You start by opening
(https://climexp.knmi.nl/start.cgi?id=someone@somewhere)

Clim exp home page.

Select a field

> Daily fields

> Monthly observations

> Monthly reanalysis fields

> Monthly and seasonal historical reconstructions

> Monthly seasonal hindcasts

> Monthly CMIP3+ scenario runs

> Monthly CMIP5 scenario runs

> Annual CMIP5 extremes

> Monthly CMIP6 scenario runs

> Monthly CORDEX scenario runs

> Attribution runs

> View, upload your field

Then on the right of the page we choose the field we need for example daily data as you requested

On the left is the name of the data source the available data from this source is denoted by x, which we click to choose the specific variable from specific source

The i on the right will give you more information about the data source

Select a daily field

Select a field by following its link (alternative)									
Observations	Tmean	Tmax	Tmin	Prcp	SLP	Glob. Rad.	Wind Speed	Elev	
CPC 0.5° global 1979-now				x,x					ℹ
CPC 0.25° CONUS 1948-now				x,x					ℹ
GPCC 1° 1988-now				x,x					ℹ
GPCP v1.3 1° 1997-now				x					ℹ
CMORPH 0.5° 1998-now				x					ℹ
CHIRPS 2.0 Africa 0.25° 1981-now				x					ℹ
KNMI Radar 1km 2009-Feb2019				x					ℹ
GPM IMERG V06 2000-now				0.5°, 0.2°					ℹ
UMD/NCEI 1° OLR 1979-now				x					ℹ
Berkeley 1880-now 1°	x	x	x						ℹ

| TAO 1980-now | SST, Tair, RH, u, v, τ_x, τ_y | | | | | | | | | ℹ |

Reanalysis	t2m	prcp	slp	z500	u200	v200	evap	wspd	
NCEP/NCAR 1948-now	x	x	x	x		x			ℹ
ERA5 1950-now 0.5°	x	x	x	x			x	x	ℹ
ERA5 1950-now 0.25° Europe	x	x	x	x			x	x	ℹ
ERA5 1950-now 0.25° Africa	x	x	x	x			x	x	ℹ
ERA5 1950-now 0.25° North America	x	x	x	x			x	x	ℹ
	Tmin	Tmax	Tdew	Twet	sp	t850	pot evap	max wspd	
ERA5 1950-now 0.5°	x	x	x	x	x	x		x	ℹ
ERA5 1950-now 0.25° Europe	x	x	x	x	x	x		x	ℹ

After we choose the variable from the source, we need by pressing x we got this page.

The paragraph gives you some information about the data

Field

ERA5 T2m

"ERA5 reanalysis, https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5" averaged over 2x 2 grid boxes

X axis: whole world in 720 0.50° steps, first point at 0.12° E, last point at 359.62° E

Y axis: regular grid with 360 -0.50° steps, first point at 89.88° N, last point at 89.62° S

1-daily data available from 01Jan1950 to 31Jul2023 (26931 times)

Variable t2m (Near-Surface Air Temperature) in K

Full metadata. The associated land/sea mask is available for some operations

Get grid points, average area or generate subset

Mask: no mask ⌄   add a mask to the list   ℹ
Latitude: [   ]°N - [   ]°N   ℹ
Longitude: [   ]°E - [   ]°E
Boundaries: halfway grid points ⌄
Make: ●average ○max ○min ○set of grid points ○subset of the field   ℹ
Considering: ●everything ○land points ○sea points show/hide more   ℹ

Full metadata. The associated land/sea mask is available for some operations

Get grid points, average area or generate subset

Mask:	no mask ⌄ add a mask to the list	ℹ
Latitude:	52.454 °N - 53.475 °N	ℹ
Longitude:	-1.380 °E - -1.161 °E	
Boundaries:	halfway grid points ⌄	
Make:	◉average ○max ○min ○set of grid points ○subset of the field	ℹ
Considering:	◉everything ○land points ○sea points show/hide more	ℹ
Units:	◉convert to Celsius ○leave in K	ℹ

Make time series

This is the most important part here you have four boxes each one representing the boundary of the area you need and it has to be filled in ascending order, the westerly coordinates are preceded by (-), further information is here **(this is a geographic (latitude and longitude) coordinates so you need to transform the OSGB36 coordinates from ARCGIS to this type of coordinates as I did in your data.)**

Here if you choose average it will get you the average of the area but if you choose set of grids it will get you every coordinate inside that area (this is preferable in case if your areas have no straight boundaries like your subbasin areas and after downloading the data we choose our required coordinates while cleaning and analyzing the data using python as I did in your case)

Here you choose if you considering all data or only land or sea points

After that you choose if you need to convert the units to Celsius (in case of temperature data)

The i on left contains detailed information for everything.

For executing you press here

After executing it will turn to this page and start loading for a while.

Time series

daily ERA5 T2m -1.3806808939--1.1615958413E 52.4549337648-53.47561533N mean

Retrieving data ...

If it takes too long you can abort the job here (using the [back] button of the browser does not kill the data extraction job)

Then this page will appear if you need to select specific set of years go down of the page and write the required years and push select.

To download the data, you press here and the data will be downloaded in netcdf format

operating on "ERA5 reanalysis, https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5" averaged over 2x 2 grid boxes, climexp.knmi.nl/select.cgi?field=era5 t2m daily, averaging anomalies over region lon= 358.375 358.875, lat= 52.625 53.625, t2m [Celsius] Near-Surface Air Temperature, (eps, pdf, metadata, raw data, netcdf)
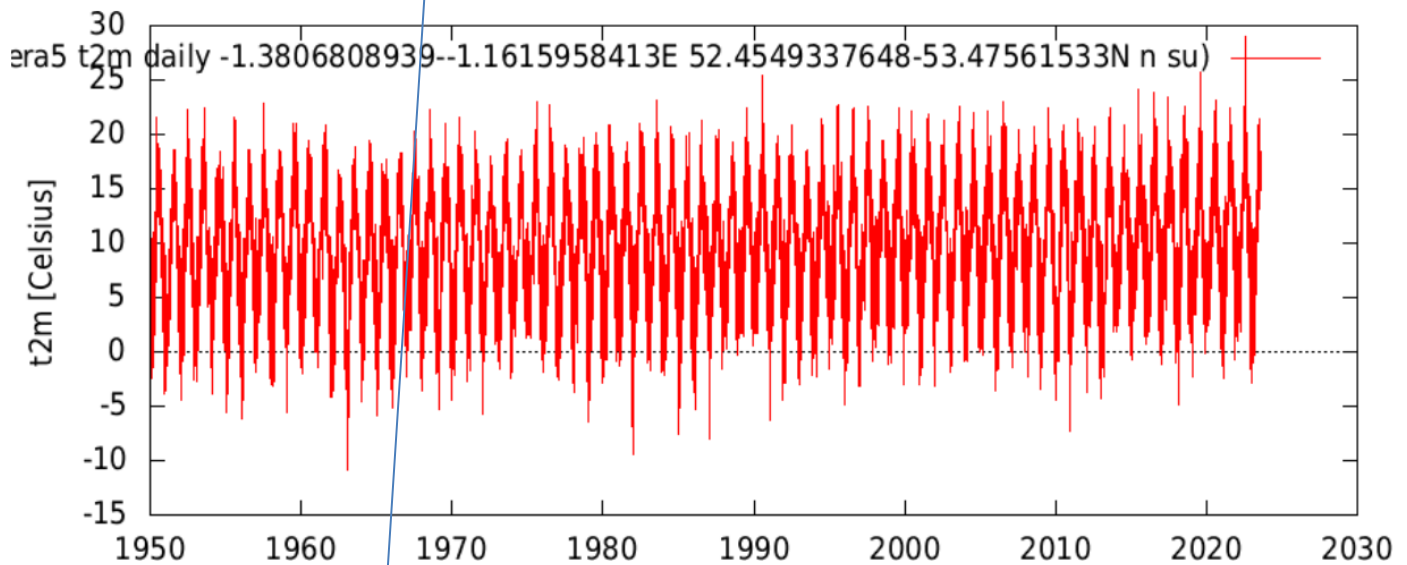
No missing data

Manipulate this time series

| Select years: | [   ] - [   ] | **select** | ℹ |
| Make index: | i_ERA5_T2m_-1.380 | **Add to list** | ℹ |

You press here to execute the downloading, after the downloading the data has to be analyzed and choosing the required coordinates and transform it to csv if you want but this will be done by python and coding

Home — Download netcdf time series: ERA5_T2m_-1.3806808939--1.1615958413E_52.4549337648-53.47561533N

Download netcdf time series

ERA5_T2m_-1.3806808939--1.1615958413E_52.4549337648-53.47561533N

Generating file. Just a moment.

Download netcdf file

Thank you Peng do not hesitate to contact me any time for any further question.