

# Crash Course Astronomy

Please Read Me First!



Here are a few considerations when viewing episodes of *Crash Course Astronomy* which may help you to enjoy the programming better and make learning easier.

1. **Pick a resolution that fits the device which you are utilizing.** If you are viewing the subtitles in a foreign language, I would strongly suggest using a laptop unless you have laser sharp vision.
2. **Subtitles:** Want a translation into your own foreign language? Then right click here. A scroll bar will pop up. There are a few languages that are considered standard. You can immediately click on any of these and see the subtitles at the bottom of the screen. Chinese and Greek are not considered standard in the menu bar. Please see on the next page how you can access many other foreign language subtitles.
3. **Phil Plait speaks very rapidly.** I have found that by slowing him up using the Playback Speed control, I can significantly increase my ability to understand him. Using 0.75 of the normal speed suits me fine, but English as second language students may want to go slower.
4. **Annotations:** Keep it in the ON position to see subtitles and other notes.

Here is the method of finding subtitles in a foreign language that are not found in the main Subtitles Menu.

Select a language to get started



Light: Crash Course Astronomy #24

Subtitles/CC Options

- Add subtitles/CC
- Off
- ✓ Arabic
- English
- Hebrew

Select language ▾

English Published

Greek **Left Click, Highlight Greek, Box turns black.**

Search 194 other languages **Type in Chinese. ENTER**

Chinese (China) **Choose this first.**

- Chinese (Hong Kong)
- Chinese (Simplified)
- Chinese (Singapore)
- Chinese (Taiwan)
- Chinese (Traditional)

Hakka Chinese **Not all forms have been translated like Hakka Chinese.**

- Hakka Chinese (Taiwan)
- Min Nan Chinese
- Min Nan Chinese (Taiwan)

English to Chinese [Switch language](#) **Left Click Here**

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Delete draft [Submit contribution](#)

Keyboard shortcuts | Help

Actions ▾

- 1:43.0 All the colors in between—orange, yellow, green, blue—have intermediate wavelengths.
- 1:47.7 This spread of colors, wavelengths, is called a spectrum.
- 1:50.9 Over millions of years, our eyes have evolved to detect the kind of light the Sun emits
- 1:55.3 most strongly. Well, that makes sense; that makes it easier for us to see! We call this

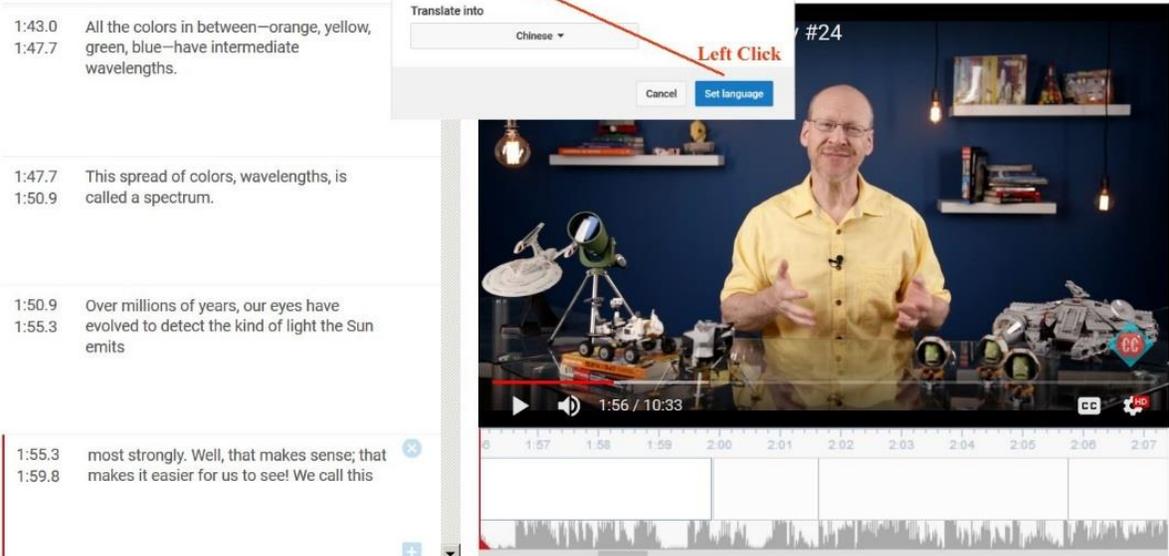
Switch language

What language would you like to translate into?

Translate into

Chinese ▾

Cancel **Left Click** [Set language](#)



Light: Crash Course Astronomy #24

1:56 / 10:33

Pause video while typing

The screenshot shows a video player interface. At the top, a blue notification bar says "You're editing your previous draft." Below this, there are two buttons: "Actions" and "Autotranslate". To the right of these buttons, there is a checkbox for "Credit my contribution." and a link for "Keyboard shortcuts | Help".

The main content is a video player. The video title is "Light: Crash Course Astronomy #24". The video shows a man in a yellow shirt speaking. The video player has a progress bar at the bottom, showing the current time as 1:20 / 10:33. There are also volume and full-screen controls.

On the left side of the video player, there is a subtitle column. It contains several entries, each with a time stamp and a subtitle. The subtitles are in Chinese. The entries are:

- 1:09.1 then back up again when the next wave rolls by. The distance between these crests in the
- 1:13.2 然后再次备份下一波峰时通过。在这些波峰之间的距离
- 1:13.2 wave is called the wavelength. Since light is a wave, it has a wavelength as well, and
- 1:18.0 波被称为波长。由于光是波，它具有波长为好，并
- 1:18.0 this may be its single most important feature. That's because the energy of light is tied to its wavelength.
- 1:24.5 这可能是它的一个最重要的特征。那是因为光的能量被绑定到其波长。
- 1:24.5 Light with a shorter wavelength has more energy, and light with a longer wavelength has less
- 1:29.1 具有较短波长的光具有更多的能量，和具有较长波长的光具有更小

At the bottom of the subtitle column, there is a checkbox for "Pause video while typing" and a search icon.

You will see a smaller screen which cannot be enlarged, but you will see subtitles in the video as well as along the left side of the screen timed with what Phil Plait is saying. In these videos you cannot annotate (add notes) to the left-hand column.

Consider listening to the video presentations multiple times. They are packed with information.

Find links to the videos here at <https://www.astronomy.org/moravian/index.html>.