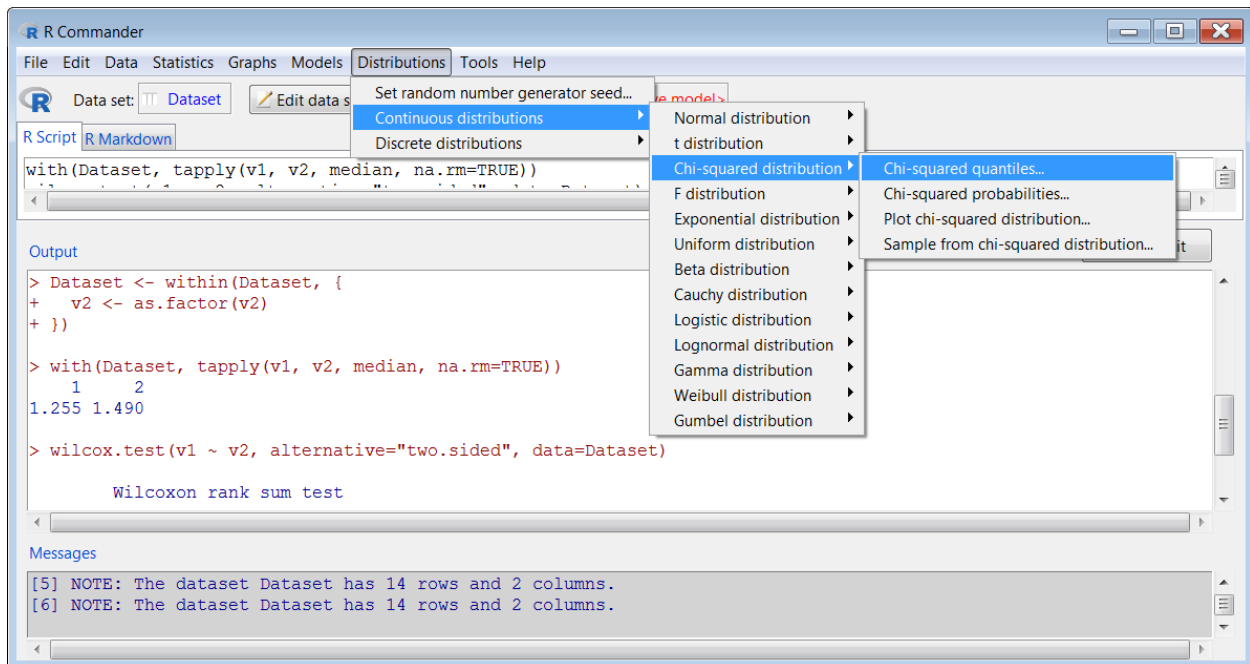


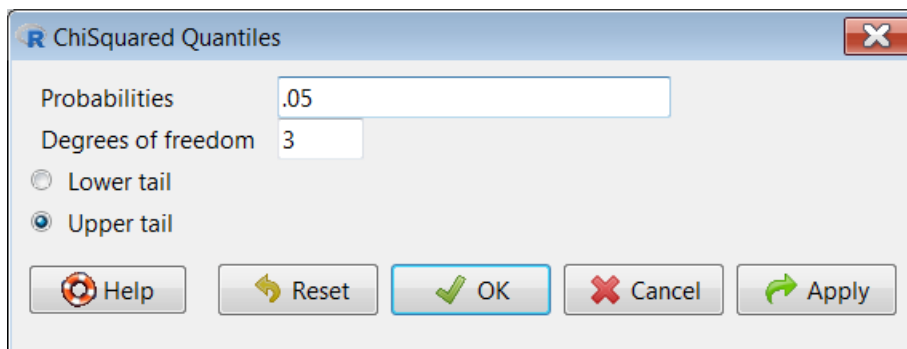
Finding a Chi-square Quantile or Critical Value

The following example shows you how to find a Chi-square critical value from a Chi-square distribution for a significant level, α , of 0.05 or 5%. It is also the .95 quantile of the Chi-squared distribution.

1. To get the dialog box for specifying the particular quantile or right tail area, for instance, have a 0.05 right tail area, one should select **Distribution** and then **Continuous distributions** and then **Chi-squared distribution** and then click on **Chi-squared quantiles...**



2. In the ChiSquared Quantiles dialog box, enter the right tail area (α , significant level), degrees of freedom, and check the Upper tail bullet, and click **OK**.



The Output window will show the following result which is the .95 quantile of a Chi-squared distribution with degrees of freedom 3, or the critical value for a Chi-squared test with degrees of freedom 3. This number is 7.814728.

```
> qchisq(c(.05), df=3, lower.tail=FALSE)
```

```
[1] 7.814728
```