



Dive into this wealth of information about the Earth's  
past, present and future climate

Search



2) Cercare «sea level»

1) Registrarsi al sito



We found 2 results

0 on ADS

0 on EWDS

Sort by Relevance

Filter by

My favourites datasets

**Product type**

**Climate projections**

Reanalysis

**Provider**

**Spatial coverage**

**Temporal coverage**

Future

Past

**Variable domain**

Atmosphere (surface)

Atmosphere (upper air)

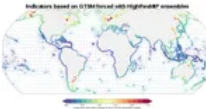
Land (biosphere)

Land (hydrology)

Ocean (biology)

**Ocean (physics)**

**Global sea level change indicators from 1950 to 2050 derived from reanalysis and high resolution CMIP6 climate projections** ★



This dataset provides statistical indicators of tides, storm surges and sea level that can be used to characterize global sea level in present-day conditions and also to assess changes under climate change. The indicators calculated include extreme-value indicators (e.g. return periods including con...

Climate projections Reanalysis Copernicus C3S Global Future Past Ocean (physics)

**Global sea level change time series from 1950 to 2050 derived from reanalysis and high resolution CMIP6 climate projections** ★



This dataset provides time series of global sea level related variables including tides, storm surges and sea level rise from 1950 to 2050 based on hydrodynamic modelling. The dataset provides a basis for studies, for instance, aiming to evaluate sea level variability, coastal flooding, coastal eros...

Climate projections Reanalysis Copernicus C3S Global Future Past Ocean (physics)

3) Filtrare i risultati della ricerca



## ★ Global sea level change time series from 1950 to 2050 derived from reanalysis and high resolution CMIP6 climate projections

Overview **Download** Documentation

### Info

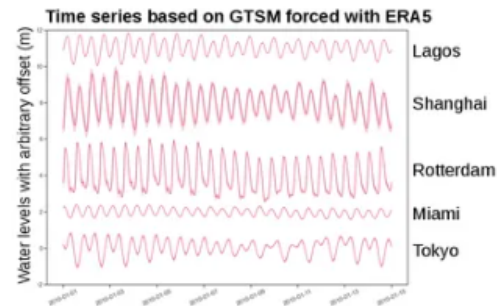
17 Apr 2025

A new version has been added requiring a change to the download form. Users are advised that CDS API requests will need to be updated to accommodate this change. Please see the known issues under the Documentation tab for more information regarding the version update.

4) Aprire la finestra download

This dataset provides time series of global sea level related variables including tides, storm surges and sea level rise from 1950 to 2050 based on hydrodynamic modelling. The dataset provides a basis for studies, for instance, aiming to evaluate sea level variability, coastal flooding, coastal erosion, and accessibility of ports.

The time series are computed using the Deltares Global Tide and Surge Model (GTSM) version 3.0, a hydrodynamic model that dynamically simulates water levels at 10-minute intervals and capable of using input forcing from reanalysis and climate models. The dataset is based on climate forcing from ERA5 global reanalysis and 5 Global Climate Models (GCMs) of the high resolution Coupled Model Intercomparison Project Phase 6 (CMIP6) global climate projection dataset from the High Resolution Model Intercomparison Project (HighResMIP) multi-model ensemble. By making use of the HighResMIP multi-model ensemble, it is possible to quantify the uncertainties associated with the input climate forcing in this dataset.



### References

[Citation and attribution](#)

DOI: [10.24381/cds.a6d42d60](https://doi.org/10.24381/cds.a6d42d60)

### Licence

[CC-BY licence](#)

### Publication date

2022-07-06

### Update date

2025-08-14

### Standard metadata

[STAC](#) [↗](#)

[CSW](#) [↗](#)

Related datasets [▼](#)

The simulations for the historical period may be selected from either ERA5 reanalysis or historical simulations

Overview **Download** Documentation

**Info**  
17 Apr 2025  
A new version has been added requiring a change to the download form. Users are advised that CDS API requests will need to be updated to accommodate this change. Please see the known issues under the Documentation tab for more information regarding the version update.

**Variable** [Select all](#) [Clear all](#) [Clear all fields](#)

Mean sea level  Storm surge residual  Tidal elevation  Total water level

**Experiment** [Clear all](#)

Future  Historical  Reanalysis

**Model**

CMCC-CM2-VHR4  EC-Earth3P-HR  GFDL-CM4C192-SST  
 HadGEM3-GC31-HM  HadGEM3-GC31-HM-SST

**Temporal aggregation** [Select all](#)

5) Selezionare la variabile di interesse

**References**  
[Citation and attribution](#)  
DOI: [10.24381/cds.a6d42d60](https://doi.org/10.24381/cds.a6d42d60)

**Licence**  
[CC-BY licence](#)

**Publication**  
2022-07-06  
**Update date**  
2025-08-14

**Standard metadata**  
[STAC](#)  
[CSW](#)

**Related data**

**Temporal aggregation** [Select all](#) [Clear all](#)

10 min  Daily maximum  Hourly  Annual

**Year** [Select all](#) [Clear all](#)

<input type="checkbox"/> 1950	<input type="checkbox"/> 1951	<input type="checkbox"/> 1952	<input type="checkbox"/> 1953	<input type="checkbox"/> 1954	<input type="checkbox"/> 1955
<input type="checkbox"/> 1956	<input type="checkbox"/> 1957	<input type="checkbox"/> 1958	<input type="checkbox"/> 1959	<input type="checkbox"/> 1960	<input type="checkbox"/> 1961
<input type="checkbox"/> 1962	<input type="checkbox"/> 1963	<input type="checkbox"/> 1964	<input type="checkbox"/> 1965	<input type="checkbox"/> 1966	<input type="checkbox"/> 1967
<input type="checkbox"/> 1968	<input type="checkbox"/> 1969	<input type="checkbox"/> 1970	<input type="checkbox"/> 1971	<input type="checkbox"/> 1972	<input type="checkbox"/> 1973
<input type="checkbox"/> 1974	<input type="checkbox"/> 1975	<input type="checkbox"/> 1976	<input type="checkbox"/> 1977	<input type="checkbox"/> 1978	<input type="checkbox"/> 1979
<input type="checkbox"/> 1980	<input type="checkbox"/> 1981	<input type="checkbox"/> 1982	<input type="checkbox"/> 1983	<input type="checkbox"/> 1984	<input type="checkbox"/> 1985
<input type="checkbox"/> 1986	<input type="checkbox"/> 1987	<input type="checkbox"/> 1988	<input type="checkbox"/> 1989	<input type="checkbox"/> 1990	<input type="checkbox"/> 1991
<input type="checkbox"/> 1992	<input type="checkbox"/> 1993	<input type="checkbox"/> 1994	<input type="checkbox"/> 1995	<input type="checkbox"/> 1996	<input type="checkbox"/> 1997
<input type="checkbox"/> 1998	<input type="checkbox"/> 1999	<input type="checkbox"/> 2000	<input type="checkbox"/> 2001	<input type="checkbox"/> 2002	<input type="checkbox"/> 2003
<input type="checkbox"/> 2004	<input type="checkbox"/> 2005	<input type="checkbox"/> 2006	<input type="checkbox"/> 2007	<input type="checkbox"/> 2008	<input type="checkbox"/> 2009
<input type="checkbox"/> 2010	<input type="checkbox"/> 2011	<input type="checkbox"/> 2012	<input type="checkbox"/> 2013	<input type="checkbox"/> 2014	<input type="checkbox"/> 2015
<input type="checkbox"/> 2016	<input type="checkbox"/> 2017	<input type="checkbox"/> 2018	<input checked="" type="checkbox"/> 2024	<input type="checkbox"/> 2019	<input type="checkbox"/> 2020
<input type="checkbox"/> 2022	<input type="checkbox"/> 2023	<input type="checkbox"/> 2030	<input type="checkbox"/> 2031	<input type="checkbox"/> 2032	<input type="checkbox"/> 2033
<input type="checkbox"/> 2034	<input type="checkbox"/> 2035	<input type="checkbox"/> 2036	<input type="checkbox"/> 2037	<input type="checkbox"/> 2038	<input type="checkbox"/> 2039
<input type="checkbox"/> 2040	<input type="checkbox"/> 2041	<input type="checkbox"/> 2042	<input type="checkbox"/> 2043	<input type="checkbox"/> 2044	<input type="checkbox"/> 2045
<input type="checkbox"/> 2046	<input type="checkbox"/> 2047	<input type="checkbox"/> 2048	<input type="checkbox"/> 2049	<input type="checkbox"/> 2050	

**Month** [Clear all](#)

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> June
<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> October	<input checked="" type="checkbox"/> November	<input checked="" type="checkbox"/> December

6) Indicare il periodo di riferimento e la risoluzione temporale

**Request validation**

Request size

[Variable](#) ✓

[Experiment](#) ✓

[Model](#) ✓

[Temporal aggregation](#) ✓

[Year](#) ✓

[Month](#) ✓

[Version](#) ⚠

Reanalysis experiment

Select all Clear all

v2 (deprecated)

v3

Terms of use

[CC-BY licence](#)

✓ Accepted

Corresponding API request

</> Show API request code

Submit form Clear all fields

7) Selezionare la versione più aggiornata del dato

8) Inviare la richiesta

N.B. I dati verranno scaricati per l'intero globo

8) Attendere e cliccare download

Your requests

All	Accepted	Running	Failed	
1 of 1 request				
Product	Submission	End	Status	Actions
Global sea level change time series from 1950 to 2050 derived from reanalysis and high resolution CMIP6 climate projections > <a href="#">Details</a>	2026-04-13 10:23:41am		Accepted	> <a href="#">Check status</a>

Successful

Delete selected

Status	Actions
Successful 00:00:31	Download 407.22 MB