WMTooltipHookStruct

See **Tooltip Hook Functions** on page IV-310 for further explanation of WMTooltipHookStruct.

```
Structure WMTooltipHookStruct
   char winName[MAX_WIN_PATH+1]      // Host window name or subwindow path
   double ticks                      // Tick count when event happened
   STRUCT Rect winRect               // Local coordinates of the window or subwindow
   STRUCT Point mouseLoc             // Mouse location
   STRUCT Rect trackRect             // Tooltip tracking rect
   double duration_ms                // Time to display the tooltip, in milliseconds
   char traceName[MAX_OBJ_NAME+1]    // If in a graph window, name of the trace
   char imageName[MAX_OBJ_NAME+1]    // If in a graph window, name of the image
   waveHndl yWave                    // Y wave for trace, image, or table column
   double row                        // Row in trace, image or wave
   double column                     // Column in trace, image or wave
   double layer                      // Layer in trace, image or wave
   double chunk                      // Chunk in trace, image or wave
   char ctrlName[MAX_OBJ_NAME+1]     // Name of control during hover event
   Int32 isHtml                      // Set to indicate tooltip contains HTML tags
   String tooltip                    // Set this to your tooltip text
EndStructure
```

WMWinHookStruct

See **Named Window Hook Functions** on page IV-295 for further explanation of WMWinHookStruct.

```
Structure WMWinHookStruct
   char winName[200]       // Host window or subwindow name
   STRUCT Rect winRect     // Local coordinates of the affected (sub)window
   STRUCT Point mouseLoc   // Mouse location
   Variable ticks          // Tick count when event happened
   Int32 eventCode         // See Named Window Hook Events on page IV-295
   char eventName[32]      // See Named Window Hook Events on page IV-295
   Int32 eventMod          // See Control Structure eventMod Field on page III-438
   char menuName[256]      // Name of the menu item as for SetIgorMenuMode
   char menuItem[256]      // Text of the menu item as for SetIgorMenuMode
   char traceName[32]      // See Named Window Hook Functions on page IV-295
   char cursorName[2]      // Cursor name A through J
   Variable pointNumber    // See Named Window Hook Functions on page IV-295
   Variable yPointNumber   // See Named Window Hook Functions
   Int32 isFree            // 1 if the cursor is not attached to anything
   Int32 keycode           // ASCII value of key struck
   Int32 specialKeyCode    // See Keyboard Events on page IV-300 - Igor Pro 7 or later
   char keyText[16]        // UTF-8 string representing key struck - Igor Pro 7 or later
   char oldWinName[32]     // Simple name of the window or subwindow
   Int32 doSetCursor       // Set to 1 to change cursor to cursorCode
   Int32 cursorCode        // See Setting the Mouse Cursor on page IV-302
   Variable wheelDx        // Vertical lines to scroll
   Variable wheelDy        // Horizontal lines to scroll
   char focusCtrl[MAX_WIN_PATH+1]    // Added in Igor Pro 9.00. See EarlyKeyboard Events.
EndStructure
```

wnoise

wnoise(*shape*, *scale*)

The wnoise function returns a pseudo-random value from the two-parameter Weibull distribution characterized by the *shape* and *scale*, the respective *gamma* and *alpha* parameters. The two-parameter Weibull probability distribution function is

$$f(x;\alpha,\gamma) = \frac{\gamma}{\alpha} x^{\gamma-1} \exp\left[-\frac{1}{\alpha}x^{\gamma}\right] \quad \begin{matrix} x \geq 0 \\ \alpha > 0 \\ \gamma > 0 \end{matrix}$$

The mean of the Weibull distribution is