



**MODELLAZIONE MATEMATICA DI SISTEMI GEOTERMICI PER LA
DEFINIZIONE DI STRUMENTI DI DECISIONE DA UTILIZZARSI NELLE
PROCEDURE DI CONTROLLO DI CONCESSIONI GEOTERMICHE**

Comandi SQL per la creazione delle tabelle

P.6.2 – Appendice C : DB PostgreSQL di fornitura

Pacco di lavoro: WP.6 – Geodatabase e GUI

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DB STRUTTURALE

Strato: DATI GEOLOGICI

Tema: Top Serbatoio Amiata

Tabella: **top_serbatoio_amiata**

```
CREATE TABLE top_serbprof_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  "Profondità" integer,
  the_geom geometry,
  CONSTRAINT top_serbprof_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Affioramento Serbatoio Amiata

Tabella: **aff_serb_amiata**

```
CREATE TABLE aff_serb_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  the_geom geometry,
  CONSTRAINT aff_serb_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Area AmiataTabella: **area_amiata**

```
CREATE TABLE area_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  "Nome" character varying(50),
  area double precision,
  the_geom geometry,
  CONSTRAINT area_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Base serbatoio superficiale dell'AmiataTabella: **base_serbsup_amiata**

```
CREATE TABLE base_serbsup_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT base_serbsup_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Base delle vulcaniti dell'AmiataTabella: **base_vulcaniti_amiata**

```
CREATE TABLE base_vulcaniti_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT base_vulcaniti_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Orizzonte K AmiataTabella: **K_amiata**

```
CREATE TABLE "K_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "K_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Limite vulcaniti dell'AmiataTabella: **limite_vulcaniti_amiata**

```
CREATE TABLE limite_vulcaniti_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  the_geom geometry,
  CONSTRAINT limite_vulcaniti_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Base del serbatoio profondo dell'AmiataTabella: **top_serbprof_amiata**

```
CREATE TABLE top_serbprof_amiata
(
  gid integer NOT NULL,
  "Id" integer,
  "Profondità" integer,
  the_geom geometry,
  CONSTRAINT top_serbprof_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```


Tema: Pozzi AmiataTabella: **pozzi_amiata**

```
CREATE TABLE pozzi_amiata
(
  gid integer NOT NULL,
  "DN" character varying(20),
  "POINT_X" double precision,
  "POINT_Y" double precision,
  "cluster" character varying(50),
  "F4" character varying(50),
  the_geom geometry,
  CONSTRAINT pozzi_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 120° AmiataTabella: **T_120_amiata**

```
CREATE TABLE "T_120_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_120_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 140° AmiataTabella: **T_140_amiata**

```
CREATE TABLE "T_140_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_140_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 150° AmiataTabella: **T_150_amiata**

```
CREATE TABLE "T_150_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_150_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 160° AmiataTabella: **T_160_amiata**

```
CREATE TABLE "T_160_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_160_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 180° AmiataTabella: **T_180_amiata**

```
CREATE TABLE "T_180_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_180_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 200° AmiataTabella: **T_200_amiata**

```
CREATE TABLE "T_200_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_200_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 220° AmiataTabella: **T_220_amiata**

```
CREATE TABLE "T_220_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_220_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 240° AmiataTabella: **T_240_amiata**

```
CREATE TABLE "T_240_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_240_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 250° AmiataTabella: **T_250_amiata**

```
CREATE TABLE "T_250_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_250_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 260° AmiataTabella: **T_260_amiata**

```
REATE TABLE "T_260_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_260_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 280° AmiataTabella: **T_280_amiata**

```
RCREATE TABLE "T_280_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_280_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 300° AmiataTabella: **T_300_amiata**

```
CREATE TABLE "T_300_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_300_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 310° AmiataTabella: **T_310_amiata**

```
CREATE TABLE "T_310_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_310_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 320° AmiataTabella: **T_320_amiata**

```
CREATE TABLE "T_320_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_320_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 340° AmiataTabella: **T_340_amiata**

```
CREATE TABLE "T_340_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_340_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 350° AmiataTabella: **T_350_amiata**

```
CREATE TABLE "T_350_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_350_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```


Tema: Distribuzione della temperatura a quota 0Tabella: **T_0_SA_amiata**

```
CREATE TABLE "T_0_SA_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_0_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota 500Tabella: **T_500_SA_amiata**

```
CREATE TABLE "T_500_SA_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_500_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota 1000Tabella: **T_1000_SA_amiata**

```
CREATE TABLE "T_1000_SA_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_1000_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota 1500Tabella: **T_1500_SA_amiata**

```
CREATE TABLE "T_1500_SA_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_1500_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota 2000Tabella: **T_2000_SA_amiata**

```
CREATE TABLE "T_2000_SA_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_2000_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota 2500Tabella: **T_2500_SA_amiata**

```
CREATE TABLE "T_2500_SA_amiata"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_2500_amiata_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Top Serbatoio LarderelloTabella: **top_serbatoio_larderello**

```
CREATE TABLE top_serbatoio_larderello
(
  gid integer NOT NULL,
  "ID" integer,
  "CONTOUR" integer,
  the_geom geometry,
  CONSTRAINT top_serbatoio_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Affioramento Serbatoio LarderelloTabella: **aff_serb_larderello**

```
CREATE TABLE aff_serb_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "ET_ID" integer,
  the_geom geometry,
  CONSTRAINT aff_serb_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Area LarderelloTabella: **area_larderello**

```
CREATE TABLE area_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "Nome" character varying(50),
  area double precision,
  the_geom geometry,
  CONSTRAINT area_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Orizzonte K LarderelloTabella: **k_larderello**

```
CREATE TABLE k_larderello
(
  gid integer NOT NULL,
  "ID" integer,
  "CONTOUR" integer,
  the_geom geometry,
  CONSTRAINT k_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Pozzi LarderelloTabella: **pozzi_larderello**

```
CREATE TABLE pozzi_larderello
(
  gid integer NOT NULL,
  "DN" character varying(20),
  "POINT_X" double precision,
  "POINT_Y" double precision,
  "F4" character varying(50),
  sottoclust character varying(50),
  the_geom geometry,
  CONSTRAINT pozzi_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 150° LarderelloTabella: **T_150_new_larderello**

```
CREATE TABLE "T_150_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_150_new_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 175° LarderelloTabella: **T_175_new_larderello**

```
CREATE TABLE "T_175_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_175_new_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 200° LarderelloTabella: **T_200_new_larderello**

```
REATE TABLE "T_200_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_200_new_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 225° LarderelloTabella: **T_225_new_larderello**

```
CREATE TABLE "T_225_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT t_225_new_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 250° LarderelloTabella: **T_250_new_larderello**

```
CREATE TABLE "T_250_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_250_new_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isoterma 275° LarderelloTabella: **T_275_new_larderello**

```
CREATE TABLE "T_275_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT t_275_new_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```


Tema: Isoterma 300° LarderelloTabella: **T_300_new_larderello**

```
CREATE TABLE "T_300_new_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_300_new_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isobara 80 LarderelloTabella: **p_80_larderello**

```
CREATE TABLE p_80_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT p_80_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isobara 100 LarderelloTabella: **p_100_larderello**

```
CREATE TABLE p_100_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT p_100_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isobara 140 LarderelloTabella: **p_140_larderello**

```
CREATE TABLE p_140_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT p_140_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isobara 160 LarderelloTabella: **p_160_larderello**

```
REATE TABLE p_160_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT p_160_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Isobara 180 LarderelloTabella: **p_180_larderello**

```
CREATE TABLE p_180_larderello
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT p_180_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della pressione a quota -1000Tabella: **P_1000_SA_larderello**

```
CREATE TABLE "P_1000_SA_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "P_1000_SA_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della pressione a quota -2000Tabella: **P_2000_SA_larderello**

```
CREATE TABLE "P_2000_SA_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "P_2000_SA_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della pressione a quota -3000Tabella: **P_3000_SA_larderello**

```
CREATE TABLE "P_3000_SA_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "P" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "P_3000_SA_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota -1000Tabella: **T_1000_SA_larderello**

```
CREATE TABLE "T_1000_SA_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_1000_SA_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota -2000Tabella: **T_2000_SA_larderello**

```
CREATE TABLE "T_2000_SA_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_2000_SA_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Distribuzione della temperatura a quota -3000Tabella: **T_3000_SA_larderello**

```
CREATE TABLE "T_3000_SA_larderello"
(
  gid integer NOT NULL,
  "Id" integer,
  "T" integer,
  "Quota" integer,
  the_geom geometry,
  CONSTRAINT "T_3000_SA_larderello_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Base del FlyshTabella: **base_flysh_larderello**

```
CREATE TABLE base_flysch_larderello
(
  gid integer NOT NULL,
  "ID" integer,
  "CONTOUR" integer,
  the_geom geometry,
  CONSTRAINT base_flysch_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Larderello-TravaleTabella: **larderello_travale**

```
CREATE TABLE larderello_travale
(
  gid integer NOT NULL,
  "Id" integer,
  nome character varying(50),
  the_geom geometry,
  CONSTRAINT larderello_travale_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Aree geotermicheTabella: **aree_geotermiche**

```
CREATE TABLE aree_geotermiche
(
  gid integer NOT NULL,
  "DENOM" character varying(50),
  "Kmq" double precision,
  conc_geot character varying(50),
  the_geom geometry,
  CONSTRAINT aree_geotermiche_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Flusso di caloreTabella: **flusso_calore**

```
CREATE TABLE flusso_calore
(
  gid integer NOT NULL,
  codice integer,
  valore integer,
  "ET_ID" integer,
  the_geom geometry,
  CONSTRAINT flusso_calore_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Gradiente geotermicoTabella: **gradiente_geotermico**

```
CREATE TABLE gradiente_geotermico
(
  gid integer NOT NULL,
  valore integer,
  codice integer,
  the_geom geometry,
  CONSTRAINT gradiente_geotermico_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'LINESTRING'::text OR
the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```


Strato: DATI GEOCHIMICI**Tema: Geochimica generale: sorgenti, Progetto mac-geo validati**Tabella: **GEOCH_Mac_Geo_S**

```
CREATE TABLE "GEOCH_Mac_Geo_S"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_SG" character varying(9),
  "NOME_MANIF" character varying(26),
  "COMUNE" character varying(22),
  "CLASSE" character varying(22),
  "TIPO" character varying(23),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(21),
  "FID_ART" integer,
  "ZONA" character varying(7),
  "QUOTA__M_" integer,
  "GB_E" integer,
  "GB_N" integer,
  "CAPTAZIONE" character varying(12),
  "LIV__FREAT" character varying(18),
  "T__øC_" double precision,
  "PH" double precision,
  "CND__æS_CM" double precision,
  "TDS" double precision,
  "CA2__MG_L_" double precision,
  "MG2__MG_L_" double precision,
  "NA__MG_L_" double precision,
  "K__MG_L_" double precision,
  "NH4__MG_L_" double precision,
  "HCO3__MG" double precision,
  "HS__MG_L_" double precision,
  "SO4_2__M" double precision,
  "CL__MG_L_" double precision,
  "F__MG_L_" double precision,
  "BR__MG_L_" double precision,
  "NO3__MG" double precision,
  "H3BO3__MG_" double precision,
  "AL_TOTAL__" double precision,
  "AS__æG_L_" character varying(8),
  "BA__æG_L_" double precision,
  "BE__æG_L_" double precision,
  "CD__æG_L_" double precision,
  "CO__æG_L_" double precision,
  "CR__æG_L_" double precision,
  "CS__æG_L_" double precision,
  "CU__æG_L_" double precision,
  "FE__æG_L_" double precision,
  "HG__æG_L_" double precision,
  "LI__æG_L_" double precision,
  "MN__æG_L_" double precision,
```

```

"MO_æG_L_" double precision,
"NI_æG_L_" double precision,
"P_æG_L_" double precision,
"PB_æG_L_" double precision,
"RB_æG_L_" double precision,
"SB_æG_L_" character varying(7),
"SC_æG_L_" double precision,
"SE_æG_L_" double precision,
"SI_æG_L_" double precision,
"SR_æG_L_" double precision,
"TL_æG_L_" double precision,
"U_æG_L_" double precision,
"V_æG_L_" double precision,
"W_æG_L_" double precision,
"ZN_æG_L_" double precision,
"C6H14_æG_" character varying(9),
"C6H6_æG_L" double precision,
"C7H8_æG_L" double precision,
"C8H8_æG_L" character varying(9),
"C2HCL3_æG" character varying(10),
"CL2CCCL2_" character varying(12),
"FREE_CO2_" character varying(15),
"CO2_GAS_DI" character varying(19),
"N2_GAS_DIS" character varying(18),
"AR_GAS_DIS" character varying(18),
"CH4_GAS_DI" character varying(19),
"O2_GAS_DIS" character varying(18),
"HE_GAS_DIS" character varying(18),
"H2_GAS_DIS" character varying(18),
the_geom geometry,
CONSTRAINT "GEOCH_Mac-Geo_S_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)

```

Tema: Geochimica generale: sorgenti, bibliografia validatiTabella: **GEOCH_Biblio_S**

```

CREATE TABLE "GEOCH_Biblio_S"
(
gid integer NOT NULL,
"ID_GEN" character varying(9),
"ID_SG" character varying(9),
"NOME_MANIF" character varying(26),
"COMUNE" character varying(22),
"CLASSE" character varying(22),
"TIPO" character varying(20),
"DATA" character varying(10),
"FONTE_ANAL" character varying(28),
"FID_ART" integer,
"ZONA" character varying(13),
"QUOTA_M_" integer,
"GB_E" integer,
"GB_N" integer,
"T_øC_" double precision,
"PH" double precision,
"EH_MV_" character varying(8),
"CND_æS_CM" character varying(13),
"TDS" double precision,
"Q_MW_M2_" character varying(11),
"P_CO2_BAR" double precision,
"CA2_MG_L_" double precision,
"MG2_MG_L_" double precision,
"NA_MG_L_" double precision,
"K_MG_L_" double precision,
"NH4_MG_L_" character varying(10),
"HCO3_MG" double precision,
"SO4_2_M" double precision,
"CL_MG_L_" double precision,
"F_MG_L_" character varying(7),
"BR_MG_L_" character varying(8),
"NO3_MG" character varying(11),
"SIO2_MG_L_" double precision,
"H3BO3_MG_" character varying(12),
"AL_TOTAL_" character varying(11),
"AL_MONOMET" character varying(15),
"AS_æG_L_" character varying(8),
"BA_æG_L_" character varying(8),
"CS_æG_L_" character varying(8),
"FE_æG_L_" character varying(9),
"LI_æG_L_" character varying(9),
"RB_æG_L_" character varying(8),
"SB_æG_L_" character varying(7),
"SR_æG_L_" double precision,
"ZN_æG_L_" character varying(7),
"I_æG_L_" character varying(8),
"H2S_æG_L_" character varying(9),
"FREE_CO2_" character varying(15),
the_geom geometry,
CONSTRAINT "GEOCH_Biblio_S_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
\

```

**Tema: Geochimica generale: sorgenti, Dipartimento Scienze della Terra
validati**Tabella: **GEOCH_Arch_S**

```
CREATE TABLE "GEOCH_Arch_S"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_SG" character varying(9),
  "NOME_MANIF" character varying(24),
  "COMUNE" character varying(8),
  "CLASSE" character varying(16),
  "TIPO" character varying(20),
  "DATA" date,
  "FONTE_ANAL" character varying(28),
  "FID_ART" integer,
  "ZONA" character varying(13),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T_øC_" double precision,
  "PH" double precision,
  "CA2__MG_L" double precision,
  "MG2__MG_L" double precision,
  "NA__MG_L_" double precision,
  "K__MG_L_" double precision,
  "NH4__MG_L" double precision,
  "HCO3__MG" double precision,
  "SO4_2__M" double precision,
  "CL__MG_L_" double precision,
  "H3BO3__MG_" double precision,
  "LI_æG_L_" double precision,
  the_geom geometry,
  CONSTRAINT "GEOCH_Arch_S_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica generale: pozzi geotermici, bibliografia validatiTabella: **GEOCH_Biblio_PG**

```

CREATE TABLE "GEOCH_Biblio_PG"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(8),
  "ID_PG" character varying(7),
  "NOME_POZZO" character varying(19),
  "COMUNE" character varying(9),
  "CLASSE" character varying(19),
  "TIPO" character varying(28),
  "DATA" integer,
  "FONTE_ANAL" character varying(20),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "DEPTH__M_" character varying(11),
  "T__øC_" double precision,
  "PH" double precision,
  "CND__æS_CM" character varying(13),
  "TDS" character varying(8),
  "CA2__MG_L" character varying(9),
  "MG2__MG_L" character varying(10),
  "NA__MG_L_" character varying(12),
  "K__MG_L_" character varying(10),
  "NH4__MG_L" double precision,
  "HCO3__MG" double precision,
  "SO4_2__M" character varying(12),
  "CL__MG_L_" double precision,
  "F__MG_L_" character varying(7),
  "SIO2__MG_L" character varying(9),
  "H3BO3__MG_" double precision,
  "LI__æG_L_" character varying(9),
  "C2H6__æG_L" character varying(12),
  "C3H8__æG_L" character varying(12),
  "I_C4H10__æ" character varying(14),
  "N_C4H10__æ" character varying(15),
  "CO2__æMOL_" character varying(11),
  "H2S__æMOL_" character varying(12),
  "N2__æMOL_M" character varying(10),
  "CH4__æMOL_" character varying(11),
  "AR__æMOL_M" character varying(11),
  "O2__æMOL_M" character varying(10),
  "H2__æMOL_M" character varying(10),
  "HE__æMOL_M" character varying(11),
  "CO__æMOL_M" character varying(11),
  "AR__O2" character varying(7),
  "GAS_STEAM_" double precision,
  the_geom geometry,
  CONSTRAINT "GEOCH_Biblio_PG_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)

```

Tema: Geochimica generale: pozzi geotermici, Dipartimento Scienze della Terra validatiTabella: **GEOCH_ArchDST_PG**

```
CREATE TABLE "GEOCH_ArchDST_PG"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(8),
  "ID_PG" character varying(7),
  "NOME_POZZO" character varying(18),
  "COMUNE" character varying(9),
  "CLASSE" character varying(19),
  "TIPO" character varying(15),
  "DATA" date,
  "FONTE_ANAL" character varying(27),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T__øC_" double precision,
  "PH" double precision,
  "CA2__MG_L" double precision,
  "MG2__MG_L" double precision,
  "NA__MG_L_" double precision,
  "K__MG_L_" double precision,
  "NH4__MG_L" double precision,
  "HCO3__MG" double precision,
  "SO4_2__M" double precision,
  "CL__MG_L_" double precision,
  "H3BO3__MG_" double precision,
  the_geom geometry,
  CONSTRAINT "GEOCH_ArchDST_PG_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica generale: emissioni gassose, bibliografia validatiTabella: **GEOCH_Biblio_G**

```

CREATE TABLE "GEOCH_Biblio_G"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_GG" character varying(7),
  "NOME_GAS" character varying(22),
  "COMUNE" character varying(16),
  "CLASSE" character varying(8),
  "TIPO" character varying(36),
  "DATA" character varying(8),
  "FONTE_ANAL" character varying(20),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T__øC_" character varying(6),
  "PH" character varying(5),
  "TDS" character varying(8),
  "CA2__MG_L" character varying(12),
  "MG2__MG_L" character varying(12),
  "NA__MG_L_" character varying(11),
  "K__MG_L_" character varying(10),
  "NH4__MG_L" character varying(12),
  "HCO3__MG" character varying(13),
  "SO4_2__M" character varying(14),
  "CL__MG_L_" character varying(10),
  "F__MG_L_" character varying(10),
  "BR__MG_L_" character varying(10),
  "NO3__MG" character varying(13),
  "SIO2__MG_L" character varying(11),
  "H3BO3__MG_" character varying(13),
  "LI__æG_L_" character varying(9),
  "C2H6__æG_L" character varying(12),
  "C3H8__æG_L" character varying(11),
  "C4H10__æG_" character varying(12),
  "I_C4H8__æG" character varying(12),
  "FREE_CO2__" character varying(19),
  "CO2__æMOL_" double precision,
  "H2S__æMOL_" character varying(15),
  "N2__æMOL_M" double precision,
  "CH4__æMOL_" double precision,
  "AR__æMOL_M" character varying(14),
  "O2__æMOL_M" character varying(14),
  "NE__æMOL_M" character varying(15),
  "H2__æMOL_M" character varying(14),
  "HE__æMOL_M" character varying(15),
  "CO__æMOL_M" character varying(15),
  "RN__BL_L_" character varying(9),
  "AR__O2__æ" double precision,
  the_geom geometry,
  CONSTRAINT "GEOCH_Biblio_G_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)

```

Tema: Geochimica generale: emissioni gassose, Dipartimento Scienze della Terra validati

Tabella: **GEOCH_ArchDST_G**

```
CREATE TABLE "GEOCH_ArchDST_G"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_GG" character varying(7),
  "NOME_GAS" character varying(16),
  "COMUNE" character varying(8),
  "CLASSE" character varying(8),
  "TIPO" character varying(5),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(28),
  "FID_ART" character varying(9),
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T__øC_" double precision,
  "PH" character varying(5),
  "CA2__MG_L" character varying(12),
  "MG2__MG_L" character varying(12),
  "NA__MG_L_" character varying(11),
  "K__MG_L_" character varying(10),
  "NH4__MG_L" character varying(12),
  "HCO3__MG" character varying(13),
  "SO4_2__M" character varying(14),
  "CL__MG_L_" character varying(10),
  "H3BO3__MG_" character varying(13),
  "LI__æG_L_" character varying(9),
  "C6H6__æG_L" double precision,
  "C7H8__æG_L" character varying(11),
  "C2H6__æG_L" double precision,
  "C3H8__æG_L" double precision,
  "C3H6__æG_L" character varying(11),
  "I_C4H10__æ" double precision,
  "N_C4H10__æ" double precision,
  "I_C4H8__æG" double precision,
  "T_2_C4H8" double precision,
  "C_2_C4H8" double precision,
  "I_C5H12" double precision,
  "N_C5H12" double precision,
  "2_3_DIMETI" character varying(16),
  "I_C6H14" double precision,
  "C5H8" character varying(8),
  "I_C7H16" character varying(8),
  "N_C6H14" character varying(8),
  "I_C8H18" character varying(8),
  "METIL_CICL" character varying(15),
  "N_C7H16" character varying(7),
  "DIMETIL_S" character varying(9),
  "N_C8H18" character varying(8),
  "N_C9H20" character varying(8),
```



```
"C4H4O" character varying(6),
"C4H4S" character varying(8),
"C5H6O" character varying(8),
"ETIL_C6H6" character varying(8),
"C5H6S" character varying(8),
"M_P_C8H10" character varying(10),
"CO2__æMOL_" double precision,
"HCL__æMOL_" character varying(15),
"HF__æMOL_M" character varying(15),
"SO2__æMOL_" character varying(15),
"H2S__æMOL_" double precision,
"S__æMOL_MO" double precision,
"H2O__æMOL_" double precision,
"N2__æMOL_M" double precision,
"CH4__æMOL_" double precision,
"AR__æMOL_M" double precision,
"O2__æMOL_M" double precision,
"NE__æMOL_M" double precision,
"H2__æMOL_M" double precision,
"HE__æMOL_M" double precision,
"CO__æMOL_M" double precision,
the_geom geometry,
CONSTRAINT "GEOCH_ArchDST_G_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica generale: sorgentiTabella: **DB_Sorgenti_Geochimica**

```
CREATE TABLE "DB_Sorgenti_Geochimica"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_SG" character varying(9),
  "NOME_MANIF" character varying(26),
  "COMUNE" character varying(22),
  "CLASSE" character varying(22),
  "TIPO" character varying(20),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(28),
  "FID_ART" integer,
  "ZONA" character varying(13),
  "QUOTA__M_" integer,
  "GB_E" integer,
  "GB_N" integer,
  "CAPTAZIONE" character varying(12),
  "LIV__FREAT" character varying(18),
  "T__øC_" double precision,
  "PH" double precision,
  "EH__MV_" character varying(8),
  "CND__æS_CM" character varying(13),
  "TDS" double precision,
  "Q__MW_M2_" character varying(11),
  "P_CO2__BAR" double precision,
  "CA2__MG_L_" double precision,
  "MG2__MG_L_" double precision,
  "NA__MG_L_" double precision,
  "K__MG_L_" double precision,
  "NH4__MG_L_" character varying(10),
  "HCO3__MG" double precision,
  "HS__MG_L_" character varying(8),
  "SO4_2__M" double precision,
  "CL__MG_L_" double precision,
  "F__MG_L_" character varying(7),
  "BR__MG_L_" character varying(8),
  "NO3__MG" character varying(11),
  "SIO2__MG_L_" double precision,
  "H3BO3__MG_" character varying(12),
  "AL_TOTAL__" character varying(11),
  "AL_MONOMET" character varying(15),
  "AS__æG_L_" character varying(8),
  "BA__æG_L_" character varying(8),
  "BE__æG_L_" character varying(8),
  "CD__æG_L_" character varying(8),
  "CO__æG_L_" character varying(8),
  "CR__æG_L_" character varying(7),
  "CS__æG_L_" character varying(8),
  "CU__æG_L_" character varying(8),
  "FE__æG_L_" character varying(9),
  "HG__æG_L_" character varying(7),
```

```

"LI_æG_L_" character varying(9),
"MN_æG_L_" character varying(8),
"MO_æG_L_" character varying(7),
"NI_æG_L_" character varying(7),
"P_æG_L_" character varying(8),
"PB_æG_L_" character varying(7),
"RB_æG_L_" character varying(8),
"SB_æG_L_" character varying(7),
"SC_æG_L_" character varying(7),
"SE_æG_L_" character varying(7),
"SI_æG_L_" character varying(9),
"SR_æG_L_" double precision,
"TL_æG_L_" character varying(7),
"U_æG_L_" character varying(7),
"V_æG_L_" character varying(7),
"W_æG_L_" character varying(7),
"ZN_æG_L_" character varying(7),
"I_æG_L_" character varying(8),
"H2S_æG_L_" character varying(9),
"C6H14_æG_" character varying(9),
"C6H6_æG_L" character varying(9),
"C7H8_æG_L" character varying(9),
"C8H8_æG_L" character varying(9),
"C2HCL3_æG" character varying(10),
"CL2CCCL2_" character varying(12),
"FREE_CO2_" character varying(15),
"CO2_GAS_DI" character varying(19),
"N2_GAS_DIS" character varying(18),
"AR_GAS_DIS" character varying(18),
"CH4_GAS_DI" character varying(19),
"O2_GAS_DIS" character varying(18),
"HE_GAS_DIS" character varying(18),
"H2_GAS_DIS" character varying(18),
the_geom geometry,
CONSTRAINT "DB_Sorgenti_Geochemica_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)

```

Tema: Geochimica generale: pozzi geotermiciTabella: **DB_Poz_Geot_Geochimica**

```

CREATE TABLE "DB_Poz_Geot_Geochimica"
(
gid integer NOT NULL,
"ID_GEN" character varying(8),
"ID_PG" character varying(7),
"NOME_POZZO" character varying(18),
"COMUNE" character varying(9),
"CLASSE" character varying(19),
"TIPO" character varying(28),
"DATA" integer,
"FONTE_ANAL" character varying(27),
"FID_ART" integer,
"ZONA" character varying(11),
"QUOTA__M_" character varying(11),
"GB_E" integer,
"GB_N" integer,
"DEPTH__M_" character varying(11),
"T__øC_" double precision,
"PH" double precision,
"CND__æS_CM" character varying(13),
"TDS" character varying(8),
"CA2__MG_L" character varying(9),
"MG2__MG_L" character varying(10),
"NA__MG_L_" character varying(12),
"K__MG_L_" character varying(10),
"NH4__MG_L" double precision,
"HCO3__MG" double precision,
"SO4_2__M" character varying(12),
"CL__MG_L_" double precision,
"F__MG_L_" character varying(7),
"SIO2__MG_L" character varying(9),
"H3BO3__MG_" double precision,
"LI__æG_L_" character varying(9),
"C2H6__æG_L" character varying(12),
"C3H8__æG_L" character varying(12),
"I_C4H10__æ" character varying(14),
"N_C4H10__æ" character varying(15),
"CO2__æMOL_" character varying(11),
"H2S__æMOL_" character varying(12),
"N2__æMOL_M" character varying(10),
"CH4__æMOL_" character varying(11),
"AR__æMOL_M" character varying(11),
"O2__æMOL_M" character varying(10),
"H2__æMOL_M" character varying(10),
"HE__æMOL_M" character varying(11),
"CO__æMOL_M" character varying(11),
"AR__O2" character varying(7),
"GAS_STEAM_" double precision,
the_geom geometry,
CONSTRAINT "DB_Poz_Geot_Geochimica_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)

```

Tema: Geochimica generale: emissioni gassoseTabella: **DB_Gas_Geochimica**

```
CREATE TABLE "DB_Gas_Geochimica"
(
gid integer NOT NULL,
"ID_GEN" character varying(9),
"ID_GG" character varying(7),
"NOME_GAS" character varying(22),
"COMUNE" character varying(16),
"CLASSE" character varying(8),
"TIPO" character varying(36),
"DATA" character varying(10),
"FONTE_ANAL" character varying(28),
"FID_ART" integer,
"ZONA" character varying(11),
"QUOTA__M_" character varying(11),
"GB_E" integer,
"GB_N" integer,
"T_øC_" double precision,
"PH" character varying(5),
"TDS" character varying(8),
"CA2__MG_L" character varying(12),
"MG2__MG_L" character varying(12),
"NA__MG_L_" character varying(11),
"K__MG_L_" character varying(10),
"NH4__MG_L" character varying(12),
"HCO3__MG" character varying(13),
"SO4_2__M" character varying(14),
"CL__MG_L_" character varying(10),
"F__MG_L_" character varying(10),
"BR__MG_L_" character varying(10),
"NO3__MG" character varying(13),
"SIO2__MG_L" character varying(11),
"H3BO3__MG_" character varying(13),
"LI_æG_L_" character varying(9),
"C6H6_æG_L" character varying(11),
"C7H8_æG_L" character varying(11),
"C2H6_æG_L" double precision,
"C3H8_æG_L" character varying(11),
"C3H6_æG_L" character varying(11),
"C4H10_æG_" character varying(12),
"I_C4H10_æ" character varying(13),
"N_C4H10_æ" character varying(14),
"I_C4H8_æG" character varying(12),
"T_2_C4H8" character varying(8),
"C_2_C4H8" character varying(8),
"I_C5H12" character varying(8),
"N_C5H12" character varying(8),
"2_3_DIMETI" character varying(16),
"I_C6H14" character varying(8),
"C5H8" character varying(8),
"I_C7H16" character varying(8),
"N_C6H14" character varying(8),
```

```

"I_C8H18" character varying(8),
"METIL_CICL" character varying(15),
"N_C7H16" character varying(7),
"DIMETIL_S" character varying(9),
"N_C8H18" character varying(8),
"N_C9H20" character varying(8),
"C4H4O" character varying(6),
"C4H4S" character varying(8),
"C5H6O" character varying(8),
"ETIL_C6H6" character varying(8),
"C5H6S" character varying(8),
"M_P_C8H10" character varying(10),
"FREE_CO2__" character varying(19),
"CO2__æMOL_" double precision,
"HCL__æMOL_" character varying(15),
"HF__æMOL_M" character varying(15),
"SO2__æMOL_" character varying(15),
"H2S__æMOL_" double precision,
"S__æMOL_MO" character varying(13),
"H2O__æMOL_" character varying(16),
"N2__æMOL_M" double precision,
"CH4__æMOL_" double precision,
"AR__æMOL_M" double precision,
"O2__æMOL_M" double precision,
"NE__æMOL_M" double precision,
"H2__æMOL_M" double precision,
"HE__æMOL_M" double precision,
"CO__æMOL_M" double precision,
"RN__BL_L_" character varying(9),
"AR__O2__æ" character varying(19),
the_geom geometry,
CONSTRAINT "DB_Gas_Geochemica_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)

```

Tema: Geochimica isotopica: sorgenti, Progetto mac-geo validatiTabella: **ISOT_Mac_Geo_S**

```
CREATE TABLE "ISOT_Mac_Geo_S"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(10),
  "ID_SI" character varying(8),
  "NOME" character varying(26),
  "COMUNE" character varying(22),
  "TIPO" character varying(21),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(21),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" integer,
  "GB_E" integer,
  "GB_N" integer,
  "CAPTAZIONE" character varying(12),
  "LIV__FREAT" double precision,
  "T__øC_" double precision,
  "PH" double precision,
  "CND__æS_CM" double precision,
  "TDS" double precision,
  "2H_¼__V_S" double precision,
  "18O_¼__V_" double precision,
  "13CDIC_¼_" double precision,
  "13C_CO2" character varying(8),
  the_geom geometry,
  CONSTRAINT "ISOT_Mac-Geo_S_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica isotopica: sorgenti, bibliografia validatiTabella: **ISOT_Biblio_S**

```
CREATE TABLE "ISOT_Biblio_S"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_SI" character varying(9),
  "NOME" character varying(26),
  "COMUNE" character varying(22),
  "TIPO" character varying(21),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(21),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T__øC_" character varying(6),
  "PH" character varying(4),
  "EH__MV_" character varying(7),
  "CND__æS_CM" character varying(13),
  "TDS" character varying(14),
  "Q__MW_M2_" character varying(11),
  "P_CO2__BAR" character varying(11),
  "2H_¼__V_S" double precision,
  "18O_¼__V_" double precision,
  "13CDIC_¼_" character varying(21),
  the_geom geometry,
  CONSTRAINT "ISOT_Biblio_S_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```


Tema: Geochimica isotopica: pozzi geotermici, bibliografia validatiTabella: **ISOT_Biblio_PG**

```
CREATE TABLE "ISOT_Biblio_PG"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_GI" character varying(9),
  "NOME" character varying(15),
  "COMUNE" character varying(8),
  "TIPO" character varying(15),
  "DATA" date,
  "FONTE_ANAL" character varying(20),
  "FID_ART" integer,
  "ZONA" character varying(13),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T__øC_" integer,
  "18O__¼__V_" character varying(18),
  "18O__CO2" character varying(10),
  "13C__CH4" integer,
  "13C_CO2" integer,
  "3HE_4HE__R" character varying(15),
  "3HE_4HE__H" character varying(17),
  "2H_CH4" character varying(9),
  the_geom geometry,
  CONSTRAINT "ISOT_Biblio_PG_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica isotopica: emissioni gassose, bibliografia validatiTabella: **ISOT_Biblio_G**

```
CREATE TABLE "ISOT_Biblio_G"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_GI" character varying(9),
  "NOME" character varying(20),
  "COMUNE" character varying(16),
  "TIPO" character varying(21),
  "DATA" character varying(6),
  "FONTE_ANAL" character varying(18),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" integer,
  "GB_E" integer,
  "GB_N" integer,
  "T__øC_" integer,
  "13C__CH4" character varying(21),
  "13C_CO2" integer,
  "15N_N2" character varying(9),
  "3HE_4HE__R" integer,
  "3HE_4HE_HE" character varying(15),
  "40AR_36AR" integer,
  the_geom geometry,
  CONSTRAINT "ISOT_Biblio_G_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica isotopica: sorgentiTabella: **DB_Sorgenti_Isotopi**

```
CREATE TABLE "DB_Sorgenti_Isotopi"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_SI" character varying(9),
  "NOME_MANIF" character varying(26),
  "COMUNE" character varying(22),
  "CLASSE" character varying(22),
  "TIPO" character varying(21),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(21),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "CAPTAZIONE" character varying(12),
  "LIV__FREAT" character varying(18),
  "T__øC_" double precision,
  "PH" double precision,
  "EH__MV_" character varying(7),
  "CND__æS_CM" character varying(13),
  "TDS" double precision,
  "Q__MW_M2_" character varying(11),
  "P_CO2__BAR" double precision,
  "2H_¼__V_S" double precision,
  "18O_¼__V_" double precision,
  "13CDIC_¼_" character varying(21),
  "13C_CO2" character varying(8),
  the_geom geometry,
  CONSTRAINT "DB_Sorgenti_Isotopi_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica isotopica: pozzi geotermiciTabella: **DB_Poz_Geot_Isotopi**

```
CREATE TABLE "DB_Poz_Geot_Isotopi"
(
gid integer NOT NULL,
"ID_GEN" character varying(9),
"ID_GI" character varying(9),
"NOME_POZZO" character varying(18),
"COMUNE" character varying(8),
"CLASSE" character varying(19),
"TIPO" character varying(28),
"DATA" date,
"FONTE_ANAL" character varying(20),
"FID_ART" integer,
"ZONA" character varying(13),
"QUOTA_M_" character varying(11),
"GB_E" integer,
"GB_N" integer,
"T_øC_" integer,
"18O_¼_V_" character varying(18),
"18O__CO2" character varying(10),
"13C__CH4" integer,
"13C_CO2" integer,
"3HE_4HE__R" character varying(17),
"3HE_4HE__H" character varying(17),
"2H_CH4" character varying(8),
the_geom geometry,
CONSTRAINT "DB_Poz_Geot_Isotopi_pkey" PRIMARY KEY (gid),
CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS
NULL),
CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Geochimica isotopica: emissioni gassoseTabella: **DB_Gas_Isotopi**

```
CREATE TABLE "DB_Gas_Isotopi"
(
  gid integer NOT NULL,
  "ID_GEN" character varying(9),
  "ID_GI" character varying(9),
  "NOME_GAS" character varying(20),
  "COMUNE" character varying(16),
  "CLASSE" character varying(16),
  "TIPO" character varying(21),
  "DATA" character varying(10),
  "FONTE_ANAL" character varying(22),
  "FID_ART" integer,
  "ZONA" character varying(11),
  "QUOTA__M_" character varying(11),
  "GB_E" integer,
  "GB_N" integer,
  "T_øC_" character varying(9),
  "13C__CH4" character varying(21),
  "13C_CO2" integer,
  "15N_N2" character varying(9),
  "3HE_4HE__R" integer,
  "3HE_4HE_HE" character varying(15),
  "40AR_36AR" character varying(9),
  the_geom geometry,
  CONSTRAINT "DB_Gas_Isotopi_pkey" PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Strato: DATI IDROGEOLOGICI**Tema: Stazioni meteo di Larderello**Tabella: **stazioni_meteorologiche_larderello**

```
CREATE TABLE stazioni_meteorologiche_larderello
(
  gid integer NOT NULL,
  "ID_L" character varying(7),
  "ID_LAMMA" integer,
  "ID_IDROPIS" integer,
  "ID_ARSIA" character varying(10),
  "NOME_STAZI" character varying(34),
  "FORNITORE" character varying(24),
  "ARCHIVIO" character varying(11),
  "ZONA" character varying(11),
  "QUOTA" double precision,
  "LAT_GEOGR" double precision,
  "LONG_GEOGR" double precision,
  "LAT_UTM" integer,
  "LONG_UTM" integer,
  "GB_E" integer,
  "GB_N" integer,
  the_geom geometry,
  CONSTRAINT stazioni_meteorologiche_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Stazioni meteo dell'AmiataTabella: **stazioni_meteorologiche_amiata**

```
CREATE TABLE stazioni_meteorologiche_amiata
(
  gid integer NOT NULL,
  "ID_A" character varying(8),
  "ID_LAMMA" integer,
  "ID_ARSIA" character varying(10),
  "ID_IDROPIS" character varying(13),
  "COD_STAZ_F" character varying(15),
  "NOME_STAZI" character varying(26),
  "FORNITORE" character varying(29),
  "ARCHIVIO" character varying(11),
  "ZONA" character varying(7),
  "QUOTA" double precision,
  "GB_E" integer,
  "GB_N" integer,
  the_geom geometry,
  CONSTRAINT stazioni_meteorologiche_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Sorgenti dell'AmiataTabella: **sorgenti_amiata**

```
CREATE TABLE sorgenti_amiata
(
  gid integer NOT NULL,
  "CODICE_SOR" double precision,
  "FID_SIENA" double precision,
  "ID_macgeo" character varying(254),
  "NOME_SORGE" character varying(254),
  "FORNITORE" character varying(254),
  "COMUNE" character varying(254),
  "TIPO" character varying(254),
  "PROV" character varying(254),
  "SUB_BACINO" character varying(254),
  "GB_E" double precision,
  "GB_N" double precision,
  "CAPTAZ_" character varying(254),
  "QUOTA" double precision,
  the_geom geometry,
  CONSTRAINT sorgenti_amiata_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Sorgenti Larderello e dati portataTabella: **sorgenti_q_larderello**

```
CREATE TABLE sorgenti_q_larderello
(
  gid integer NOT NULL,
  "ID_macgeo" character varying(254),
  "ID" double precision,
  "NUMERAZION" double precision,
  "NOME_SORGE" character varying(254),
  "GB_E" double precision,
  "GB_N" double precision,
  "FONTE" character varying(254),
  "TIPOLOGIA" character varying(254),
  "Q__L_min_" double precision,
  "Q_censimen" double precision,
  the_geom geometry,
  CONSTRAINT sorgenti_q_larderello_pkey PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Time tableTabella: **time_table**

```
CREATE TABLE time_table
(
  id_time_table serial NOT NULL,
  mese character varying(10),
  anno integer,
  CONSTRAINT time_table_pkey PRIMARY KEY (id_time_table)
)
```

Tema: Dati meteo tabellari AmiataTabella: **dati_staz_amiata_aggregati**

```
CREATE TABLE dati_staz_amiata_aggregati
(
  id_a character varying(7) NOT NULL,
  id_time_table integer NOT NULL,
  pluviometria double precision,
  temperature double precision,
  neve double precision,
  manto_nevoso double precision,
  ricostruito_p integer,
  ricostruito_t integer,
  CONSTRAINT pk_dati_aggregati_amiata PRIMARY KEY (id_a, id_time_table),
  CONSTRAINT fk_datistaz_timetable FOREIGN KEY (id_time_table)
    REFERENCES time_table (id_time_table) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT rrr FOREIGN KEY (id_a)
    REFERENCES stazioni_meteorologiche_amiata ("ID_A") MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```


Tema: Dati meteo tabellari LarderelloTabella: **dati_staz_larderello_aggregati**

```
CREATE TABLE dati_staz_larderello_aggregati
(
  id_l character varying(7) NOT NULL,
  id_time_table integer NOT NULL,
  pluviometria double precision,
  temperature double precision,
  ricostruito_p integer,
  ricostruito_t integer,
  CONSTRAINT pk_dati_aggregati_larderello PRIMARY KEY (id_l, id_time_table),
  CONSTRAINT fk_datistazl_timetable FOREIGN KEY (id_time_table)
    REFERENCES time_table (id_time_table) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_larderello_staz_aggregati FOREIGN KEY (id_l)
    REFERENCES stazioni_meteorologiche_larderello ("ID_L") MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Valori di portata dell' AmiataTabella: **dati_sorgenti_amiata_aggregati**

```
CREATE TABLE dati_sorgenti_amiata_aggregati
(
  id_macgeo character varying(7) NOT NULL,
  id_time_table integer NOT NULL,
  portata double precision,
  ricostruito_q integer,
  CONSTRAINT pkdatisorgamiaaggr PRIMARY KEY (id_macgeo, id_time_table),
  CONSTRAINT fk_datiagramiasorg_timetable FOREIGN KEY (id_time_table)
    REFERENCES time_table (id_time_table) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_sorgamiata_datiaggr FOREIGN KEY (id_macgeo)
    REFERENCES sorgenti_amiata ("ID_macgeo") MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Strato: CARATTERIZZAZIONE DEL TERRITORIO**Tema: Limiti amministrativi comunali**Tabella: **comuni_pol**

```
CREATE TABLE comuni_pol
(
  gid integer NOT NULL,
  dn character varying(254),
  the_geom geometry,
  CONSTRAINT comuni_pol_pkey1 PRIMARY KEY (gid),
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

DB MODELLO DI SIMULAZIONE GEOTERMICA I-TOUGH2

Strato: SIMULAZIONI

Tema: Simulazioni

Tabella: **simulazioni**

```
CREATE TABLE simulazioni
(
  id_simulazione integer NOT NULL DEFAULT nextval('simulazione_id_simulazione_seq'::regclass),
  data date,
  ora timestamp without time zone,
  descrizione text,
  id_modulo_eos integer,
  id_dominio integer,
  nome character varying(50),
  id_scenario integer,
  CONSTRAINT pk_simulazione PRIMARY KEY (id_simulazione),
  CONSTRAINT fk_moduli_eos_simulazioni FOREIGN KEY (id_modulo_eos)
    REFERENCES moduli_eos (id_modulo_eos) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_scenari_simulazioni FOREIGN KEY (id_scenario)
    REFERENCES scenari (id_scenario) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Moduli eos

Tabella: **moduli_eos**

```
CREATE TABLE moduli_eos
(
  id_modulo_eos integer NOT NULL DEFAULT nextval('moduli_eos_id_seq'::regclass),
  modulo_eos character varying,
  CONSTRAINT pk_moduli_eos PRIMARY KEY (id_modulo_eos)
)
```

Tema: ScenariTabella: **Scenari**

```
CREATE TABLE scenari
(
  id_scenario serial NOT NULL,
  id_dominio integer,
  nome character varying(50),
  descrizione character varying,
  caratteristiche text,
  CONSTRAINT pk_scenari PRIMARY KEY (id_scenario),
  CONSTRAINT fk_scenari_domini FOREIGN KEY (id_dominio)
    REFERENCES domini (id_dominio) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: DominiTabella: **domini**

```
CREATE TABLE domini
(
  id_dominio serial NOT NULL,
  nome character varying(100) NOT NULL,
  lat_min double precision,
  lat_max double precision,
  long_min double precision,
  long_max double precision,
  CONSTRAINT pk_domini PRIMARY KEY (id_dominio)
)
```

Strato: PARAMETRI DI INPUT DEL MODELLO DI SIMULAZIONE**Tema: Parametri variabili**Tabella: **param**

```
CREATE TABLE param
(
  id_param serial NOT NULL,
  id_simulazione bigint,
  opzioni text, -- Blocco testo Opzioni di calcolo del modello
  x1 double precision, -- Parametro variabile 1
  x2 double precision, -- Parametro variabile 2
  x3 double precision, -- Parametro variabile 3
  x4 double precision, -- Parametro variabile 4
  comb_cond_ini_descr text, -- Combinazione delle variabili delle condizioni iniziali
  CONSTRAINT pk_param PRIMARY KEY (id_param),
  CONSTRAINT fk_param_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: InconTabella: **incon**

```
CREATE TABLE incon
(
  el_en character varying(10), -- Nome del blocco
  nseq integer,
  nadd integer, -- Coefficiente funzionale al modello
  porx integer,
  x1 double precision, -- Parametro variabile 1
  x2 double precision, -- Parametro variabile 2
  x3 double precision, -- Parametro variabile 3
  x4 double precision, -- Parametro variabile 4
  id_incon serial NOT NULL,
  id_simulazione bigint,
  dati_originali text,
  comb_cond_ini_descr text, -- Descrizione combinazione delle variabili delle condizioni iniziali
  CONSTRAINT pk_incon PRIMARY KEY (id_incon),
  CONSTRAINT fk_incon_simulazione FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Caratteristiche dei materiali rocciosiTabella: **rocks**

```

CREATE TABLE rocks
(
  id_simulazione bigint NOT NULL,
  mat character varying(5) NOT NULL, -- Nome identificativo del materiale
  dati_originali text,
  nad double precision, -- coefficiente funzionale al modello
  drok double precision, -- Densita Kg/m3
  por double precision, -- Porosita
  per1 double precision, -- Permeabilita prima direzione
  per2 double precision, -- Permeabilita seconda direzione
  per3 double precision, -- Permeabilita terza direzione
  cwet double precision, -- Conducibilita termica (W/m °C)
  spht double precision, -- Calore specifico (J/Kg °C)
  com double precision, -- Comprimibilita dei pori (1/Pa)
  expan double precision, -- Espansibilita dei pori (1/°C)
  cdry double precision, -- Conducibilita termica in condizioni non sature (W/m * °C)
  tortx double precision, -- Fattore di tortuosita per la diffusione binaria
  gk double precision, -- Parametro di Klinkenberg
  xkd3 double precision, -- Coefficiente di distribuzione dell'isotopo genitore (m3 * 1/Kg)
  xkd4 double precision, -- Coefficiente di distribuzione dell'isotopo figlio (m3 * 1/Kg)
  irp integer, -- Coefficiente per la funzione di permeabilita relativa
  rp1 double precision, -- coefficiente 1
  rp2 double precision, -- coefficiente 2
  rp3 double precision, -- Coefficiente 3
  rp4 double precision, -- Coefficiente 4
  rp5 double precision, -- Coefficiente
  rp6 double precision, -- Coefficiente 6
  rp7 double precision, -- Coefficiente 7
  icp integer, -- Coefficiente per la scelta della funzione di capillarita
  cp1 double precision, -- coefficiente 1
  cp2 double precision, -- coefficiente 2
  cp3 double precision, -- coefficiente 3
  cp4 double precision, -- coefficiente 4
  cp5 double precision, -- coefficiente 5
  cp6 double precision, -- coefficiente 6
  cp7 double precision, -- coefficiente 7
  CONSTRAINT pk_rocks PRIMARY KEY (id_simulazione, mat),
  CONSTRAINT fk_rocks_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)

```

Tema: Parametri Tough 2Tabella: **parametri_tough2**

```

CREATE TABLE parametri_tough2
(
  id_parametro_tough2 serial NOT NULL,
  id_simulazione integer,
  dati_gen bytea,
  dati_inp bytea,
  dati_mes bytea,
  dati_ini bytea,
  CONSTRAINT pk_parametri_tough2 PRIMARY KEY (id_parametro_tough2),
  CONSTRAINT fk_param_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)

```

Tema: GenerTabella: **gener**

```
CREATE TABLE gener
(
  id_gener serial NOT NULL,
  id_simulazione bigint,
  el_ne character varying(5),
  sl_ns character varying(5),
  nseq integer, -- Coefficienti funzionali al modello
  nadd integer, -- Coefficiente funzionale al modello
  nads integer, -- Coefficiente funzionale al modello
  ltab integer, -- Coefficiente funzionale al modello
  "type" character varying, -- Codice per discriminare il tipo di sorgente
  itab character varying(1), -- Coefficiente funzionale al modello
  gx double precision, -- Tasso di generazione costante
  ex double precision, -- Parametro variabile necessario al modello
  hx double precision, -- Spessore dello strato (m)
  f1 double precision, -- Parametri aggiuntivi funzionali al modello
  f2 double precision, -- Parametro aggiuntivo funzionale al modello 2
  f3 double precision, -- Parametro aggiuntivo funzionale al modello 3
  blocco text,
  CONSTRAINT pk_gener PRIMARY KEY (id_gener),
  CONSTRAINT fk_gener_simulazione FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: RpcapTabella: **rpcap**

```
CREATE TABLE rpcap
(
  id_rpcap integer NOT NULL DEFAULT nextval('RPCAP_id_rpcap_seq'::regclass),
  id_simulazione bigint,
  dati_originali character varying,
  irp integer, -- Coefficiente per la funzione di permeabilità relativa
  rp1 double precision, -- coefficiente 1
  rp2 double precision, -- coefficiente 2
  rp3 double precision, -- Coefficiente 3
  rp4 double precision, -- Coefficiente 4
  rp5 double precision, -- Coefficiente
  rp6 double precision, -- Coefficiente 6
  rp7 double precision, -- Coefficiente 7
  icp integer, -- Coefficiente per la scelta della funzione di capillarità
  cp1 double precision, -- coefficiente 1
  cp2 double precision, -- coefficiente 2
  cp3 double precision, -- coefficiente 3
  cp4 double precision, -- coefficiente 4
  cp5 double precision, -- coefficiente 5
  cp6 double precision, -- coefficiente 6
  cp7 double precision, -- coefficiente 7
  CONSTRAINT pk_rpcap PRIMARY KEY (id_rpcap),
  CONSTRAINT fk_rpcap_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: IndomTabella: **indom**

```
CREATE TABLE indom
(
  id_simulazione bigint NOT NULL,
  mat character varying(5), -- nome materiale
  id_indom serial NOT NULL,
  dati originali text,
  x1 double precision, -- parametro variabile 1
  x2 double precision, -- parametro variabile 2
  x3 double precision, -- parametro variabile 3
  x4 double precision, -- parametro variabile 4
  comb_cond_ini_descr text, -- Combinazioni delle variabili delle condizioni iniziali
  CONSTRAINT pk_indom PRIMARY KEY (id_indom),
  CONSTRAINT fk_indom_simulazione FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Strato: PARAMETRI DI OUTPUT DEL MODELLO DI SIMULAZIONE**Tema: Grandezze fisiche Eos14**Tabella: **grandezze_fisiche_eos_14**

```
CREATE TABLE grandezze_fisiche_eos14
(
  id_grandezza_fisica integer NOT NULL DEFAULT nextval('grandezze_fisiche_id_grandezza_fisica_seq'::regclass),
  elem character varying(6) NOT NULL, -- Nome elemento (come cat nelle griglie)
  "index" integer NOT NULL, -- Indice progressivo
  p double precision, -- Pressione (Pa)
  t double precision, -- Temperatura (°C)
  sg double precision, -- Saturazione Gas (%)
  sl double precision, -- Saturazione Liquida (%)
  ss double precision, -- Saturazione Solida (%)
  xnacl double precision, -- Frazione massica di NaCl
  pco2 double precision, -- Pressione parziale CO2 (Pa)
  xco2l double precision, -- Frazione di CO2 in fase liquida (%)
  pcap double precision, -- Pressione di Capillarita (Pa)
  fv double precision,
  dl double precision, -- Densita del liquido (Kg/m3)
  id_simulazione integer,
  tempo integer, -- Istante di tempo T
  CONSTRAINT pk_grandezze_fisiche PRIMARY KEY (id_grandezza_fisica),
  CONSTRAINT fk_grandezze_fisiche_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Grandezze fisiche Eos1Tabella: **grandezze_fisiche_eos1**

```
CREATE TABLE grandezze_fisiche_eos1
(
  id_grandezza_fisica_eos1 serial NOT NULL,
  elem character varying, -- nome blocco della griglia di discretizzazione
  "index" integer, -- indice numerico creato in automatico dal programma come identificativo di ogni blocco della griglia
  p double precision, -- Pressione (Pa)
  t double precision, -- Temperatura (C)
  sg double precision, -- Saturazione gas
  sw double precision, -- Saturazione acqua (fase acquosa)
  x_wat1 double precision, -- frazione acqua 1*
  x_wat2 double precision, -- frazione acqua 2*
  pcap double precision, -- pressione di capillarita
  dg double precision, -- densita fase gas (kg/m3)
  dw double precision, -- densita acqua (fase acquosa (kg/m3)
  id_simulazione integer,
  tempo integer, -- istante di tempo di riferimento
  CONSTRAINT pk_grandezze_fisiche_eos1 PRIMARY KEY (id_grandezza_fisica_eos1),
  CONSTRAINT fk_grfiseos1_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Output originaliTabella: **output_originali**

```
CREATE TABLE output_originali
(
  id_output serial NOT NULL,
  id_simulazione integer,
  blocco bytea,
  CONSTRAINT pk_output_originale PRIMARY KEY (id_output),
  CONSTRAINT fk_output_simulazioni FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```


Tema: Simulazioni inverseTabella: **simulazioni_inverse**

```
CREATE TABLE simulazioni_inverse
(
  gen text,
  ini text,
  inp text,
  mes text,
  "out" text,
  i_dat text,
  i_inp text,
  i_out text,
  nome character varying,
  id_simulazione_inversa integer NOT NULL,
  blocco bytea,
  CONSTRAINT pk_simulazioni_inverse PRIMARY KEY (id_simulazione_inversa)
)
```

Tema: Tabella di join per simulazioni inverseTabella: **simulazioni_isimulazioni**

```
CREATE TABLE simulazioni_isimulazioni
(
  id_simulazione integer NOT NULL,
  id_simulazione_inversa integer NOT NULL,
  CONSTRAINT pk_simulazioni_isimulazioni PRIMARY KEY (id_simulazione, id_simulazione_inversa),
  CONSTRAINT fk_isimulazioni_sis FOREIGN KEY (id_simulazione_inversa)
    REFERENCES simulazioni_inverse (id_simulazione_inversa) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_simulazioni_sis FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Strato: GRIGLIE DI SIMULAZIONE DEL MODELLO**Tema: Griglie 3d**Tabella: **griglie3d**

```
CREATE TABLE griglie3d
(
  id_griglia integer NOT NULL DEFAULT nextval('griglie3d_id_griglia3d_seq'::regclass),
  cat integer,
  blockname character varying(6),
  strato integer,
  mat character varying(5),
  x double precision,
  y double precision,
  z double precision,
  spessore double precision,
  the_geom geometry,
  id_griglia_lista integer,
  CONSTRAINT pk_griglie3d PRIMARY KEY (id_griglia),
  CONSTRAINT fk_lista_griglie3d FOREIGN KEY (id_griglia_lista)
    REFERENCES lista_griglie (id_griglia_lista) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Lista_griglieTabella: **lista_griglie**

```
CREATE TABLE lista_griglie
(
  id_griglia_lista integer NOT NULL DEFAULT nextval('lista_griglie_id_griglia_seq'::regclass),
  nome character varying(20),
  descrizione character varying,
  id_tipo_griglia integer,
  CONSTRAINT pk_lista_griglie PRIMARY KEY (id_griglia_lista),
  CONSTRAINT fk_griglia_tipo FOREIGN KEY (id_tipo_griglia)
    REFERENCES tipi_griglia (id_tipo_griglia) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Tipi grigliaTabella: **tipi_griglia**

```
CREATE TABLE tipi_griglia
(
  id_tipo_griglia integer NOT NULL DEFAULT nextval('tipo_griglie_id_tipo_griglia_seq'::regclass),
  descrizione character varying,
  CONSTRAINT pk_tipi_griglia PRIMARY KEY (id_tipo_griglia)
)
```

Tema: Griglie 3d irrTabella: **griglie3d_irr**

```
CREATE TABLE griglie3d_irr
(
  id_griglia serial NOT NULL,
  cat integer,
  blockname character varying(6),
  strato integer,
  mat character varying(5),
  x double precision,
  y double precision,
  z double precision,
  spessore double precision,
  the_geom geometry,
  id_griglia_lista integer,
  CONSTRAINT pk_griglie3d_irr PRIMARY KEY (id_griglia),
  CONSTRAINT fk_lista_griglie3dirr FOREIGN KEY (id_griglia_lista)
    REFERENCES lista_griglie (id_griglia_lista) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POINT'::text OR the_geom IS NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Griglie 2dTabella: **griglie2d**

```
CREATE TABLE griglie2d
(
  id_griglia integer NOT NULL DEFAULT nextval('griglia3d_id_griglia_seq'::regclass),
  cat integer,
  the_geom geometry,
  id_griglia_lista integer,
  CONSTRAINT pk_griglia3d PRIMARY KEY (id_griglia),
  CONSTRAINT fk_lista_griglia2d FOREIGN KEY (id_griglia_lista)
    REFERENCES lista_griglie (id_griglia_lista) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Griglie 2d irrTabella: **griglie2d_irr**

```
CREATE TABLE griglie2d_irr
(
  id_griglia integer NOT NULL DEFAULT nextval('griglia2d_irr_id_griglia_seq'::regclass),
  cat integer,
  the_geom geometry,
  id_griglia_lista integer,
  CONSTRAINT pk_griglia2dirr PRIMARY KEY (id_griglia),
  CONSTRAINT fk_lista_griglie2dirr FOREIGN KEY (id_griglia_lista)
    REFERENCES lista_griglie (id_griglia_lista) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT enforce_dims_the_geom CHECK (st_ndims(the_geom) = 2),
  CONSTRAINT enforce_geotype_the_geom CHECK (geometrytype(the_geom) = 'POLYGON'::text OR the_geom IS
  NULL),
  CONSTRAINT enforce_srid_the_geom CHECK (st_srid(the_geom) = 3003)
)
```

Tema: Simulazioni griglie 2dTabella: **simulazioni_griglie2d**

```
CREATE TABLE simulazioni_griglie2d
(
  id_simulazione integer NOT NULL,
  id_griglia integer NOT NULL,
  CONSTRAINT pk_simulazione_griglia2d PRIMARY KEY (id_simulazione, id_griglia),
  CONSTRAINT fk_grigl_grigl FOREIGN KEY (id_griglia)
    REFERENCES griglie2d (id_griglia) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_simu_gri FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Simulazioni griglie 2d irrTabella: **simulazioni_griglie2d_irr**

```
CREATE TABLE simulazioni_griglie2d_irr
(
  id_griglia integer NOT NULL,
  id_simulazione integer NOT NULL,
  CONSTRAINT pk_sim_grid2irr PRIMARY KEY (id_griglia, id_simulazione),
  CONSTRAINT fk_sim_sim2 FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_sim_sim3 FOREIGN KEY (id_griglia)
    REFERENCES griglie2d_irr (id_griglia) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Simulazioni griglie 3dTabella: **simulazioni_griglie3d**

```
CREATE TABLE simulazioni_griglie3d
(
  id_griglia integer NOT NULL,
  id_simulazione integer NOT NULL,
  CONSTRAINT pk_sim_sim4 PRIMARY KEY (id_griglia, id_simulazione),
  CONSTRAINT fk_sim_sim4 FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_sim_sim5 FOREIGN KEY (id_griglia)
    REFERENCES griglie3d (id_griglia) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Tema: Simulazioni griglie 3d irrTabella: **simulazioni_griglie3d_irr**

```
CREATE TABLE simulazioni_griglie3d_irr
(
  id_griglia integer NOT NULL,
  id_simulazione integer NOT NULL,
  CONSTRAINT pk_sim_sim7 PRIMARY KEY (id_griglia, id_simulazione),
  CONSTRAINT fk_sim_sim200 FOREIGN KEY (id_simulazione)
    REFERENCES simulazioni (id_simulazione) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_sim_sim99 FOREIGN KEY (id_griglia)
    REFERENCES griglie3d_irr (id_griglia) MATCH SIMPLE
    ON UPDATE NO ACTION ON DELETE NO ACTION
)
```

Strato: LISTA GRANDEZZE FISICHE PER APPLICAZIONE WEB

Tema: Lista grandezze fisiche

Tabella: **lista_grandezze_fisiche**

```
REATE TABLE lista_grandezze_fisiche
(
  id_lista_grandezza_fisica serial NOT NULL,
  grandezza_fisica character varying,
  descrizione character varying,
  CONSTRAINT pk_lista_grandezze_fisiche PRIMARY KEY (id_lista_grandezza_fisica)
)
```