

## Mediterranean coastal database (MCD)

### Citation:

-to be added after publication-

### Abstract:

We have developed a new coastal database for the Mediterranean basin that is intended for coastal impact and adaptation assessment to sea-level rise and associated hazards on a regional scale. The data structure of the database relies on a linear representation of the coast with associated spatial assessment units. Using information on coastal morphology, human settlements and administrative boundaries, we have divided the Mediterranean coast into 13,900 coastal assessment units. To these units we have spatially attributed 158 parameters on the characteristics of the natural and socio-economic subsystems, such as extreme sea levels, vertical land movement and number of people exposed to sea-level rise and extreme water levels. The database contains information on current conditions and on plausible future changes that are essential drivers for future impacts, such as sea-level rise rates and socio-economic development. The database has been developed to support risk and impact assessment to sea-level rise and can be used in a wide range of coastal applications.

### Details on file structure:

| Files                               | Content   |
|-------------------------------------|---|
| Coastal segments shapefile          | Coastal segment shapefile, including information on segment length, latitude, longitude, country_name, administrative_unit_name, admin_id and locationid. |
| Python scripts                      | Includes all the python scripts that have been produced for the MCD   |
| MCD – coastal segment level         | Contains the data on coastal segment level, see table 1 of the manuscript for detailed information  |
| MCD – coastal assessment unit level | Contains the data on coastal assessment unit level, see table 1 of the manuscript for detailed information  |
| Coastal assessment units grid       | Grid of the coastal assessment units, 90m resolution  |
| Administrative boundaries shapefile | Shapefile of the administrative boundaries including information on ISO code, country_name, administrative_unit_name and admin_id                         |