
Command Reference: SetCropPatternTS()

Set crop pattern time series values

StateCU Command

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The SetCropPatternTS() command sets crop pattern time series data for a CU Location. The combination of location ID, crop type, and year identify the data. It is recommended that the SetCropPatternTSFromList() command be used instead to shorten commands files and allow sharing of the data with SetIrrigationPracticeTSFromList() commands. There are two uses for this command:

1. Specify crop data for a location, to be processed with parcel data. For example, an irrigated lands assessment using GIS might show zero acreage for a ditch but other information indicates that the ditch irrigates lands. The ditch may be an individual (key) structure or may be part of an aggregate/system. In this case, the specified data values contribute to the final data values in output. The following dialog is used to edit the command and illustrates the syntax of the command. The years typically agree with an irrigated lands assessment and the **Process when** value must be specified as **WithParcels**. In this case, the `SetCropPatternTS()` commands should be specified before `ReadCropPatternTSFromHydroBase()` or other similar commands. The data will be processed as if they were read from `HydroBase`.

Edit SetCropPatternTS() Command

This command edits crop pattern time series data, using the CU Location ID to look up the location.

Crop patterns should be specified using the format:

Crop1,Area1,Crop2,Area2

For example:

ALFALFA,300,POTATOES,150

If ProcessWhen=Now, previous crop patterns for matching CU locations (created with `CreateCropPatternTSForCULocations()`) are reset when the command is processed. Acreage for other crops at the location and date (e.g., from other commands) will be set to zero. Therefore this command completely defines the crop pattern for a location at a point in time. Used in this way, the command usually comes AFTER commands that process crop patterns from parcels, and changes are made to final CU Locations (not parts in an aggregate/system).

If ProcessWhen=WithParcels, the crop patterns are processed with `HydroBase` irrigated parcels data. Each crop/area/year triplet is treated as if it were determined from parcels, to supplement later processing. Used in this way, the commands should come BEFORE commands that process crop patterns from parcels, and data can be defined for parts of an aggregate/system.

CU location ID:

Set start (year):

Set end (year):

Crop pattern:

Irrigation method:

Supply type:

Set to missing:

Process when:

If not found:

Required - the CU location(s) to fill (use * for wildcard)

Optional - starting year to set data (blank for full period).

Optional - ending year to set data (blank for full period).

Required - irrigation method for crops.

Required - supply type for crops.

Optional - set data to missing (no crops) - can then be filled.

Optional - indicate when to process the data (default=Now).

Optional - indicate action if no match is found (default=Warn).

Command:

```
SetCropPatternTS (ID="200506", SetStart=1998, SetEnd=1998, CropPattern="GRASS_PASTURE, 100", IrrigationMethod=Flood, SupplyType=Surface, ProcessWhen=WithParcels)
```

OK

Cancel

SetCropPatternTS_WithParcels

SetCropPatternTS() Command Editor (to specify parcel information)

2. Specify crop data to override (or supply) crop pattern data for a structure. In this case, the specified data will be visible as the final data values in output and will not be considered when irrigated lands parcels are processed. The **Process when** flag should be blank or Now. In this case, the SetCropPatternTS() commands should be specified after ReadCropPatternTSFromHydroBase() or other similar commands. It is recommended that the previous alternative be used, in particular when multiple years of data are being processed and need to be quality controlled.

Edit SetCropPatternTSfromList() Command

This command sets crop pattern time series data, using the CU Location ID to look up the location.
 If ProcessWhen=Now, supplied data will be applied when the command is processed.
 If ProcessWhen=WithParcels, data will supplement HydroBase data when readCropPatternTSfromHydroBase() is processed.
 A comma-delimited list file is used to supply data, with values being set one of the following ways.
 If the set start and end years are specified and a year column is not specified, the file values are applied to each year in the set period.
 If a year column is specified, year and corresponding values are read from the list file. The set period limits the years that are processed.
 The crop pattern data will be reset to new values (or data will supplement HydroBase data, as per ProcessWhen). All crops not set will be set to zero.
 Blanks in column fields will result in no change to the data.
 It is recommended that the location of the file be specified using a path relative to the working directory.
 The working directory is: C:\Develop\StateDMI_SourceBuild\StateDMI\test\regression\UserManualRef\ReadCropPatternTSfromHydroBase

List file:

CU Location ID: Required - CU Location(s) to fill (use * for wildcard).

Set start (year): Optional - starting year to set data (default=output period).

Set end (year): Optional - ending year to set data (default=output period).

CU location ID column: Required - column in file for CU location ID.

Year column: Optional - column in file for year.

Crop type column: Optional - column in file for crop type.

Area (ACRE): Optional - column in file for crop area.

Irrigation method column: Optional - column in file for irrigation method (column containing SPRINKLER, FLOOD).

Supply type column: Optional - column in file for supply type (column containing Ground or Surface).

Process when?: Optional - when to process the data (default=Now).

Command:

```
SetCropPatternTSfromList (ListFile="NoGIS_1936.csv", ID="*", SetStart=1936, SetEnd=1936, IDCol="1", CropTypeCol="2", AreaCol="3", ProcessWhen=WithParcels, IrrigationMethodCol="4", SupplyTypeCol="5")
```

SetCropPatternTS() Command Editor (to edit crop pattern time series)

SetCropPatternTS

The command syntax is as follows:

```
SetCropPatternTS (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.
SetStart	The first year to set data values.	If not specified, data are set for the full output period.
SetEnd	The last year to set data values.	If not specified, data are set for the full output period.
CropPattern	A sequence of crop type and area values, to set as data for the specified period.	None – must be specified.
SetStart	Starting year to set data.	Set for the full period.
SetEnd	Ending year to set data.	Set for the full period.
SetToMissing	Indicate whether the crop pattern for the specified years should be set to missing, instead of supplying data values. This was used in the Río Grande as follows: Read 1936, 1998, and 2002 data, resulting in crop pattern time series. It is necessary to include all years in order to get a complete list of crops over the period, even if zero or missing in some years. After reading all years, 2002 is set to missing using this command and a standard filling approach is used for the full period. Then, 2002 is read at the end. The overall result is that 2002's crops are listed in the full period but only have non-zero observations in 2002.	False
ProcessWhen	Indicates when the specified data values should be processed. If the parameter value is WithParcels, then the values will be considered when irrigated lands data are processed with later ReadCropPatternTSFromHydroBase().	Now, indicating that the acreage should be set when the command is processed (not when later read commands are processed).
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 matched Ignore – ignore (don't add and don't generate a message) if the ID is not matched Warn – generate a warning message if the ID is not matched 	Warn