## A brief help file for the Dive Statistics tab in Subsurface

To open the statistics tab, go Main-menu  $\rightarrow$  Log  $\rightarrow$  Dive Statistics

In this module, statistics are presented as graphs. There are no additional text that is generated. The lefthand side of the Statistics panel contains the controls for specifying a graph. These graph controls are divided into three parts:

1) The variable that should be along the bottom horizontal axis of the graph ("Base variable"). Click on the top combobox to see a list of all dive variables that are available for graphing. Select the variable that you would like along the bottom of the graph. Lets take, as an example, Max Depth. For a now, in the "Binning" combobox of this group, select "None".

2) The Data variable. Select the variable that should be presented along the lefthand vertical axis of the graph by using the second group ("Data"). For our example, lets select "SAC" as the Data variable. This presents a graph similar to this:



In this graph the exact depth and exact SAC is shown for each dive. It is possible to divide the depth value into categories, represented by the "Binning" combobox in the topmost group of the graph controls. Click on the Binning of Max. Depth in the top control and select "In 5m steps". The graph changes to show whisker plots for each 5m step in Max Depth. In this graph, Max Depth has been drawn as a variable grouped (i.e. "binned") vin 5m steps. While one cannot see the exact depth for each dive, useful summary information of SAC is presented for the dives in each depth incement, including the mean, minimum, maximum and quartiles:



Now, select a binning value for the SAC values. Lets say "in 5l/min steps". The graph changes as follows:



This graph shows, for each increment in dive depth, the number of dives in each category of SAC. The legend at the top right provides the meaning of each colour. The height of each coloured block indicates the number of dives for this combination of depth and SAC. Hover over one of the coloured blocks. The detail of the data represented by that block is shown in yellow:



In this case the block represents 20 dives in the depth range 15-20m and SAC 20-25 l/min.

3) The bottom group in the graph controls ("Chart") contains information about other graph types that may be applicable to this combination of requirements. For instance:



Select the preferred graph type from this list.

IMPORTANT: if no second "Data" variable has been selected (i.e. the Base variable selected is "None", but a binning value has been selected for the Base variable), COUNT data are shown for the Base variable:



This document is not meant as a user manual. It is just quick-start guide for the "beta" of the statistics tool of Subsurface so that the user can get a feel for specifying graphs based on their dive log data.

The purpose of this document is also to stimulate you as a reader to comment on the software discussed above. Your comment is critical for finalising the way that the final version of this software will look and act like. Please send all comments to the mail list: <a href="mailto:subsurface@subsurface-divelog.org">subsurface@subsurface\_divelog.org</a>