# GSPC Historical File Utility

Graphic Statistical Process Control
by MeltLab Systems
844-MeltLab
www.meltlab.com

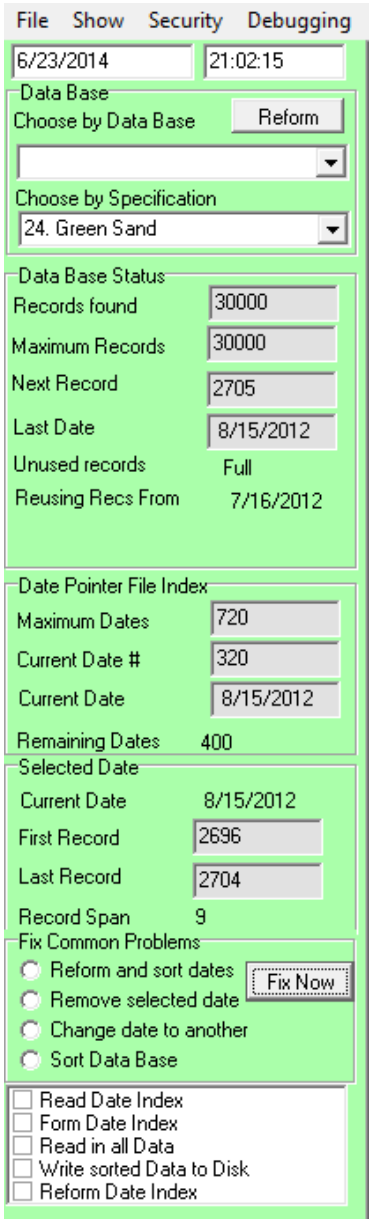
Fast • Accurate • Comprehensive

# GSPC Historical File (Data Base)

- The data base consists of multiple files. The principle ones are the main data base and it's pointer file. For example, if the database was named Iron, then the pointer file would be named Iron.pt.
- Other files can optionally be used mostly to store text. Iron.St1 through St8 for shorter remarks,  Iron.Cm1 through 4 for long comments.
- This program can reform the pointer file or optionally sort both the data file and the pointer file into date order.
- You can also change a date on a group of records of the same date. Say you incorrectly entered a day a year from now. This function can change all of those dates to a new date that you select.
- And finally, you can delete a date from the data base if needed. It is not easy, but after warnings, and confirming it a few times, it can be done.

# Historical Information Panel

- Different Data bases can be sorted and reorganized.
- Increase the maximum records and Reform file to place the most recent data at the end.
- Remove a date.
- Redate a date (Change to another date)
- Export Data to an archive.



# Data base usage and recycling

- Our requirements were that the data base be fast, be indexed, and require no user knowledge to keep it going.
- When the maximum number of dates were used, the dates would wrap around and reuse the oldest date position for the next date.
- When the maximum number of records were used, the records would wrap around and reuse the oldest positions.
- A knowledgeable user could export the data before storage was reused, but in foundries where this wasn't important, the data base would keep running without maintenance and recycle old data storage.

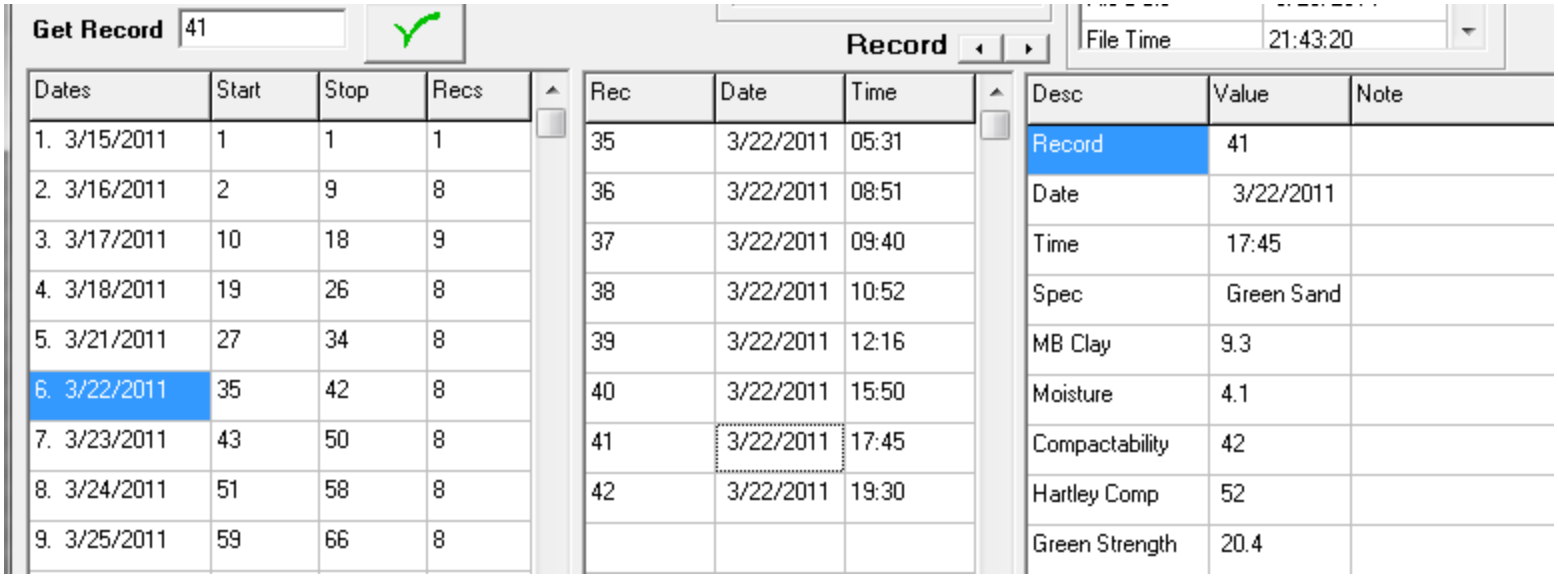
# Dates and info

| Dates | Recs | Dates | Recs | Dates | Recs | Dates | Recs |
|---|---|---|---|---|---|---|---|
| 3/15/2011 | 1 | 6/15/2011 | 6 | 9/28/2011 | 9 | 1/6/2012 | 11 |
| 3/16/2011 | 8 | 6/16/2011 | 3 | 9/29/2011 | 8 | 1/9/2012 | 8 |
| 3/17/2011 | 9 | 6/17/2011 | 8 | 10/3/2011 | 9 | 1/10/2012 | 9 |
| 3/18/2011 | 8 | 6/20/2011 | 6 | 10/4/2011 | 3 | 1/11/2012 | 11 |
| 3/21/2011 | 8 | 6/21/2011 | 7 | 10/5/2011 | 7 | 1/12/2012 | 8 |
| 3/22/2011 | 8 | 6/22/2011 | 7 | 10/6/2011 | 6 | 1/13/2012 | 7 |
| 3/23/2011 | 8 | 6/23/2011 | 8 | 10/7/2011 | 9 | 1/16/2012 | 6 |
| 3/24/2011 | 8 | 6/24/2011 | 9 | 10/10/2011 | 6 | 1/17/2012 | 13 |
| 3/25/2011 | 8 | 6/27/2011 | 7 | 10/11/2011 | 9 | 1/18/2012 | 9 |
| 3/29/2011 | 8 | 6/28/2011 | 7 | 10/12/2011 | 10 | 1/19/2012 | 11 |
| 3/30/2011 | 8 | 6/29/2011 | 1 | 10/13/2011 | 5 | 1/23/2012 | 9 |

- The number of records is the last record – first record + 1.
- Sometimes dates can overlap due to the way samples are delivered to a spectrometer lab.
- So it is not the actual number of records but information on were to start and stop a search for a given date.

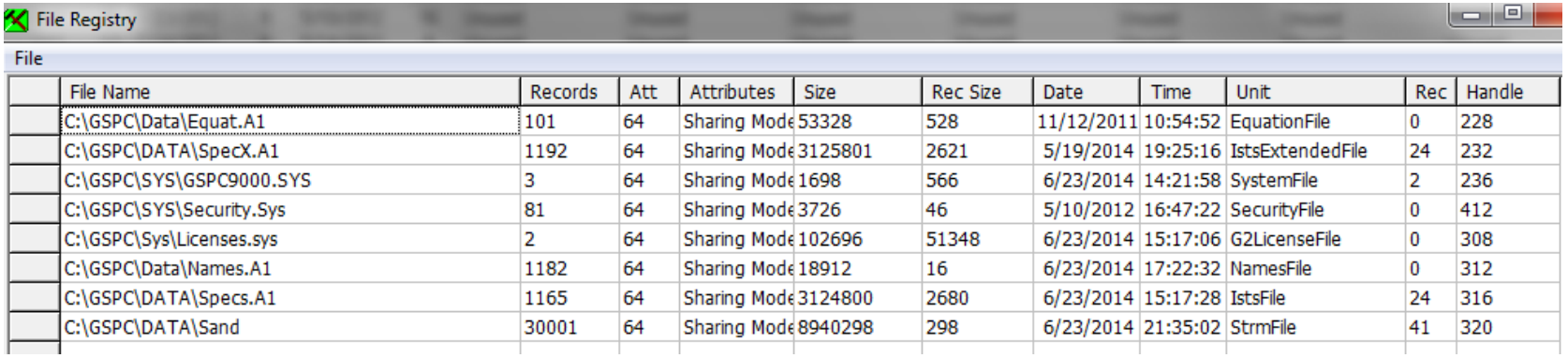
# Individual Records

- Individual records can also be examined from the drop down ***Show*** menu. Pick a date, a time and see the record.



# Files Open (every program)

- The File Registry is used to debug programs and find out which files are being used.
- The first record is often record zero because computers start counting with zero, not one.
- But some files use the zero record for version numbers and other things.


File Registry

File

| File Name | Records | Att | Attributes | Size | Rec Size | Date | Time | Unit | Rec | Handle |
|---|---|---|---|---|---|---|---|---|---|---|
| C:\GSPC\Data\Equat.A1 | 101 | 64 | Sharing Mode | 53328 | 528 | 11/12/2011 | 10:54:52 | EquationFile | 0 | 228 |
| C:\GSPC\DATA\SpecX.A1 | 1192 | 64 | Sharing Mode | 3125801 | 2621 | 5/19/2014 | 19:25:16 | IstsExtendedFile | 24 | 232 |
| C:\GSPC\SYS\GSPC9000.SYS | 3 | 64 | Sharing Mode | 1698 | 566 | 6/23/2014 | 14:21:58 | SystemFile | 2 | 236 |
| C:\GSPC\SYS\Security.Sys | 81 | 64 | Sharing Mode | 3726 | 46 | 5/10/2012 | 16:47:22 | SecurityFile | 0 | 412 |
| C:\GSPC\Sys\Licenses.sys | 2 | 64 | Sharing Mode | 102696 | 51348 | 6/23/2014 | 15:17:06 | G2LicenseFile | 0 | 308 |
| C:\GSPC\Data\Names.A1 | 1182 | 64 | Sharing Mode | 18912 | 16 | 6/23/2014 | 17:22:32 | NamesFile | 0 | 312 |
| C:\GSPC\DATA\Specs.A1 | 1165 | 64 | Sharing Mode | 3124800 | 2680 | 6/23/2014 | 15:17:28 | IstsFile | 24 | 316 |
| C:\GSPC\DATA\Sand | 30001 | 64 | Sharing Mode | 8940298 | 298 | 6/23/2014 | 21:35:02 | StrmFile | 41 | 320 |

# File Errors (every program)

- What you don’t want to see is I/O Errors (Input Output errors)
- Errors can come from server errors, switch errors, and slow response times.
- When a program is having problems, check the errors in the file registry.

| | I/O Error | I/O Desc | I/O Time | File Name and Path | Extended Description of error |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |