

TI-83 Plus TimeSpan™ Viewer

Getting Started

- What Is the TimeSpan™ Viewer Application?
- What You Need
- Where to Find Installation Instructions

How To...

- Start and Quit the Application
- Select Topics and Timelines
- View and Navigate Timelines
- Zoom In and Out
- Change the Way Dates Are Shown
- Delete the Application

More Information

- Error Recovery
- Customer Support



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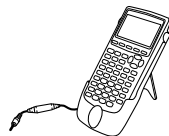
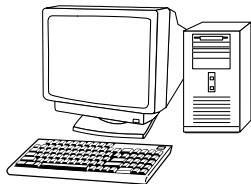
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What Is the TlmeSpan™ Viewer Application?

TlmeSpan™ Viewer is a handheld software application (App) for the TI-83 Plus and TI-83 Plus Silver Edition that you use to view electronic timelines created with the TlmeSpan Creator software on a computer.

TlmeSpan Viewer is an excellent aid in teaching or studying:

- History, economics, and other social studies
- Discoveries and inventions in science and technology
- Events in literature, music, and art



Teacher creates topics using TlmeSpan Creator on the computer.

Topics are transferred using TI Connect™ software and a TI Connectivity Cable.

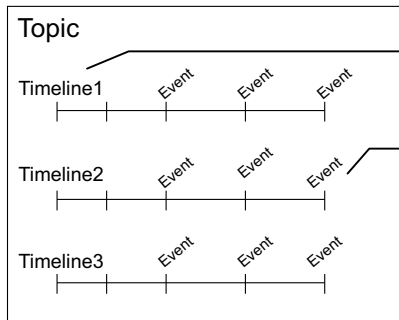
Students use TlmeSpan Viewer to select a topic and view its timelines on the handheld device.

TimeSpan™ Creator is a Windows® computer software application that teachers or students can use to create topic files containing multiple timelines, which can then be viewed on the TI-83 Plus. You can use the TimeSpan Creator or TI Connect™ software to transfer topics from the computer to the TI-83 Plus. For detailed information on how to use the TimeSpan Creator, see the TimeSpan Creator Help.

Up to three timelines may be viewed at a time on the handheld. Students can compare one series of events with other events as they happen concurrently.

TimeSpan information is structured as follows.

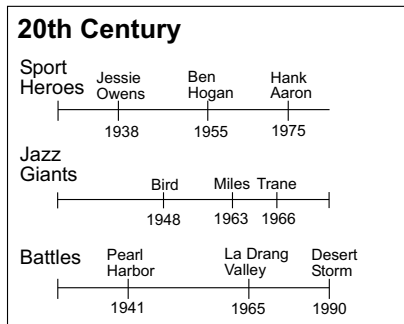
- **Topics** are files or application variables (AppVars) that contain a collection of timelines. Each topic can have up to 20 timelines. A topic must have at least one timeline.
- **Timelines** are stored within a topic. The TimeSpan Viewer can display up to three timelines at a time. Each timeline can contain up to 250 events.
- **Events** are included in each timeline. Each event must have a unique name and a date. The event description is optional.



Each Topic can have up to 20 Timelines.

Each Timeline can have up to 250 Events.

General information structure



Example: A topic named 20th Century includes three timelines, each of which has its own events.

The TimeSpan™ Viewer can display timeline names up to 20 characters long, including spaces.

What You Need

Note In this guidebook, any information that pertains to the TI-83 Plus also pertains to the TI-83 Plus Silver Edition, unless otherwise noted.

Hardware and software	Notes
TI-83 Plus or TI-83 Plus Silver Edition with version 1.16 or later of the operating system software.	Download a free copy of the latest operating system software from education.ti.com/softwareupdates . Look for the TI-83 Plus Operating System.
TI Connectivity computer-to-device cable.	If you do not have this cable, call your distributor, or order the cable from TI's online store .
Computer with Microsoft® Windows® 95/98/ME/2000/XP, Windows NT®, or Apple® Mac® OS 7.1 or later.	You can use a Macintosh to install the App or transfer topic AppVars, but not to create TImeSpan topics.
TI Connect™ software 1.2.1 or later for Windows or 1.0 for Macintosh.	Download free copies of TI Connect software from education.ti.com/softwareupdates . Follow the links to Computer Software and Connectivity Software.
Optional: TImeSpan™ Creator computer software application (Windows only) to create TImeSpan topics.	Download a free copy of TImeSpan™ Creator software from education.ti.com/softwareupdates . Follow the link to Computer Software.

Where to Find Installation Instructions

Detailed instructions on installing this and other Apps are available at education.ti.com/guides. Follow the link to Flash installation instructions.

Note

The instructions in this guidebook are only for this App. If you need help using the TI-83 Plus, refer to its comprehensive guidebook at education.ti.com/guides.

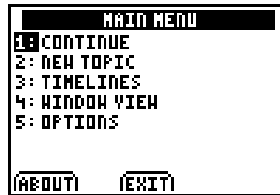
Starting and Quitting the Application

Starting the Application

1. Press **[APPS]** to display the list of Apps on your TI-83 Plus.
2. Select **TimeSpan**. The information screen displays.
3. Press any key to continue. If at least one topic is found on your TI-83 Plus, the **MAIN MENU** displays.



First-time Main Menu



Normal Main Menu

If a topic file is not found on your TI-83 Plus, the following message displays.



You must transfer at least one file created in TlmeSpan™ Creator to use the TlmeSpan Viewer.

Quitting the Application

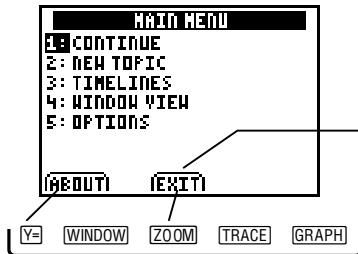
To quit the App, you must return to the **MAIN MENU**.

1. If you are on a timeline screen, press **2nd** [QUIT] to return to the **MAIN MENU**.
2. From the **MAIN MENU**, press **2nd** [QUIT] to quit the application.

Using Menus and Options

To select a menu option on the TI-83 Plus, either move the cursor to highlight the option and press **ENTER**, or press the number that corresponds to the menu option.

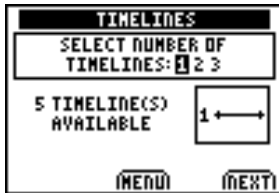
To select an option defined at the bottom of the screen (such as **EXIT** associated with the **ZOOM** key), press the graphing key directly below the option.



Press a graphing key to select one of these options. For example, press **ZOOM** to select **EXIT**.

Selecting Topics and Timelines

1. From the **MAIN MENU**, select **NEW TOPIC**. The **SELECT A TOPIC** screen displays.
2. Select a topic name. The information screen for the topic displays.
3. Press any key to display the **TIMELINES** screen.



4. Press **→** or **←** to highlight the number of timelines you want to display at a time: (1, 2, or 3), and then select **NEXT**. Alternatively, you can press **1**, **2**, or **3**.



The **ORDER THE TIMELINES** screen displays.

5. Use the and keys to highlight the timeline you want to display at the top of the screen, and then press .

Note If you change your mind, press to undo your last selection.

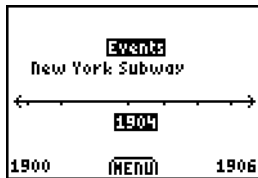
6. Use the and keys to highlight other timelines you want to display and press .

7. Select **NEXT**.

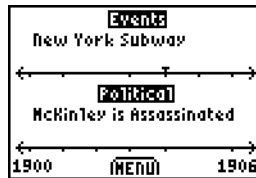
The timelines are displayed in the order you selected them.

Viewing and Navigating Timelines

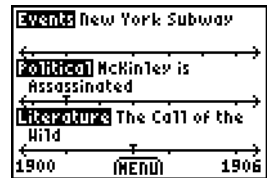
You can view one, two, or three timelines at a time, depending on the choices you make when you [select your timelines and put them in order](#). All of these timelines are collected within a single topic.



Viewing one timeline



Viewing two timelines



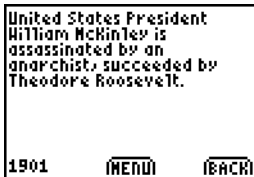
Viewing three timelines

The beginning and ending dates for the current window view display in the bottom corners of the screen. Each mark on a timeline represents an event in time.

Viewing multiple timelines lets you compare and contrast events within a topic. The cursor blinks to indicate the current event and timeline.

- To move the cursor from one timeline to another, use the up or down arrow keys (▲ or ▼).
- To move the cursor forward or backward on a timeline, use the right or left arrow keys (▶ or ◀). As you move, the line above the cursor displays the event name.

- To move to the first event in the timeline, press **2nd** **◀**. To move to the last event, press **2nd** **▶**.
- To view the full description and date of a single event on a timeline, press **ENTER**. If the description continues beyond the limits of the display, press **▼**. To return to the timeline view, select **BACK**.



United States President
William McKinley is
assassinated by an
anarchist, succeeded by
Theodore Roosevelt.

1901 (MENU) (BACK)

- To return to the **MAIN MENU**, select **MENU**.

Setting the Window View

Initially, the window view includes the first 25% of the topic's entire time span (unless there are 10 or fewer events), beginning with the year of the earliest event on the left.








If you prefer, you can change the window view to “zoom in” to a shorter time period or “zoom out” to a longer time period.

1. From the **MAIN MENU**, select **WINDOW VIEW**. The first statement on this screen displays the beginning and ending dates for the current timelines.



The second statement displays the beginning and ending dates for the current window view.


The cursor is at the beginning date for the window view.

2. Enter the necessary digits to set a new beginning date for the window view. If you want to change between AD and BC, press  or .
3. Press  to advance to the next date.
4. Enter the digits to set a new ending date for the window view. If you want to change between AD and BC, press  or .



Changed dates for window view. When you change the dates, you are not changing the original time and date.

Tip If you want to reset the window view dates to the original window view, select **RESET**.

5. Select **ENTER** or press  to complete your changes and view the timelines within the newly defined window view.

Any time you want to change or reset the dates for the window view, select **WINDOW VIEW** from the **MAIN MENU**.

Setting the Date Shown Options

The **DATE SHOWN** screen lets you set preferences for how dates are viewed.

1. Select **OPTIONS** from the **MAIN MENU**.
2. Press the arrow keys to move the cursor to the option you want to change.
3. Press **ENTER** to either select (show) or clear (hide) the date options that are available in the topic. A preview of how the date will be displayed is at the lower left of the screen.

The options on this screen will vary according to the information included in the topic when it was created. For example, the Date Shown screen displays options for month, day, hour, or minute only if that information was included in the currently selected topic.



Variations in the types of data included in a topic

Preview of
date format

YEAR is usually selected so that the year for each event displays on your timelines. However, you might decide to clear it if viewing a timeline whose events occur all in the same year. You must select at least one date unit, such as year, month, or day.

If the timelines include events that occur before the birth of Christ (BC), you will probably want to include the era suffix. If **ERA** is selected, the suffix (traditionally BC or AD) *displays* after the year. (**YEAR** is automatically selected when **ERA** is selected.)

- Select **BC/AD** to display BC (Before Christ) and AD (Anno Domini) as suffixes for the era.
- Select **BCE/CE** to display BCE (Before Current Era) and CE (Current Era) as suffixes for the era.

If your topic includes month and day information, you can choose either the **MMDDYYYY** format or the **DDMMYYYY** format. If your topic includes hour and minute information, you can choose either **AM/PM** format or the **24 HOUR** format.

Sharing TlmeSpan™ Topics

You can send a topic from one TI-83 Plus to another.

1. Connect the unit-to-unit cable between two TI-83 Plus devices.
2. On the receiving unit, press **2nd** [LINK].
3. Press **▶** to select **RECEIVE**, and then press **ENTER**.
4. On the sending unit, press **2nd** [LINK].
5. Press **▼** or **▲** to select **AppVars**, and then press **ENTER**.
6. Press **▼** or **▲** to move the pointer to the AppVar name (for example, CIVILWAR), and then press **ENTER** to select it.
7. Press **▶** to highlight **TRANSMIT**, and then press **ENTER**.

The file is sent to the receiving unit.

Deleting Topics (TlmeSpan™ AppVars)

Deleting a Topic from the TI-83 Plus

1. Quit the TlmeSpan Viewer App (**2nd** [QUIT]).
2. Press **2nd** [MEM] to display the **MEMORY** menu.
3. Select **Mem Mgmt/Del**.
4. Use **▼** or **▲** to move the pointer to **AppVars**, and then press **ENTER**.
5. Use **▼** or **▲** to move the pointer to the name of the topic, and then press **DEL**. The topic is deleted.

Note If the AppVar is archived, the message **Are You Sure?** displays. Select **Yes** to delete the AppVar.

Deleting the Application (TlmeSpan™ Viewer App)

1. Press **[2nd] [MEM]** to display the **MEMORY** menu.
2. Select **Mem Mgmt/Del**.
3. Select **Apps**.
4. Move the cursor to **TlmeSpan**.
5. Press **[DEL]**. A confirmation message displays.
6. Select **Yes** to delete the application.

Application Error Messages

Error message	Where it occurs	Description
NOTICE: YOU MUST UPDATE YOUR OS IN ORDER TO RUN THIS APP	When you first launch TimeSpan™ Viewer	You do not have the required Operating System version 1.16 or later installed on your handheld. Use TI Connect™ software to download and install the latest OS.
NOTICE: THERE ARE NO TOPICS AVAILABLE	When you press a key after viewing the information screen	There are no TimeSpan topics loaded on your TI-83 Plus. Press any key, exit the app, and use TI Connect to transfer at least one topic from a computer to the handheld.
INVALID TOPIC APPVAR	SELECT A TOPIC or TIMELINES (or may occur at other times)	TimeSpan Viewer cannot read the topic file. Possible reasons: the topic name exceeds 20 characters, including spaces; the file is corrupted; or the file is in the wrong format.
DATES HAVE TO BE BETWEEN TIMELINE SPAN	WINDOW VIEW	The dates you enter must occur between the first date and the last date of the set of timelines you have selected to view.

Error message	Where it occurs	Description
INVALID DATE(S)	WINDOW VIEW	The end date must occur after the start date, and the date you enter must be valid for a given month (for example, June 31st is not valid).
AT LEAST ONE DATE UNIT MUST BE CHECKED	OPTIONS > DATE SHOWN	You must choose one of the items in the left column of the DATE SHOWN screen.

Installation Error Messages

Low Battery

Do not attempt to download a Flash application if a low-battery message appears because the installation may fail. If you see this error message during an installation, change the batteries before trying again.

Invalid Signature or Certificate

Electrical interference may have caused a link to fail. Try to install the application again.

Error in Xmit

This problem is usually associated with the unit-to-unit cable and its connection between the devices. Make sure the cable is firmly inserted in the link port of each device.

Link Transmission Error

This error indicates that the TI Connect™ software is unable to communicate with the device. The problem is usually associated with the TI Connectivity Cable and its connection to the TI-83 Plus or to the computer.

- Make sure the cable is firmly inserted in the device's link port and the computer's serial or USB port.
- Verify that the correct cable type is selected in the software link settings.
- Verify that the correct communication port (Com Port) is selected in the software link settings. (This step does not apply if you are using the USB port and TI Connect software).

Archive Full

This error occurs when the TI-83 Plus does not have sufficient memory for the application. In order to make room for another application, you must delete an application or archived variables from the TI-83 Plus. Before you delete an application from the TI-83 Plus, you can save it on your computer using the TI Connect™ or TI-GRAPH LINK™ software for the TI-83 Plus. You can reload it to the TI-83 Plus later using the TI-GRAPH LINK or TI Connect software.

Other Errors

See the “Error Conditions” section in Appendix B in the [TI-83 Plus Graphing Calculator Guidebook](#) for information about the specific error.

Checking Version Numbers and Free Space

Verify Operating System Version and ID Number

The TlmeSpan™ Viewer App is compatible with the TI-83 Plus operating system 1.16 and later.

Note The TlmeSpan™ Viewer App will not work with an operating system earlier than version 1.16.

To verify your operating system version number:

1. From the home screen, press **[2nd] [MEM]**.
2. Select **ABOUT**.

The operating system version number displays below the product name and has the format x.yy. The ID number displays on the line below the product number.

Verify Flash Application Version (TimeSpan Viewer App)

The version number displays on the information screen below the application name. To display the information screen, do one of the following:

- Press **[APPS]**, and then select **TimeSpan**.
—or—
- Select **ABOUT** from the application's main menu.

Check Amount of Flash Application Free Space

1. From the home screen, press **[2nd] [MEM]**.
2. Select **Mem Mgmt/Del**.

The TimeSpan™ Viewer App requires 16,384 bytes of **ARC FREE** (Flash) memory to load the application.

For more information about memory and memory management, refer to the [TI-83 Plus Graphing Calculator Guidebook](#).

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Page Reference

This PDF document contains electronic bookmarks designed for easy on-screen navigation. If you decide to print this document, please use the page numbers below to find specific topics.

What Is the TlmeSpan™ Viewer Application?	3
What You Need	6
Where to Find Installation Instructions	7
Starting and Quitting the Application	8
Using Menus and Options	10
Selecting Topics and Timelines.....	11
Viewing and Navigating Timelines	13
Setting the Window View	15
Setting the Date Shown Options	17
Sharing TlmeSpan Topics.....	19
Deleting Topics (TlmeSpan AppVars)	20
Deleting the Application (TlmeSpan Viewer App)	21
Application Error Messages.....	22
Installation Error Messages	24
Checking Version Numbers and Free Space	27
Texas Instruments (TI) Support and Service	29
Texas Instruments License Agreement	31