

Command Reference: CreateCropPatternTSForCULocations()

Create empty crop pattern time series for each CU Location

StateCU Command
Version 3.09.01, 2010-02-01

The `CreateCropPatternTSForCULocations()` command creates empty crop pattern time series for each CU Location. This is necessary to ensure that the crop pattern time series are in the same order as the CU locations and that lists of crop pattern time series are initialized for each location. The following dialog is used to edit the command and illustrates the syntax of the command.

Edit CreateCropPatternTSForCULocations() Command

This command creates crop pattern time series for each CU location that is defined. This is necessary because it creates empty time series for all locations, some of which may be filled by reading from HydroBase or other data. No time series values are assigned. However, the time series headers are initialized with the output period and units. This command should be used after CU Locations and their aggregates/systems are defined. After this command, use other commands to read and fill the crop pattern time series data.

CU location ID: Required - specify the locations to process (use * for wildcard).

Crop area units: Required - specify the crop area units.

If not found: Optional - indicate action if no match is found (default=Warn).

Command:

CreateCropPatternTSForCULocations() Command Editor

The command syntax is as follows:

`CreateCropPatternTSForCULocations (Parameter=Value, ...)`

Command Parameters

Parameter	Description	Default
ID	A single CU Location identifier to match or a pattern using wildcards (e.g., 20*).	None – must be specified as *
Units	The units for crop area time series.	ACRE
IfNotFound	Used for error handling, one of the following: <ul style="list-style-type: none">Fail – generate a failure message if the ID is not matchedIgnore – ignore (don't add and don't generate a message) if the ID is not matchedWarn – generate a warning message if the ID is not matched	Warn

The following command file illustrates how to create a crop pattern time series file:

```
# Step 1 - Set output period and read CU locations
SetOutputPeriod(OutputStart="1950",OutputEnd="2006")
ReadCULocationsFromStateCU(InputFile="..\StateCU\cm2006.str")
# Step 2 - Read SW aggregates
SetDiversionSystemFromList(ListFile="colorado_divsys.csv",IDCol=1,
    NameCol=2,PartIDsCol=3,PartsListedHow=InRow)
SetDiversionAggregateFromList(ListFile="colorado_agg.csv",IDCol=1,
    NameCol=2,PartIDsCol=3,PartsListedHow=InRow)
# Step 3 - Create *.cds file form and read acreage/crops from HydroBase
CreateCropPatternTSForCULocations(ID="*",Units="ACRE")
ReadCropPatternTSFromHydroBase(ID="*")
# Step 4 - Need to translate crops out of HB to include TR21 suffix
# Translate all crops from HB to include .TR21 suffix
TranslateCropPatternTS(ID="*",OldCropType="GRASS_PASTURE",NewCropType="GRASS_PASTURE.TR21")
TranslateCropPatternTS(ID="*",OldCropType="CORN_GRAIN",NewCropType="CORN_GRAIN.TR21")
TranslateCropPatternTS(ID="*",OldCropType="ALFALFA",NewCropType="ALFALFA.TR21")
TranslateCropPatternTS(ID="*",OldCropType="SMALL_GRAINS",NewCropType="SPRING_GRAIN.TR21")
TranslateCropPatternTS(ID="*",OldCropType="VEGETABLES",NewCropType="VEGETABLES.TR21")
TranslateCropPatternTS(ID="*",OldCropType="ORCHARD_WO_COVER",NewCropType="ORCHARD_WO_COVER.TR21")
TranslateCropPatternTS(ID="*",OldCropType="ORCHARD_WITH_COVER",NewCropType="ORCHARD_WITH_COVER.TR21")
TranslateCropPatternTS(ID="*",OldCropType="DRY_BEANS",NewCropType="DRY_BEANS.TR21")
TranslateCropPatternTS(ID="*",OldCropType="GRAPES",NewCropType="GRAPES.TR21")
TranslateCropPatternTS(ID="*",OldCropType="WHEAT",NewCropType="SPRING_GRAIN.TR21")
TranslateCropPatternTS(ID="*",OldCropType="SUNFLOWER",NewCropType="SPRING_GRAIN.TR21")
TranslateCropPatternTS(ID="*",OldCropType="SOD_FARM",NewCropType="GRASS_PASTURE.TR21")
# Step 5 - Translate crop names
# use high-altitude coefficients for structures with more than 50% of
# irrigated acreage above 6500 feet
TranslateCropPatternTS(ListFile="cm2005_HA.lst",IDCol=1,
    OldCropType="GRASS_PASTURE.TR21",NewCropType="GRASS_PASTURE.DWHA")
# Step 6 - Fill Acreage
# Fill SW structure acreage backward from 1999 to 1950
# Fill acreage forward for all structures from 2000 to 2006
FillCropPatternTSRepeat(ID="*",CropType="*",FillStart=1950,FillEnd=1993,FillDirection=Backward)
FillCropPatternTSRepeat(ID="*",CropType="*",FillStart=1993,FillEnd=1999,FillDirection=Forward)
FillCropPatternTSRepeat(ID="*",CropType="*",FillStart=2000,FillEnd=2006,FillDirection=Forward)
# Step 7 - Write final *.cds file
WriteCropPatternTSToStateCU(OutputFile="..\StateCU\cm2006.cds",
    WriteCropArea=True,WriteHow=OverwriteFile)
# Check the results
CheckCropPatternTS(ID="*")
WriteCheckFile(OutputFile="cm2006.cds.StateDMI.check.html")
```