



## MEDIAS CTDs

Table medbs_rdb_schema.e_ctd_measur_hd			
Idx	Name	Data Type	Description
CTD			
* Pk	survey_name	varchar(14)	Survey name (e.g. MEDIAS, MEDITS)
* Pk	cd_country	varchar(3)	Country ISO 3166 international standard
* Pk	gsa	varchar(7)	GFCM Geographical subarea
* Pk	cd_centre	varchar(14)	Centre code
* Pk	cd_inst	varchar(14)	Institute code
* Pk	cd_cruise	varchar(14)	Cruise code
* Pk	cd_vessel	varchar(12)	Vessel
* Pk	cast_id	varchar(14)	Cast ID
* Pk	cd_instrument	varchar(14)	Instrument code
*	latitude	numeric(7,4)	Latitude in decimal degrees
*	longitude	numeric(7,4)	Longitude in decimal degrees
	cast_date	date	Date
	cast_time	time	Shooting time
	max_depth	smallint	Maximum depth of the cast (to be filled auto by the profile table)
	haul_depth	smallint	Haul depth (m)
	cd_bottom_q1	varchar(4)	Bottom quality
	roughness	numeric(7,2)	Roughness ( <a href="https://www.researchgate.net/figure/a-Bottom-roughness-length-20-used-for-varied-condition-b-refined-bottom-roughness_fig2_335792497">https://www.researchgate.net/figure/a-Bottom-roughness-length-20-used-for-varied-condition-b-refined-bottom-roughness_fig2_335792497</a> )
	slope	numeric(6,2)	Slope (for degrees, the range of slope values is 0 to 90)
	cd_weather	varchar(2)	Weather
	cd_sea	varchar(2)	Sea condition
	cd_wind	varchar(3)	Wind direction
	transect_id	smallint	Transect ID
Indexes			
Type	Name	On	Description
Pk	e_ctd_measur_hd_pkey	survey_name, cd_country, gsa, cd_centre, cd_inst, cd_cruise, cd_vessel, cast_id, cd_instrument	
Foreign Keys			
Type	Name	On	Description
	cd_vessel_fk\$rv_eurofleets ( cd_vessel ) ref rv_eurofleets ( vessel_code )		
	survey_name_fk\$p_surveys ( survey_name ) ref p_surveys ( survey_code )		
	cd_instrument_fk\$e_instrument ( cd_instrument ) ref e_instrument ( cd_instrument )		
	weather_fk\$p_weather ( cd_weather ) ref p_weather ( cd )		
	sea_condition_fk\$p_sea_condition ( cd_sea ) ref p_sea_condition ( cd )		
	wind_fk\$p_wind ( cd_wind ) ref p_wind ( cd )		
	bottom_quality_fk\$p_bottom_types ( cd_bottom_q1 ) ref p_bottom_types ( cd_bottom )		
	e_ctd_measur_hd_country_fk\$p_country3166 ( cd_country ) ref p_countries_iso3166 ( country_a3code )		
	gsa_fk\$p_fdi_subregion ( gsa ) ref p_fdi_subregion ( subregion_cd )		

## Table medbs\_rdb\_schema.e\_ctd\_measur\_hd

cd\_centre\_fk\$p\_fishery\_bodies\_acronym ( cd\_centre ) ref  
p\_fishery\_bodies ( acronym )

cd\_inst\_fk\$p\_fishery\_body\_departments ( cd\_inst ) ref  
p\_fishery\_body\_departments ( department )

### Constraints

Name	Definition	Description
chk_latitude	latitude >= 34.00) AND (latitude <= 45.70	
chk_longitude	longitude >= '- 5.50':::numeric) AND (longitude <= 35.00	
chk_haul_depth	haul_depth >= 10) AND (haul_depth <= 1500	
chk_roughness	(roughness > (0)::numeric) OR NULL::boolean	
chk_slope	((slope >= (0)::numeric) AND (slope <= (90)::numeric)) OR NULL::boolean	
chk_max_depth	max_depth >= 10) AND (max_depth <= 1500	

## Table medbs\_rdb\_schema.e\_ctd\_measur\_it

Idx	Name	Data Type	Description
CTD Measurments			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS, MEDITS)
* PK	cd_country	varchar(3)	Country ISO 3166 international standard
* PK	gsa	varchar(7)	GFCM Geographical subarea
* PK	cd_centre	varchar(14)	Centre code
* PK	cd_inst	varchar(14)	Institute code
* PK	cd_cruise	varchar(14)	Cruise
* PK	cd_vessel	varchar(12)	Vessel
* PK	cast_id	varchar(14)	Cast ID
* PK	cd_instrument	varchar(14)	Instrument code
* PK	cd_parameter	varchar(32)	Parameter
* PK	profile_depth	numeric(5,1)	Water column depth (m)
	val	numeric	Parameter value

### Indexes

Type	Name	On	Description
Pk	e_ctd_measur_it_pkey	profile_depth, cd_parameter, cd_instrument, cast_id, cd_vessel, cd_cruise, cd_inst, cd_centre, gsa, cd_country, survey_name	

### Foreign Keys

Type	Name	On	Description
	cd_vessel_fk\$rv_eurofleets ( cd_vessel ) ref rv_eurofleets ( vessel_code )		
	survey_name_fk\$p_surveys ( survey_name ) ref p_surveys ( survey_code )		
	fk_e_instrument_parameter\$e_instrument_parametes ( cd_instrument, cd_parameter ) ref e_instrument_parameters ( cd_instrument, cd_parameter )		
	medbs_rdb_schema.e_ctd_measur_it_country_fk\$p_country31 66 ( cd_country ) ref p_countries_iso3166 ( country_a3code )		

## Table medbs\_rdb\_schema.e\_ctd\_measur\_it

```
gsa_fk$p_fdi_subregion ( gsa ) ref p_fdi_subregion (
subregion_cd )

cd_centre_fk$p_fishery_bodies_acronym ( cd_centre ) ref
p_fishery_bodies ( acronym )

cd_inst_fk$p_fishery_body_departments ( cd_inst ) ref
p_fishery_body_departments ( department )

e_ctd_measur_it_fk$e_ctd_measur_hd ( survey_name,
cd_country, gsa, cd_centre, cd_inst, cd_cruise,
cd_vessel, cast_id, cd_instrument ) ref e_ctd_measur_hd
( survey_name, cd_country, gsa, cd_centre, cd_inst,
cd_cruise, cd_vessel, cast_id, cd_instrument )
```

### Constraints

Name	Definition	Description
chk_profile_depth	profile_depth >= 0.1) AND (profile_depth <= (1500)::numeric	
chk_val	val >= (0)::numeric	

## Table medbs\_rdb\_schema.e\_instrument\_parameter\_unit\_used

Idx	Name	Data Type	Description
Parameter unit used in a station by equipment used (e.g. equipment=CTDSBE19p, parameter=TM, unit=C)			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS, MEDITS)
* PK	cd_country	varchar(3)	Country ISO 3166 international standard
* PK	gsa	varchar(7)	GFCM Geographical subarea
* PK	cd_centre	varchar(14)	Centre code
* PK	cd_inst	varchar(14)	Institute code
* PK	cd_cruise	varchar(14)	Cruise
* PK	cd_vessel	varchar(3)	Vessel
* PK	cast_id	varchar(14)	Cast ID
* PK	cd_instrument	varchar(14)	Instrument code (e.g. CTDSBE19p)
* PK	cd_parameter	varchar(32)	Parameter (e.g. TM)
* PK	unit	varchar(64)	Unit (e.g. C)

### Indexes

Type	Name	On	Description
Pk	e_instrument_parameter_unit_us ed_pkey	survey_name, cd_country, gsa, cd_centre, cd_inst, cd_cruise, cd_vessel, cast_id, cd_instrument, cd_parameter, unit	

### Foreign Keys

Type	Name	On	Description
	e_instrument_parameter_unit_used_fk\$e_ctd_measur_hd ( survey_name, cd_country, gsa, cd_centre, cd_inst, cd_cruise, cd_vessel, cast_id, cd_instrument ) ref e_ctd_measur_hd ( survey_name, cd_country, gsa, cd_centre, cd_inst, cd_cruise, cd_vessel, cast_id, cd_instrument )		
	fk_e_parameter_unit_used\$e_instrument_variable_units ( cd_parameter, unit ) ref e_instrument_parameter_list_of_units ( parameter, unit )		