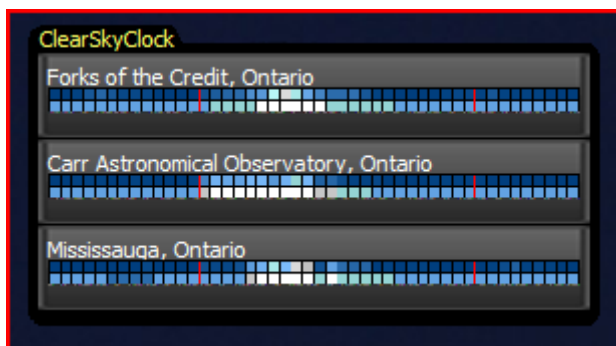# A Clear Sky Clock Gadget for Windows Vista

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by Brian J Gibson, Brampton Ontario
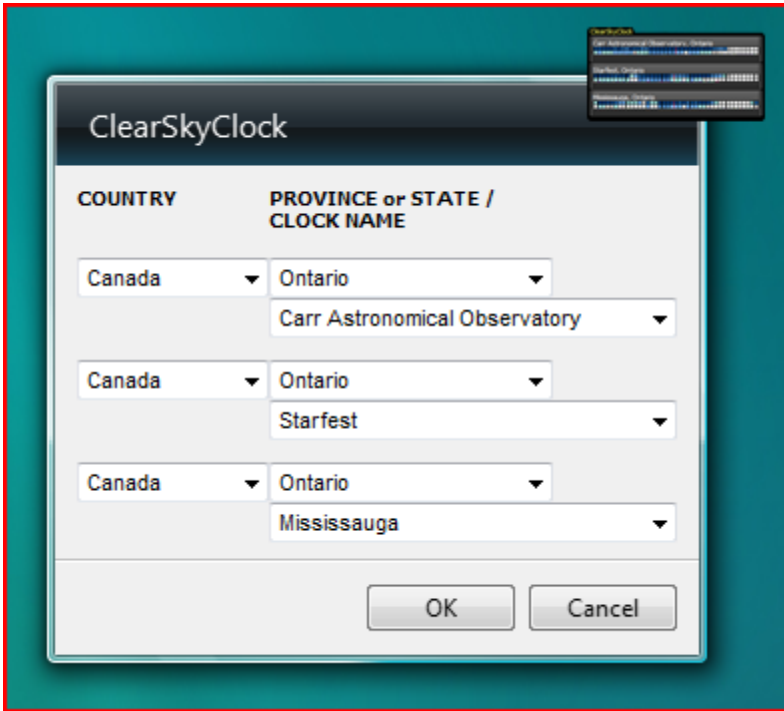
Many amateur astronomers in North America monitor local sky conditions using the Clear Sky Clock web sites http://cleardarksky.com/csk created by Atilla Danko which provide very detailed 48 hour color coded forecast charts on cloud cover, transparency, seeing, wind, temperature and other factors. I have been an avid amateur astronomer in Canada for over 30 years and a software developer for more than 20 years. When I purchased my new laptop computer loaded with Windows Vista I found the new Sidebar gadget utilities very interesting and immediately envisioned a gadget to constantly monitor multiple Clear Sky Clock sites as I often observe from different locations. After a bit of research I determined that no one had built a ClearSkyClock gadget for Vista so I decided to build my own.

My gadget contains an XML database of 3100+ clock sites organized by country, state/province and clock name. It allows any 3 clocks to be selected on the options screen and previewed continuously on the Vista sidebar. A second instance can be installed if more sites are desired. You can click on the chart to directly open any of the three selected sites in your browser. Undocking the gadget will increase the width to display a clearer hour by hour preview chart that shows cloud cover on the top row and transparency on the lower row. Each square represents one hour and the color runs from dark blue (excellent skies) to white (very poor). A red line indicates midnight each day. Refer to the Clear Sky Clock web site for complete details on reading the Clear Sky Clock charts. Attilla updates the clocks twice daily and the gadget is designed to refresh every 30 minutes during those two update periods.

Undocked view of the gadget on desktop.

The gadget Options Screen is shown populated with three local Ontario observing sites. The country pick list includes Bahamas, Canada, Mexico and the USA. The Province or State list is populated based on the Country selected and the Clock Name list is populated after a Province or State is selected.
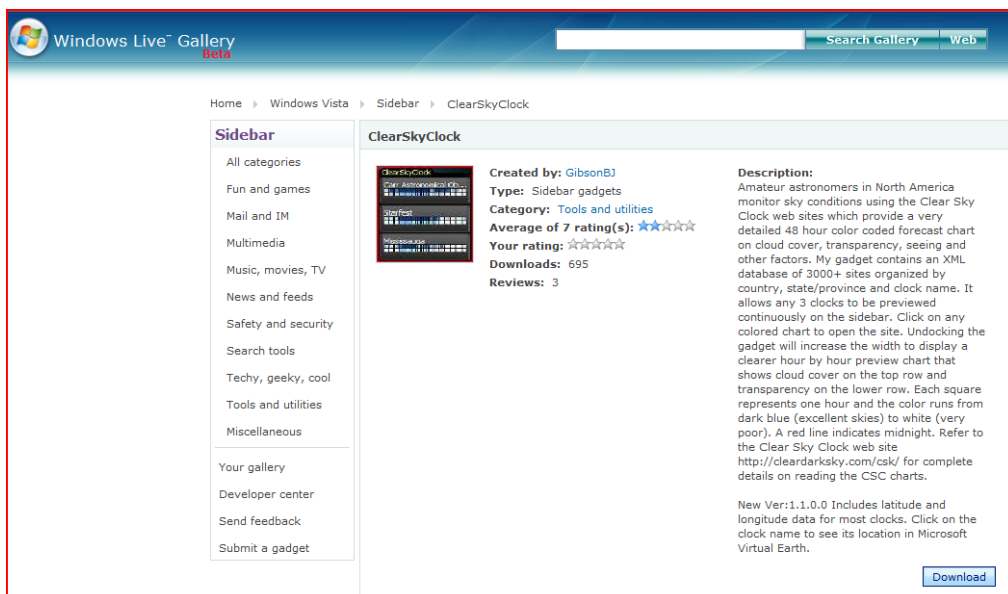
There are large varieties of useful Windows Vista sidebar gadgets. Several come pre-installed with your Vista computer but thousands more are available for download (free) from the web gallery. This screen shows the ClearSkyClock gadget icon and details in the Sidebar gadgets dialog window.

The gadget database includes latitude and longitude data for most Clear Sky Clock sites. Clicking on the clock name (when docked or undocked) will display a flyout panel showing a map of the location using Microsoft's Virtual Earth web service. The telescope icon is centered on the coordinates. The message "Private Location" on some sites indicates that the coordinates are not provided. You can zoom in and out or drag the map around in the window.
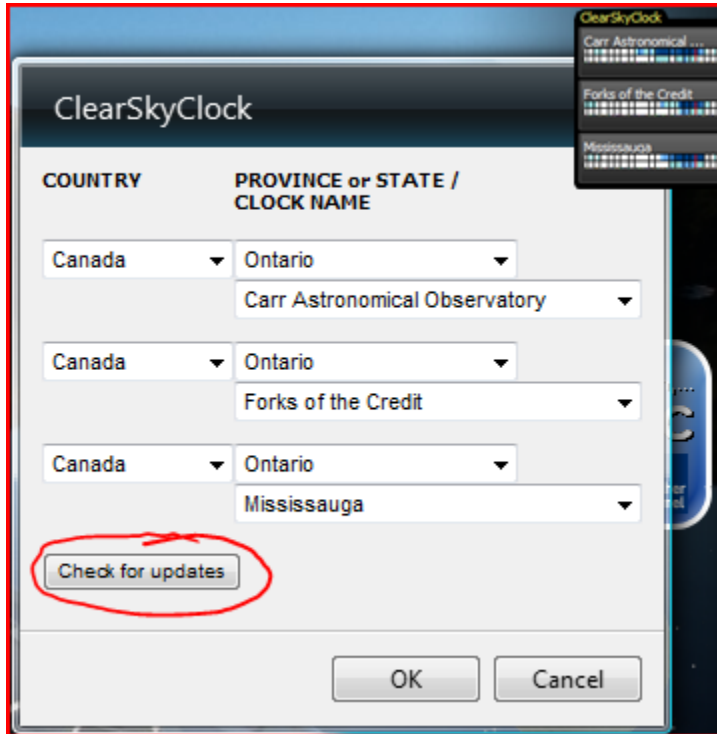

My ClearSkyClock Vista gadget is available for free download from the Windows Live Gallery at http://gallery.live.com/liveItemDetail.aspx?li=48917ad4-e1a9-4121-8713-bd4e0716a035 . Here is a screen shot. I hope it encourages you to get your scopes out more often!
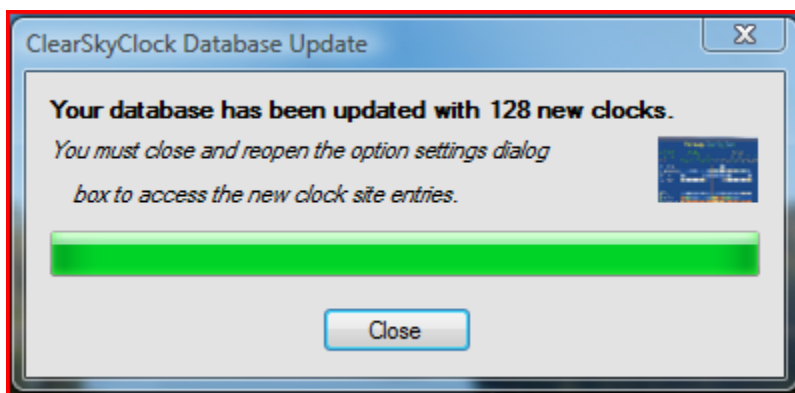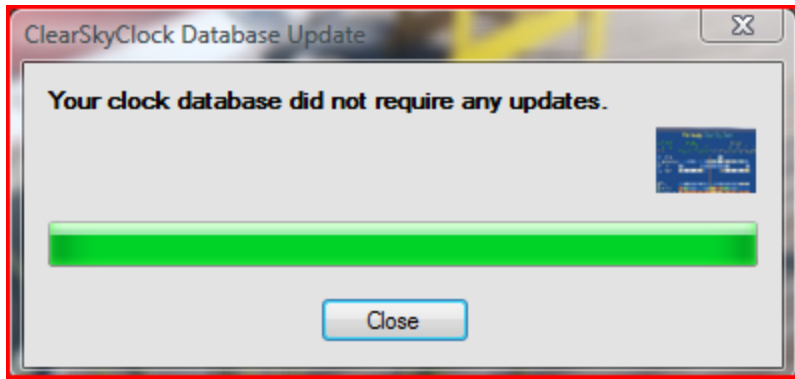
New Version 1.2.0.0 Update Feature

The option settings dialog has a button that allows you to check for updates. Click the button to see if there are any new clock sites that can be added to the gadget database. This is not required unless your clock does not appear in the drop down list.

You must allow the CSCgadgetUpdate.exe program to run in the background when asked by Vista.

If new clocks are found then you will see this message displayed showing the count.

If no new clocks are found then this is the message displayed.