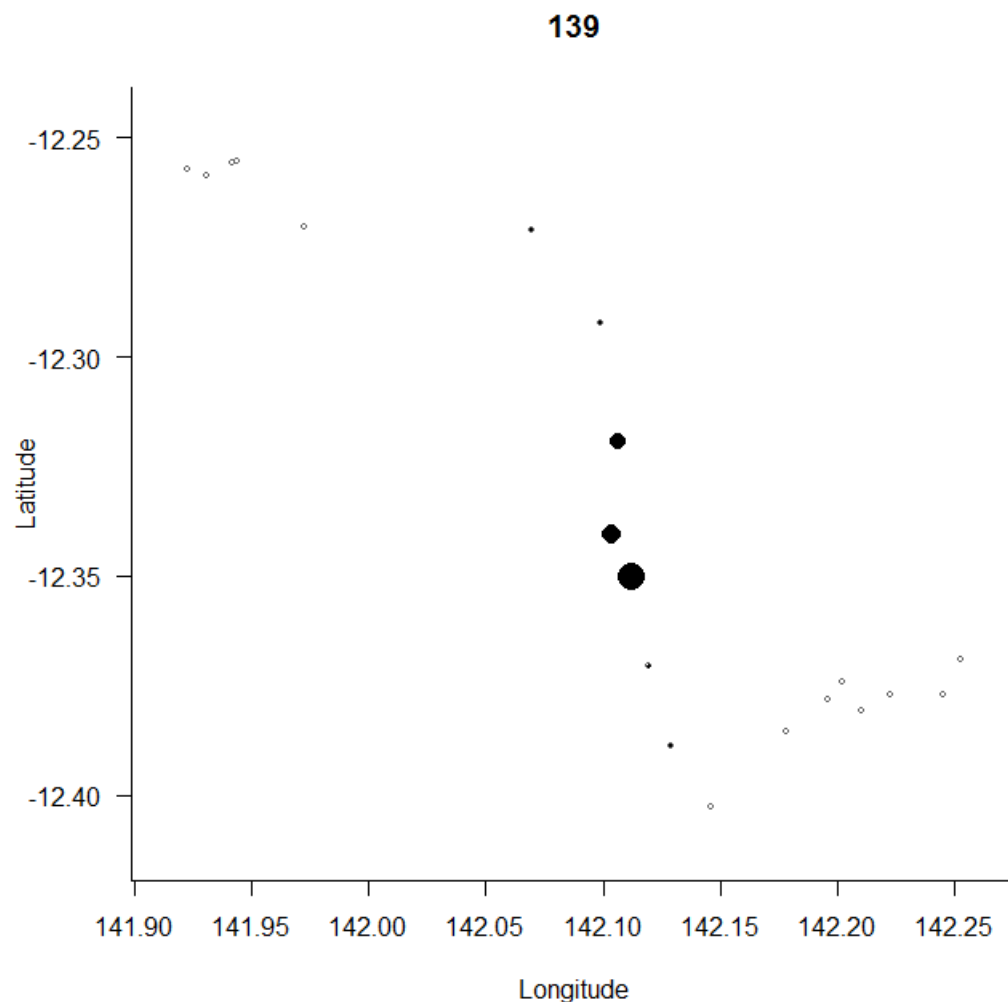
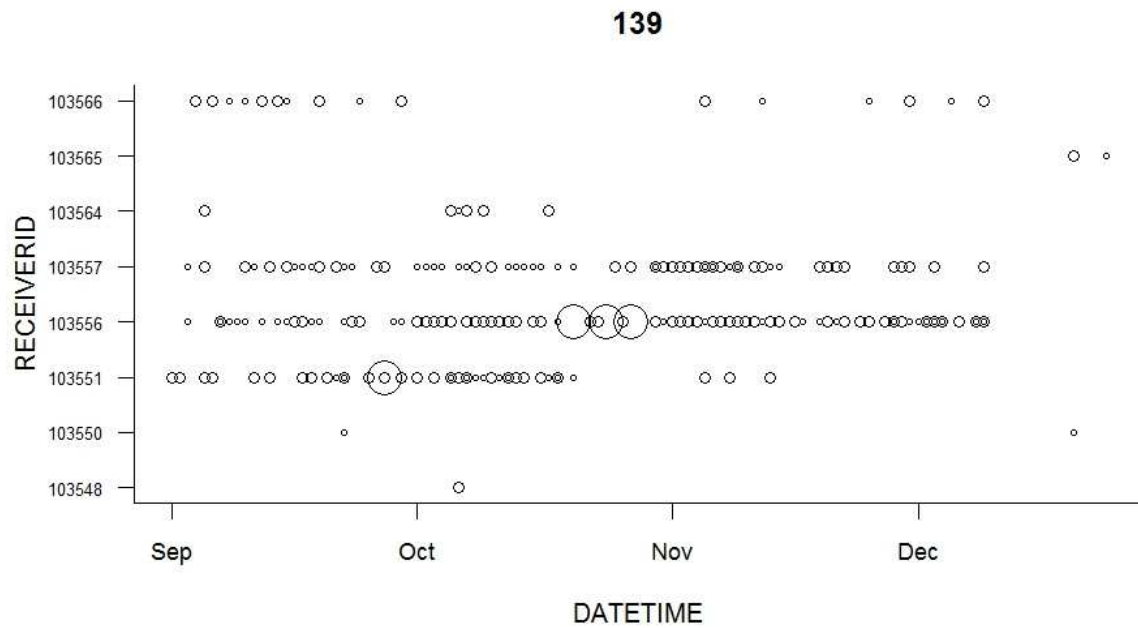


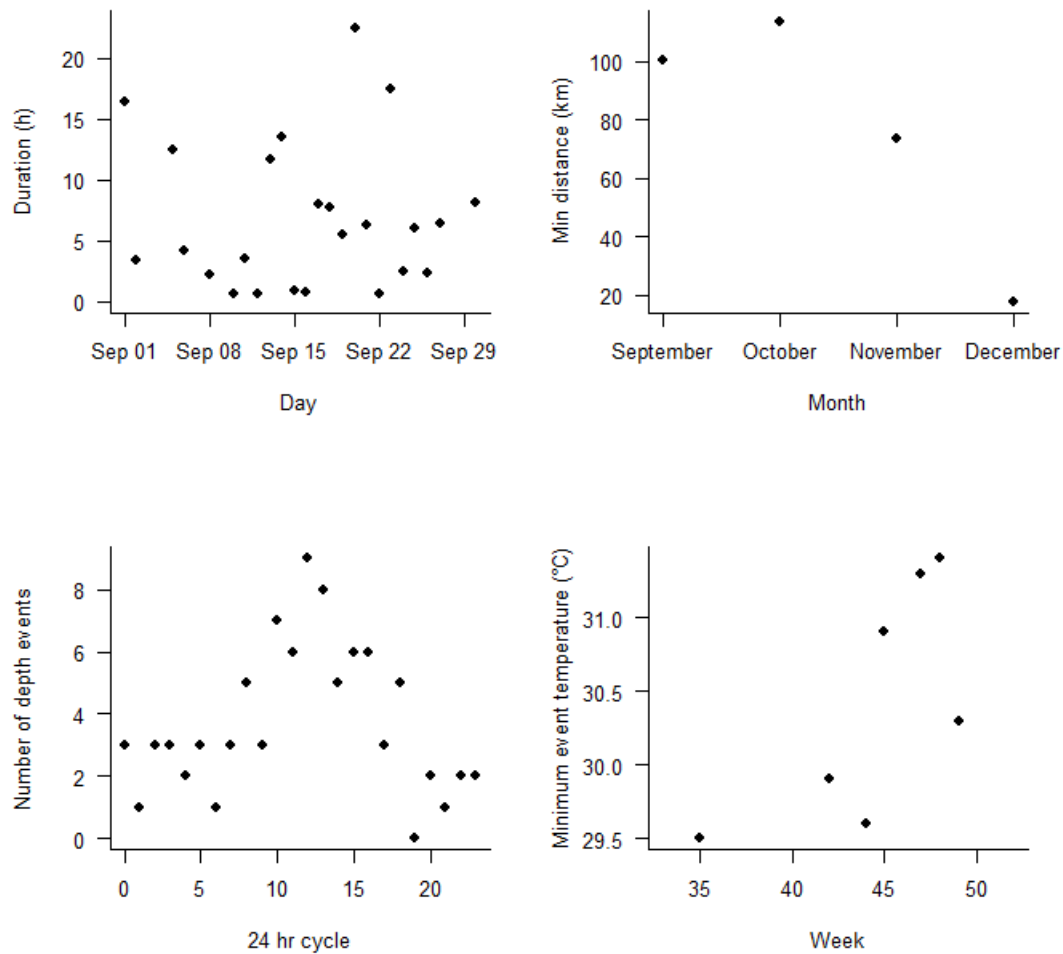
Supplementary Material 2



Supplementary Figure 2.1. Each circle in the figure shows the geographical locations (datum WGS84) of twenty VR2W receivers. The array has been plotted in a linear formation along the length of a river. The relative size of each circle illustrates the relative amount of time that a freshwater whipray (*Himantura dalyensis*) tagged with a VEMCO V13 (ID 139) transmitter spent at each receiver over a 12 month period. Residence time was calculated using the behavioural event qualifier in V-Track.



Supplementary Figure 2. The daily duration of time that an estuarine crocodile tagged with a V13 (ID 139) transmitter, was detected at each VR2W within an array. The data are calculated using the residence event function in V-Track. The function uses a user defined time out window to define periods when the shark was present within a receiver's detection range. These were then amalgamated for each 24 h period. The serial number of each VR2W receiver within the array is displayed on the y-axis. The total residence time that that the crocodile was at each receiver for each day is illustrated using 4 circles of different sizes; these are < 1 min, < 1 hr, < 1day, > 1day.



Supplementary Figure 2.3. Behavioural events qualified by V-Track a) The total duration that a bull shark was within the detection ranges of an array of twelve VR2W receivers during the month of September; b) The minimum monthly distance moved by a bull shark between September and December, c) The number of dives undertaken by a tagged crocodile for each hour of the diel cycle, d) The minimum temperature achieved whilst undertaking a temperature defined event each week for a tagged black cod between September (week 35) and December (week 50).