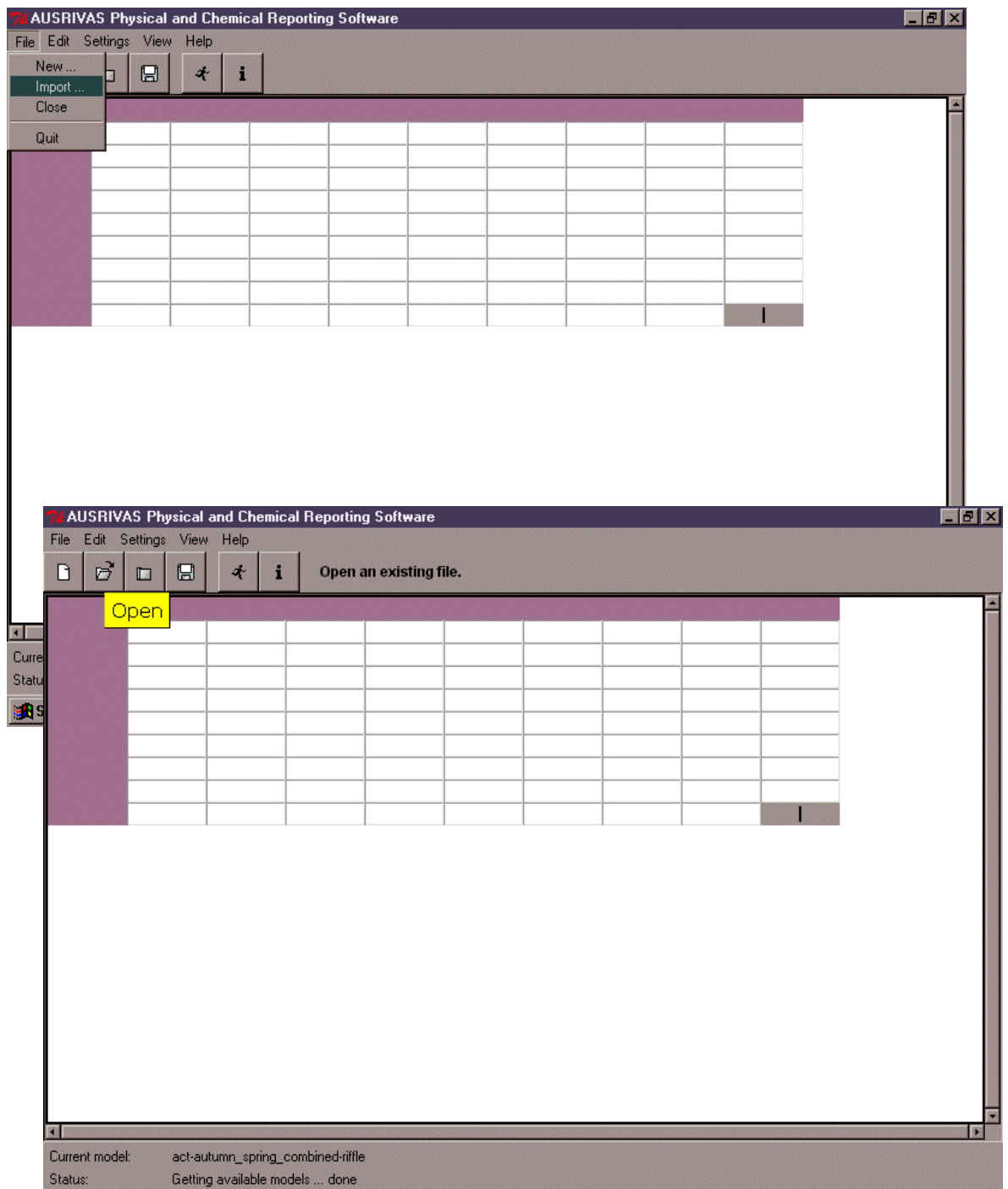




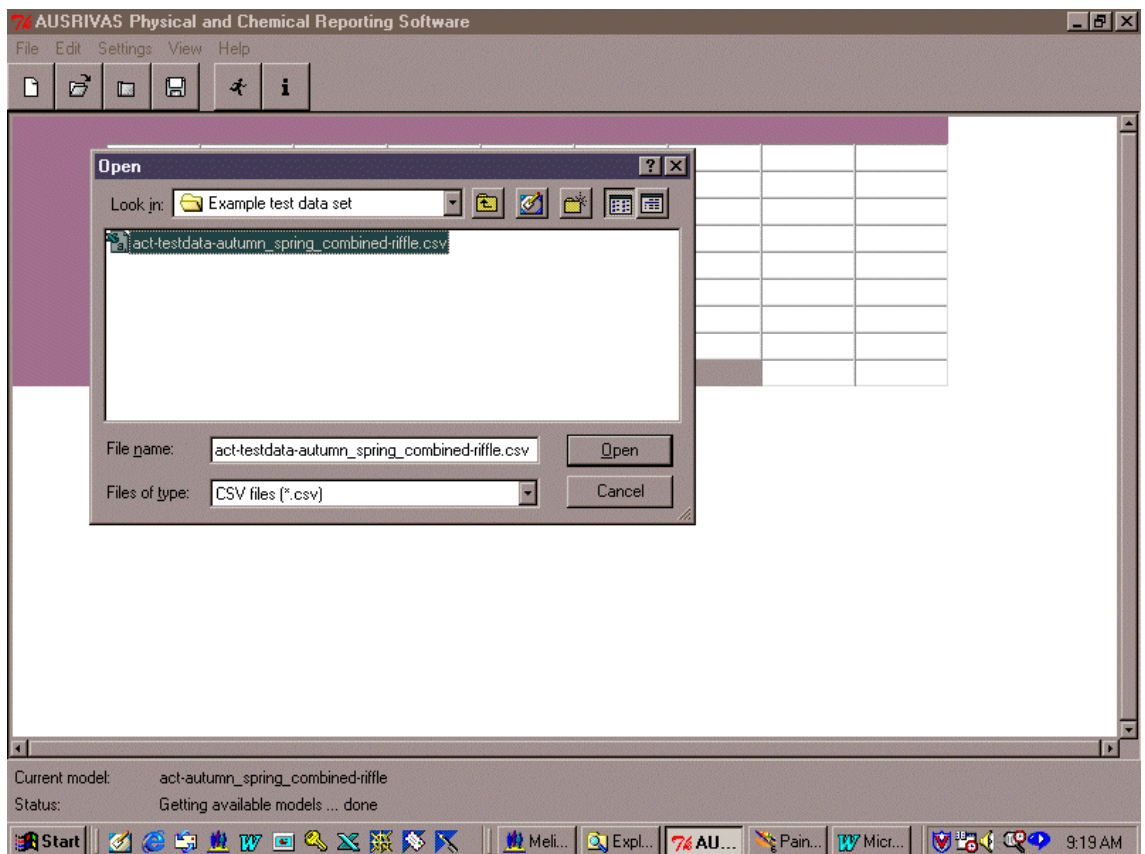
# 4 RUNNING TEST SITE DATA

## 4.1 Loading test data

Open the required test data set by using the "Open" button, or by selecting "Import" from the "File" menu.



A standard file browser is displayed. Navigate to the location required, select the file and click "Open".



The resulting file will resemble the following:

STATESITECODE	RPWD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	CHAL
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	20	1	104	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	2	10	1	88	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	77	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	3	5	1	105	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	14

### Special note on column widths

To change the width of any column for viewing, place the cursor on the edge of the column - the cursor will switch to a + symbol. Then, holding the RIGHT mouse button down, drag the column out to the desired width.

## 4.2 Selecting which variables and sites to analyse

The user can select any combination of sites or variables to analyse. Selected cells are highlighted in green, and are subsequently submitted for analysis using the "Run" button (see Section 4.3). There are several options for selecting sites and variables:

### 4.2.1 Selecting all variables from a single site

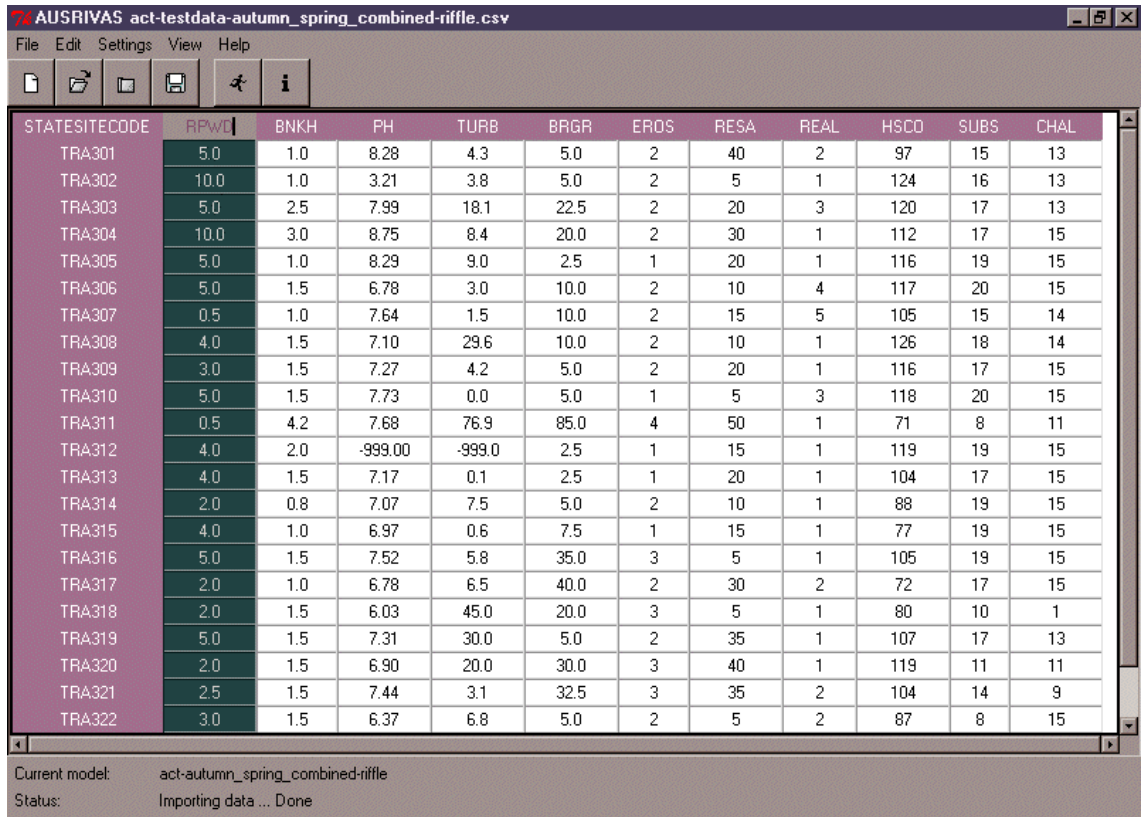
To analyse all variables from a single site, select the entire row by clicking on the required site number in the STATESITECODE column. In the following example, all variables for Site Number TRA311 will be submitted for analysis.

The screenshot shows the AUSRIVAS software interface with a data table. The table has the following columns: STATESITECODE, RPWD, BNKH, PH, TURB, BRGR, EROS, RESA, REAL, HSCO, SUBS, and CHAL. The row for site TRA311 is highlighted in green, indicating it is selected for analysis. The status bar at the bottom shows 'Current model: act-autumn\_spring\_combined-riffle' and 'Status: Importing data ... Done'.

STATESITECODE	RPWD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	CHAL
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	20	1	104	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	2	10	1	88	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	77	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	3	5	1	105	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

## 4.2.2 Selecting all sites for a single variable

To analyse all sites for a single variable, select the entire column by clicking on the required variable. The selected variable will be highlighted in green. In the following example, the variable RPWD will be analysed for all sites.



The screenshot shows the AUSRIVAS software interface with a data table. The table has 13 columns: STATESITECODE, RPWD, BNKH, PH, TURB, BRGR, EROS, RESA, REAL, HSCD, SUBS, and CHAL. The RPWD column is highlighted in green. The data rows are as follows:

STATESITECODE	RPWD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCD	SUBS	CHAL
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	20	1	104	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	2	10	1	88	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	77	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	3	5	1	105	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

Current model: act-autumn\_spring\_combined-riffle  
Status: Importing data ... Done

## 4.2.3 Selecting different combinations of sites and variables

Different combinations of sites and variables can be selected. Non-contiguous cells are selected by clicking in each required cell, while holding down the <CONTROL> key. To select contiguous cells, click in a single cell and hold down the <SHIFT> key while clicking on a second cell. All cells between the first and second (in rows and columns) are selected. In the following example, it was desired to analyse only chemical variables at test sites TRA302, TRA303 and TRA317, and it was desired to analyse only physical variables at test sites TRA308 and TRA311.



AUSRIVAS act-testdata-autumn\_spring\_combined-riffle.csv

File Edit Settings View Help

STATESITECODE	RPwD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	CHAL
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	20	1	104	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	2	10	1	88	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	77	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	3	5	1	105	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

Current model: act-autumn\_spring\_combined-riffle  
Status: Importing data ... Done

#### 4.2.4 Selecting all variables and sites

To analyse all sites and variables, select the entire spreadsheet by clicking on the first cell of the first column (STATESITECODE).

AUSRIVAS act-testdata-autumn\_spring\_combined-riffle.csv

File Edit Settings View Help

STATESITECODE	RPwD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	CHAL
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	20	1	104	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	2	10	1	88	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	77	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	3	5	1	105	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

Current model: act-autumn\_spring\_combined-riffle  
Status: Importing data ... Done

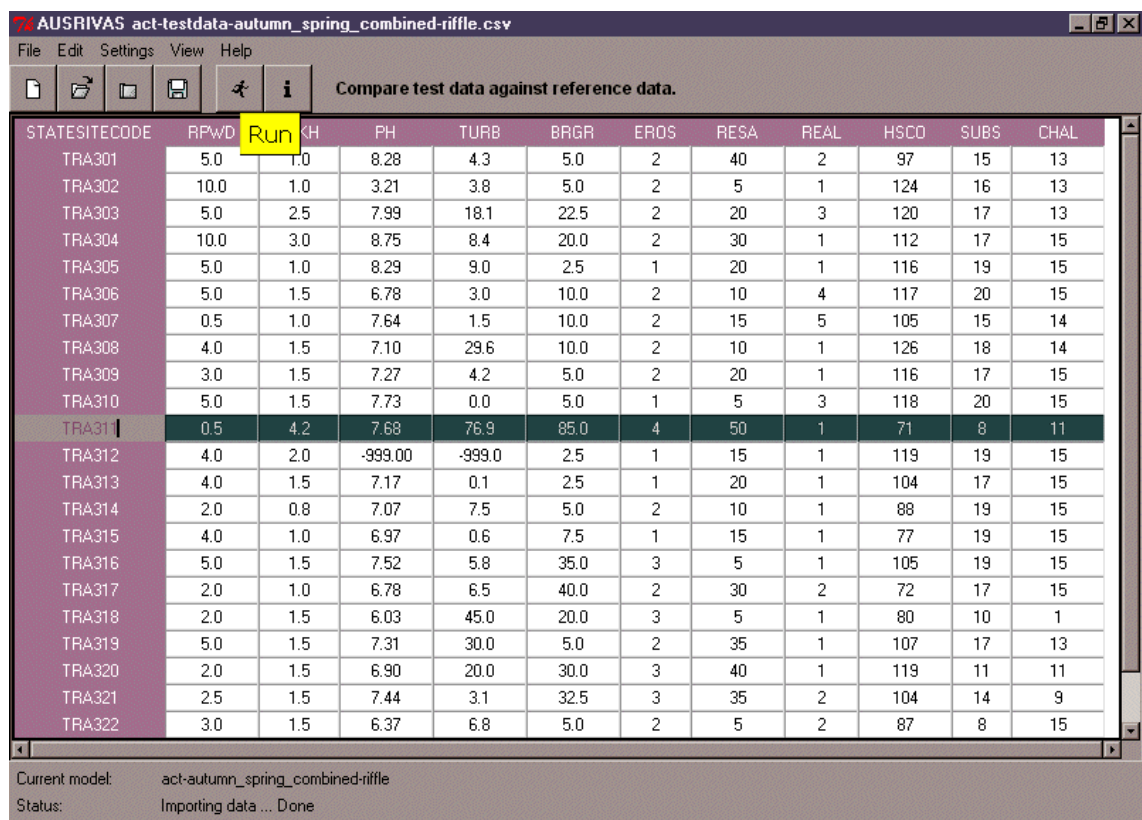
### 4.2.5 Special note about selecting variables and sites

The output for any continuous variable is a boxplot graph that displays the test site in relation to statistical parameters of the reference sites (see Part 5). For each separate variable, all the selected test sites are arrayed on the same boxplot. Thus, it is recommended that users limit analyses to 5-10 test sites, otherwise the position of each individual test site may be difficult to view on the boxplot.

In addition, it is recommended that users do not select cells that contain missing data (i.e. a -999 code) because these values will skew the resulting boxplot. In cases where there are missing data in the test data set, use the selecting cells procedure described in Section 4.2.3 to circumvent the cells with missing data values.

## 4.3 Running a test data set

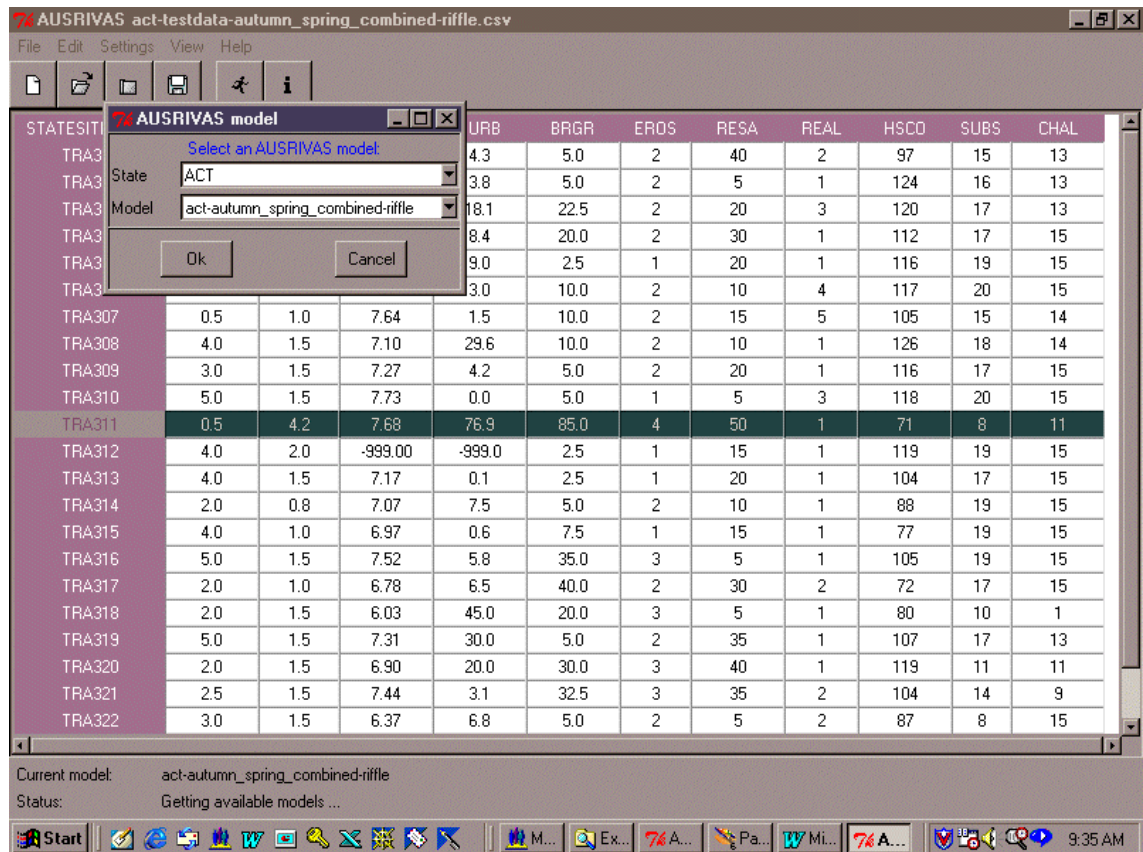
After selecting the sites and variables required, test data are submitted using the "Run" button.



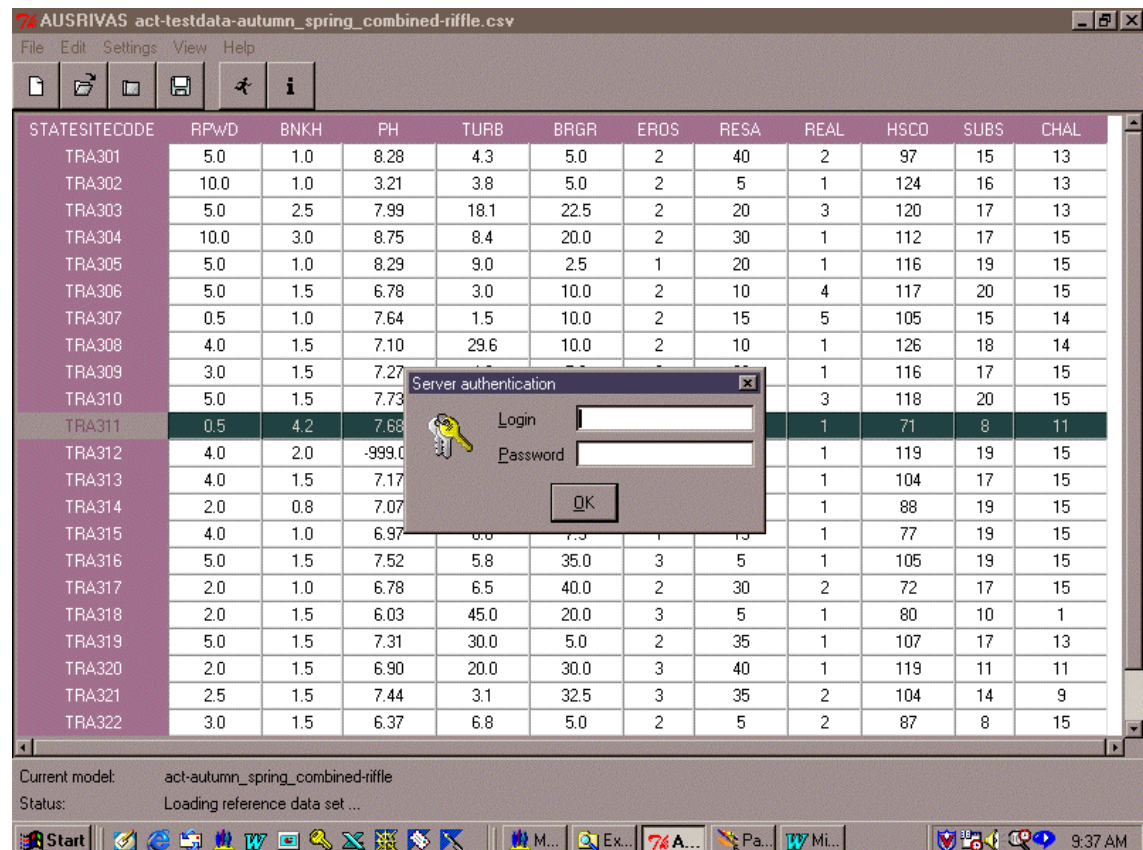
The screenshot shows the AUSRIVAS software interface. The title bar reads "AUSRIVAS act-testdata-autumn\_spring\_combined-riffle.csv". The menu bar includes "File", "Edit", "Settings", "View", and "Help". Below the menu bar is a toolbar with icons for file operations and a "Run" button, which is highlighted in yellow. The main window displays a table titled "Compare test data against reference data." with the following columns: STATESITECODE, RPWD, KH, PH, TURB, BRGR, EROS, RESA, REAL, HSCO, SUBS, and CHAL. The data rows list various test sites (TRA301 to TRA322) with their corresponding values for each variable. The status bar at the bottom indicates "Current model: act-autumn\_spring\_combined-riffle" and "Status: Importing data ... Done".

STATESITECODE	RPWD	KH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	CHAL
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	20	1	104	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	2	10	1	88	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	77	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	3	5	1	105	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

The model dialog box will appear again. Check that the correct model is in use.

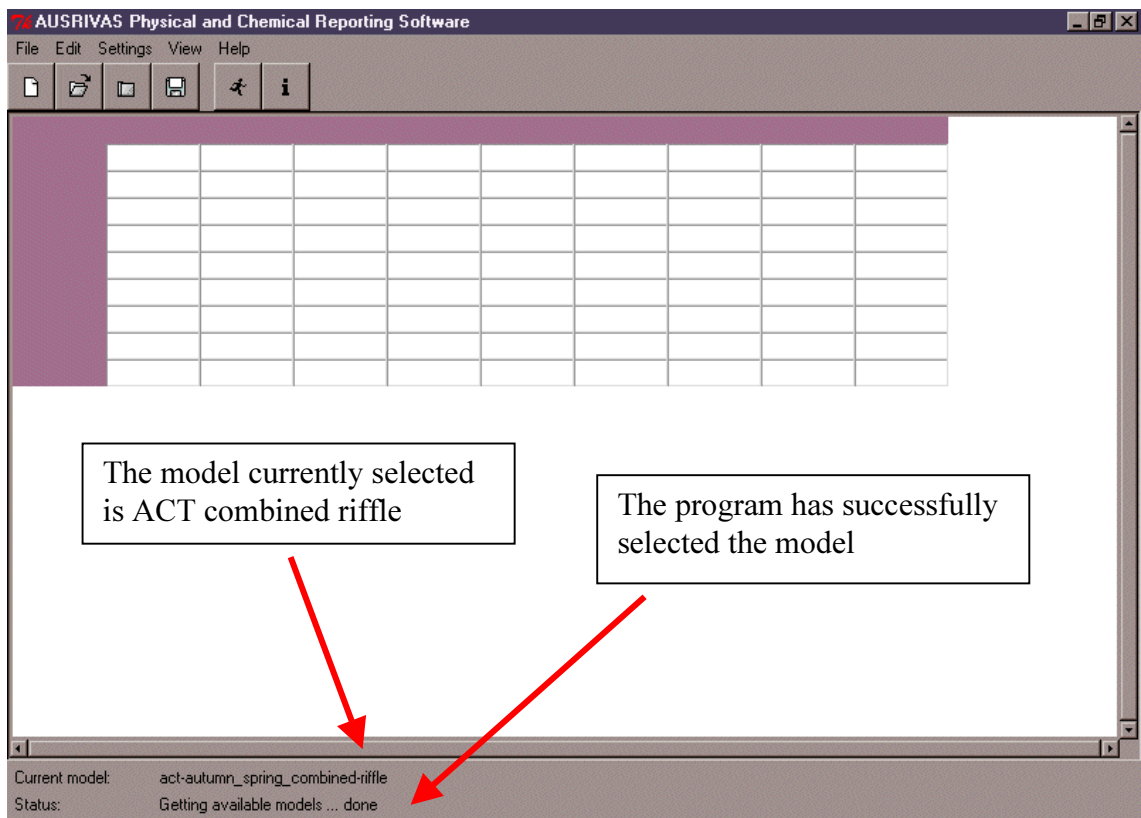


The server authentication box may also appear at this stage. Enter your login and password (see Part 2 for further information on logging in).



## 4.4 The status bar

The status bar is located at the bottom of the program window. The status bar details the model that is currently selected for use, and should be referred to at all stages of analysis to ensure that the correct model is used. The status bar also details the step that is currently processing, and displays the words "...done" when this step has executed successfully. For example:





AUSRIVAS act-testdata-autumn\_spring\_combined-riffle.csv

File Edit Settings View Help

STATESITECODE	RPWD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	HA
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	15	1	119	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	1	15	1	119	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	119	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	1	15	1	119	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

Current model: act-autumn\_spring\_combined-riffle  
Status: Importing data ... Done

The program has successfully imported test site data

AUSRIVAS act-testdata-autumn\_spring\_combined-riffle.csv

File Edit Settings View Help

STATESITECODE	RPWD	BNKH	PH	TURB	BRGR	EROS	RESA	REAL	HSCO	SUBS	HA
TRA301	5.0	1.0	8.28	4.3	5.0	2	40	2	97	15	13
TRA302	10.0	1.0	3.21	3.8	5.0	2	5	1	124	16	13
TRA303	5.0	2.5	7.99	18.1	22.5	2	20	3	120	17	13
TRA304	10.0	3.0	8.75	8.4	20.0	2	30	1	112	17	15
TRA305	5.0	1.0	8.29	9.0	2.5	1	20	1	116	19	15
TRA306	5.0	1.5	6.78	3.0	10.0	2	10	4	117	20	15
TRA307	0.5	1.0	7.64	1.5	10.0	2	15	5	105	15	14
TRA308	4.0	1.5	7.10	29.6	10.0	2	10	1	126	18	14
TRA309	3.0	1.5	7.27	4.2	5.0	2	20	1	116	17	15
TRA310	5.0	1.5	7.73	0.0	5.0	1	5	3	118	20	15
TRA311	0.5	4.2	7.68	76.9	85.0	4	50	1	71	8	11
TRA312	4.0	2.0	-999.00	-999.0	2.5	1	15	1	119	19	15
TRA313	4.0	1.5	7.17	0.1	2.5	1	15	1	119	17	15
TRA314	2.0	0.8	7.07	7.5	5.0	1	15	1	119	19	15
TRA315	4.0	1.0	6.97	0.6	7.5	1	15	1	119	19	15
TRA316	5.0	1.5	7.52	5.8	35.0	1	15	1	119	19	15
TRA317	2.0	1.0	6.78	6.5	40.0	2	30	2	72	17	15
TRA318	2.0	1.5	6.03	45.0	20.0	3	5	1	80	10	1
TRA319	5.0	1.5	7.31	30.0	5.0	2	35	1	107	17	13
TRA320	2.0	1.5	6.90	20.0	30.0	3	40	1	119	11	11
TRA321	2.5	1.5	7.44	3.1	32.5	3	35	2	104	14	9
TRA322	3.0	1.5	6.37	6.8	5.0	2	5	2	87	8	15

Current model: act-autumn\_spring\_combined-riffle  
Status: Generating output ... done.

The program has successfully generated the output as a new window

New window