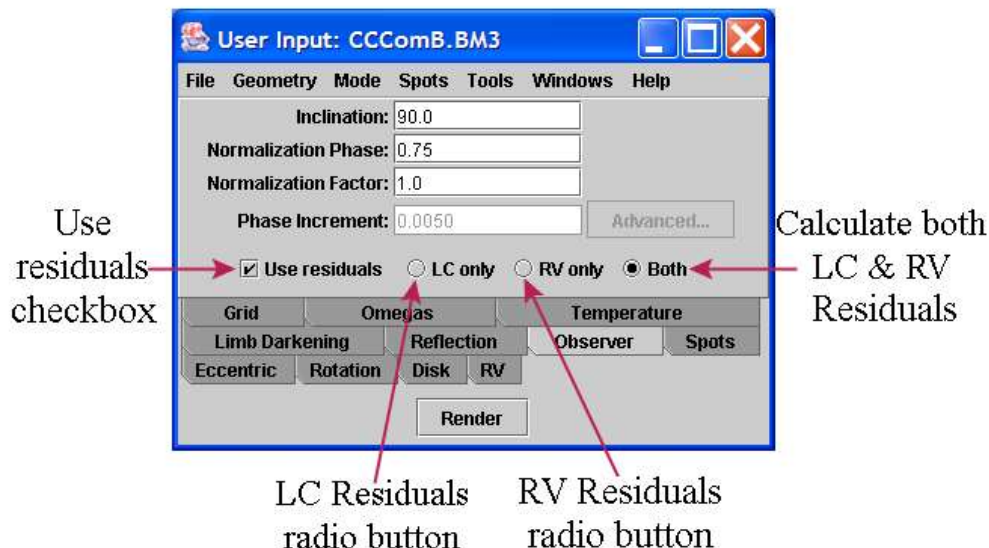


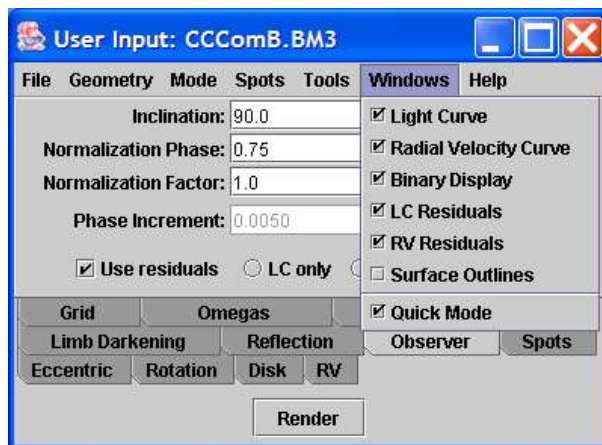


Residuals mode

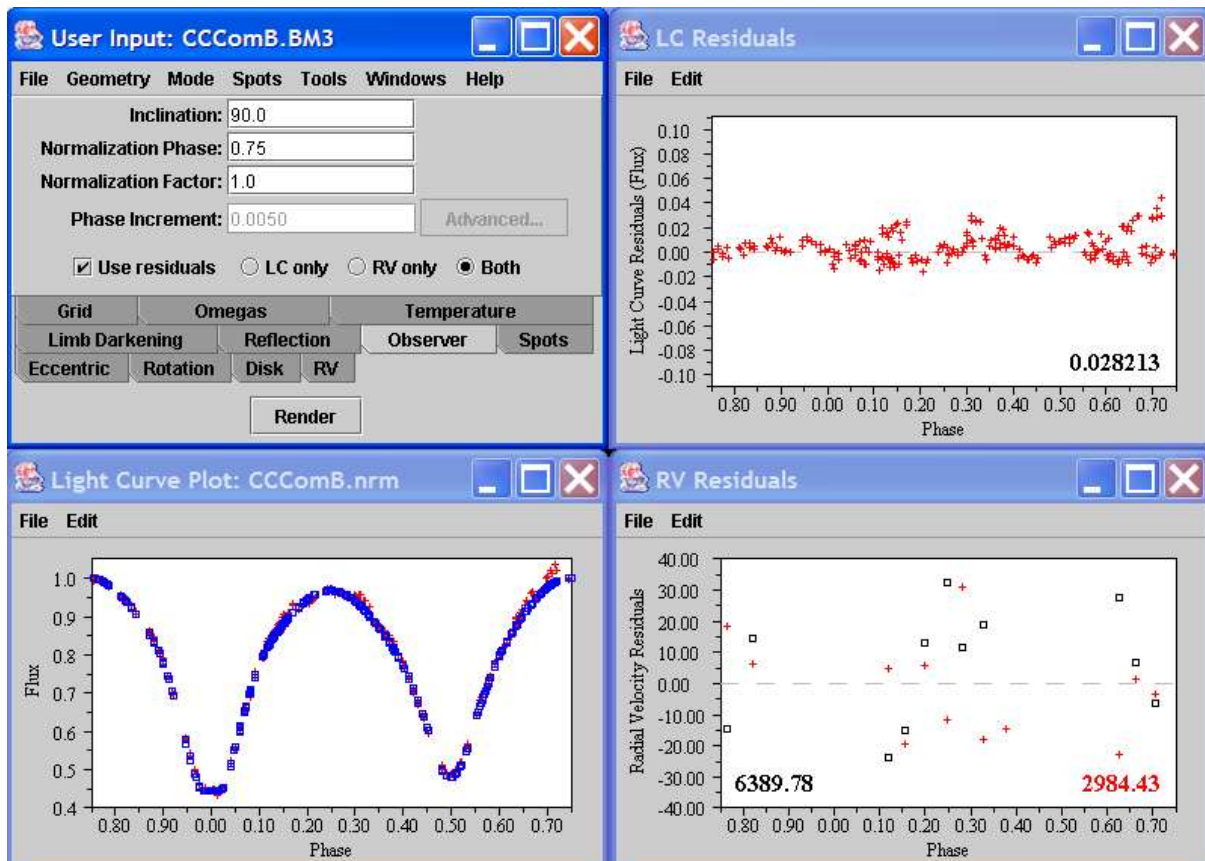
Binary Maker 3 gives the user the option to calculate the synthetic light and radial velocity curves at exactly the same phases as the input observed curves. This allows the program to calculate the sum of the squares of the residuals between the synthetic and observed curves and plot these residuals in separate windows. This gives an actual number which can be used to judge the goodness of fit between theory and observation.



By checking the **Use residuals** checkbox this option is selected and the default is for **both** the light curve and radial velocity residual curves to be calculated. Alternately, by checking the boxes next to the labels **LC only** or **RV only** one can select to just calculate one of the residual plots. In order to display the **LC** and/or **RV Residuals** windows their respective checkboxes under the **Windows** menu must be checked as shown below:



LC and RV Residuals windows checkboxes are selected in order to display those windows



Residuals Mode invoked for the overcontact binary CC Com in the *B* filter showing both **Residuals** plots

The number in the bottom right hand corner of the **LC Residuals** window is the sum of the squares of the residuals for the flux points. The black number in the bottom left of the **RV Residuals** is the sum of the squares of the residuals of the primary star's radial velocity points; the red in the bottom right hand side the sum of the squares of the residuals of the secondary star's radial velocity points. These plots can be saved as *PostScript* files like all of the other plotting windows under the **File** menus.