5. **Execute this in the command line:**

   ```
   ImageInterpolate/S={-5,0.1,5,-5,0.1,5}/CMSH Voronoi data
   ```

   The Voronoi interpolation created two waves: M_ScatterMesh and M_InterpolatedImage. M_ScatterMesh consists of a series of XYZ coordinates that define polygons in 3D space which fit the scatter data. We will use M_ScatterMesh to append a surface to the 3D plot.

6. **Click the + icon at the bottom of the object list in the Gizmo0 Info window and choose Surface.**

   Igor displays the Surface Properties dialog.

7. **Choose Triangles from the Source Wave Type pop-up menu and M_ScatterMesh from the Surface Wave pop-up menu.**

   There are several additional options but we will leave them in their default states for now.

8. **Click Do It.**

   Igor created a surface object named surface0 and added it to the object list in the info window. It is not yet visible in the Gizmo0 window because we have not yet added it to the display list.

9. **Drag the surface0 object from the object list to the display list.**

   The surface appears in the Gizmo0 window.

10. **Using the mouse, rotate the contents of the Gizmo plot to inspect the fit from various angles.**

    The surface fits the scatter objects pretty well.

11. **Double-click the surface0 object in the display list, click the Grid Lines and Points tab, check the Draw Grid Lines checkbox, and click Do It.**

    This shows the polygons created by Voronoi interpolation and represented by the M_ScatterMesh wave.

12. **Clean up by executing:**

    ```
    KillWaves M_InterpolatedImage
    Rename M_ScatterMesh, VoronoiMesh
    ```

    It's a good idea to rename waves that Igor creates with default wave names so that, if you later execute another command that uses the same default wave name, you will not inadvertently overwrite data. Also we don't need the M_InterpolatedImage wave.

13. **Choose File→Save Experiment and save the experiment as "Gizmo Surface Using Voronoi Interpolation Tour.pxp".**

    This is just in case you want to revisit the tour later and is not strictly necessary.

That concludes the Gizmo guided tour. There are more examples below. Also choose File→Example Experiments→Visualization for sample experiments.

Gizmo Windows

For each 3D plot, Gizmo creates a display window and its associated info window. The display window presents a rotatable representation of your 3D objects. You use the info window to control which objects are displayed, the order in which they are drawn, and their properties. You can hide both windows to reduce clutter when you do not need them. You can also kill and recreate Gizmo windows like you kill and recreate graphs.

You can create any number of Gizmo display windows. Keeping multiple Gizmo display windows open has some drawbacks. Even inactive and hidden Gizmo display windows consume graphics resources that could otherwise be used for the active Gizmo display window. Also, in some laptop computers you may be able to reduce power consumption by closing Gizmo display windows that include rotating objects. Depending on your hardware, saving unused Gizmo display windows as recreation macros may be beneficial.

For brevity, we sometimes use the term "Gizmo window" to refer to the Gizmo display window. We use "Gizmo info window" or "info window" to refer to the Gizmo info window.