

Datastructure of the WWX-Files

WWX-Files

The WWX-Files contains the noise data of a complete day (1 measurement data-byte per every second).

Content: All measurement data of 1 day

Filename: **cccc-rrr-yyyyymmdd-sss.wwx**

with: **cccc** Checksum (hexadecimal)

rrr Regionnumber

yyyy Year

mm Month

dd Day

sss Stationnumber

Year, month and day describes the day of the data

cccc, **rrr** and **sss** are constant values which are delivered by DFLD.

Length: 86401 or 86402 Bytes

Byte 1 - 86400: 86400 bytes of measurement-data (1 per every second) from 00:00:00 to 23:59:59.
Binary data in the range from 0 to 127 dBA
If bit 0x80 is set, then it's an overflight (only if overflight detection is made from station owner)

Byte 86401: Checksum of bytes 1 to 86400

Byte 86402: 0 or own overflight detection version (128 - 255)
This byte must not be send, if the overflight detection is calculated from DFLD.

This file must be send to our anonymous server ftp.dfld.de:

User: anonymous

Password: *eMail address*

Directory: incoming (write only)

Checksum - Algorithm

Programming language: C

```
/* **** */
// ChckSum: Build CheckSum
//          Input: Data   Array with the data
//          Lgt   Number of bytes in the array 'Data'
//          Return: Checksum

// CrcTab calculated by Mark G. Mendel, Network Systems Corporation
static unsigned short CrcTab[256] =
{
    0x0000, 0x1021, 0x2042, 0x3063, 0x4084, 0x50a5, 0x60c6, 0x70e7,
    0x8108, 0x9129, 0xa14a, 0xb16b, 0xc18c, 0xd1ad, 0xe1ce, 0xf1ef,
    0x1231, 0x0210, 0x3273, 0x2252, 0x52b5, 0x4294, 0x72f7, 0x62d6,
    0x9339, 0x8318, 0xb37b, 0xa35a, 0xd3bd, 0xc39c, 0xf3ff, 0xe3de,
    0x2462, 0x3443, 0x0420, 0x1401, 0x64e6, 0x74c7, 0x44a4, 0x5485,
    0xa56a, 0xb54b, 0x8528, 0x9509, 0xe5ee, 0xf5cf, 0xc5ac, 0xd58d,
    0x3653, 0x2672, 0x1611, 0x0630, 0x76d7, 0x66f6, 0x5695, 0x46b4,
    0xb75b, 0xa77a, 0x9719, 0x8738, 0xf7df, 0xe7fe, 0xd79d, 0xc7bc,
    0x48c4, 0x58e5, 0x6886, 0x78a7, 0x0840, 0x1861, 0x2802, 0x3823,
    0xc9cc, 0xd9ed, 0xe98e, 0xf9af, 0x8948, 0x9969, 0xa90a, 0xb92b,
    0x5af5, 0x4ad4, 0x7ab7, 0x6a96, 0x1a71, 0x0a50, 0x3a33, 0x2a12,
    0xdbfd, 0xcbdc, 0xfbbf, 0xeb9e, 0x9b79, 0x8b58, 0xbb3b, 0xab1a,
    0x6ca6, 0x7c87, 0x4ce4, 0x5cc5, 0x2c22, 0x3c03, 0x0c60, 0x1c41,
    0xedae, 0xfd8f, 0xcdec, 0xddcd, 0xad2a, 0xbd0b, 0x8d68, 0x9d49,
    0x7e97, 0x6eb6, 0x5ed5, 0x4ef4, 0x3e13, 0x2e32, 0x1e51, 0x0e70,
    0xff9f, 0xefbe, 0xdfdd, 0xcffc, 0xbf1b, 0xaf3a, 0x9f59, 0x8f78,
    0x9188, 0x81a9, 0xb1ca, 0xa1eb, 0xd10c, 0xc12d, 0xf14e, 0xe16f,
    0x1080, 0x00a1, 0x30c2, 0x20e3, 0x5004, 0x4025, 0x7046, 0x6067,
    0x83b9, 0x9398, 0xa3fb, 0xb3da, 0xc33d, 0xd31c, 0xe37f, 0xf35e,
    0x02b1, 0x1290, 0x22f3, 0x32d2, 0x4235, 0x5214, 0x6277, 0x7256,
    0xb5ea, 0xa5cb, 0x95a8, 0x8589, 0xf56e, 0xe54f, 0xd52c, 0xc50d,
    0x34e2, 0x24c3, 0x14a0, 0x0481, 0x7466, 0x6447, 0x5424, 0x4405,
    0xa7db, 0xb7fa, 0x8799, 0x97b8, 0xe75f, 0xf77e, 0xc71d, 0xd73c,
    0x26d3, 0x36f2, 0x0691, 0x16b0, 0x6657, 0x7676, 0x4615, 0x5634,
    0xd94c, 0xc96d, 0xf90e, 0xe92f, 0x99c8, 0x89e9, 0xb98a, 0xa9ab,
    0x5844, 0x4865, 0x7806, 0x6827, 0x18c0, 0x08e1, 0x3882, 0x28a3,
    0xcb7d, 0xdb5c, 0xeb3f, 0xfb1e, 0x8bf9, 0x9bd8, 0xabbb, 0xbb9a,
    0x4a75, 0x5a54, 0x6a37, 0x7a16, 0x0af1, 0x1ad0, 0x2ab3, 0x3a92,
    0xfd2e, 0xed0f, 0xdd6c, 0xcd4d, 0xbdaa, 0xad8b, 0x9de8, 0x8dc9,
    0x7c26, 0x6c07, 0x5c64, 0x4c45, 0x3ca2, 0x2c83, 0x1ce0, 0x0cc1,
    0xef1f, 0xff3e, 0xcf5d, 0xdf7c, 0xaf9b, 0xbfba, 0x8fd9, 0x9ff8,
    0x6e17, 0x7e36, 0x4e55, 0x5e74, 0x2e93, 0x3eb2, 0x0ed1, 0x1ef0
};

// UPDCRC macro derived from article Copyright (C) 1986 Stephen Satchell.
// NOTE: First argument must be in range 0 to 255.
//       Second argument is referenced twice.
//
// Programmers may incorporate any or all code into their programs,
// giving proper credit within the source. Publication of the
// source routines is permitted so long as proper credit is given
// to Stephen Satchell, Satchell Evaluations and Chuck Forsberg,
// Omen Technology.
#define UPDCRC(cp,crc) ( CrcTab[((crc >> 8) & 255)] ^ (crc << 8) ^ cp)

unsigned char ChckSum(TByte *Data,int Lgt)
{
    unsigned short Crc = 0; int i;
    for ( i=0 ; i<Lgt ; i++ ) Crc = UPDCRC ( *Data++,Crc );
    return ( (unsigned char)Crc );
}
/* **** */
```