

# Learning to Create Charts in Google Sheets: Handling Blank Cells for Effective Data Visualization

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October 28, 2025

## RECOMMENDED CITATION

Mohammed Iooti (2025). *Learning to Create Charts in Google Sheets: Handling Blank Cells for Effective Data Visualization*. PSYCHOLOGICAL STATISTICS. Retrieved from <https://statistics.arabpsychology.com/?p=4695>

## Mastering Data Visualization Amidst Missing Values

When professionals analyze vast quantities of information, they frequently encounter [data spreadsheets](#) that contain imperfections, such as [blank cells](#) or missing entries. Within sophisticated analysis platforms like [Google Sheets](#), these omissions pose a significant hurdle when the goal is to create clear, continuous [charts](#) essential for effective [data visualization](#). By default, most standard charting engines, in the absence of explicit instruction, often struggle to handle these empty data points, potentially interpreting them as zero values or, worse, creating disruptive breaks in the visual flow, resulting in misleading or disjointed representations of the underlying information.

The presence of [null values](#) can profoundly disrupt the intended visual narrative of a chart, making it challenging for the audience to discern overarching trends or patterns across the complete [data range](#). Consider, for example, a critical time-series chart where a missing data point results in a sudden gap in the line. This visual discontinuity often implies a cessation of activity or a significant dip to zero, rather than simply an instance of unreported data. This is particularly problematic when the primary objective is to convey the overall momentum and continuous nature of a trend, even when occasional data collection gaps exist.

Fortunately, [Google Sheets](#) offers a highly intuitive and powerful solution designed specifically to mitigate this issue: the "**Plot null values**" option. This critical functionality empowers users to instruct the charting engine to intelligently interpolate and connect the data points surrounding the empty cells. By bridging these visual gaps, this feature ensures a smooth, continuous, and far more interpretable visual output. This comprehensive guide will walk you through a practical, step-by-step example, demonstrating precisely how to leverage this feature to create insightful visualizations that correctly and effectively handle missing data.

### Setting Up Your Dataset for Trend Analysis

To illustrate the essential utility of the "**Plot null values**" feature, we will utilize a common scenario involving monthly sales performance tracking. Imagine a spreadsheet designed to monitor the sales figures for a specific product over a full year. Due to real-world factors--such as reporting delays, temporary system failures, or actual instances of zero sales being recorded as empty cells--certain months may lack recorded sales figures. This results in [blank cells](#) appearing in our primary data column. The image below provides a clear example of such a dataset, highlighting the missing entries for specific periods.

	A	B	C	D
1	<b>Month</b>	<b>Sales</b>		
2	January	4		
3	February	7		
4	March	9		
5	April	12		
6	May			
7	June	17		
8	July	20		
9	August			
10	September	22		
11	October	26		
12	November	29		
13	December	27		
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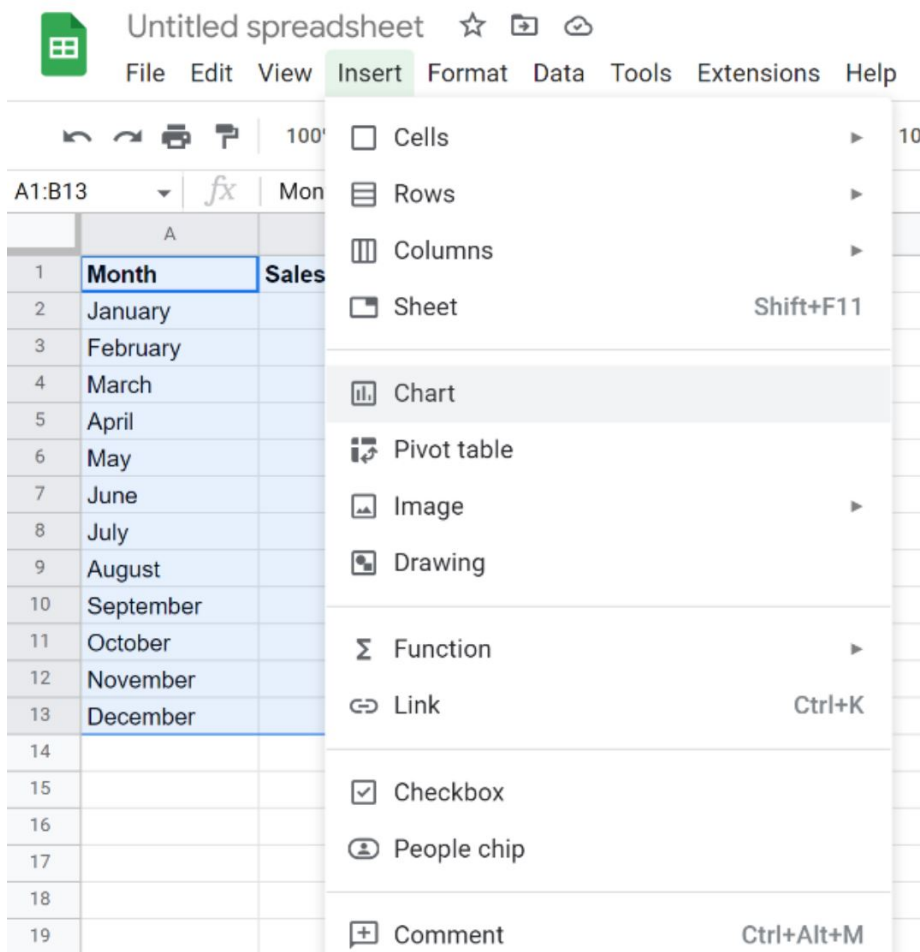
In this hypothetical [data spreadsheet](#), Column A is designated for the "Month," serving as our primary categorical axis, while Column B contains the corresponding "Sales" figures, representing our quantitative data series. Crucially, observe the absence of numerical data in the "Sales" column for both May and August. Our analytical objective is to visualize this sales progression using a [line chart](#). However, to accurately convey the yearly performance narrative, the chart must maintain visual continuity and avoid breaks, effectively estimating the trend across these missing data points.

### Initial Chart Generation: Observing the Default Behavior

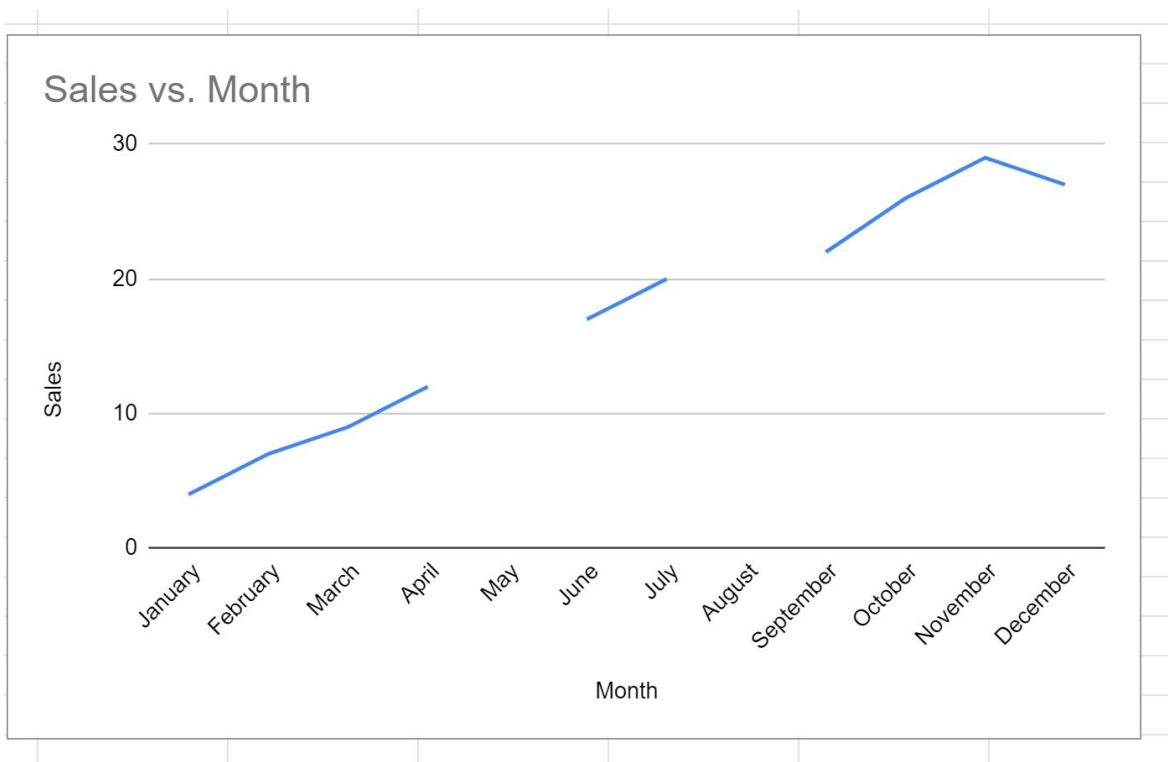
The standard procedure for initiating [chart](#) creation involves selecting the entire block of data intended for visualization. For our specific sales example, we must meticulously highlight the complete [data range](#), which spans from cell **A1** down to **B13**. Once this range is selected, the user must navigate to the top primary menu ribbon of [Google Sheets](#) to begin the insertion process.

Locate and click on the "**Insert**" tab, which is a foundational element of the spreadsheet interface. A comprehensive dropdown menu will appear, from which you must select the "**Chart**" option. Executing this command prompts the application to automatically generate a preliminary, default

chart based on the selected data, usually attempting to infer the most appropriate chart type, which, for time-series data, is typically a line graph.



Following the selection of "Chart," [Google Sheets](#) typically defaults to generating a [line chart](#), as this format is best suited for visualizing sequential or time-based data. The immediate output of this initial generation phase will clearly demonstrate the software's default mechanism for handling [blank cells](#). Without modification, the software interprets these gaps as points where the data series is broken or nonexistent.

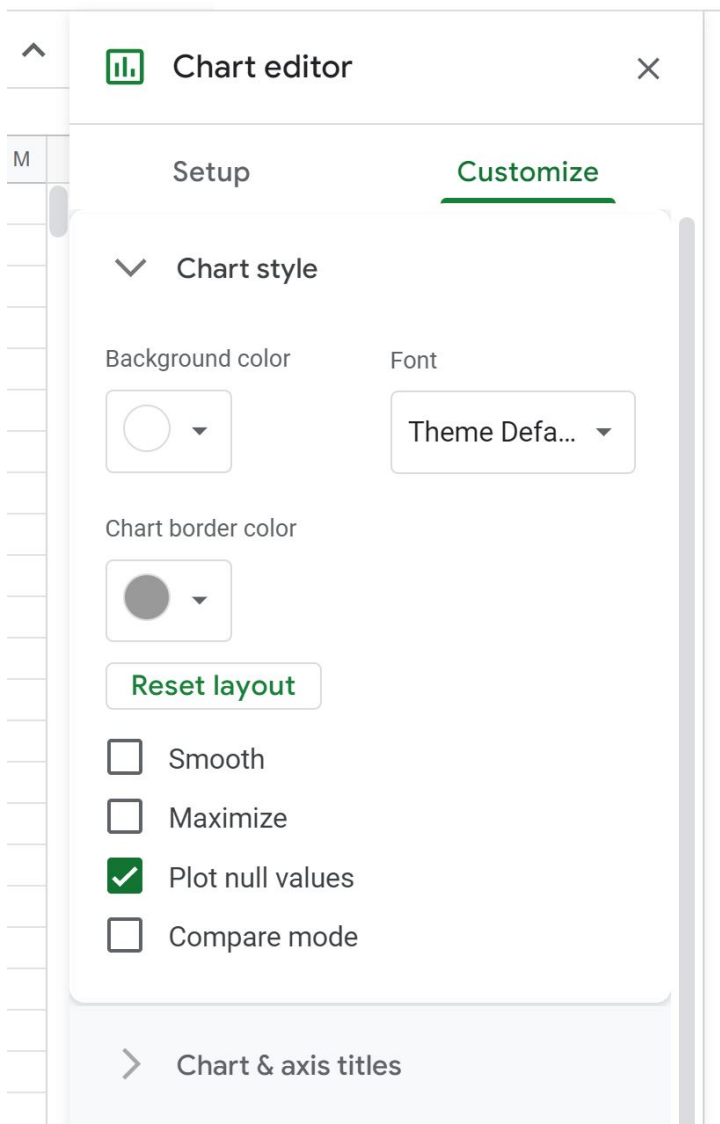


As clearly depicted in the automatically generated [line chart](#) above, there are pronounced discontinuities--visible "gaps"--in the data line. These gaps correspond exactly to the months of May and August, the precise locations in our dataset where we entered [null values](#) for sales. This standard, default behavior confirms that [Google Sheets](#), by default, treats empty cells as points where the data series is fundamentally broken, thereby preventing the crucial continuous visual representation of the sales trend. To achieve a smooth, uninterrupted visualization, explicit adjustment of the chart's configuration settings is required.

## Configuring the Chart for Seamless Data Continuity

To effectively remedy the visual gaps resulting from [blank cells](#) and enable the desired continuous plotting, we must access the advanced configuration panel, known as the [Chart editor](#). This panel is easily opened by executing a simple double-click action anywhere on the newly generated chart visualization. The editor panel will materialize on the right-hand side of your screen, providing a wealth of customization options for refining your visual presentation.

Within the multifaceted [Chart editor](#) interface, users must navigate past the initial Setup tab and click on the "**Customize**" tab. This section grants highly granular control over both the aesthetic elements and the fundamental behavioral logic of your [chart](#). It is in this crucial section that one can fine-tune titles, axis labels, specific series coloring, and, most importantly, dictate precisely how the engine should handle missing data points.

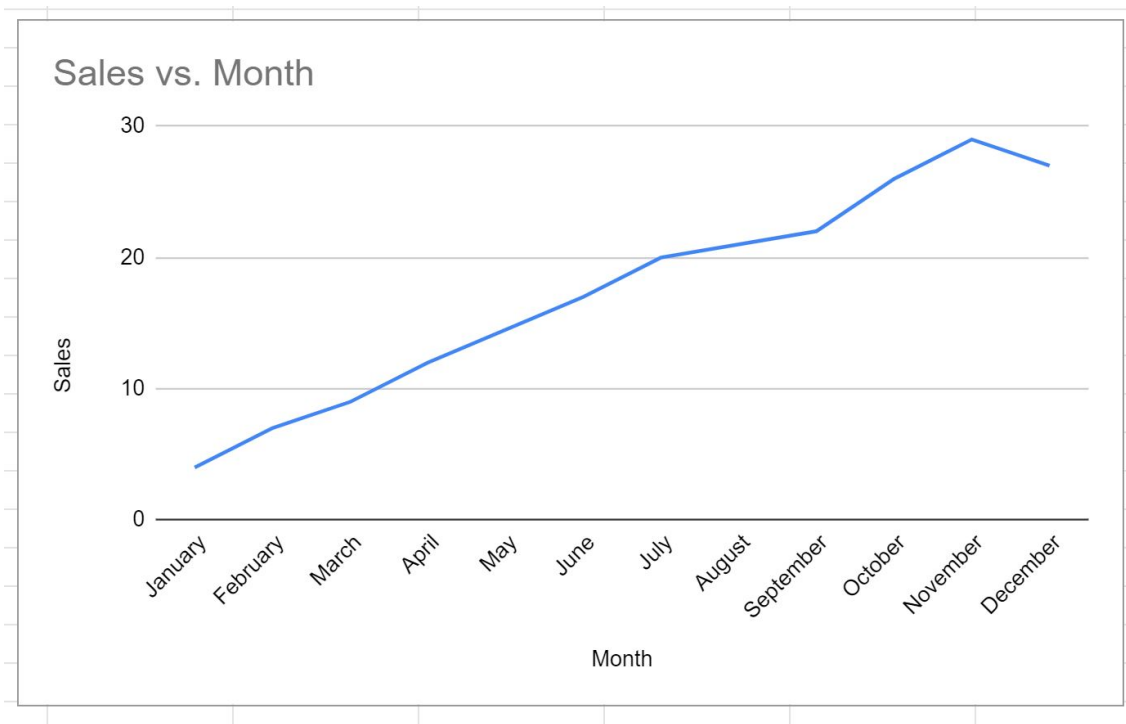


Proceed by scrolling through the numerous "**Customize**" options until you locate the "**Series**" section, which governs the behavior of the plotted data lines. Within this subsection, you will find the essential control feature: a checkbox explicitly labeled "**Plot null values.**" This is the key configuration setting needed to transform the chart. By activating this checkbox, you are instructing [Google Sheets](#) to draw a connecting line between the last valid data point before the [null value](#) and the next valid data point after it, thereby effectively bridging the gaps that marred the default [line chart](#) output.

## Achieving Professional and Unbroken Visual Output

The moment the "**Plot null values**" option is selected within the [Chart editor](#), the visualization undergoes an immediate and striking transformation. The previously noticeable and disruptive gaps in the [line chart](#), which were directly attributable to the months containing [blank cells](#) in the

dataset, instantaneously vanish, yielding a continuous plot.



The resulting [line chart](#) now displays a remarkably continuous trend line, with smooth interpolation across the formerly blank data points. This result creates a significantly more coherent and visually appealing representation of the sales data, facilitating easier and more intuitive interpretation of the overall trajectory without the distraction of missing values. This feature proves invaluable for analysts visualizing trends where maintaining visual continuity is paramount, even when certain data points are temporarily unavailable or unreported.

By strategically enabling the "**Plot null values**" setting, analysts ensure that the underlying visual narrative of their data remains unbroken and consistent, providing a much clearer understanding of underlying long-term patterns. This simple, yet incredibly powerful, customization available in [Google Sheets](#) is essential for producing professional and highly insightful [data visualization](#), particularly when contending with real-world datasets that often contain unavoidable imperfections.

## Conclusion: Best Practices for Data Integrity

The effective and accurate handling of [blank cells](#) within your [charts](#) constitutes a foundational element of creating honest and easily digestible [data visualization](#). As meticulously demonstrated through this example, [Google Sheets](#) has simplified this often-complex process dramatically with its dedicated "**Plot null values**" feature. This option allows users to transform a disjointed and potentially confusing chart into a continuous, informative visual narrative with minimal effort.

This specific feature is exceptionally beneficial when managing time-series data, generating financial reports, or working with any dataset where maintaining the consistent visual flow of an established trend holds precedence over highlighting every single missing data point. It plays a critical role in preventing misinterpretations that frequently arise from sudden breaks or gaps in a [line chart](#), ensuring that your audience remains focused on the overall pattern and trajectory rather than being fixated on the absence of specific, isolated data entries.

We strongly encourage all data analysts and spreadsheet users to integrate this reliable technique into their standard data analysis workflow. By mastering such simple yet impactful customizations, you are empowered to produce significantly more polished, professional, and insightful charts that communicate your data's true story effectively, even when facing the common and pervasive challenge of [null values](#).

## Advancing Your Google Sheets Expertise

To further enhance your overall proficiency with [Google Sheets](#) and unlock its complete potential for advanced [data visualization](#) and rigorous analysis, we recommend exploring the following related tutorials and expert resources. These supplemental guides cover various common tasks and powerful functionalities that can further refine and deepen your spreadsheet management and analytical skills.

Understanding the distinctions between different [chart](#) types and determining when to utilize each one effectively for maximum impact.

Mastering chart appearance customization, including adjusting colors, font styles, and gridlines for significantly enhanced readability and compliance with brand standards.

Working with advanced data filtering, sorting, and pivoting techniques to meticulously prepare raw data for sophisticated analysis.

Utilizing robust data validation features to actively maintain data integrity and prevent common errors within large-scale spreadsheets.