Daily total and hemispheric sunspot numbers

Time range:
1/1/1818 - 31/12/1991: only daily total sunspot numbers (also available as single file)

1/1/1992 - last elapsed month (provisional values): daily total and hemispheric sunspot numbers

Data description:
Daily total and hemispheric sunspot numbers derived by the formula: R= 0.6 (Ns + 10 * Ng), with Ns the number of spots and Ng the number of groups counted either over the entire solar disk (total), the North hemisphere or South hemisphere (based on the sunspot group heliographic latitude). The 0.6 scaling factor was determined to bring the modern total counts to the scale of the original sunspot index derived by Rudolph Wolf in the mid-19th century.

The North and South numbers are always normalized to the total number, which is the global scaling reference. The production of the hemispheric numbers together with the international total sunspot number started only in 1992.

TXT (yearly files)

Filename: dssnYYYY.dat (with YYYY = year in 4 digits)

Format: plain ASCII text

Contents:
Column 1: Gregorian calendar date
Column 2: Date in fraction of year
Column 3: Daily total sunspot number. A '?' symbol replaces the value when none is available for that day (NB: happens only in files before 1849).
Column 4: North daily sunspot number.
Column 5: South daily sunspot number.
Column 6: Definitive/provisional marker. A blank indicates that the value is definitive. A '*' symbol indicates that the value is still provisional and is subject to a possible revision (Usually the last 3 to 6 months)
NB: columns 4, 5 and 6 are empty for all files before 1992.

Line format [character position]:

 - [1-4]   Year
 - [5-6]   Month
 - [7-8]   Day
 - [11-18] Decimal date
 - [20-22] daily sunspot number
 - [24-26] North daily sunspot number
 - [28-30] South daily sunspot number
 - [32]   Definitive/provisional indicator

TXT (single file): all years from 1992 to last elapsed month

Filename: ISSN_D_hem.txt

Format: plain ASCII text

Contents:
Column 1: Gregorian calendar Year
Column 2: Gregorian calendar Month
Column 3: Gregorian calendar Day
Column 4: Date in fraction of year
Column 5: Daily total sunspot number.
Column 6: Daily North sunspot number.
Column 7: Daily South sunspot number.
Column 8: Definitive/provisional marker. A blank indicates that the value is definitive. A '*' symbol indicates that the value is still provisional and is subject to a possible revision (Usually the last 3 to 6 months)

Line format [character position]:

 - [1-4]   Year
 - [6-7]   Month
 - [9-10] Day
 - [13-20] Decimal date

 - [22-24] Daily total sunspot number
 - [26-28] Daily North sunspot number
 - [30-32] Daily South sunspot number
 - [34]   Definitive/provisional indicator

CSV (single file): all years from 1/1/1992 to last elapsed month

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Filename: ISSN_D_hem.csv
Format: Comma Separated values (adapted for import e.g. in MS Excel)

Contents:
Column 1: Gregorian calendar Year
Column 2: Gregorian calendar Month
Column 3: Gregorian calendar Day
Column 4: Date in fraction of year
Column 5: Daily total sunspot number.
Column 6: Daily North sunspot number.
Column 7: daily South sunspot number.
Column 8: Definitive/provisional marker, '1' indicates that the value is definitive, '0' indicates that the value is still provisional and is subject to a possible revision (Usually the last 3 to 6 months)