# TI-Nspire<sup>™</sup> Technology *Version 2.1*

**Release Notes** 



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TI-Nspire<sup>™</sup> Technology Version 2.1

Release Notes

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# Intro

Thank you for updating your TI-Nspire<sup>™</sup> products to Version 2.1. These Release Notes cover updates to the following products:

- TI-Nspire Handheld Operating System Version 2.1
- TI-Nspire CAS handheld Operating System Version 2.1
- TI-Nspire Teacher Software Version 2.1
- TI-Nspire CAS Teacher Software Version 2.1
- TI-Nspire Student Software Version 2.1
- TI-Nspire CAS Student Software Version 2.1

Please note that the following TI-Nspire products were not updated with this release:

- TI-Nspire Navigator Software
- Computer Link Software
- Connect-to-Class<sup>™</sup> Software

These Release Notes are to help those users that have previously been using TI-Nspire products and updated their TI-Nspire Handhelds and/or Computer Software to Version 2.1. These notes will help users see what changes have been made since the most recent release, Version 2.1. Please make sure to update all of your TI-Nspire products to the latest version to take full advantage of TI-Nspire technologies.

## Overview

 TI-Nspire Teacher Software There are now two workspaces in the Teacher Software to help teachers manage content:

			_ 0 ×
		Content	Documents
	Switch to the Document	s workspace to auth	or and display content
Date			07/09/2000 ▲

- Content Workspace: Now teachers can manage content for their classes and search Activities Exchange right inside their TI-Nspire Teacher Software. Teachers can also transfer TI-Nspire files and new operating systems to all handhelds connected to the computer through a USB cable or the new TI-Nspire Docking Station.
- Document Workspace this is the same as the workspace you currently use in your TI-Nspire Student or Teacher Software.
- New functionality
  - Frequency plots can now be organized by list order
  - Sliders can now be minimized vertically or horizontally
  - Users can now change the end values of sliders just by double clicking on the value on the screen of the handheld.

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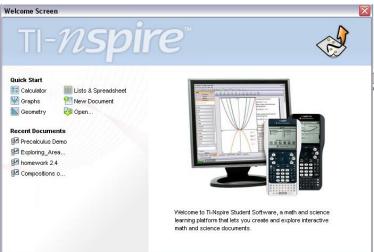
## **1 TI-Nspire Teacher Software**

#### 1.1 Welcome Screen

When you open your Student or Teacher Software version 2.1, you will notice there is now a Welcome Screen to help you get started quickly. Here are some of the features of the Welcome Screen. It will appear each time you open your TI-Nspire Computer Software, but you always have the option of disabling the Welcome Screen if you would like to. First shown here is the Welcome Screen for Teacher Software; following is the Welcome Screen for the Student Software.

	TI- <i>NSpir</i>	€ <sup>™</sup>
Quickly access all applications	Quick Start <sup>*</sup> Calculator <sup>*</sup> Graphs <sup>*</sup> New Document <sup>*</sup> Geometry	
Quickly access teacher tools for	Teacher Tools Sview Content Manage Handhelds Transfer Document(s)	
Quickly access all recently saved documents	Recent Documents P Compositions o P quadratics P Homework 1.2 P pythagoreanTri	Welcome to TI-Nspire Teacher Software! Create, download, and distribute interactive math and science documents for your students.
Uncheck box if you do not want to see Welcome Screen at start-up.	Always show this at startup	
	Welcome Screen	

TI-Nspire Student Software also has a Welcome Screen, including a Quick Start option for fast access to TI-Nspire Applications and easy access to recently saved documents.



Always show this at startup

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#### 1.2 Content Workspace

The Content Workspace is a new addition to TI-Nspire Teacher Software only. This workspace is not in the TI-Nspire Student Software. This workspace was added to help teachers manage content for their classes and more easily find lessons online. Teachers can also manage student handhelds in this workspace while using the new TI-Nspire Docking Station or if handhelds are connected to the computer via USB cables. For more information on the TI-Nspire Docking Station go to <u>TI-Nspire</u> <u>Docking Station</u>.

The left panel in the Content Workspace is called the Resource Panel, which includes files and folders on your computer, links to websites that you can access quickly, Web Content imported from TI's Activities Exchange and a list of TI-Nspire handhelds currently connected to your computer.

#### **Local Content**

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Local Content is the content that is saved on your computer. You can select your Desktop or My Documents. When you select either of these, the folders and files located in that space will show up in the top right panel. If you click on a TI-Nspire document (a file with the .tns extension), you will see a preview of the document in the lower right panel. You can click on the right arrow next to the preview and go through each page of the document. You can add your own link to files that have TI-Nspire documents in them by finding the folder in the upper right panel. Then right click on the file and click on Create Shortcut.

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Desktop	🔻 🚞 Algebra				06/28/2010
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add education.ti.com	🛛 Balanced_System.tns		11		12/07/2009
TI-Nspire Tutorials	🕼 CellPhoneRange.tns		12		07/16/2009
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- C Search by Standard	e Compare_Linear_Expone			KB	07/16/2009
Search by Textbook	P Comparing_Linear_Expor			KB	07/16/2009
Math Nspired	P Compositions of function			KB	06/28/2010
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TPhysics.com	열 DogDays_Soln.tns 열 Domain and Range.tns		13		07/16/2009
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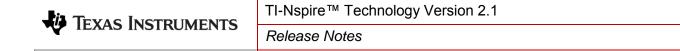
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#### Links

The links section is a place where teachers can put shortcuts to websites for quick access. Some links have already been placed there. Teachers can add their own links easily using a right click on the word Links. Teachers can launch a website by: clicking on a link in the Resources panel, by clicking on the blue link in the upper right panel, or by clicking the Launch Website button in the lower right panel.

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#### Web Content

Web Content pulls in activities that are located in Activities Exchanges. Activities from TI Math and Math Nspired have also been put in Activities Exchange so you can locate those activities from here as well. Teachers can sort through activities at the top of the upper right panel by subject, topic and category. Teachers can even filter by keyword. When you click on a particular activity, a brief summary of the activity will appear in the bottom right panel along with all files that are related to this activity. You can open each of the files by double clicking on the file. If you double click on a Word file or PDF, it will open in its associated application. A TI-Nspire document will open in the Document Workspace. Teachers can also right click on a file to get the option to save, open or copy the file. If a teacher clicks on the Save this Activity to Computer button, then all files will be saved to a place specified by the teacher as a TI-Nspire Lesson Bundle.

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🕆 📾 Local Content	Name	Author	Date Posted	Size	
	Application of Linear Systems	Texas Instruments	11/9/09	316 KB	
My Documents	California Algebra 2 CST Release Questions	Philip Magner	12/1/09	64 KB	
▼ C Links	Algebra 2/Trigonometry NY Regents Exam	NY State Education Departme		961 KB	
	Temperature Lab	Heidi Rudolph	12/24/09	254 KB	
education ti.com	Application of Completing the Square	Texas Instruments	1/7/10	286 KB	
TI-Nspire Tutorials	nSpire-ing Extraneous Solution Understanding	Jeremy Zelkowski	1/18/10	860 KB	
- Activity Samplers	Braking Distance and Driving Conditions	Leslie Mattern	2/11/10	521 KB	
- Search by Standard	Carbon Dating	Leslie Mattern	2/11/10	183 KB	
Search by Textbook	Zeros of Polynomials	Texas Instruments	2/25/10	2261 KB	
	Application of Polynomials	Texas Instruments	3/12/10	1999 KB	
Math Napired	Loci: Keeping Constant	Paul Fracaro	3/27/10	175 KB	
Kath.com	Life Lines for Curves	David Fies	4/19/10	783 KB	
- TPhysics.com	Quadratic Transformation with sliders	Ray Fox	4/20/10	279 KB	
	Translation foundation using absolute value	Lisa Baranoski	4/20/10	274 KB	
web Content	Application of Matrix Multiplication	Texas Instruments	4/21/10	581 KB	
	Review Solving Quadratic Equation	Cherie Stucki	5/15/10	5 KB	
	Solving Exponential and Logarithmic Equations	Cherie Stucki	5/15/10	3 KB	
Connected Handhold	Algebra I Review for Algebra II	Cherie Stucki	5/15/10	3 KB	
	Application of Linear Systems			🎡 Options 👻 🛛 Save this A	ctivity to Computer
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				Author: Texas Ins	truments
				Date Posted: 11/9/09	
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				Device: TI-Nspire	™ CAS, TI-Nspire™
				Grade Level: 9-12	
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#### **Connected Handhelds**

Connected Handhelds are handhelds that are connected to the computer via a USB cable. It could be a single handheld or several handhelds using multiple USB cables. Teachers can connect up to 40 handhelds by using four of the new TI-Nspire Docking Station. When a teacher clicks on Connected Handhelds, the teacher will see each of the handhelds connected in the top right panel. Teachers can name handhelds any name they wish by just right clicking on the name and selecting Rename. Other information that will be supplied for each handheld will be percentage of lithium ion batteries for those TI-Nspire with Touchpad handhelds that have a rechargeable battery, percentage of AAA batteries, storage used/total storage space, and current OS version. If a teacher clicks on a particular handheld, that handheld's information will be showed in the lower right panel as shown below.

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Hy Documents	File TI-Nspire 2	100%	100%	15.7/27.8 MB			2.1.0.5
Links	Figure 3	-	100%	15.8/27.8 MB			2.1.0.5
-	TI-Nspire 4	100%	100%	13.7/27.8 MB			2.1.0.5
a education.ti.com	TI-Nspire 5		10%	14.9/27.8 MB			2.1.0.5
TI-Nspire Tutorials	File TI-Nspire 6		100%	15.4/27.8 MB			2.1.0.5
- Activity Samplers	File TI-Nspire 7		100%	15.8/27.8 MB			2.1.0.5
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- Search by Textbook	<ul> <li>TI-Nspire CAS 10</li> <li>TI-Nspire CAS 9</li> </ul>	-	50% 100%	15.4/27.8 MB			2.1.0.5
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- 🗑 TI-Nspire CAS 9				Boot 2	1.4.1571		
				Operating System	2.1.0.520		
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Teachers can send files to any connected handheld by clicking on the Send to Handhelds button. Clicking on this will open Transfer Tool. Teachers can then select files or an OS to transfer to all connected handhelds.

File	Edit	View	Tools	Window	Help	
		sson Bur		Save to	-	Send to Handhelds

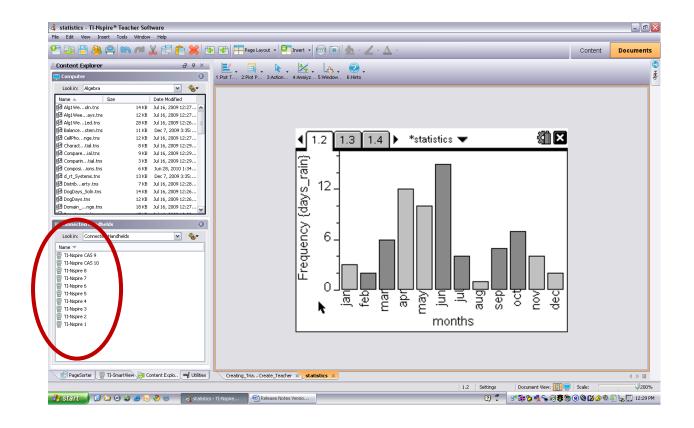
Teachers can also right click on any TI-Nspire document or TI-Nspire Lesson Bundle in the top right panel and they will get the option Send to Handhelds. This will also open the Transfer Tool and teachers can send the documents immediately to connected handhelds. Note that if a Lesson Bundle has other types of files, like a Word document or PDF, only the .tns files will be sent to the handhelds. The teacher does not have to separate them.

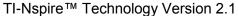
🔹 Transfer Tool		
Setup Status		
Add to Transfer List	Remove Selected Delete a	all folders and files before transfer
File Name	Destination Folder	Size
E Documents	📄 Transfers-7-4-10	360 k
Edit destination Folder:	Transfers-6-22-10	Change
		Start Transfer Close

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#### **1.3 Document Workspace**

The Document Workspace is an area that was available in all previous versions of TI-Nspire, where students and teachers can create documents and explore mathematics. In the Content Explorer in the left panel of the TI-Nspire Teacher Software, the teacher can see all handhelds that are connected to the computer via a USB cable or the TI-Nspire Docking Station.





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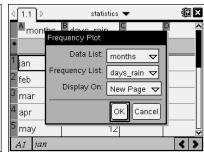
#### 2 Mathematical Enhancements

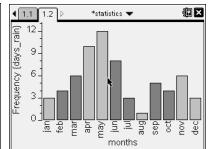
#### 2.1 Statistics

Frequency plots will now default to list order, meaning that the first entry will be listed first, the second entry listed second, and so on. Other plot types default to alphabetical order, regardless of the order of the data in the list.

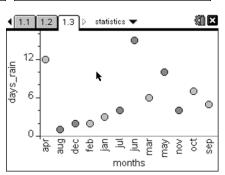
Below is some data that was put into a Lists & Spreadsheet application. In previous versions of TI-Nspire, if a user created a frequency plot, the columns would default to alphabetical order no matter what order the data was actually put into the spreadsheet. In version 2.1 the data will appear in the order they were listed in the spreadsheet. Here is an example using months as the Data List. To graph a frequency plot go to Menu>Data>Frequency Plot from a Lists & Spreadsheet application.

⊴1.1 ▷	statistics 🔻		× 🕄
A months	<sup>∎</sup> days_rain	C	
•			
1 <sub>jan</sub>	3		
<sup>2</sup> feb	4		
<sup>3</sup> mar	6		
<sup>4</sup> apr	10		
<sup>5</sup> may	12		
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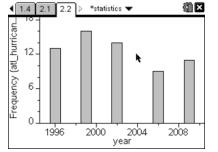
Here is the same data graphed in a dot plot in a Data &Statistics application. Notice that the months are now in alphabetical order. The default for data in the plot types in Data & Statistics is still alphabetical order. Having the independent axis appear in list order only applies to data in a spreadsheet available for Frequency Plot and not for other plot types.

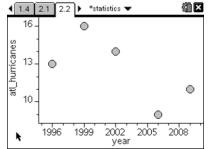


Here is an example of data taken for the number of hurricanes in the Atlantic Ocean for certain years. Whether you graph the data as a frequency plot or dot plot, the default will be to put the data in numerical order.

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	A y	ear	atl_hurricanes	C	D	
+						
1		2009	<b>★</b> 11			
2		2006	9			
3		2002	14			
4		1999	16			
5		1996	13			
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#### 2.2 Sliders

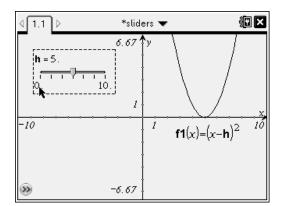
Several updates have been made to the slider functionality. When you first insert a slider, you can immediately choose where you think it should appear on the screen. Users also have the choice of minimizing the size of both horizontal and vertical sliders and the option to double click on the end values of a slider and change those values directly without having to open the setting menu.

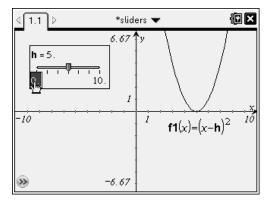
Here is a new document with a Graphs and Geometry application page. When you perform Insert Slider, when you press enter you will see a ghost image of the slider being held by a closed hand. Use the Touchpad or Clickpad to put the slider on the screen wherever you wish. Then press the center click to permanently place the slider. You will then be prompted automatically to enter the variable the slider is meant to define. The new process makes it very easy to create the slider.

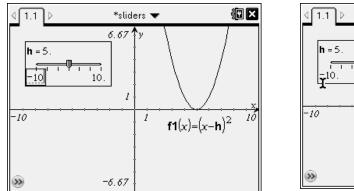


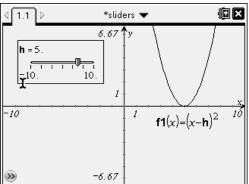
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TEXAS INSTRUMENTS Release Notes 12 Another new feature of the sliders is being able to adjust the end values with out using the settings menu. The slider that was created above is shown below. If you want this slider to have a range of values from [-10, 10] rather than [0, 10] all you have to do is double click on the 0. The 0 will open in a text box. Then just type in the number -10 and press enter.



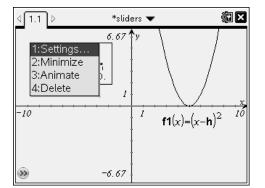


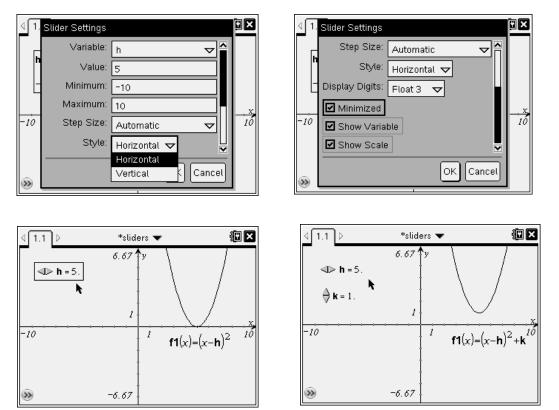




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TEXAS INSTRUMENTS Release Notes 13 The slider setting menu has also been changed to add in additional functionality. To get to that menu, hover over the slider and press ctrl and then menu. Settings are the first menu option. Tab down to the Style and there are now only two options, Horizontal and Vertical. The minimized option is now towards the end of the settings menu. A user can now minimize both a horizontal and vertical slider by placing a check in the minimized box. Default is unchecked.



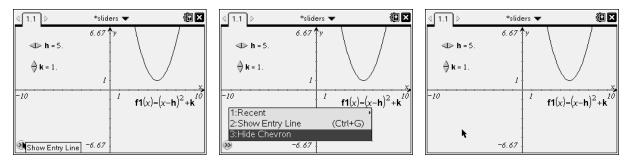


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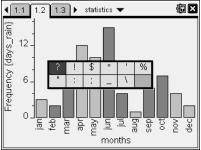
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#### Appendix – Ease of Use

 There is now an option to hide the chevron that you see on the bottom left hand side of a Graphs & Geometry Application. If you hover over the chevron and then press ctrl and then menu, there is now an option 3: Hide Chevron.



To give easier access to the percent symbol, it has been added under the ⑦ key to the right of the ⑥ key.



• When you print a TI-Nspire Document you now have a choice of the page area you want to print. You can choose to print only what is on the viewable screen or you can choose to print what is outside the viewable screen with the print all option. That would be what you have to scroll down on the screen to look at when going through the TI-Nspire document.

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TEXAS INSTRUMENTS Release Notes 15 • There is new syntax that can be added to the Automatic Data Capture which is an extra optional parameter. It is:

capture(var to capture, 1, {list of vars data capture is depending on})

		5 V 9: ace 6:Analyz 7:Points 8:Measur 9:			
3.34 V				Axcoord	Bycoord
xc=xcoordinate			-	=capture('xc,1,yc)	=capture('yc,1,xc)
			1	2.34455	1.82782
yc=ycoordinate	yc-ycoorainaie		2	2.13694	1.82852
		(3.24, 1.32)	1.1	1.8671	1.82942
			2	1.28598	1.83136
			- -	5 1.22374	1.83157
			6	51.203	1.83164
			7	1.18225	1.83171
			8	31.1615	1.83178
	× 0.2	i i i i i i i i i i i i i i i i i i i	5	1.12001	1.83192
-1.65	0.2	0.5	4.65	01.07859	1.83206
-4.65		2.0.5 ×	<sup>4.05</sup> 1	11.01642	1.83226
			1	20.933497	1.83254
			1	30.850649	1.83282
		(	1	40.829902	1.83289
	x x	(xcoord,ycoord)	1	50.788478	1.83303
	*		1	60.767731	1.8331
	× ×× ××× ××× × ×	3000X X X X X X X X X X X X	1	0.746985	1.83317
			1	80.726238	1.83323
			1	90.601965	1.83365
			2	0 0.539725	1.83386

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