

Climate Wizard – query

Each dataset name contains all the information needed to retrieve or identify it. There are several parts to the name that are described here so that a query can be assembled to retrieve the image representing that information.

There are 2 services; 1 for United States data and 1 for global data. They follow the same naming conventions with minor differences as noted below.

US: <http://174.129.35.252/ArcGIS/rest/services/TNC/US3Band/ImageServer>

Global: <http://174.129.35.252/ArcGIS/rest/services/TNC/Global3Band/ImageServer>

Dataset names follow this pattern:

mapOption	CirculationModel	EmissionScenario	climateVariable	timeOfYear	timePeriod
↓	↓	↓	↓	↓	↓
< m>	<cccma_cgcm3_1.1>	<a1>	< tmean>	<14>	< 2040_2060>

ex. m_ cccma_cgcm3_1.1_a1_tmean_14_2040_2060

Where:

- **Map Option**

There are 2 map options: Map of Average and Map of Change

m = Map of Average. The average value of temperature or precipitation

c = Map of Change

Degrees departure from present temperature values

Percent change from present precipitation values

- **General Circulation Model**

There are 16 General Circulation Models (GCM) and several 'Ensembles'

GCM valid values:

bccr_bcm2_0.1

cccma_cgcm3_1.1

cnrm_cm3.1

csiro_mk3_0.1

gfdl_cm2_0.1

gfdl_cm2_1.1

giss_model_e_r.1

inmcm3_0.1

ipsl_cm4.1

miroc3_2_medres.1

miub_echo_g.1

mpi_echam5.1
mri_cgcm2_3_2a.1
ncar_ccsm3_0.1
ncar_pcm1.1
ukmo_hadcm3.1

or Ensemble valid values:

ensemble_0
ensemble_20
ensemble_40
ensemble_50
ensemble_60
ensemble_80
ensemble_100

- **Emission Scenario**

Emission Scenario valid values:

b1 = low
a1b = medium
a2 = high

- **Climate measurement variable**

Climate variable valid values:

tmean = temperature (degrees F for United States, degrees C for global)
pptPct = precipitation (inches for United States, mm for global)

- **Time of year**

Model or historic results are available annually, monthly or seasonally

Valid values:

1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
10 = October
11 = November
12 = December
14 = Annual
15 = December – February
16 = March – May
17 = June – August
18 = September - November

- **Time period**

Time period valid values:

1951_2006 = Past 50 Years for the United States
1951_2002 = Past 50 Years for Global
2040_2060 = mid century (2050s)

2070_2099 = end century (2080s)

Examples

- Annual temperature for the end of the century as modeled by UKMO-HadCM3 using the a2 emission scenario
 - m_ukmo_hadcm3.1_a2_tmean_14_2070_2099
- August precipitation change for the mid century with the average ensemble and a1b emission scenario
 - c_ensemble_50_a1b_pptPct_8_2040_2069
- Historic US precipitation for the December to February time frame
 - m_pptPct_15_1951_2006
- Historic global precipitation for the December to February time frame
 - m_pptPct_15_1951_2002