# Climate Wizard – query

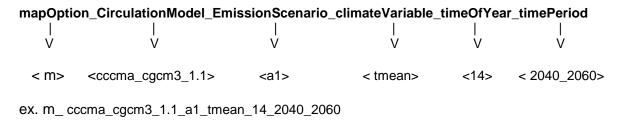
Each dataset name contains all the information needed to retrieve or identify it. There are several parts to the name that are described here so that a query can be assembled to retrieve the image representing that information.

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:



#### 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
  - o m\_ ukmo\_hadcm3.1\_a2\_tmean\_14\_2070\_2099
- August precipitation change for the mid century with the average ensemble and a1b emission scenario
  - o c\_ensemble\_50\_a1b\_pptPct\_8\_2040\_2069
- Historic US precipitation for the December to February time frame
  - o m\_pptPct\_15\_1951\_2006
- Historic global precipitation for the December to February time frame
  - o m\_pptPct\_15\_1951\_2002