

### 4.3.8. Smooth

The **Smooth** command is available in buffer windows only. It transforms the data in the buffer according to a five-point, area-preserving, binomial smoothing algorithm; that is, the existing data is replaced, channel-by-channel, with the averaged or smoothed data as follows:

$$S_i = \frac{(O_{i-2} + 4O_{i-1} + 6O_i + 4O_{i+1} + O_{i+2})}{16} \quad (23)$$

where:

$S_i$  = the smoothed data in channel  $i$

$O_i$  = the original data in channel  $i$

### 4.3.9. Strip...

This command (Fig. 64) strips the specified disk spectrum from the spectrum in the buffer and stores the result in the buffer. Select a **File name** and **Stripping Factor**, and click on **OK**.

**NOTE** Any valid spectral data file can be selected, but it must contain the same number of channels as the buffer.

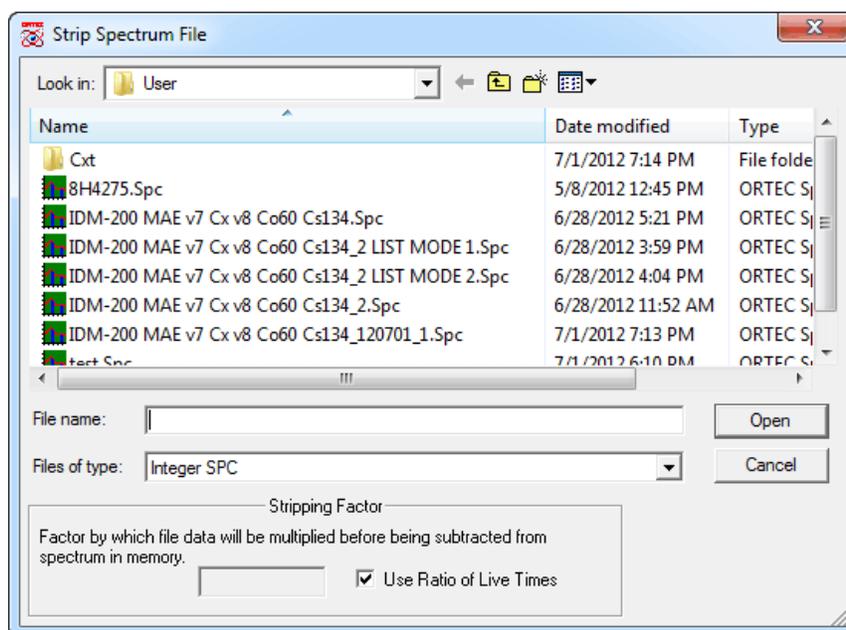


Fig. 64. Choose Strip Spectrum.

The strip factor is a real number that is multiplied, channel by channel, by the disk spectrum before being subtracted from the buffer. If the **Use Ratio of Live Times** box is marked, the strip factor is calculated as the ratio of the live time of the buffer spectrum divided by the live time of the disk spectrum. Unmarking the **Use Ratio** box allows you to enter a factor, which can be negative, in which case the spectra are added.

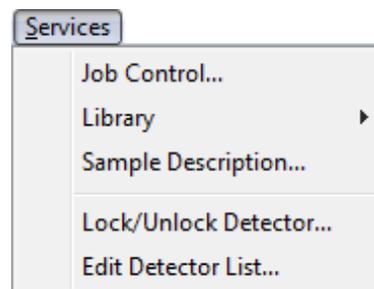
**NOTE** The live time and real time are not changed by any strip operation. Also, the peak uncertainty does not include the stripped areas and might not represent the true uncertainty.

## 4.4. Services

The Services menu (Fig. 65) contains several functions and utilities.

### 4.4.1. Job Control...

Most of the functions under the various MAESTRO menus can be automated by writing a *JOB*, which consists of one or more commands written in ASCII text (see Chapter 6 for an in-depth discussion). JOBS allow you to easily perform repetitive tasks and/or define initial conditions at Detector startup. These files are given a filename extension of .JOB. To start a JOB or edit a .JOB file, select **Services/Job Control...** to display the dialog shown in Fig. 66.



**Fig. 65. The Services Menu.**

To see the list of commands in a particular .JOB file, mark the **Show Contents** checkbox, then click to highlight the desired filename.

To run a JOB, select it and click on **Open**.

Once a JOB is started, most menu functions will be disabled (gray) to prevent interference with JOB as it runs. The .JOB filename will be displayed on the Title Bar.

If a JOB is running and you try to start another one, the dialog shown in Fig. 67 will show the name of the current JOB and ask if you wish to **Terminate** or continue running the JOB (click on **Close** or press <Esc>).

#### 4.4.1.1. Editing a .JOB File

You can edit a .JOB file from the Run JOB File dialog or by opening the file in Notepad. To edit in the Run JOB File dialog: