

SPIN(w) RELEASE NOTES VERSION 5.4

SPIN(w) is a wake and basic data preprocessor for VSAERO. SPIN(w) version 5.4 creates VSAERO input files compatible with **version 7.1 or later**. SPIN(w) comes with a set of executables, a manual, context-sensitive help files, and a sample Xdefaults file. Release 5.4 consists of bug fixes and small changes.

SYSTEM REQUIREMENTS

SPIN(w) uses OpenGL graphics and a Motif graphical user interface. SPIN(w) version 5.4 is available on Linux/Motif version 3/X11R6, Silicon Graphics IRIX 6.5, HP-UX 11.11, IBM AIX-4.3, and Sun Solaris operating systems. SPIN(w) requires a high performance 3D graphics card with a minimum graphics resolution of 1024x768 pixels, 1280x1024 **recommended**. 512 megabytes of memory are recommended. SPIN(w) requires OpenGL and Motif/X version 11.

NEW FEATURES IN SPIN(w) 5.4

Scroll wheel support has been added. If your mouse has a scroll wheel and it is supported by X, scrolling up will zoom in; down will zoom out.

The + key now zooms in to 200% of previous view scale. The – key zooms out to 50% of previous scale.

CHANGES IN SPIN(w) 5.4

SPIN(w) now recognizes DOS format VSAERO input files, as well as UNIX format.

The SPIN(w) icon name and resource name has been changed to Spinw (it was Spin). This means .Xdefaults file resources for SPIN(w) will need to be changed to the new name.

Zooming with perspective on in 3D now changes the field of view, rather than the screen z location. To return to the old style of zooming, set the following resource in your .Xdefaults file:

```
Spinw.middleMouseZoom2: false
```

Note that this resource only affects zooming by dragging the middle mouse up and down; scroll wheel and +/- key zooming always change field of view.

Additional light shading resources have been added:

```
Spinw.lightMatAmbient, lightMatDiffuse, lightMatSpecular,  
lightMatShininess, light1Ambient, light1Diffuse,  
light1Specular
```

The default lighting is slightly darker, to match OMNI3D. The default values of these resources are shown in the Xdefaults.example file in the help directory delivered with the software.

Ident is no longer a separate button, but is an option in the Panel Shading and Color Scale menus.

The Fast Transform toggle now defaults to off. The Fast Transform toggle “hot” key is SHIFT-f.

Bounding box zoom and aspect information are now written to the view (.vue) file.

SPIN(w) version 5.4 writes a comment containing the version number and date to the VSAERO input file it creates.

The `-in` command line option (basic data generator only) is no longer supported. You must have a body geometry to begin. The `-body` and `-wake` options no longer support reading those data from different files, only from different solution numbers within the same file.

BUGS FIXED IN SPIN(w) 5.4

The NMLSOL and PRNTNL groups are now parsed correctly in VSAERO input files. Previously, spaces around the ‘=’ caused an infinite loop, ‘&’ was not recognized, and comments were not skipped properly.

SPIN(w) now releases the license when the user clicks “Cancel” from the file selection widget.

The following program crashes were fixed in 5.4:

- In Wake Separation editing, user tried to change the side with no wake open.
- In Wake Separation editing of unstructured patch, user set edge > 4.
- Plot file read with file selection box contained boundary layer data.
- Input file containing off-body velocity scan input could not be written out.
- User turned on reflection in a 2D station cut with non-blended data.
- User attempted to reflect and copy a superwake read from an input (.IN) file.
- In Wake Separation editing, user turned on “Stitch All” for an unstructured patch.

CTRL+SHIFT key combinations sometimes failed.

OFB2,LINE data plot file groups caused error.

Inquire widget now pops up in the correct location, pops down when ‘i’ key is released, and highlights the panel before popping down (linux).

Text input widget accepts input from anywhere in the window.

Wake copy now only creates superwake for type 4,6,7, or 8 AND wake begins and ends on plane of symmetry. Apply default wakeline did not work properly for wakelines in plane of symmetry.

Confirm, message, warning and text input windows no longer contain copies of old messages.

2D Area calculation was incorrect.

Bounding box zoom now drawn correctly on systems with no overlay planes.