area Scattering Coefficient (NASC) Tags:			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS) Tags:
* PK	cd_country	varchar(3)	Country ISO 3166 international standard Tags:
* PK	gsa	varchar(7)	GFCM Geographical subarea Tags:
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast) Tags:
* PK	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area) Tags:
* PK	cd_centre	varchar(14)	Research center code Tags:
* PK	cd_inst	varchar(14)	Research institute code Tags:
* PK	cd_vessel	varchar(12)	Vessel Tags:
* PK	sampling_year	smallint	Sampling year Tags:
* PK	cd_cruise	varchar(14)	Cruise Tags:
* PK	calibration_id	smallint	The echosounder calibration identification code (e.g. 1, 2). Used to associate acoustic integration data in other tables with the specific instrument calibration applied during data collection & analysis. Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc

* Pk	transect	smallint	Transect ID Tags:
	transect_name	varchar(32)	Transect name Tags:
* Pk	edsu_id	smallint	Elementary Distance Sampling Unit: The EDSU interval index (unitless) within the transect as a result of deviding the total transect length by the EDSU, e.g. 1, 2, 3 Tags:
	trawl_haul_reference	varchar(128)	Trawl haul_id reference: [survey_name] [cd_country] [gsa] [survey_area] [geographical_stratum] [cd_centre] [cd_inst] [cd_vessel] [cd_cruise] [subset_id] [vhaul_id] Tags:
* Pk	echo_type	varchar(3)	Echo type: E1: fish schools at the bottom (altitude <20m); E2: schools in open water (altitude >20 m depth) attributed to sardine; E3: diffuse schools in open water (altitude >20 m depth) allocated to mackerel; E4: surface schools (altitude <30 m); E5: Myctophidae fish Tags:
	tm_avg	timestamp	The date and time of the middle ping in the domain corresponding to the EDSU interval Tags:
*	depth_avg	numeric(6,2)	The average bottom depth in the domain corresponding to the EDSU interval as calculated by all interval pings Tags:
*	longitude_avg	numeric(7,4)	The longitude (decimal degrees) of the middle ping in the domain corresponding to the EDSU interval Tags:
*	latitude_avg	numeric(7,4)	The latitude (decimal degrees) of the middle ping in the domain corresponding to the EDSU interval Tags:
*	nasc	numeric(10,4)	The Nautical Area Scattering Coefficient (NASC) corresponding to the acoustic backscatter characterized by echo type (m ² /nmi ²) within the EDSU interval Tags:

Indexes

Type	Name	On	Description
Pk	medias_acoustics_sset_bio_pkey	survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id, transect, edsu_id, echo_type	Tags:

Foreign Keys

Type	Name	On	Description
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		Tags:
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		Tags:
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		Tags:
	fk_sset_bio\$survey_sset (survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id) ref medias_acoustics_sset (survey_name, cd_country, gsa, survey_area, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id)		Tags:
	geo_stratum_fk\$p_medias_geo_stratum (geographical_stratum) ref p_medias_geo_stratum (geo_stratum_code)		Tags:
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		Tags:
	medias_acoustics_sset_nasc_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc

survey_area_fk\$p_medias_survey_area (survey_area)	Tags:
ref p_medias_survey_area (survey_area_code)	
survey_name_fk\$p_surveys (survey_name) ref	Tags:
p_surveys (survey_code)	

Constraints

Name	Definition	Description
chk_depth_avg	depth_avg >= (10)::numeric) AND (depth_avg <= (1500)::numeric	Tags:
chk_echo_type	echo_type)::text = ANY (ARRAY[('E1'::character varying)::text, ('E2'::character varying)::text, ('E3'::character varying)::text, ('E4'::character varying)::text, ('E5'::character varying)::text, ('E6'::character varying)::text]	Tags:
chk_edsu_id	edsu_id >= 1) AND (edsu_id <= 2000	Tags:
chk_calibration_id	calibration_id >= 1) AND (calibration_id <= 10	Tags:
chk_longitude_avg	longitude_avg >= '-5.50'::numeric) AND (longitude_avg <= 35.00	Tags:
chk_total_fish_nasc	nasc >= (0)::numeric	Tags:
chk_transect	transect >= 1) AND (transect <= 999	Tags:
chk_latitude_avg	latitude_avg >= 34.00) AND (latitude_avg <= 45.70	Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc_species

Idx	Name	Data Type	Description
Hydro Acoustic: Biomass (NASC) Species Identification			
Tags:			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS) Tags:
* PK	cd_country	varchar(3)	Country ISO 3166 international standard Tags:
* PK	gsa	varchar(7)	GFCM Geographical subarea Tags:
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast) Tags:
* PK	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area) Tags:
* PK	cd_centre	varchar(14)	Research center code Tags:
* PK	cd_inst	varchar(14)	Research institute code Tags:
* PK	cd_vessel	varchar(12)	Vessel Tags:
* PK	sampling_year	smallint	Sampling year Tags:
* PK	cd_cruise	varchar(14)	Cruise code Tags:
* PK	calibration_id	smallint	The echosounder calibration identification code (e.g. 1, 2). Used to associate acoustic integration data in other tables with the specific instrument calibration applied during data collection & analysis. Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc_species

* Pk	transect	smallint	Transect ID Tags:
* Pk	edsu_id	smallint	Elementary Distance Sampling Unit: The EDSU interval index (unitless) within the transect as a result of deviding the total transect length by the EDSU, e.g. 1, 2, 3 Tags:
	trawl_haul_reference	varchar(128)	Trawl haul_id reference: [survey_name] [cd_country] [gsa] [survey_area] [geographical_stratum] [cd_centre] [cd_inst] [cd_vessel] [cd_cruise] [subset_id] [vhaul_id] Tags:
* Pk	echo_type	varchar(3)	Echo type: E1: fish schools at the bottom (altitude <20m); E2: schools in open water (altitude >20 m depth) attributed to sardine; E3: diffuse schools in open water (altitude >20 m depth) allocated to mackerel; E4: surface schools (altitude <30 m); E5: Myctophidae fish Tags:
* Pk	species	varchar(7)	Species code: species list based on ASFIS FAO and WoRMS (for MEDIAS purposes) Tags:
* Pk	size_category	char(1)	Tags:
*	abundance	numeric(14,3)	The number of fish for the species corresponding to the EDSU interval Tags:
*	biomass	numeric(14,4)	The total weight of fish for the species corresponding to the EDSU interval (ton) Tags:
*	species_b20	numeric(5,2)	The species TS (dB) for the EDSU interval. This is a result of the average species fish length attributed to the EDSU interval (form biological sampling) and the L-TS function used Tags:
*	species_nasc	numeric(8,4)	The Nautical Area Scattering Coefficient (NASC) corresponding to backscatter attributed species within the EDSU interval (m^2/nmi^2) Tags:

Indexes

Type	Name	On	Description
Pk	medias_acoustics_sset_bio_species_pkey	survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id, transect, edsu_id, echo_type, species, size_category	Tags:

Foreign Keys

Type	Name	On	Description
	species_fk\$species_list_medias (species) ref species_list_medias (species)		Tags:
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		Tags:
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		Tags:
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		Tags:
	fk_sset_nasc_spec\$sset_nasc (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id, transect, edsu_id, echo_type) ref medias_acoustics_sset_nasc (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id, transect, edsu_id, echo_type)		Tags:
	geo_stratum_fk\$p_medias_geo_stratum (geographical_stratum) ref p_medias_geo_stratum (geo_stratum_code)		Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc_species

gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)	Tags:
medias_acoustics_sset_nasc_species_country_fk\$p_count ry3166 (cd_country) ref p_countries_iso3166 (country_a3code)	Tags:
survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)	Tags:
survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)	Tags:

Constraints

Name	Definition	Description
chk_biomass	biomass >= (0)::numeric	Tags:
chk_calibration_id	calibration_id >= 1) AND (calibration_id <= 10	Tags:
chk_echo_type	echo_type)::text = ANY (ARRAY[('E1'::character varying)::text, ('E2'::character varying)::text, ('E3'::character varying)::text, ('E4'::character varying)::text, ('E5'::character varying)::text, ('E6'::character varying)::text]	Tags:
chk_edsu_id	edsu_id >= 1) AND (edsu_id <= 2000	Tags:
chk_abundance	abundance >= 0	Tags:
chk_species_b20	species_b20 >= ('- 90'::integer)::numeric) AND (species_b20 <= ('- 60'::integer)::numeric	Tags:
chk_species_nasc	species_nasc >= (0)::numeric	Tags:
chk_transect	transect >= 1) AND (transect <= 999	Tags:
chk_size_category	size_category = ANY (ARRAY['S'::bpchar, 'L'::bpchar, 'C'::bpchar])	Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc_species_lenclass

Idx	Name	Data Type	Description
Hydro Acoustic: Length classes Tags:			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS) Tags:
* PK	cd_country	varchar(3)	Country ISO 3166 international standard Tags:
* PK	gsa	varchar(7)	GFCM Geographical subarea Tags:
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast) Tags:
* PK	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area) Tags:
* PK	cd_centre	varchar(14)	Research center code Tags:
* PK	cd_inst	varchar(14)	Research institute code Tags:
* PK	cd_vessel	varchar(12)	Vessel Tags:
* PK	sampling_year	smallint	Sampling year Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc_species_lenclass

* Pk	cd_cruise	varchar(14)	Cruise code Tags:
* Pk	calibration_id	smallint	The echosounder calibration identification code (e.g. 1, 2). Used to associate acoustic integration data in other tables with the specific instrument calibration applied during data collection & analysis. Tags:
* Pk	transect	smallint	Transect ID Tags:
* Pk	edsu_id	smallint	Elementary Distance Sampling Unit: The EDSU interval index (unitless) within the transect as a result of deviding the total transect length by the EDSU, e.g. 1, 2, 3 Tags:
* Pk	species	varchar(7)	Species code: species list based on ASFIS FAO and WoRMS (for MEDIAS purposes) Tags:
* Pk	length_class	smallint	Length class (by 0.5 cm) Tags:
	abundance	numeric(14,2)	The number of fish for species at length class, corresponding to the EDSU interval Tags:
	biomass	numeric(14,4)	The total weight of fish for cd_species at length_class corresponding to the EDSU interval (ton) Tags:

Indexes

Type	Name	On	Description
Pk	medias_acoustics_sset_nasc_species_lenclass_pkey	survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, calibration_id, transect, edsu_id, species, length_class	Tags:

Foreign Keys

Type	Name	On	Description
	species_fk\$species_list_medias (species) ref species_list_medias (species)		Tags:
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		Tags:
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		Tags:
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		Tags:
	geo_stratum_fk\$p_medias_geo_stratum (geographical_stratum) ref p_medias_geo_stratum (geo_stratum_code)		Tags:
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		Tags:
	medias_acoustics_sset_nasc_species_lc_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		Tags:
	survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)		Tags:
	survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)		Tags:

Constraints

Name	Definition	Description
chk_abundance	abundance >= 0	Tags:
chk_biomass	biomass >= (0)::numeric	Tags:
chk_calibration_id	calibration_id >= 1) AND (calibration_id <= 10	Tags:
chk_edsu_id	edsu_id >= 1) AND (edsu_id <= 2000	Tags:

Table medbs_rdb_schema.medias_acoustics_sset_nasc_species_lenclass

chk_transect	transect >= 1) AND (transect <= 999	Tags:
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