

DSSAT CLI file description for MarkSim_standalone

The CLI file required for MarkSim_standalone is a reduced version of the standard DSSAT CLI file. It does not contain either the WGEN parameters, the RANGE CHECK VALUES, or the FLAGGED DATA COUNT. It therefore stops after the listing of MONTHLY AVERAGES.

MarkSim ignores many fields, but some are transferred to the new CLI file constructed with the future climate.

```
*CLIMATE : PALMIRA-CIAT
@ INSI      LAT      LONG      ELEV      TAV      AMP      SRAY      TMXY      TMNY      RAIY
  PALM      3.500     -76.300     965      24.1     11.6    199.4     29.4     18.8     1147
```

In this line only the INSI, LAT, LONG and ELEV fields are actually used. All the others are recalculated from the new climate. If necessary they can take the value -99.0 or -99 and they will be replaced in the new file.

```
@START  DURN  ANGA  ANGB  REFHT  WNDHT
      0      0  0.25  0.50  0.00  0.00
@ GSST  GSDU
      1  365
```

None of the values in these two lines are used, however they are transferred to the new file. The values shown here are the standard default values and should always be set to these if actual values are not available.

```
*MONTHLY AVERAGES
@MONTH  SAMN  XAMN  NAMN  RTOT  RNUM  SHMN
      1  18.0  29.7  18.7  81.0   9.1 -99.0
      2  18.0  29.8  18.8  75.0   7.8 -99.0
      . . . .
      12  17.4  29.1  18.6  102.0  10.6 -99.0
```

SAMN and RNUM are recalculated for the new file and can take the missing value -99.0 if desired. SHMN is not used and will be transferred to the new file. It is however, read and needs to be present, even if only missing value.

Example

```
*CLIMATE : Chiangmai
@ INSI      LAT      LONG      ELEV      TAV      AMP      SRAY      TMXY      TMNY      RAIY
  DTCM      19.000     99.000      0      25.6     3.9    17.3     31.5     19.7     1226
@START  DURN  ANGA  ANGB  REFHT  WNDHT  SOURCE
  1963    16  0.25  0.50 -99.0 -99.0 Calculated_from_daily_data
@ GSST  GSDU
      1  365
```

```
*MONTHLY AVERAGES
@ MTH  SAMN  XAMN  NAMN  RTOT  RNUM  SHMN
      1  16.7  28.5  12.8  12.6   1.5 -99.0
      2  18.6  31.7  13.8   2.9   0.9 -99.0
      3  19.3  34.6  17.5  17.6   2.2 -99.0
      4  20.3  35.7  21.1  47.6   6.0 -99.0
```

5	19.0	33.6	23.1	150.2	15.3	-99.0
6	17.3	32.3	23.5	130.8	16.1	-99.0
7	15.8	31.5	23.3	183.0	19.1	-99.0
8	15.7	30.6	23.1	271.6	21.9	-99.0
9	16.5	31.0	22.8	230.8	17.2	-99.0
10	16.7	30.9	21.6	118.7	11.1	-99.0
11	16.0	29.5	18.7	43.6	5.2	-99.0
12	15.7	28.3	15.0	16.5	2.5	-99.0