

GC Content Polynomial Fit C# Script v1.4.6 for GenomeStudio® Software

1. General Information

GC Content Polynomial Fit is a C# script that can be executed from within the GenomeStudio Software interface to remove GC waves from the Log R Ratio. A third degree polynomial curve is fit through the GC Content vs. Log R Ratio data. The script adds two new columns to the GenomeStudio Full Data table, enabling you to view the results of the script. This document provides information about downloading, installing, and using the GC Content Polynomial Fit C# script.

2. Downloading and Installing the GC Content Polynomial Fit C# Script

1. Download the GCCContentPolynomialFit_1.4.6.zip from either:
 - The GenomeStudio Portal
 - The software downloads section of [iCom](#)
2. Double-click the SetupGCCContentPolynomialFit_1.4.6.msi file to run the setup program.
3. Follow the instructions in the installation prompts.

The setup program copies the script, as well as several other supporting files, to the following directory on your computer:

C:\Program Files (x86)\Illumina\GCCContentPolynomialFit

3. Using the GC Content Polynomial Fit C# Script with GenomeStudio

1. Open a genotyping project using GenomeStudio Software.
2. In the Samples table, select the samples from which you want to remove GC content.
If you do not make any selections, the script will run against all samples in your project.
3. Select **Tools | Run C# Script**. The Execute C# Script window opens.
4. Click **Load** and navigate to the GCCContentPolynomialFit.cs script in the following directory:

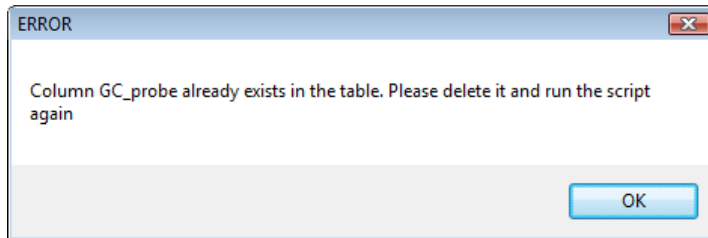
C:\Program Files (x86)\Illumina\GCCContentPolynomialFit

The content of the script will appear on the User C# Script tab.

5. Click **Execute**. The script will begin to run.
Depending on the number of samples you selected, it could take from several seconds to several minutes to complete. While the script is running, you will see an hourglass cursor over the Execute C# Script window.
When the script finishes, the Results area will show the status **Execution is complete**.
6. Close the Execute C# Script window.
Two new columns appear in your Full Data Table and can be included in reports and graphs.
 - The **GC_Probe** column is provided as a reference to show what GC content was used.
 - The **GCC_LRR** column shows the adjusted Log R Ratio. You might want to add the Log R Ratio subcolumn to the Full Data Table for side-by-side comparison with this column.

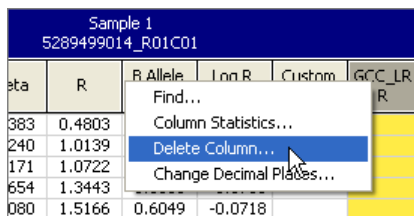
4. Troubleshooting

If you add the GC_Probe and GCC_LRR columns to the Full Data Table, then try to re-run the script, an error message opens, saying that the columns already exist in the table.



The solution is to delete the two columns created by the script from the Full Data Table, then run the script again and re-show the columns.

To remove the GC_Probe and GCC_LRR columns from the Full Data Table, right-click each heading and select **Delete Column**.



5. Technical Support

Direct questions about installing and using the GCContentPolynomialFit C# script to Illumina Technical Support at techsupport@illumina.com, 1.800.809.4566 (toll-free), or +1.858.202.4566 (outside North America).

6. Version History

Build	Date
v1.4.6 for GenomeStudio	03/23/2011

- Initial release

For Research Use Only

© 2011 Illumina, Inc. All rights reserved.

Illumina, illuminaDx, Solexa, Making Sense Out of Life, Oligator, Sentrix, GoldenGate, GoldenGate Indexing, DASL, BeadArray, Array of Arrays, Infinium, BeadXpress, VeraCode, IntelliHyb, iSelect, CSPPro, GenomeStudio, Genetic Energy, HiSeq, HiScan, Eco, TruSeq, and MiSeq are registered trademarks or trademarks of Illumina, Inc. All other brands and names contained herein are the property of their respective owners.