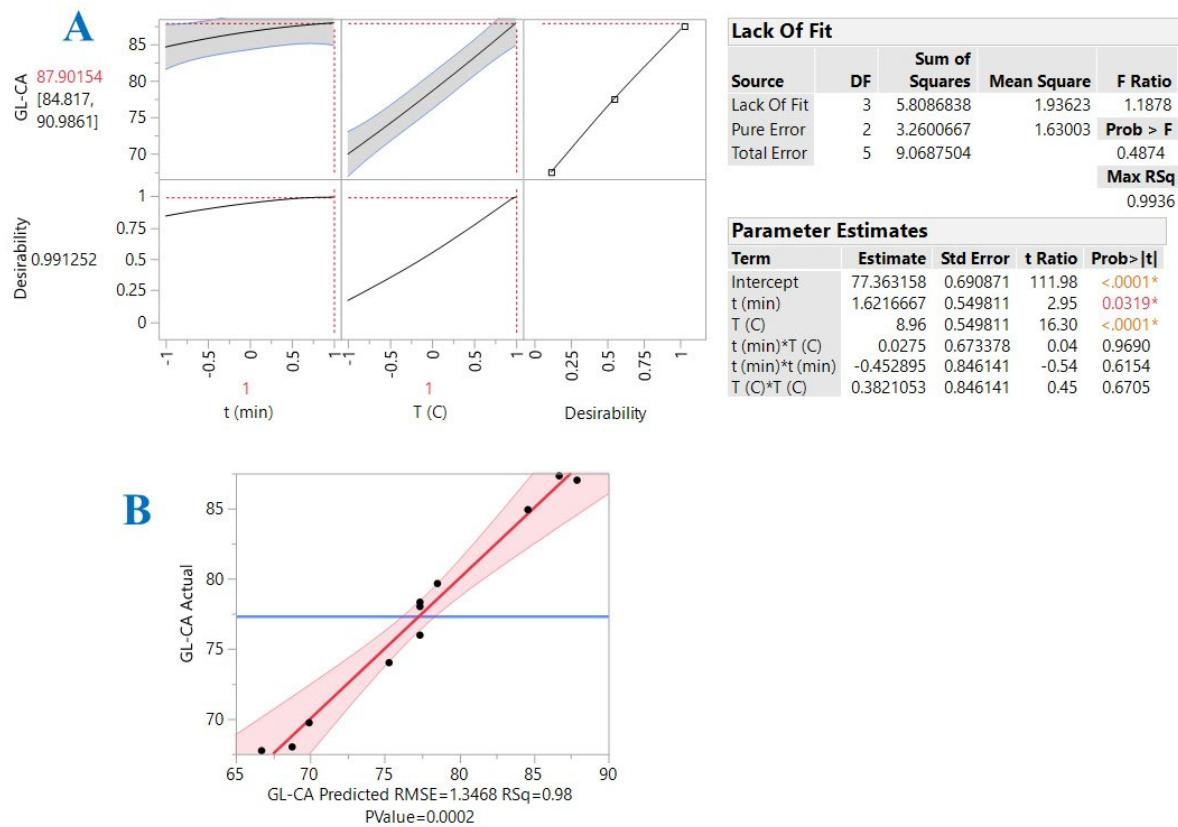
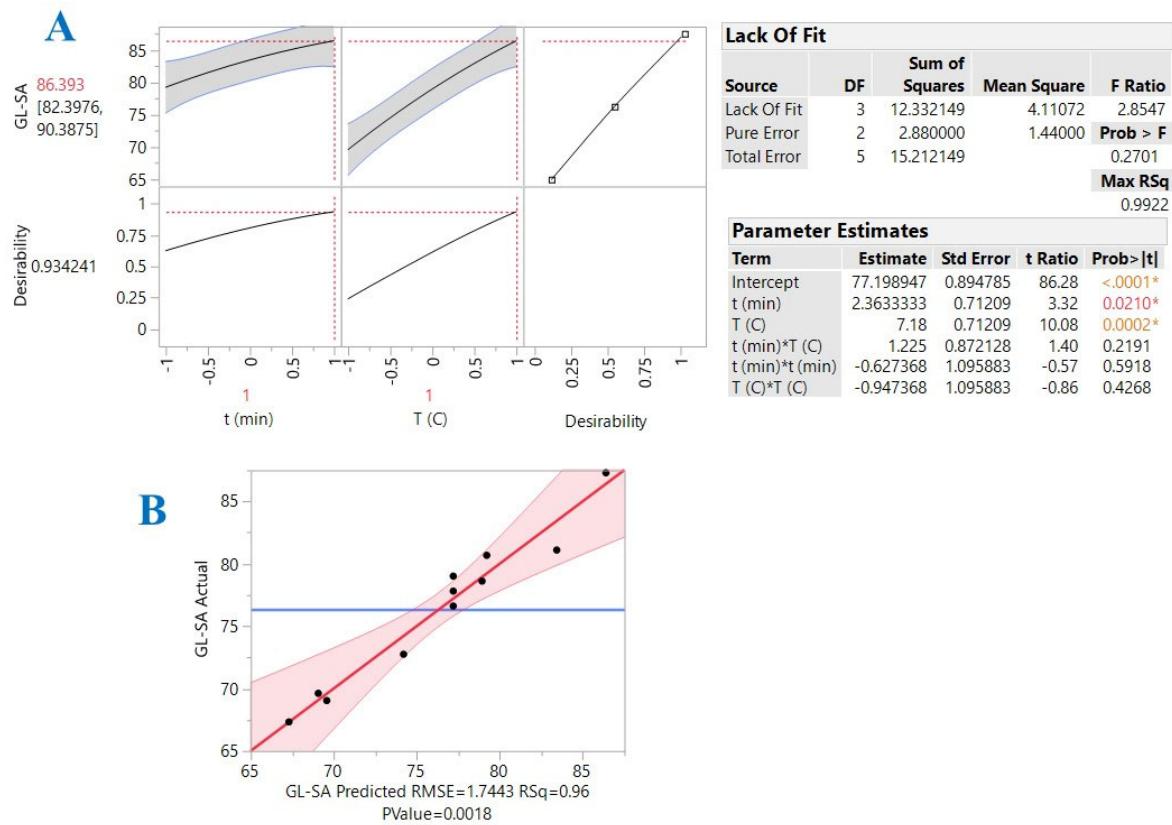


**Figure S1:** Desirability function (graph A) and plot of predicted vs. actual values of the response ( $Y_{TP}$ ) (plot B) for the optimization of the extraction of OSW polyphenols performed with glycerol. Inset tables provide statistics associated with the assessment of the model derived. Values with color and asterisk are statistically significant.



**Figure S2:** Desirability function (graph A) and plot of predicted vs. actual values of the response ( $Y_{TP}$ ) (plot B) for the optimization of the extraction of OSW polyphenols performed with the GL-CA DES. Inset tables provide statistics associated with the assessment of the model derived. Values with color and asterisk are statistically significant.



**Figure S3:** Desirability function (graph A) and plot of predicted vs. actual values of the response ( $Y_{TP}$ ) (plot B) for the optimization of the extraction of OLL polyphenols performed with the GL-SA DES. Inset tables provide statistics associated with the assessment of the model derived. Values with color and asterisk are statistically significant.