**TFL Data Structure**

There are two accepted that tfl data can take, long and wide. Where possible long data should be used, this adds benefits to both the qc process and any figures created from table data. Cases where long data is not possible include listings, where summary statistics are displayed horizontally instead of vertically.

Long Structure

Long structure is where the data contains one record per each value of the across variable, typically a treatment variable. PROC REPORT then creates a column for each value of an across variable, multiple across variables can be used.

The input dataset can contain the following variables, the variables that are required are noted. All variables can contain blank or missing records.

|  |  |  |
| --- | --- | --- |
| **Variable** | **Type** | **Description** |
| section | Numeric | Numeric ordering of the section, this can be missing. |
| sectionlabel | Character | Label displayed for section, this can be missing. |
| panel | Numeric | Numeric ordering of the panel within the section. |
| panellabel | Character | Label displayed for the panel, this can be missing. |
| panelopt | Character | Panel options:   * Indent level for whole panel, if missing no panel indentation occurs. |
| row | Numeric | Numeric ordering variable for row within panel. |
| rowlabel | Character | Label displayed for row, this can be missing. |
| rowopt | Character | Row options:   * indent level for the row label * row text bold (1 for bold, missing for not bold) * row top border (1 for border, missing for none).   Each must be separated by a “+”.  E.g level 1 indentation, bold text and no top border would have rowopt = “1+1+ ”.  No indentation, bold text and no top border would have rowopt = “ + 1+ “. |
| &avar. (e.g TRTP) | Character | Across variables. There should be one variable corresponding to each variable referenced by avar in macro call. |
| &resultvar. (e.g num1, num2, str1m str2) | Character or Numeric | Result variables. There should be one variable corresponding to each variable referenced by resultvar in macro call. |
| <numeric versions of character result variables> | Numeric | Result variables. |
| &addvar. (e.g page, linebrk.) | Numeric | Any additional variables not printed. This is expect to be variables used for page breaking or line breaking in a dataset. |

A simple example tfl data for a Demographic table is shown below.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **section** | **sectionlabel** | **row** | **rowlabel** | **rowopt** | **trtp** | **fmtvar1** | **numvar1a** | **numvar1b** |
| 1 | Sex | 1 | Male | 1 | Treatment P | Xx (xx.x) | Xx | xx.x |
| 1 | Sex | 2 | Female | 1 | Treatment P | Xx (xx.x) | Xx | xx.x |
| 1 | Sex | 1 | Male | 1 | Treatment A | Xx (xx.x) | Xx | xx.x |
| 1 | Sex | 2 | Female | 1 | Treatment A | Xx (xx.x) | Xx | xx.x |
| 2 | Age (years) | 1 | n | 1 | Treatment P | xxx | Xx | xx.x |
| 2 | Age (years) | 2 | Mean | 1 | Treatment P | xx.x | xxx |  |
| 2 | Age (years) | 3 | SD | 1 | Treatment P | xx.xx | xx.x |  |
| 2 | Age (years) | 4 | Median | 1 | Treatment P | xx.x | xx.xx |  |
| 2 | Age (years) | 5 | Min | 1 | Treatment P | xx | xx.x |  |
| 2 | Age (years) | 6 | Max | 1 | Treatment P | xx | xx |  |
| 2 | Age (years) | 1 | n | 1 | Treatment A | xxx | Xx | xx.x |
| 2 | Age (years) | 2 | Mean | 1 | Treatment A | xx.x | xxx |  |
| 2 | Age (years) | 3 | SD | 1 | Treatment A | xx.xx | xx.x |  |
| 2 | Age (years) | 4 | Median | 1 | Treatment A | xx.x | xx.xx |  |
| 2 | Age (years) | 5 | Min | 1 | Treatment A | xx | xx.x |  |
| 2 | Age (years) | 6 | Max | 1 | Treatment A | xx | xx |  |

Wide Structure

Wide structure should only be used when “long” data does not make sense, such as the sas procedure outputs the data in the format presented and turning this into long data will take additional steps (e.g summary statistics displayed horizontally as in the example below). The structure of the tfl data is very similar to that of long data. In this case each result variable should be named …….

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **section** | **sectionlabel** | **Panel** | **Panellabel** | **panelopt** | **row** | **rowlabel** | **n** | **Mean** | **SD** | **Median** | **Min.** | **Max.** |
| 1 | After lying down 5 min. | 1 | Treatment P (N = xx) | 1 | 1 | Baseline | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 1 | After lying down 5 min. | 1 | Treatment P (N = xx) | 1 | 2 | Week 24 | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 1 | After lying down 5 min. | 1 | Treatment P (N = xx) | 1 | 3 | End of Treatment | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 1 | After lying down 5 min. | 2 | Treatment A (N = xx) | 1 | 1 | Baseline | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 1 | After lying down 5 min. | 2 | Treatment A (N = xx) | 1 | 2 | Week 24 | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 1 | After lying down 5 min. | 2 | Treatment A (N = xx) | 1 | 3 | End of Treatment | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 2 | After lying down 5 min. | 1 | Treatment P (N = xx) | 1 | 1 | Baseline | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 2 | After standing 1 min. | 1 | Treatment P (N = xx) | 1 | 2 | Week 24 | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 2 | After standing 1 min. | 1 | Treatment P (N = xx) | 1 | 3 | End of Treatment | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 2 | After standing 1 min. | 2 | Treatment A (N = xx) | 1 | 1 | Baseline | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 2 | After standing 1 min. | 2 | Treatment A (N = xx) | 1 | 2 | Week 24 | xxx | xx.x | xx.xx | xx.x | xx | xx |
| 2 | After standing 1 min. | 2 | Treatment A (N = xx) | 1 | 3 | End of Treatment | xxx | xx.x | xx.xx | xx.x | xx | xx |