

## CORDEX data publication

### Previous configuration

See [3. Configuration for publishing](#)

### CORDEX publication

This documentation gives instructions to publish 02\_EuroCORDEX\_INTERIM\_044\_v20140616 datasets.

The source code of esgprep must be modified in order to work with symbolic links! See [?https://github.com/IS-ENES-Data/esgf-prepare/pull/3](https://github.com/IS-ENES-Data/esgf-prepare/pull/3)

Add the dataset root to /esg/config/esgcat/esg.ini:

```
thredds_dataset_roots =
  esg_dataroot | /esg/data
  01_EuroCORDEX_INTERIM_022 | /esg/cordex/01_EuroCORDEX_INTERIM_022
  02_EuroCORDEX_INTERIM_044 | /esg/cordex/02_EuroCORDEX_INTERIM_044
  eur44-wrf34li-eraint | /esg/cordex/eur44-wrf34li-eraint
  eur44-wrf34li-canesm | /esg/cordex/eur44-wrf34li-canesm
  sam44-wrf34li-eraint | /esg/cordex/sam44-wrf34li-eraint
```

Modify /esg/config/esgcat/esg.cordex.ini to fit your needs. In this case:

```
[project:cordex]

categories =
  project      | enum   | true  | true  | 0
  product      | enum   | true  | true  | 1
  domain       | enum   | true  | true  | 2
  institute    | enum   | true  | true  | 3
  driving_model | enum   | false | true  | 4
  experiment   | enum   | false | true  | 5
  ensemble     | string | false | true  | 6
  rcm_name     | string | false | true  | 7
  rcm_version  | enum   | false | true  | 8
  time_frequency | enum  | false | true  | 9
  description  | text   | false | false | 99

category_defaults =
  project | CORDEX

filename_format = %(variable)s_%(domain)s_%(driving_model)s_%(experiment)s_%(ensemble)s_%(rcm_model)s_%(rcm_version)s_%(time_frequency)s

dataset_id = cordex.%(product)s.%(domain)s.%(institute)s.%(driving_model)s.%(experiment)s.%(ensemble)s.%(rcm_name)s.%(rcm_version)s

directory_format = %(root)s/%(project)s/%(product)s/%(domain)s/%(institute)s/%(driving_model)s/%(experiment)s/%(ensemble)s

product_options = output

domain_options = AFR-44, AFR-44i, ANT-44, ANT-44i, ARC-44, ARC-44i, AUS-44, AUS-44i, CAM-44, CAM-44i, CAS-44, CAS-44i, EAS-44, EAS-44i

institute_options = AUTH-LHTEE, AUTH-Met, AWI, BCCR, CCCma, CHMI, CLMcom, CNRM, CRP-GL, CUNI, DHMZ, DMI, ENEA, GERICS, HMI, IPSL

driving_model_options = CCCma-CanESM2, CSIRO-QCCCE-CSIRO-Mk3-6-0, CNRM-CERFACS-CNRM-CM5, ECMWF-ERAINT, ICHEC-EC-EARTH, IPSL

experiment_options =
  cordex | evaluation | Evaluation
  cordex | historical | Historical
  cordex | rcp26    | RCP2.6
```

```

cordex | rcp45      | RCP4.5
cordex | rcp60      | RCP6.0
cordex | rcp85      | RCP8.5

ensemble_pattern = r%(digit)si%(digit)sp%(digit)s

rcm_model_options = AUTH-LHTEE-WRF321B, AUTH-Met-WRF331A, AWI-HIRHAM5, BCCR-WRF331, BCCR-WRF331C, CCCma-CanRCM4, CHMI-ALADIN52, CLMcom-CCLM4-8-17, CNRM-ARPEGE51, CNRM-ARPEGE52, CNRM-ALADIN53, CRP-GL-WRF331A, CUNI-RegCM4-2

rcm_version_options = v1, v01, v2, v3, v4, v411, v1a, v5

time_frequency_options = day, fx, mon, sem, 3hr, 6hr

maps = las_time_delta_map, domain_description_map, rcm_name_map

domain_description_map = map(project_id, domain : domain_description)
  cordex | AFR-44      | Africa
  cordex | AFR-44i     | Africa
  cordex | ANT-44      | Antarctica
  cordex | ANT-44i     | Antarctica
  cordex | ARC-44      | The Arctic
  cordex | ARC-44i     | The Arctic
  cordex | AUS-44      | Australasia
  cordex | AUS-44i     | Australasia
  cordex | CAM-44      | Central America
  cordex | CAM-44i     | Central America
  cordex | CAS-44      | Central Asia
  cordex | CAS-44i     | Central Asia
  cordex | EAS-44      | East Asia
  cordex | EAS-44i     | East Asia
  cordex | EUR-11      | High-res. Europe
  cordex | EUR-11i     | High-res. Europe
  cordex | EUR-44      | Europe
  cordex | EUR-44i     | Europe
  cordex | MED-44      | HYMEX Mediterranean
  cordex | MED-44i     | HYMEX Mediterranean
  cordex | MNA-22      | Middle East and North Africa
  cordex | MNA-22i     | Middle East and North Africa
  cordex | MNA-44      | Middle East and North Africa
  cordex | MNA-44i     | Middle East and North Africa
  cordex | NAM-44      | North America
  cordex | NAM-44i     | North America
  cordex | SAM-44      | South America
  cordex | SAM-44i     | South America
  cordex | WAS-44      | West Asia
  cordex | WAS-44i     | West Asia

rcm_name_map = map(project, rcm_model : rcm_name)
  cordex | AUTH-LHTEE-WRF321B | WRF321B
  cordex | AUTH-Met-WRF331A  | WRF331A
  cordex | AWI-HIRHAM5        | HIRHAM5
  cordex | BCCR-WRF331        | WRF331
  cordex | BCCR-WRF331C       | WRF331C
  cordex | CCCma-CanRCM4     | CanRCM4
  cordex | CHMI-ALADIN52     | ALADIN52
  cordex | CLMcom-CCLM4-8-17 | CCLM4-8-17
  cordex | CNRM-ARPEGE51     | ARPEGE51
  cordex | CNRM-ARPEGE52     | ARPEGE52
  cordex | CNRM-ALADIN53     | ALADIN53
  cordex | CRP-GL-WRF331A   | WRF331A
  cordex | CUNI-RegCM4-2    | RegCM4-2

```

cordex	DHMZ-RegCM4-2	RegCM4-2
cordex	DMI-HIRHAM5	HIRHAM5
cordex	ENEA-RegCM4-3	RegCM4-3
cordex	GERICS-REMO2009	REMO2009
cordex	HMS-ALADIN52	ALADIN52
cordex	ICTP-RegCM4-3	RegCM4-3
cordex	IDL-WRF331D	WRF331D
cordex	IPSL-INERIS-WRF331F	WRF331F
cordex	IITM-RegCM4-1	RegCM4-1
cordex	IITM-RegCM4-4	RegCM4-4
cordex	KNMI-RACMO21P	RACMO21P
cordex	KNMI-RACMO22E	RACMO22E
cordex	KNMI-RACMO22T	RACMO22T
cordex	MGO-RRCM	RRCM
cordex	MIUB-WRF331A	WRF331A
cordex	MOHC-HadGEM3-RA	HadGEM3-RA
cordex	MOHC-HadRM3P	HadRM3P
cordex	MPI-CSC-REMO2009	REMO2009
cordex	NUIM-WRF331F	WRF331F
cordex	RMIB-UGent-ALARO-0	ALARO-0
cordex	SMHI-RCA4	RCA4
cordex	SMHI-RCA4-SN	RCA4-SN
cordex	SMHI-RCAO	RCAO
cordex	SMHI-RCAO-SN	RCAO-SN
cordex	UCAN-WRF331G	WRF331G
cordex	UCAN-WRF350I	WRF350I
cordex	UCLM-PROMES	PROMES
cordex	UHOH-WRF331H	WRF331H
cordex	ULg-MAR36	MAR36
cordex	UQAM-CRCM5	CRCM5

```
las_time_delta_map = map(time_frequency : las_time_delta)
```

```
mon | 1 month
day | 1 day
fx  | fixed
3hr | 3 hours
sem | seasonal mean
6hr | 6 hours
```

```
project_handler_name = basic_builtin
```

```
las_configure = true
```

```
thredds_exclude_variables = a, a_bnds, alev1, alevel, alevhalf, alt40, b, b_bnds, basin, bnds, bounds_lat, bounds_lon, dbz
```

```
variable_locate = ps,ps_
```

```
variable_per_file = true
```

Generate the DRS structure. Use `--version` to change version. User `--symlink` to create symlinks. If some facet is incorrect or missing use `--set-value` (institute\_id and product in this case):

```
esgprep drs list --project cordex /oceano/gmeteo/DATA/ESGF/UNICAN-NODE/DATASETS/01_EuroCORDEX_INTERIM_022 --version 201405
esgprep drs tree --project cordex /oceano/gmeteo/DATA/ESGF/UNICAN-NODE/DATASETS/01_EuroCORDEX_INTERIM_022 --version 201405
esgprep drs todo --project cordex /oceano/gmeteo/DATA/ESGF/UNICAN-NODE/DATASETS/01_EuroCORDEX_INTERIM_022 --version 201405
esgprep drs upgrade --project cordex /oceano/gmeteo/DATA/ESGF/UNICAN-NODE/DATASETS/01_EuroCORDEX_INTERIM_022 --version 201405
```

Generate the mapfiles:

```
esgprep mapfile --project cordex ./CORDEX/
```

Publish to data and index nodes:

```
esgpublish --service fileservice --map mapfiles/ --project cordex --thredds --publish
```

## Data unpublication

Unpublication is well documented in [?esg-publisher docs](#). You can use bash commands to help with unpublication:

```
find /a/directory/with/mapfiles -regextype posix-extended -regex '.*ustar.*\map' -exec esgunpublish --project cordex --ma
```

The previous command will unpublish datasets for the *ustar* variable, using mapfiles found in */a/directory/with/mapfiles*.