

Andy Ray Developments

**The PCS Image File Conversion Suite
Notes**

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All information in these notes is given by Andy Ray Developments in good faith. However, it is acknowledged that there may be errors or omissions. Andy Ray Developments welcomes comments and suggestions.

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These notes are intended only to assist the reader in the use of the PCS Image File Conversion Suite and, therefore, Andy Ray Developments shall not be liable for any loss or damage whatsoever arising from the use of any information or particulars in, or errors or omissions in, these notes.

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The PCS Image File Conversion Suite uses the CFITSIO library of routines for reading and writing data files in the FITS (Flexible Image Transport System) data format.

The CFITSIO Copyright, Disclaimer and Gnu General Public License is included with the PCS Image File Conversion Suite. Alternatively, see <http://heasarc.gsfc.nasa.gov/fitsio/> and <http://www.gnu.org/licenses>

The PCS Image File Conversion Suite can be downloaded from the Andy Ray Developments website, <http://www.andyraydevelopments.co.uk>.

Introduction to the PCS Image File Conversion Suite Notes

Andy Ray Developments wrote the PCS Image File Conversion Suite to enable PCSpectra to read and write data files in the bmp, fits and pgm formats. The programs in the Suite convert bmp, fits and pgm format files to and from pcs format files which are then read and written by PCSpectra.

The pcs format data files have a fixed size 256 byte header followed by the data, see Appendix I pcs.h PCS Header File.

The PCS Image File Conversion Suite is written in C. It was compiled and linked on a Windows 7 PC from the Visual Studio 2008 Command Prompt of Microsoft Visual C++ 2008 Express Edition.

The PCS Image File Conversion Suite consists of the six programs shown in the table below:

Program	From Format	To Format
bmp2pcs	bmp	pcs
fit2pcs	fit	pcs
pgm2pcs	pgm	pcs
pcs2bmp	pcs	bmp
pcs2fit	pcs	fit
pcs2pgm	pcs	pgm

Installation

The following instructions assume that Microsoft Visual C++ 2008 Express Edition has been installed.

Download the PCS Image File Conversion Suite (package.zip archive) from the Andy Ray Developments website, <http://www.andyraydevelopments.co.uk>, to a folder.

Copy the contents of the package.zip archive to another folder eg
D:\ PCS Image File Conversion Suite

Select Start->All Programs->Microsoft Visual C++ 2008 Express Edition->Visual Studio Tools->Visual Studio 2008 Command Prompt

Re-Making the PCS Image File Conversion Suite

From the Command Prompt change the working folder to D:\ PCS Image File Conversion Suite eg

Setting environment for using Microsoft Visual Studio 2008 x86 tools.

```
C:\Program Files (x86)\Microsoft Visual Studio 9.0\VC>D:
```

```
D:\>cd D:\PCS Image File Conversion Suite
```

```
D:\PCS Image File Conversion Suite>make.bat
```