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**TECHNICAL BULLETIN**

# OASIS Pro

## Open Analytical Service & Information System

For quality control
in the photographic laboratory

FUJIFILM

August 2018
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# OASIS Pro

**OASIS : Open Analytical Service & Information System**

***for quality control in the photographic laboratory***

***The OASIS Pro v3.02 / v3.07 programs :***

**OASIS Pro Lite**
**OASIS Pro Compact**
**OASIS Pro**
**OASIS Pro Monitor**
**OASIS Pro Monitor with OASIS X-link**
**OASIS Remote**

## COPYRIGHT



*All techniques described in this document are based on the OASIS Pro family of programs, version 3.02 / v3.07 / V4.01 and were correct at the time of going to press. Details of Fuji Hunt chemistry mentioned in this document were correct at the time of going to press. Please see publication date on the front cover.*

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# I. INTRODUCTION TO THE OASIS PRO PROGRAMS

## 1. What is OASIS Pro, and who needs it?

The OASIS Pro programs allow easy and effective control of all processes and printers in the photo-processing laboratory. The OASIS Pro package consists of an industry-standard Windows-based program that allows you to rapidly read and plot all types of control tests, transfer data between sites, include chemical data, and much more besides. It includes comprehensive manuals that cover all aspects of program set-up and use.

If this sounds too complicated, and perhaps more than you need, it is not. The OASIS Pro family of quality control software consists of four programs to suit all types of laboratory. The programs have been designed by technicians working in the photographic industry - with very considerable input from major customers in all fields of photo-processing - to make sure the programs perfectly match your laboratory requirements.

The result is a user-friendly tool using normal Windows procedures - easy to use and simple to learn. Anyone even vaguely familiar with Windows applications can use OASIS Pro with almost no instruction.

As an alternative, OASIS Remote allows strips to be read at customer sites, with the data being automatically transmitted through the internet to a central monitoring service. This allows experts to provide immediate advice for any process problems. The knowledge required by the user is limited to simply how to put a strip into the (automatic) densitometer – everything else is completely automatic.

Anyone who reads process or printer control strips with a densitometer - or intends to - and plots the graphs as an aid to quality control can benefit from using OASIS Pro. There is a program to suit every requirement, big or small.

This Technical Bulletin gives you an overview of some of the more commonly used features of the OASIS Pro v3.02, v3.07 and v4.01 programs; please contact mailto:marketing_feb@fujifilm.eu if you require additional information.

## 2. The Programs

OASIS Pro Lite is the simplest program, allowing reading of process and printer control tests, viewing graphs and process diagnostics, and giving full modem links with either the OASIS Pro or OASIS Pro Monitor program.

OASIS Pro Compact is designed for the stand-alone laboratory, but includes modem communications with other sites. Additional facilities for recording data are provided, along with many powerful features including the comparison of processors and different control strips, the inclusion of chemical data, an advanced printer control program, and inter-negative exposure calculation.

OASIS Pro is a full-featured program designed to meet all requirements. This program is designed for the larger laboratory, or for a head office site supporting any number of OASIS Pro Lite (or OASIS Pro) installations. All of the features included in the Compact program are available, plus many additional options to allow in-depth analysis of all aspects of laboratory quality control.

OASIS Pro Monitor is similar to the OASIS Pro program, but with many further features to facilitate operating a monitoring service, including a comprehensive data export function (to Microsoft Excel) to allow preparation of quality reports and custom data analysis functions.

OASIS Pro Monitor with OASIS X-link is a special version of the OASIS Pro Monitor program that includes the possibility of direct linking to remote X-Rite 820, 88x and 89x series densitometers using just the telephone system, with no need for an OASIS Pro program at the remote site.

OASIS Remote is a remote monitoring service system designed particularly for minilab chains, but also suitable for the independent laboratory. A custom OASIS Remote densitometer is required for each site, plus internet access. Data is automatically sent to a central monitoring service after reading the strips locally; any problems are then corrected (within minutes of the strip being read) by telephone and posted for review on a private web site. This powerful service is used by some of the world's leading minilab chains, covering many thousands of locations.

# 3. About OASIS Pro

The OASIS Pro family of programs is designed to enable a much higher standard of process control to be achieved with a reduced need to employ specially trained and skilled personnel. The programs are designed to operate without any requirement for chemical analysis; full facilities are however provided for entering and using chemical analysis data.

The OASIS Pro family is capable of providing extensive diagnostics and corrective measures for a wide range of materials, printers and processes. The data recording and presentation abilities of OASIS Pro are unsurpassed in the field of photographic quality control software, and enable the user to take an easy, rapid and far-ranging view of all aspects of the photographic process.

All of the OASIS Pro programs, from the simplest OASIS Pro Lite to the very advanced OASIS Pro, can be upgraded as required with no loss of data. If the needs of your laboratory change, you need never fear that your valuable data are at risk.

All OASIS Pro programs also include advanced diagnostics functions. This even extends to the transferring of diagnostics between sites, and the possibility of downloading diagnostics directly from FUJIFILM.

FUJIFILM hopes you enjoy using the OASIS Pro programs. OASIS Pro has been designed specifically for ease of use, yet provides all of the power that any laboratory, amateur or professional, large or small, could possibly require.

The latest release of OASIS Pro is version 4.01. This version is functionally identical to version 3.02/3.07, but supports installation on WIN7,WIN8 and WIN10 (x64 and x86) and use of a USB dongle.

The previous releases version of OASIS Pro are version 3.02 (old parallel dongle) or version 3.07 (USB dongle), released February 2004 and 2008 for use on older PC's.

All software versions are for free download from the esclusivo section of FUJIFILM Europe web site, or, on request, on USB from FUJIFILM Belgium NV.
https://www.fujifilmesclusivo.eu/

The OASIS Remote system is a monitoring service operated by FUJIFILM; please ask your FUJIFILM representative for more details.

# II. PROGRAM FEATURES

## 1. Program overview

The program has been written to be easy and simple to use. Despite the very comprehensive set of features available in the OASIS Pro programs, you only have to use what you need at the moment, and can start using more advanced features later, as and when you need them.

All of the OASIS Pro programs share a common method of operation; all share similar setup routines for defining the equipment in your laboratory.

OASIS Pro is so designed that the user can add, change or delete items as required - without the need for FUJIFILM's help to modify the program. Almost all parameters in the program can be adjusted to suit your requirements (but standard settings are supplied with the program) - aims, limits, what to show on a graph, etc., and even the program menus themselves can be fully configured so that unwanted options can be hidden.

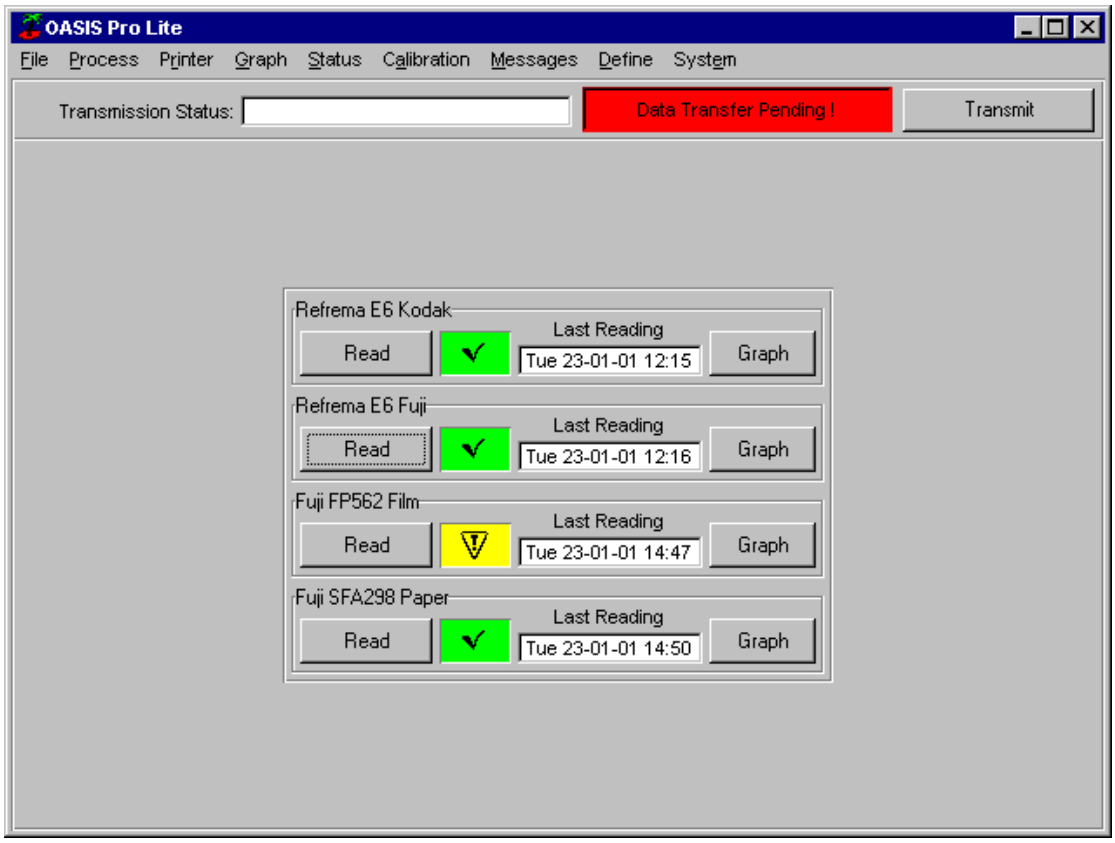
All program setup options are password protected - and you can change the password as often as you wish. This prevents unauthorised changes to your program, and also unauthorised deletion of data.

OASIS Pro includes all standard process control strip types from all manufacturers. All parameters and settings can be adjusted, and you can even create new strip types. Less-used strip types (for example, process EP2, Konica, most Agfa strips) are hidden from view in normal use to make things easier for the user (in a new installation); they can easily be revealed as required. A set of standard calculations for the advanced printer correction module is also supplied with all programs except Lite; again, you can fine-tune the program as required.

A comprehensive Windows help file is supplied for all OASIS Pro version 3.x and 4.x programs, covering all aspects of setting up and using the programs.
Please take note that windows help files are no longer supported by Microsoft latest software versions Vista, WN7, WIN8, WN10.
Therefore we offer the OASIS help file in html-version.
Install this html version on your local PC as it will not work while opening on a network.

## 2. OASIS Pro Lite

This is the program for the ultimate in ease of use. Having setup your laboratory in the OASIS Pro Lite program, you can now customise the main OASIS Pro Lite screen for maximum simplicity :




To read a strip or view a graph, simply click on the appropriate button.

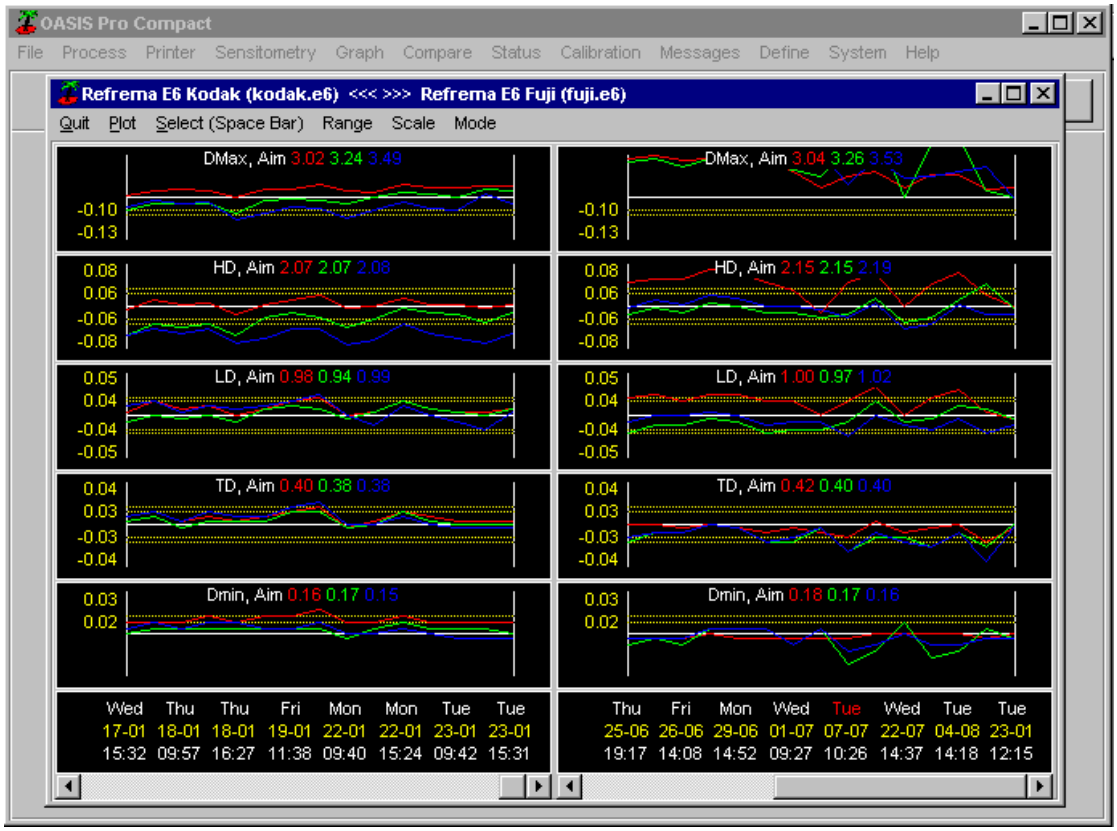
This example shows OASIS Pro Lite set up for sending data to a remote OASIS Pro installation using serial communications (a modem) - perhaps the head office for a laboratory group. To send the latest test data, all you have to do is click on the Transmit button - OASIS does everything else for you. For stand-alone sites, the data transmission status bar is not shown.

Version 4 of OASIS Pro (all programs) also supports sending data using the Internet – all you need is an Internet connection to your OASIS PC.

# 3. OASIS Pro Compact

The OASIS Pro Compact program, the next step up in the OASIS Pro family, adds many extra facilities. Many options for comparing data between strips and processors are available.

A typical example in a professional laboratory processing both Fuji and Kodak controls for an E6 process could be :



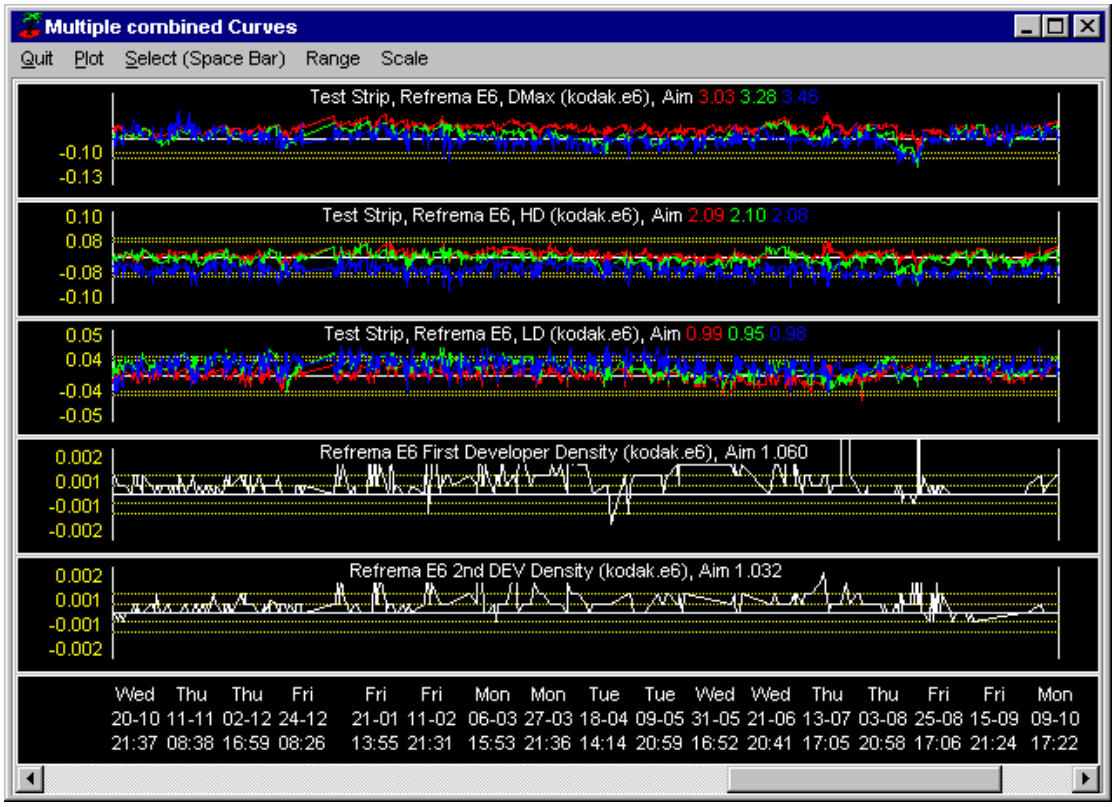

For optimum process control, processing of both Fuji and Kodak controls is recommended. No other process control program allows this type of comparison - you need to see both plots together to gain a full understanding of process changes.

# 4. OASIS Pro

This is the ideal program for the larger professional laboratory, photofinishing labs, and head office locations controlling a number of secondary sites using the OASIS Pro Lite or OASIS Pro programs.

Further opportunities for examining your data are provided, to the extent that any data from any location, or even process strip plus chemical data, can be shown on the same graph.

In this example, you can see the graph for an E6 process (covering a whole year) with the first and colour developer densities shown, as well as the LD, HD and D-max of the process strips :



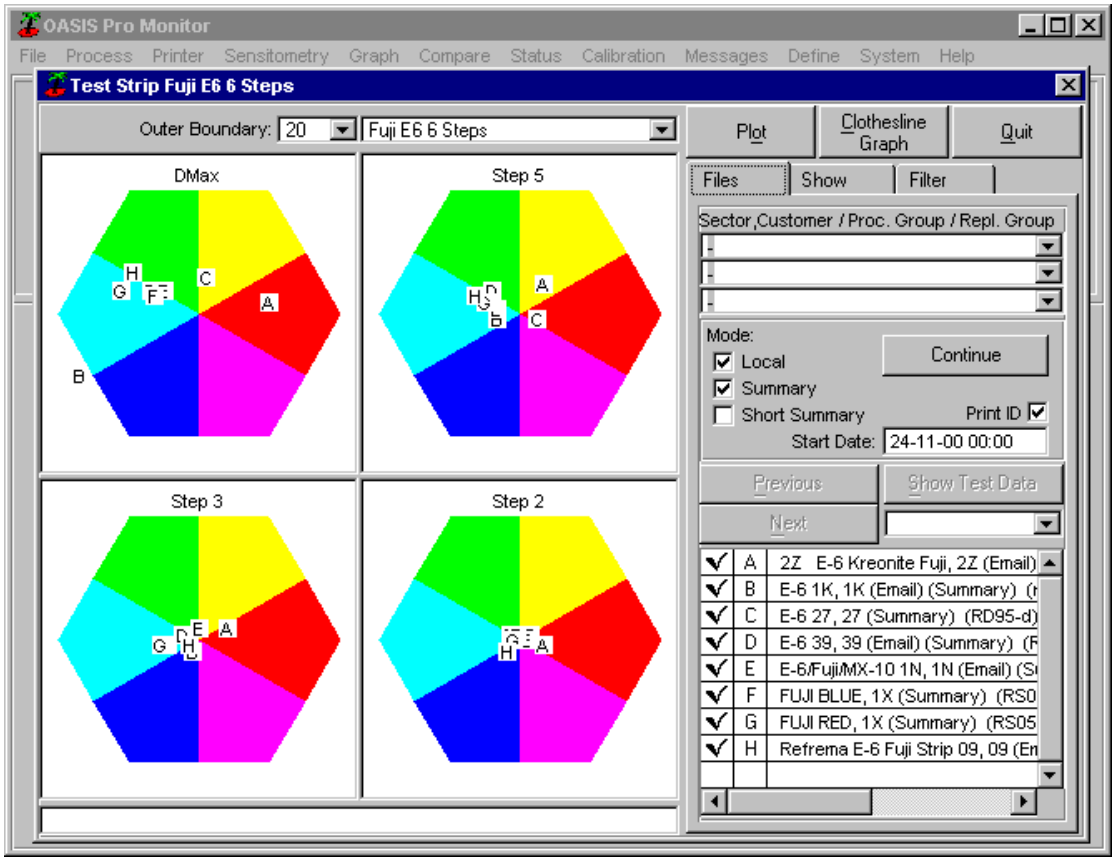

This type of presentation - OASIS Pro allows comparisons based on time as well as the more common graphing based simply on the number of strips processed - is invaluable when looking at long term trends and overall stability of a process.

OASIS Pro can produce graphs covering any period from 15 to 365 days on a single screen. All OASIS Pro programs let you print what you see - just click on Plot to print out the graph.

# 5. OASIS Pro Monitor

This is the program for monitoring services. There are many features for writing letters, batch printing of letters and additional data transfer functions, as well as the full range of options included in the OASIS Pro program. Version 3 includes a very comprehensive data export option.

One option allows the comparison of many processors on a single trilinear graph - ideal for market surveys :




This sort of function can also be used in the largest laboratories for comparisons between their own processors - or printers. Data can also be displayed as a clothesline graph with a single mouse click, and full data selection and filtering options are provided.

Letter writing with OASIS Pro Monitor uses DDE links to Microsoft Word to build and output the letters; the actual letter writing function is contained within the OASIS Pro program. English, French and German language versions of Microsoft Word, versions 7 is supported.

## 6. OASIS Remote

This is the FUJIFILM real-time monitoring service, currently available in the UK from FUJIFILM UK, and in Europe from FUJIFILM Belgium NV. This uses a custom densitometer to read process control strips (any make, but typically Fuji) at the laboratory.


This densitometer is highly automated, and features include :
No calibration by the customer
Automatic determination of strip type being read
Automatic strip measurement
Automatic entry of reference strip correction factors
Automatic announcement of process condition every time a strip is read
Automatic transmission of data to the FUJIFILM Monitoring Service

Data transfer to FUJIFILM is by Internet, normally using the store's existing Ethernet network.

The Monitoring Service (currently in English) will contact the customer within 30 minutes (maximum, but typically much quicker) to give support for all out-of-action and out-of-control process conditions. Where an out-of-control condition cannot be rectified over the telephone, the process control information is posted onto a private web site to allow a second level of support from a field technician.

Reports for each location, exception reports, and data analysis by region, processor type, or any other sort criteria required by the company management, are posted monthly on the private web site.

There are very significant benefits available for the mass retailer – amongst these are greatly reduced training and field support requirements, faster technical assistance, improvements in quality and consistency from location to location, and much improved targeting of problem areas by use of the exception reports.

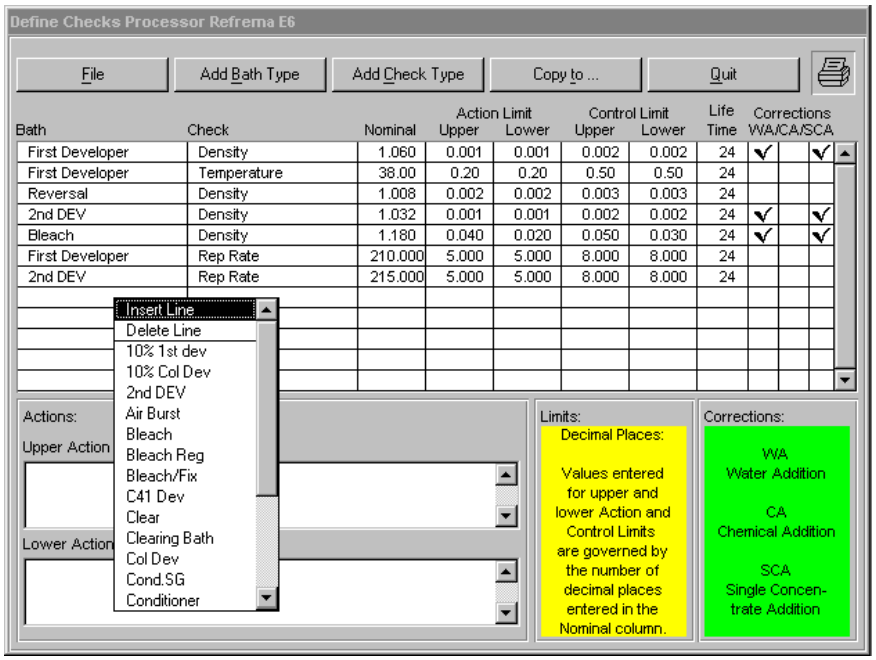
For further information, please contact marketing_feb@fujifilm.eu

# III. EXAMPLES FROM OASIS PRO

## 1. Program Set-up

All program set-up is password protected. All sorts of parameters can be defined using the Define menu options. A typical example is Tank Checks :

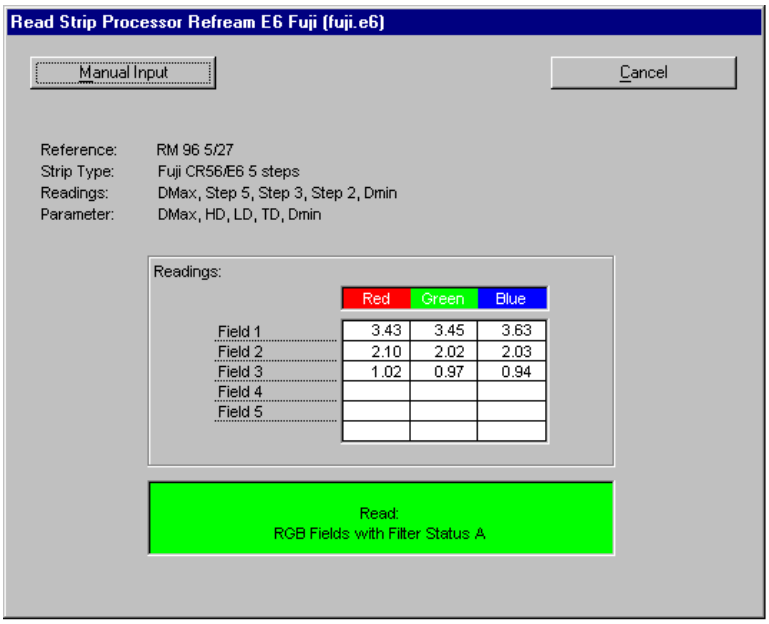

where you can define check types as you wish, and create as many checks - chemical or other data - for a processor as you require. The aims and limits you type in are your own - *you* define how you want to run a process.


Define Checks Processor Refrema E6
File
Add Bath Type
Add Check Type
Copy to ...
Quit
Bath
Check
Nominal
Action Limit Upper
Action Limit Lower
Control Limit Upper
Control Limit Lower
Life Time
Corrections WA/CA/SCA
First Developer Density 1.060 0.001 0.001 0.002 0.002 24
First Developer Temperature 38.00 0.20 0.20 0.50 0.50 24
Reversal Density 1.008 0.002 0.002 0.003 0.003 24
2nd DEV Density 1.032 0.001 0.001 0.002 0.002 24
Bleach Density 1.180 0.040 0.020 0.050 0.030 24
First Developer Rep Rate 210.000 5.000 5.000 8.000 8.000 24
2nd DEV Rep Rate 215.000 5.000 5.000 8.000 8.000 24
Insert Line
Delete Line
10% 1st dev
10% Col Dev
2nd DEV
Air Burst
Bleach
Bleach Reg
Bleach/Fix
C41 Dev
Clear
Clearing Bath
Col Dev
Cond.SG
Conditioner
Actions:
Upper Action
Lower Action
Limits:
Decimal Places:
Values entered for upper and lower Action and Control Limits are governed by the number of decimal places entered in the Nominal column.
Corrections:
WA
Water Addition
CA
Chemical Addition
SCA
Single Concen-trate Addition

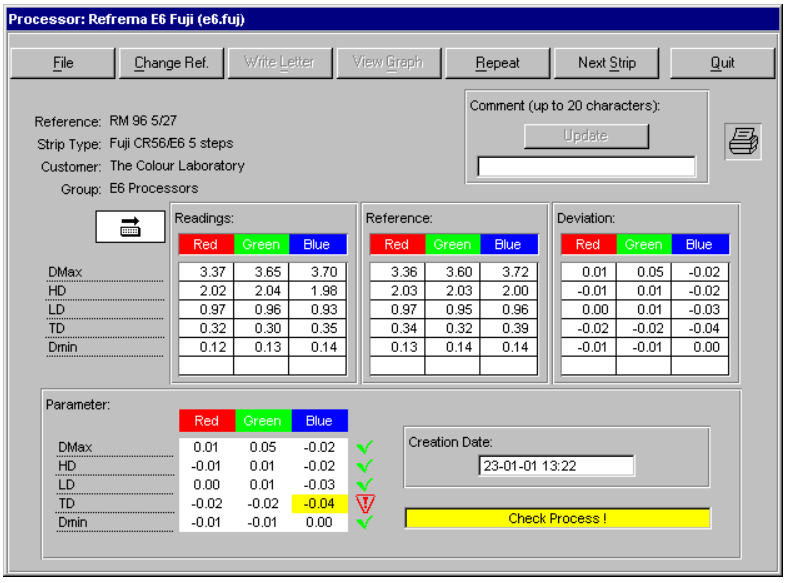
## 2. Reading a process control strip

With OASIS Pro Lite, simply click on the **Read** button and start reading the strip with the densitometer.

With the other OASIS Pro programs, all process control strip functions are found under the **Process** menu. Selecting **Read Test Strip** from the menu, and then your processor, allows direct input of data from a densitometer :




When readings are completed, the deviations and status of the strip are shown automatically :



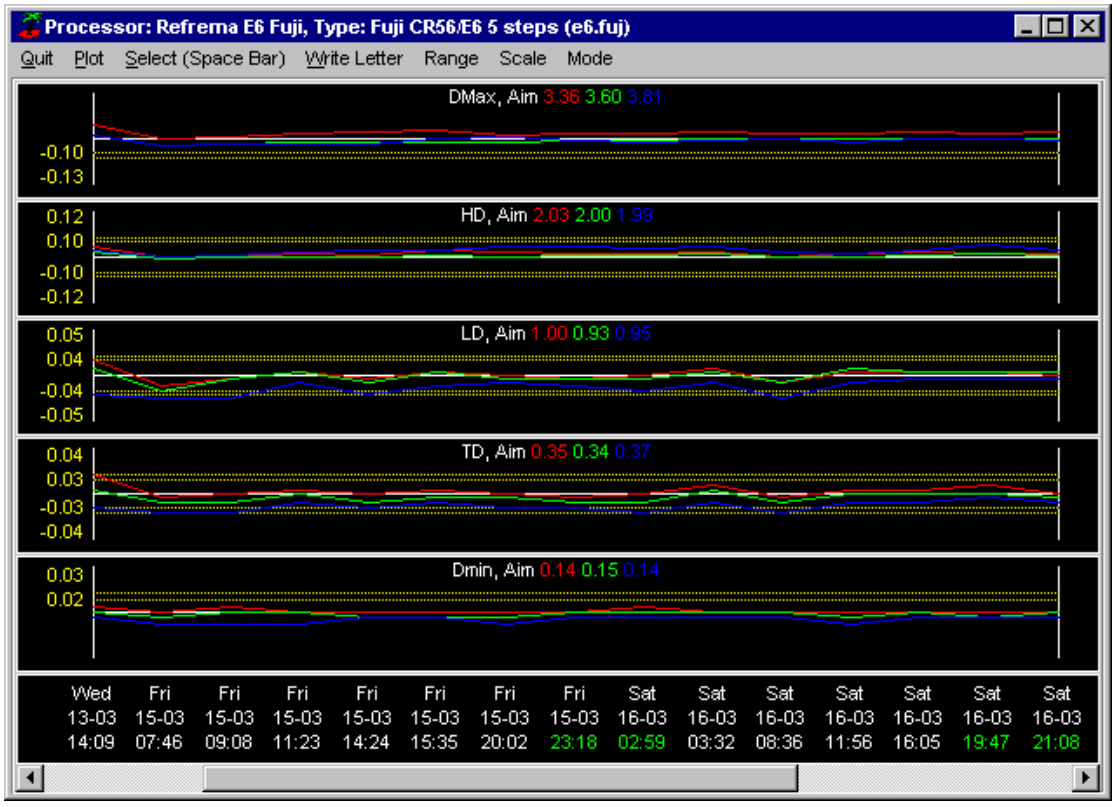

A simple system of green for Ok, yellow for out-of-action limit, and red for out-of-control is used to indicate parameter status throughout OASIS Pro.

## 3. Viewing a graph

With OASIS Pro Lite, it could not be easier! Simply click on the **Graph** button of your chosen processor.

With other OASIS Pro programs, click on the **Graph** menu option, choose a graph type and then your processor.

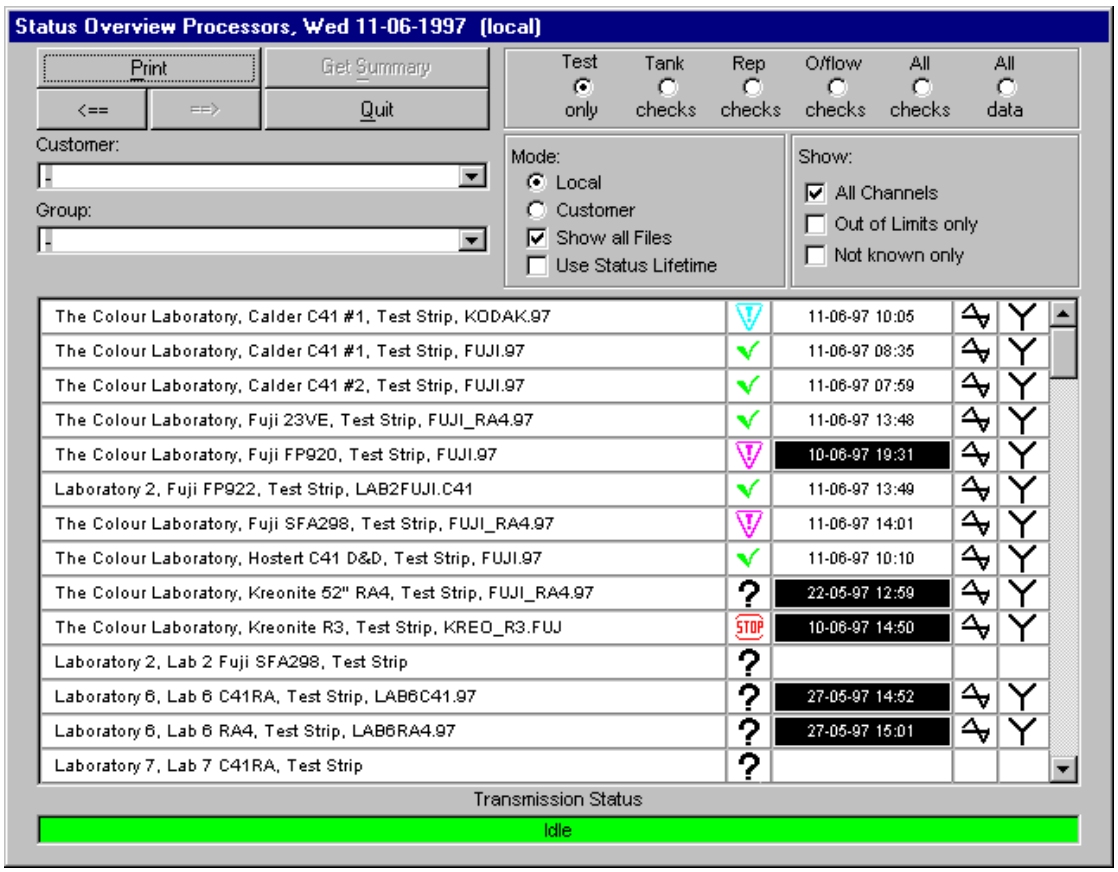
From all OASIS Pro programs, you can go directly to the graph from the strip readings screen - simply click on the **View Graph** button :




The scroll bar at the bottom of the graph allows you to move freely through all the data stored on your system. Zooming in to any portion of the graph is easily accomplished by simply selecting the area you want to see with the mouse.

# 4. Status

A quick overview of all processors in your laboratory can be easily seen by choosing the Status option. For a large laboratory, you may see :




Depending on the particular OASIS Pro program you are using, it is just as easy to look up processor status, the status of any chemical checks you have defined, printers or printer channel status, or everything together.

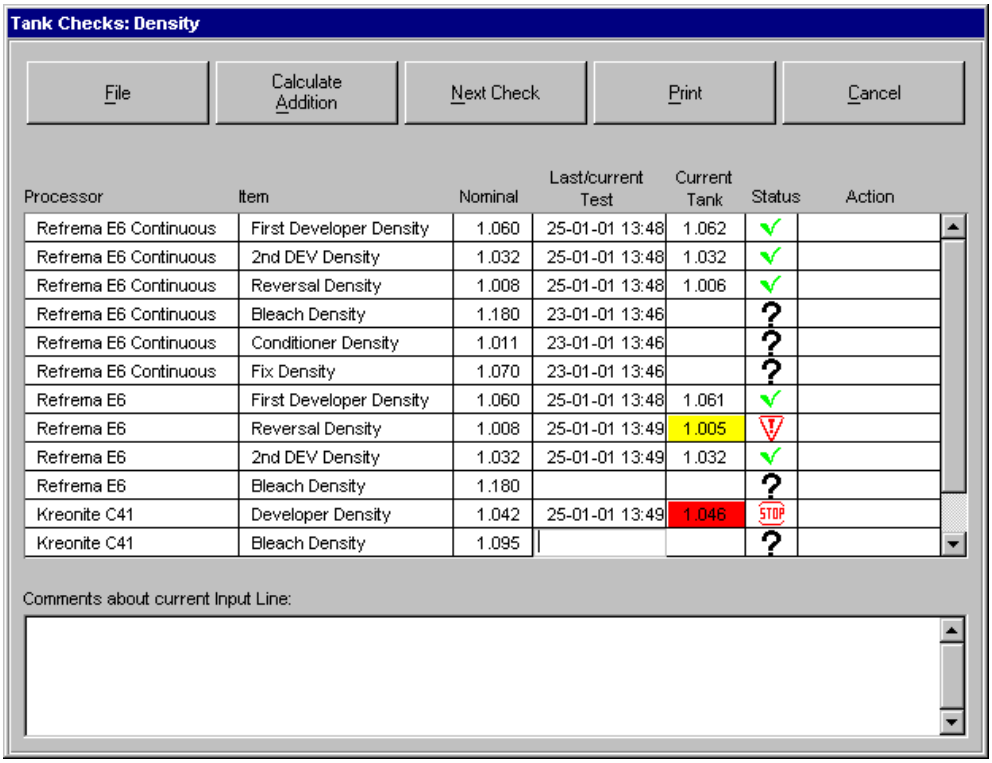
You can also pick out Not known only - tests which should have been completed (by your definitions within OASIS Pro), but which have not been, or simply any parameters which are out of limits. You can also set time limits for the oldest displayed data, preventing the display of processors that are no longer in use. For OASIS Pro and Pro Monitor, it is also easy to show the status of all other sites transferring data to your computer.

The Status screens are also a handy short-cut to graphs and trilinear graphs. Selecting a customer also allows you to download data from another OASIS Pro or OASIS Pro Lite installation - and then view the data as if it was data from your own laboratory.

# 5. Checks

Checks in OASIS Pro are generally chemical checks - solution densities, pH, analysed chemical values, etc. They can also be virtually anything else that you can express in numbers - replenishment rates, temperatures, and so on. Examples can be seen on page 10, Program Set-up.

Checks can either be carried out (assuming you want to!) by processor, or by the type of check that you are doing. This can be more convenient when you have, for example, a lot of solution densities to measure :




You only need to carry out the checks that you want to do at that time. If you click on the Calculate Addition button, OASIS will estimate water (or concentrate) additions to bring your chemistry back into control.

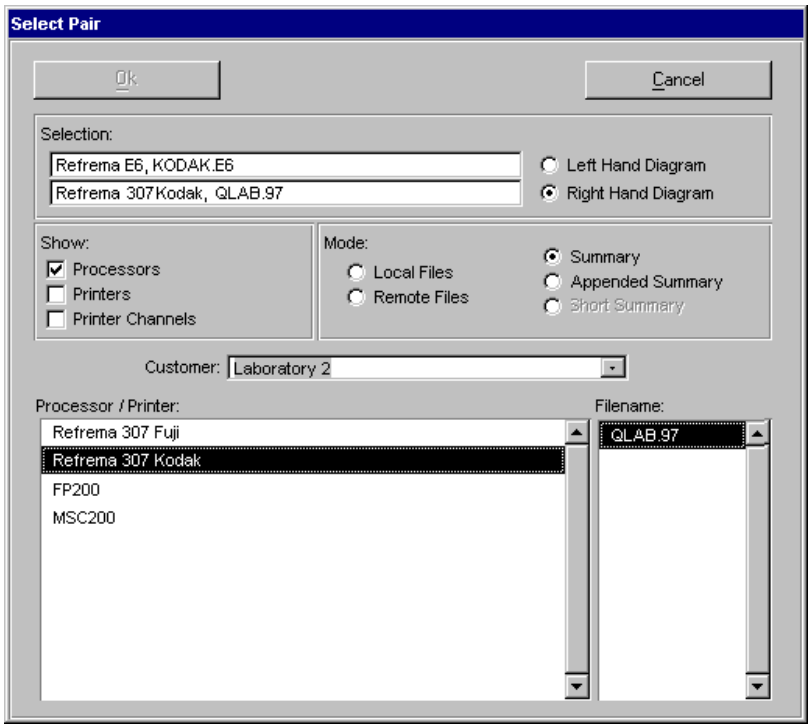
Chemical checks are not available in OASIS Pro Lite. With OASIS Pro Compact, chemical check types are limited to those commonly used for monitoring the E6 process, although these checks can be used for as many processors as you wish. Checks are unlimited with OASIS Pro and Pro Monitor.

# 6. Compare

An example of the Compare function can be seen on page 6, as seen in OASIS Pro Compact.

With OASIS Pro and OASIS Pro Monitor, comparisons can be taken a stage further - any two graphs, no matter the source of the data - can be displayed on the screen at once.

Perhaps you wish to compare an E6 processor in your own laboratory with one in a satellite site. After importing the Summary file, you can freely select the data you want to see :




This example is pulling together data from your local “Refrema E6” processor, along with that from the “Refrema 307 Kodak” processor at the "Laboratory 2" laboratory.

There are no limits to what you can compare - two processors, printers with processors, different strip types from the same processor, even data covering different periods of time from the same processor. What you see on the screen is easily printed by clicking on Plot.

# 7. Combined Graphs

Combined graphs are available to users of the OASIS Pro and OASIS Pro Monitor programs. Here, any combination of data that you want can be shown on a single graph.

This allows you to look at combinations of data that would be practically impossible with paper plots or other photographic quality control programs. There is a lot you can learn about a process by watching, for example, variations in the plot with developer densities. It is so quick and easy to pull these graphs out with OASIS Pro that it opens up a whole new realm of possibilities for precise and meaningful quality control.


This example shows a mix of Kodak and Fuji E6 strip lots from a processor, looking just at the D-max and HD. This allows the user to examine the relationship between the different strip types and decide on optimum corrective actions.

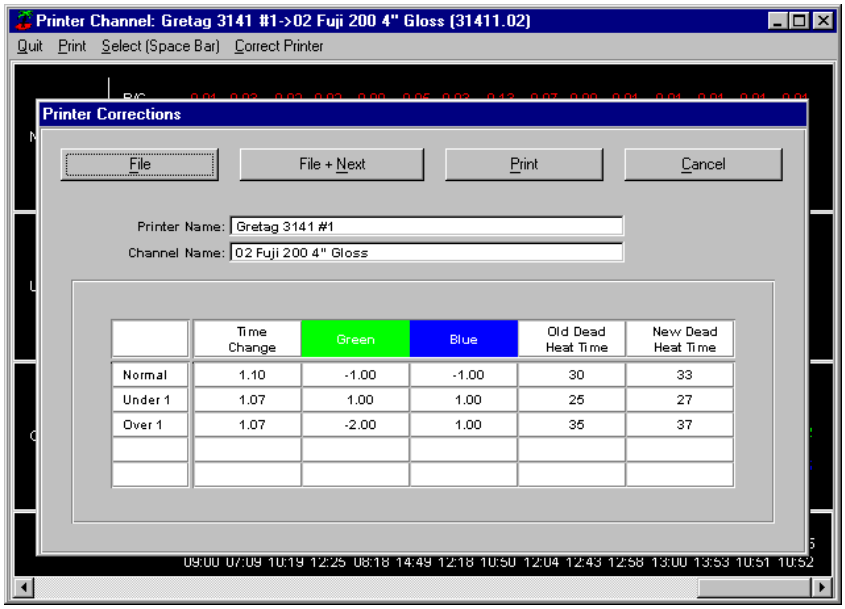
# 8. Printer set-up and control

Whilst it is possible to monitor printers with the OASIS Pro Lite program, you will need OASIS Pro Compact, OASIS Pro or OASIS Pro Monitor to get the benefits of the powerful printer control module included in these programs.

This module has been developed with the needs of all laboratories using printers in mind. All types of stand-alone printer are supported, even such specialised types as the Kodak CLAS35.

Printers use printer channels to store their set-up information. These are logically grouped within OASIS Pro to allow comparisons of all channels for one printer, or all master channels of all printers. With everything matching, you know that you will have consistent output throughout your laboratory. This is true for all types of lab - photofinishers, social laboratories, or anyone using machine printers.

OASIS Pro can give you precise corrections for all types of printer - standard printer correction formulae are built into the program. A typical example could be :



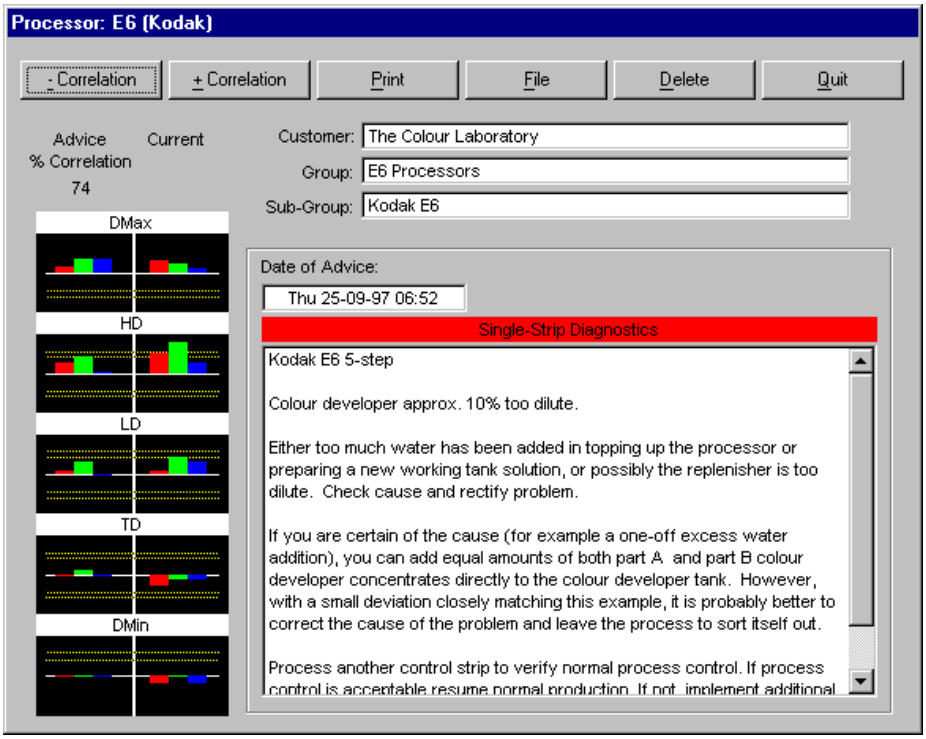

Just read in your printer control test and ask for Correct Printer. All of the hard work is done for you by OASIS Pro.

# 9. Diagnostics

Comprehensive diagnostics possibilities are an integral part of all OASIS Pro programs.

Diagnostics can be used both on a “single strip” basis, or looking at trends. Also, diagnostics can include both chemical and process data where available for increased precision.

A diagnostic message may appear as :




You can add your own diagnostics, modify or delete diagnostics as you wish. These functions can be password protected.

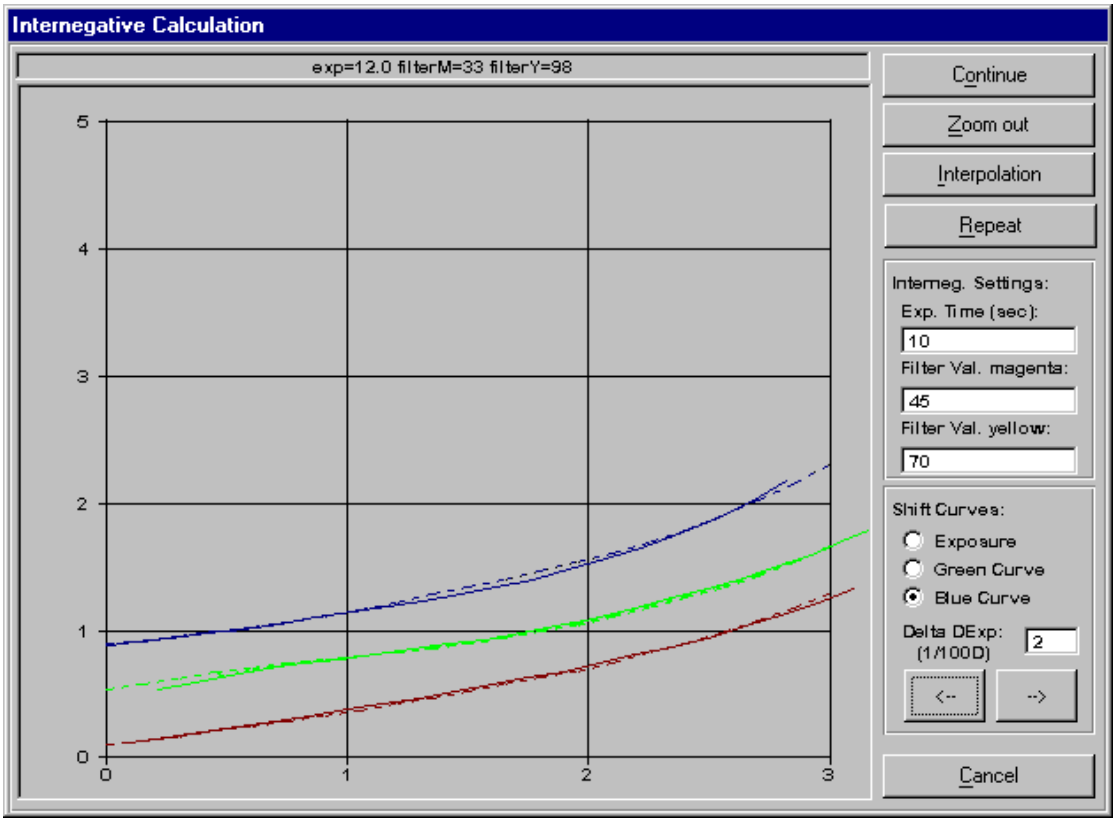
Diagnostics are offered in decreasing order of matching between the selected strip (or range of strips) and diagnostics stored on your OASIS Pro system. For the best results, enter diagnostics yourself for problems you have solved - past experience on your own processors is always the best guide for solving future problems.

# 10. Sensitometry - Internegative Calculation

OASIS Pro Compact, OASIS Pro and OASIS Pro Monitor include a full-featured sensitometric evaluation program. This can be used for reading and plotting any type of process strip, even those you may have made yourself.

Professional laboratories will find this part of the program of great use in calculating correct exposures and filtration for internegative film.

Once you have read in an internegative reference (not limited to Fuji IT-N film - any make can be used), simply read in your exposure test and then shift the curves to obtain a best match. This is easily achieved by using the arrow keys at the bottom right of the screen :




Correct exposure and filtration values are shown at the top of the screen. This procedure cuts the time taken for calculation of internegative exposures (compared to the manual method using graph paper) to a fraction of what it used to be.

# IV. OASIS PRO : A TECHNICAL OVERVIEW

## 1. Computer Requirements

The OASIS Pro programs, version 3.02 and 3.07, are 32-bit programs designed for older PC, but buth these programs also run under Windows XP or Vista, WIN7. WIN8 (x86 32 bit).

OASIS Software version 3.02 was developed for use with parallel dongle.
OASIS Software versions v3.07 and v4.01 allows use of USB dongles.

To install the OASIS programs under WIN7, WIN8 and WIN10 ( x64, x86 64 bit) you require OASIS v 4.01.

The OASIS Pro programs come with a windows help file (WinHlp32.exe).
Please take note that windows help files are no longer supported by Microsoft latest software versions Vista, WN7, WIN8, WN10.
Therefore we also offer the OASIS help file in html-version.
Install this html version on your local PC as it will not work while opening on a network.
The original OASIS WinHlp32.exe file is also still available for expert users who know how to get around this issue.

As the OASIS Pro programs are true Windows programs, any printer or other output device that can be run from Windows may be used for output of graphs or other data. Typically, a colour inkjet printer is found to be the most suitable.

Any densitometer with a standard RS232 serial output (almost all modern equipment) may be connected to OASIS Pro for direct input of test data. If the computer is not fitted with a serial port, a USB to serial replicator can be used.
Most densitometers have been discontinued by the manufacturers but still available as second hand. Latest available models were Barbieri Densy 150 E, X-Rite 504.

Densitometers such as the X-Rite 820, 881 or 882 may also be connected to the OASIS Pro and OASIS Pro Monitor programs by direct telephone links, without the need for an OASIS installation at the remote site.

## 2. What's behind the program?

Behind OASIS Pro (as with all such programs) there is a database. Unlike many competing programs, data storage methods used by the OASIS Pro programs ensure that data is automatically stored in a very flexible, pre-sorted form that allows extremely rapid data recall, with little or no reduction in program speed with increasing number of records stored and / or processors / printers monitored. An almost unlimited amount of data for any or many (more than 1200) processors or printers can be stored without problem - records do not have to be automatically discarded just to keep the program running at any reasonable speed.

## 3. Using Modems and the Internet

The OASIS Pro programs included the possibility of communications between sites - or between a laboratory and FUJIFILM or a distributor.

The serial communications functions with OASIS Pro are no longer used.

Alternatively, version 3.02/3.07 and 4.01 of the OASIS Pro programs fully supports use of the Internet to transfer data between sites. No additional software (other than the Internet connection) is required; all functions are built into your OASIS Pro program, and a full set-up procedure may be found in the Help files.

You will need the OASIS Pro or OASIS Pro Monitor programs to receive incoming data, no matter how it has been transferred.

### OASIS Remote

For OASIS Remote, local internet access is required to transmit data to the central monitoring service. Alternative connection methods may be possible if local internet access is not available.