

---

# Climate Change and Transition Studies

## An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC  
as a project of the

Young Scholars' Online Learning Initiative

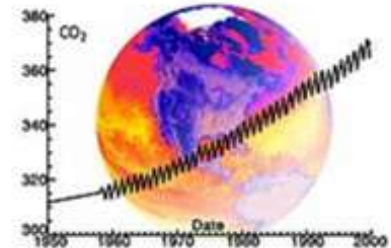
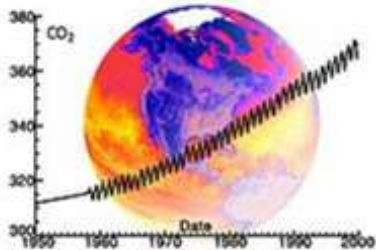
created by

Timothy C. Weiskel

Research Director, *Cambridge Climate Research Associates*

**Climate Science for Human Survival**

Copyright, ©, 2018, Timothy C. Weiskel



## “Where Can We Turn To Learn?”

An introduction to online learning about  
climate change and transition studies

12 July 2018

---

# In today's session we will touch upon these topics....

1. The nature of “climate” and “transition studies”

# In today's session we will touch upon these topics....

1. The nature of “climate” and “transition studies”
2. The need for informed global leadership with understanding and vision of our circumstance.

# In today's session we will touch upon these topics....

1. The nature of “climate” and “transition studies”
2. The need for informed global leadership with understanding and vision of our circumstance.
3. An overview of the online course structure and sequence

# In today's session we will touch upon these topics....

1. The nature of “climate” and “transition studies”
2. The need for informed global leadership with understanding and vision of our circumstance.
3. An overview of the online course structure and sequence
4. Steps in composing a research report: information acquisition, storage, retrieval, report presentation.

# In today's session we will touch upon these topics....

1. The nature of “climate” and “transition studies”
2. The need for informed global leadership with understanding and vision of our circumstance.
3. An overview of the online course structure and sequence
4. Steps in composing a research report: information acquisition, storage, retrieval, report presentation.
5. Using the **“Transition-Studies”** weblog as a “portal” to begin your research.

# 1) The nature of “climate” and “transition studies”

First question....

What is the difference  
between weather  
and climate?



# We all experience weather....

## Worldwide Record Breaking Floods in China and Canada (May 2017)

Posted on [May 10, 2017](#) | [Leave a comment](#) | [Edit](#)



# We all experience weather....and sometimes *extreme* weather...

## Worldwide Record Breaking Floods in China and Canada (May 2017)

Posted on [May 10, 2017](#) | [Leave a comment](#) | [Edit](#)



<https://environmentaljusticetv.wordpress.com/2017/05/10/worldwide-record-breaking-floods-in-china-and-canada-may-2017/>

# Is a drought an example of weather or of climate?

## Somali Drought Puts Millions of Lives at Risk

Posted on [September 10, 2014](#) | [Leave a comment](#) | [Edit](#)



<https://environmentaljusticetv.wordpress.com/2017/05/14/somali-drought-puts-millions-of-lives-at-risk-2/>

# China: Yangtze River floods as first yellow alert of the year is issued

Posted on [July 12, 2018](#) | [Leave a comment](#)



[South China Morning Post](#)

Published on Jul 11, 2018

<https://environmentaljusticetv.wordpress.com/2018/07/12/china-yangtze-river-floods-as-first-yellow-alert-of-the-year-is-issued/>



## Apocalyptic flooding collapses buildings in China – June 24, 2018

Posted on [July 12, 2018](#) | [Leave a comment](#)



[Miscelánea Noticias](#)

Published on Jun 25, 2018

<https://environmentaljusticetv.wordpress.com/2018/07/12/apocalyptic-flooding-collapses-buildings-in-china-june-24-2018/>

# Power supplies and internet connections disrupted after floods affect China

Posted on [July 12, 2018](#) | [Leave a comment](#)



[WION](#)

Published on Jul 10, 2018

<https://environmentaljusticetv.wordpress.com/2018/07/12/power-supplies-and-internet-connections-disrupted-after-floods-affect-china/>

# Japan Flooding and China Preparations

Posted on [July 12, 2018](#) | [Leave a comment](#)



[News Theories](#)

Published on Jul 11, 2018

<https://environmentaljusticetv.wordpress.com/2018/07/12/japan-flooding-and-china-preperations/>

# Are China floods a result of “extreme weather” or a changing climate?



<https://environmentaljusticetv.wordpress.com/2017/05/14/jennifer-turner-discusses-chinas-flood-season-2/>



# The Difference Between...

Weather and Climate has to do with:

- 1) **Scale** – (climate is global, not local, think of regional changes – not just local weather) and

# The Difference Between...

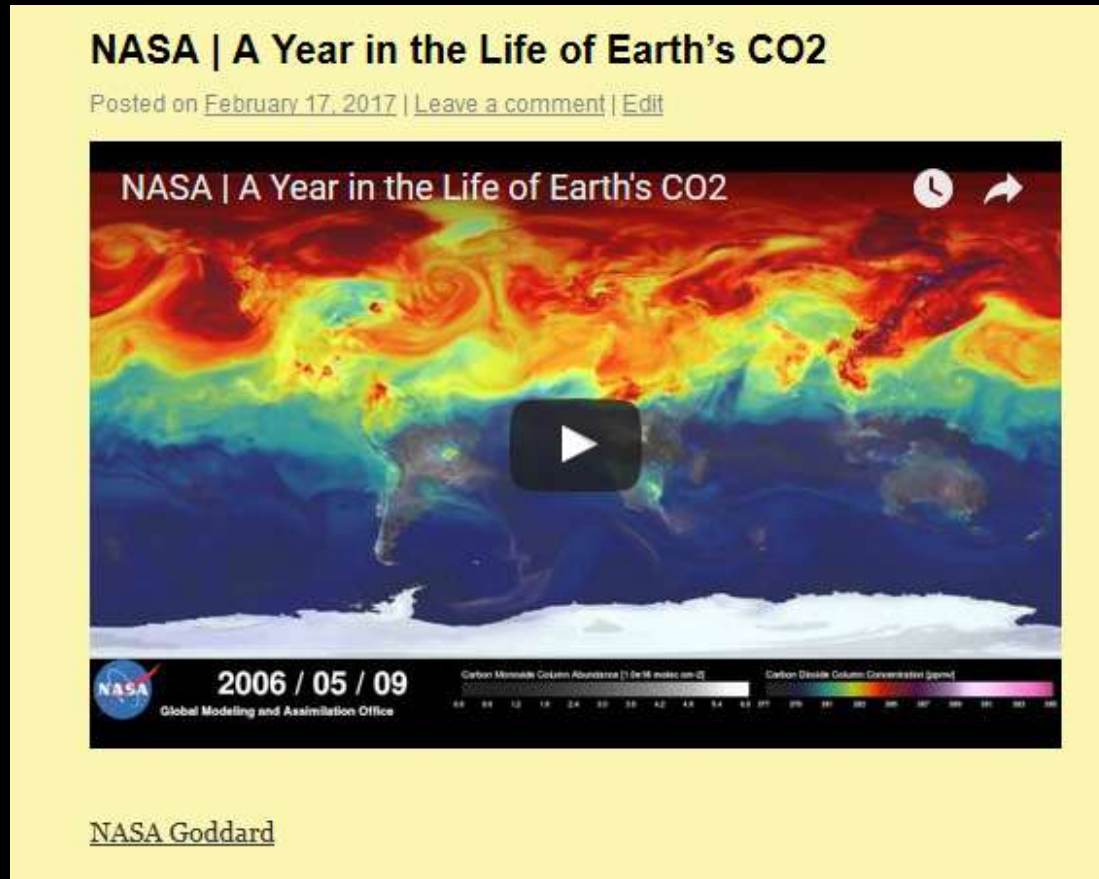
**Weather** and **Climate** has to do with:

- 1) **Scale** – (climate is global, not local, think of regional changes – not just local weather) and
- 2) **Time** – (climate involves changes NOT from season-to-season, or year to year BUT rather over decades, centuries and millennia... scientists used to think this was remote, but maybe not....)

# To understand climate you need to think on a Global Scale

(Consider the annual cycling of atmospheric carbon around the world)

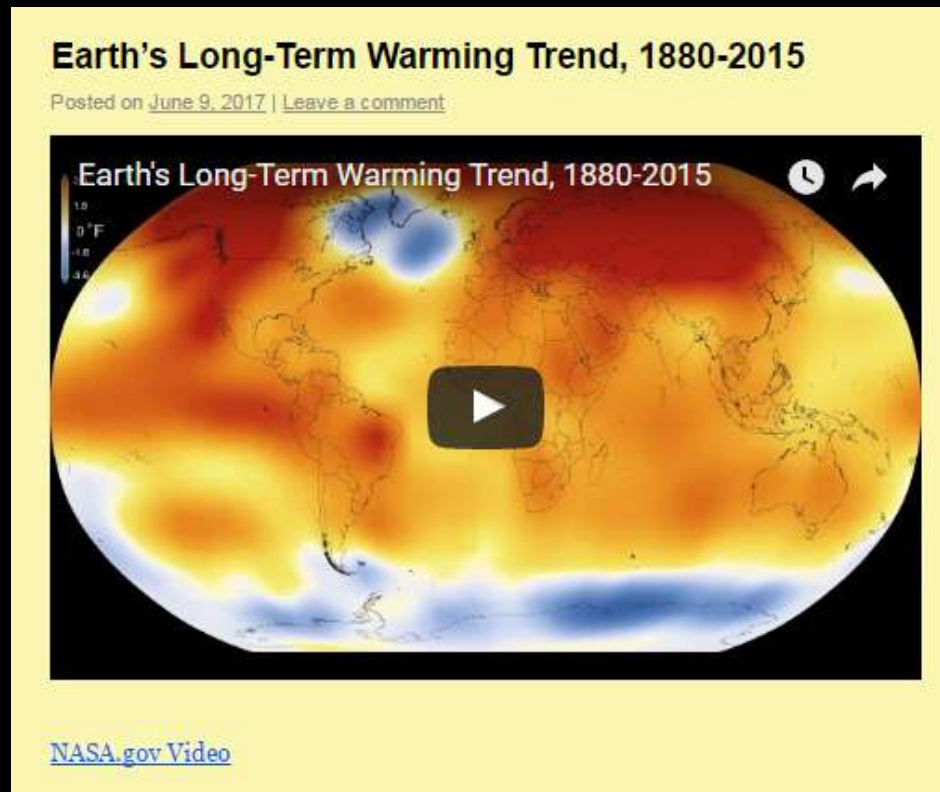
Click to graphic data. View and study patterns of atmospheric carbon circulation in one year.



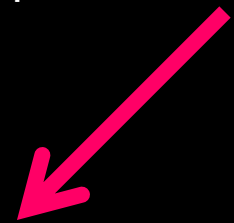
<https://environmentaljusticetv.wordpress.com/2017/02/17/nasa-a-year-in-the-life-of-earths-co2-4/>

# To understand climate you need to think **over** decades, centuries and millennia

(Consider the evolution of average temperature across the world over the last 135 years or so...)



Click to graphic data. View and study the pattern of temperature change over time and over specific areas.

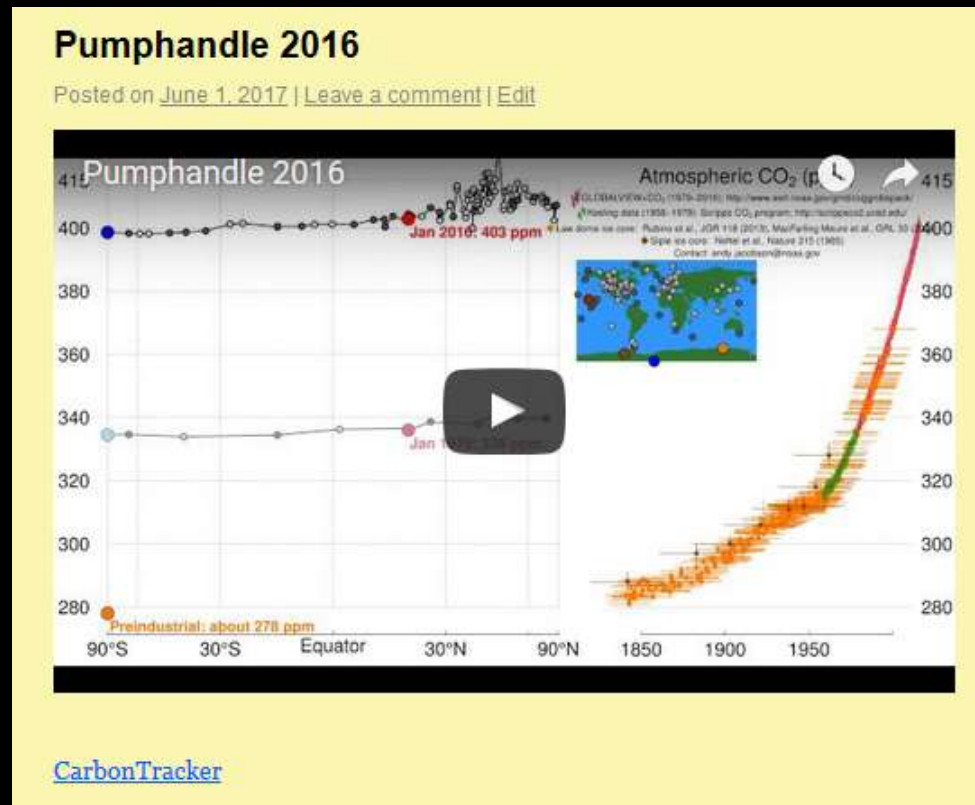


<https://environmentaljusticetv.wordpress.com/2017/06/09/154-earth-s-long-term-warming-trend-1880-2015/>

# To understand climate you need to think **over** tens and hundreds of millennia...

(Consider the evolution of the parts-per-million (ppm) of CO<sub>2</sub> in the atmosphere over the last 800,000 years.

Click to graphic data. View and study patterns of atmospheric carbon concentrations in ppm over the last 800,000 years.

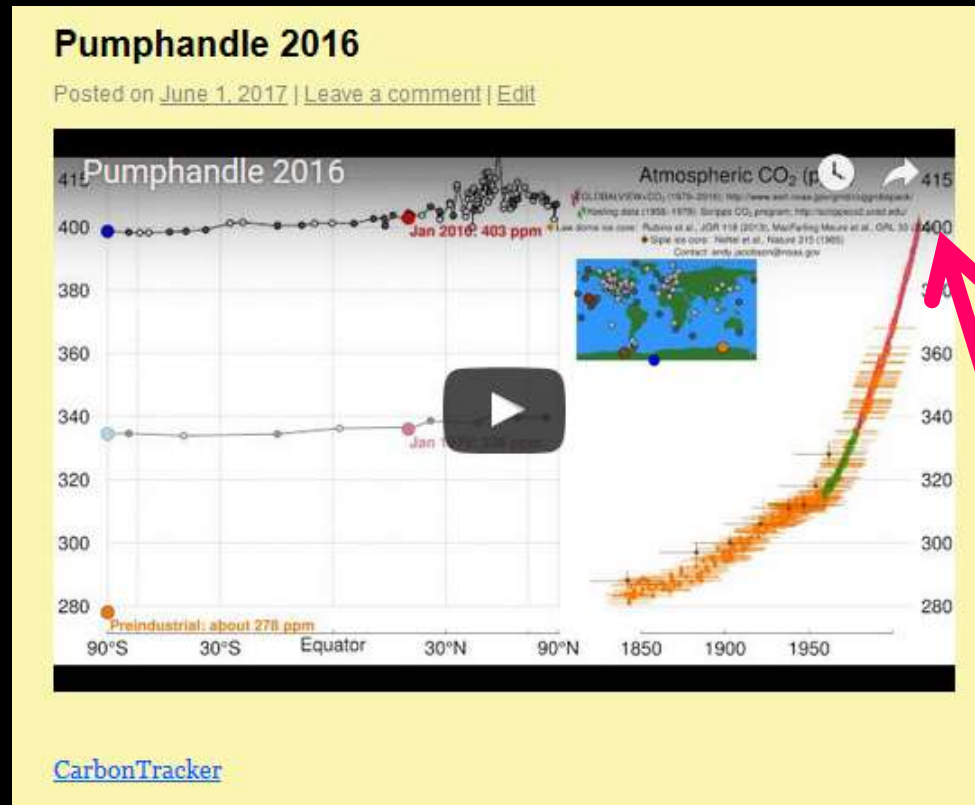


<https://environmentaljusticetv.wordpress.com/2017/06/01/pumphandle-2016-3/>

# To understand climate you need to think **over** tens and hundreds of millennia...

(Consider the evolution of the parts-per-million (ppm) of CO<sub>2</sub> in the atmosphere over the last 800,000 years.

Click to graphic data. View and study patterns of atmospheric carbon concentrations in ppm over the last 800,000 years.



Where are we today in terms of the historical pattern of carbon emissions in Earth's atmosphere?

<https://environmentaljusticetv.wordpress.com/2017/06/01/pumphandle-2016-3/>

Sea-level has changed with the changing ice ages in the past.



<https://environmentaljusticetv.wordpress.com/2014/05/29/earth-under-water-worldwide-flooding-sea-level-rise-slr/>



# Is sea level changing now?





# If so, how can we tell?



<https://environmentaljusticetv.wordpress.com/2014/05/29/earth-under-water-worldwide-flooding-sea-level-rise-slr/>

Watch the full video to see some of the implications we will be studying...



<https://environmentaljusticetv.wordpress.com/2014/05/29/earth-under-water-worldwide-flooding-sea-level-rise-slr/>

Some regions of the world with high population densities close to the coast are a “catastrophe coming at us...”



<https://environmentaljusticetv.wordpress.com/2014/05/29/earth-under-water-worldwide-flooding-sea-level-rise-slr/>

Your research and writing in this course can help the public and policy-makers understand the seriousness of the human crisis

### Where Can We Turn to Learn?

Posted on [January 29, 2016](#) | [Leave a comment](#) | [Edit](#)

**A CITIZEN'S GUIDE TO SELECTED RESOURCES FOR  
SELF-INSTRUCTION AND EXPLORATION OF  
TRANSITION STUDIES**



\*\*\*

# With all the anxiety about climate change, why bother with “Transition Studies?”



<https://environmentaljusticetv.wordpress.com/about/>



We will need to make the “transition”  
*beyond fossil fuels* simply to survive  
as a civilized human community.



<https://environmentaljusticetv.wordpress.com/about/>

# In today's session we will touch upon these topics....

1. The nature of “climate” and “transition studies”
2. The need for informed global leadership with understanding and vision of our circumstance.

The human community now needs fully informed *global leadership* with *understanding* and *vision* to make the transition to a sustainable future....

## In Climate Deal With China, Obama May Set 2016 Theme

Posted on November 13, 2014 | [Leave a comment](#) | [Edit](#)



PLAY VIDEO | 2:02

What the Climate Accord Could Change

[https://](https://climate-)

[Climate Goals Pledged by China and the U.S.](#)

[mate-](#)



In some cases, this vision and leadership was achieved, for a while at least ....

## In Climate Deal With China, Obama May Set 2016 Theme

Posted on [November 13, 2014](#) | [Leave a comment](#) | [Edit](#)



PLAY VIDEO | 2:02

What the Climate Accord Could Change

<https://climate->

[Climate Goals Pledged by China and the U.S.](#)

[mate-](#)

In some cases, this vision and leadership  
was achieved, for a while at least ....  
**BUT**, as we have seen...

## In Climate Deal With China, Obama May Set 2016 Theme

Posted on [November 13, 2014](#) | [Leave a comment](#) | [Edit](#)



<https://climate->

[Climate Goals Pledged by China and the U.S.](#)

[mate-](#)

# This “vision” and “leadership” can be quickly reversed...!

**Trump on climate decision: I was elected to represent Pittsburgh, not Paris**

Posted on [June 3, 2017](#) | [Leave a comment](#) | [Edit](#)



[Al Jazeera English](#)

# This “vision” and “leadership” can be quickly reversed...!



This will be a catastrophe for humankind  
**unless new leaders**, like yourselves, start  
to make an important difference....

# This “vision” and “leadership” can be quickly reversed...!



You are in a **very powerful position** if you  
can learn how to mobilize and present  
vitally important scientific information...

# This “vision” and “leadership” can be quickly reversed...!



**You are in a very powerful position if you  
can learn how to mobilize and present  
vitally important scientific information...**



# This “vision” and “leadership” can be quickly reversed...!



**To learn and practice these skills should  
be one of your goals in this course.**

# This “vision” and “leadership” can be quickly reversed...!

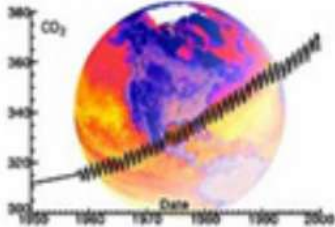


**To learn and practice these skills should  
be one of your goals in this course.**



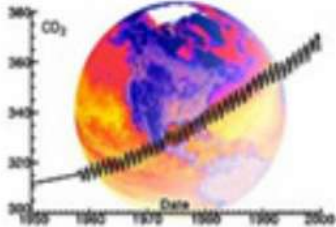
### 3. An overview of the online course structure and sequence

The course “Home Page” online.



## Climate Change and Transition Studies

An Interactive Online Teaching Initiative  
Created for **IvyMind Consulting, LLC**  
as the  
Young Scholars' Online Learning Initiative  
by  
Timothy C. Weiskel  
Research Director, Cambridge Climate Research Associates  
Copyright, ©, 2018, Timothy C. Weiskel

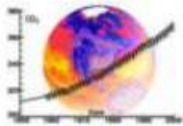


<http://ecoethics.net/YSOLI/201807-Climate/>

### 3. An overview of the online course structure and sequence

## The course Time Table of meetings & assignments

# Climate Change and Transition Studies



**An Interactive Online Learning Initiative**

Designed for **IvyMind Consulting, LLC**

as a project of the

[Young Scholars' Online Learning Initiative](#)

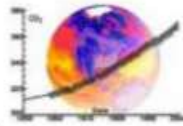
created by

[Timothy C. Weiskel](#)

Research Director, *Cambridge Climate Research Associates*

**Climate Science for Human Survival**

Copyright, ©, 2018, Timothy C. Weiskel



---

## Interactive Schedule for Online Learning Initiative

Online Session	Date	Assignment	Group Topic	Readings & Links
				See links to Session Resources, Slides, & Questions
[Phase 1 - Research Introduction and Information Presentation]				
<b>1 Introductory Session</b>	12 July 8:00-10:00pm		<b>"Where Can We Turn To Learn?"</b> An introduction to online learning about climate change and transition studies	<b>_Class Introduction_</b> - Slides - <u><a href="#">Questions</a></u>
	18 July	Personal statement due from each participating students		

<http://ecoethics.net/YSOLI/201807-Climate/2018-Schedule.pdf>

### 3. An overview of the online course structure and sequence

## Course Session Sequence

### 3. An overview of the online course structure and sequence

---

**Climate Change and Transition Studies**

**An Interactive Online Learning Initiative**

Designed for IvyMind Consulting, LLC  
as a project of the  
Young Scholars' Online Learning Initiative  
created by  
Timothy C. Weiskel  
Research Director, *Cambridge Climate Research Associates*  
*Climate Science for Human Survival*  
Copyright, ©, 2018, Timothy C. Weiskel

---

**“Where Can We Turn To Learn?”**  
An introduction to online learning about  
climate change and transition studies

12 July 2018

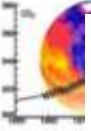
---

Navigation icons: back, forward, search, etc.

# 3. An overview of the online course structure and sequence

## Climate Change and Transition Studies

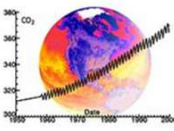
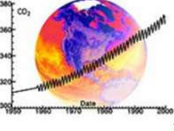
An Interactive Online Learning Initiative



## Climate Change and Transition Studies

An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC  
as a project of the  
[Young Scholars' Online Learning Initiative](#)  
created by  
[Timothy C. Weiskel](#)  
Research Director, Cambridge Climate Research Associates  
[Climate Science for Human Survival](#)  
Copyright, ©, 2018, Timothy C. Weiskel



### Session 2

Some Techniques and Best Practices for Sourcing  
and Properly Citing Climate Science Research

19 July 2018

### 3. An overview of the online course structure and sequence

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

#### Climate Change and Transition Studies

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC

as a project of the

Young Scholars' Online Learning Initiative

created by

Timothy C. Weiskel

Research Director, *Cambridge Climate Research Associates*

Climate Science for Human Survival

Copyright, ©, 2018, Timothy C. Weiskel

Som  
anc

#### Session 3

#### Earth's Changing Climate: Causes and Global Consequences

26 July 2018



### 3. An overview of the online course structure and sequence

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

#### Climate Change and Transition Studies

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC

as a project of the

[Young Scholars' Online Learning Initiative](#)

created by

[Timothy C. Weiskel](#)

Research Director, Cambridge Climate Research Associates

[Climate Science for Human Survival](#)

Copyright, ©, 2018, Timothy C. Weiskel

#### Session 4

#### Climate Change, Soils, Agriculture and the Global Food System

2 August 2018

Som  
anc

### 3. An overview of the online course structure and sequence

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

#### Climate Change and Transition Studies

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative  
Designed for IvyMind Consulting, LLC

#### Climate Change and Transition Studies

An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC

as a project of the

[Young Scholars' Online Learning Initiative](#)

created by

[Timothy C. Weiskel](#)

Research Director, Cambridge Climate Research Associates

[Climate Science for Human Survival](#)

Copyright, ©, 2018, Timothy C. Weiskel

#### Session 5

International Negotiations on a Global  
Problem: Progress and the Major Remaining  
Challenges for Global Leadership

9 August 2018

4. Steps in composing a research report:  
information **acquisition**, **storage**, **retrieval**,  
& report **presentation**.

You will need to learn to locate and

- **Acquire** reliable sources

## 4. Steps in composing a research report: information **acquisition**, **storage**, **retrieval**, & report **presentation**.

You will need to learn to locate and

- Acquire reliable sources
- **Store** those sources in electronic form  
(permanent URLs or “hardcopy”)

## 4. Steps in composing a research report: information **acquisition**, **storage**, **retrieval**, & report **presentation**.

You will need to learn to locate and

- Acquire reliable sources
- Store those sources in electronic form (permanent URLs or “hardcopy”)
- **Retrieve** those sources in a dependable and replicated manner  
and learn to

## 4. Steps in composing a research report: information **acquisition**, **storage**, **retrieval**, & report **presentation**.

You will need to learn to locate and

- **Acquire** reliable sources
- **Store** those sources in electronic form  
(permanent URLs or “hardcopy”)
- **Retrieve** those sources in a dependable and  
replicated manner  
and learn to
- **Present** the data in a useful research report



## 4. Steps in composing a research report: information **acquisition**, **storage**, **retrieval**, & report **presentation**.

You will need to learn to locate and

- **Acquire** reliable sources
- **Store** those sources in electronic form  
(permanent URLs or “hardcopy”)
- **Retrieve** those sources in a dependable and  
replicated manner  
and learn to
- **Present** the data in a useful research report

**Your goal is to become an excellent  
“knowledge broker” for the topic you choose**

# 5. Using the “*Transition-Studies*” online weblog to begin your research.

## Transition Studies

Exploring the Transition to a Just and Sustainable Future on a Finite Planet

HOME

ABOUT

NEWS CONCERNING....

ONLINE COURSES

OTHER RESOURCES

FILMS

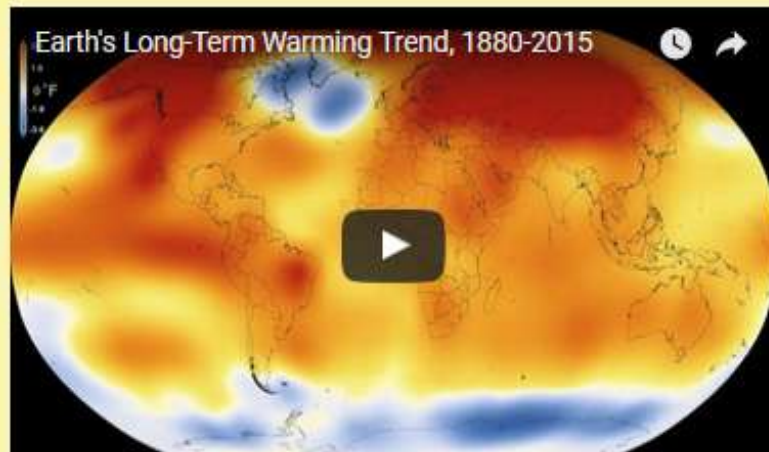
VISIONARIES & INSTITUTIONS

JOBS



### Earth's Long-Term Warming Trend, 1880-2015

Posted on June 9, 2017 | [Leave a comment](#)



#### WELCOME....

Welcome to [Transition Studies](#). To prosper for very much longer on the changing Earth humankind will need to move beyond its current fossil-fueled civilization toward one that is sustained on recycled materials and renewable energy. This is not a trivial shift. It will require a major transition in all aspects of our lives.

This weblog explores the transition to a sustainable future on our finite planet. It provides links to current news, key documents from government sources and non-governmental organizations, as well as video documentaries about climate change, environmental ethics and environmental justice concerns.

The links are listed here to be used in whatever manner they may be helpful in public information campaigns, course preparation, teaching, letter-writing, lectures, class presentations, policy discussions, article writing, civic or Congressional hearings and citizen action campaigns, etc. For further information on this blog see: [About this weblog](#), and [How to use this weblog](#).

CALENDAR – CLICK ON DATE  
FOR LINKS ENTERED ON THAT  
DAY

SEARCH SITE

# 5. Using the “*Transition-Studies*” online weblog to begin your research.

## Transition Studies

Exploring the Transition to a Just and Sustainable Future on a Finite Planet

HOME

ABOUT

NEWS CONCERNING....

ONLINE COURSES

OTHER RESOURCES

FILMS

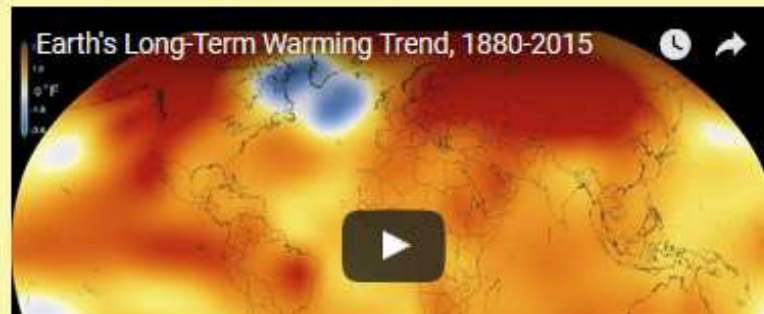
VISIONARIES & INSTITUTIONS

JOBS



### Earth's Long-Term Warming Trend, 1880-2015

Posted on June 9, 2017 | [Leave a comment](#)



#### WELCOME....

Welcome to [Transition Studies](#). To prosper for very much longer on the changing Earth humankind will need to move beyond its current fossil-fueled civilization toward one that is sustained on recycled materials and renewable energy. This is not a trivial shift. It will require a major transition in all aspects of our lives.

This weblog explores the transition to a sustainable future on our finite planet. It provides links to current news, key documents from government sources and non-governmental organizations, as well as video documentaries about climate change, environmental ethics and environmental justice concerns.

The links are listed here to be used in whatever manner they may be helpful in public information campaigns, course preparation, teaching, letter-writing, lectures, class presentations, policy discussions, article writing, civic or Congressional hearings and citizen action campaigns, etc. For further information on this blog see: [About this weblog](#), and [How to use this weblog](#).



# 5. Using the “*Transition-Studies*” online weblog to begin your research.

HOME

Earth's Long-Term Warming Trend, 1880-2015

Earth's Long-Term Warming Trend, 1880-2015

HOME

Earth's Long-Term Warming Trend, 1880-2015

Earth's Long-Term Warming Trend, 1880-2015

## Transition Studies

### Transition Studies

Exploring the Transition to a Just and Sustainable Future on a Finite Planet

[HOME](#) [ABOUT](#) [NEWS CONCERNING....](#) [ONLINE COURSES](#) [OTHER RESOURCES](#) [FILMS](#) [VISIONARIES & INSTITUTIONS](#) [JOBS](#)



#### Earth's Long-Term Warming Trend, 1880-2015

Posted on [June 9, 2017](#) | [Leave a comment](#)



#### WELCOME....

Welcome to [Transition Studies](#). To prosper for very much longer on the changing Earth humankind will need to move beyond its current fossil-fueled civilization toward one that is sustained on recycled materials and renewable energy. This is not a trivial shift. It will require a major transition in all aspects of our lives.

This weblog explores the transition to a sustainable future on our finite planet. It provides links to current news, key documents from government sources and non-governmental organizations, as well as video documentaries about climate change, environmental ethics and environmental justice concerns.

The links are listed here to be used in whatever manner they may be helpful in public information campaigns, course preparation, teaching, letter-writing, lectures, class presentations, policy discussions, article writing, civic or Congressional hearings and citizen action campaigns, etc. For further information on this blog see: [About this weblog](#), and [How to use this weblog](#).

# In today's session, then, we touched upon these topics....

1. The nature of “climate” and “transition studies”
2. The need for informed global leadership with understanding and vision of our circumstance.
3. An overview of the online course structure and sequence
4. Steps in composing a research report: information acquisition, storage, retrieval, report presentation.
5. Using the **“Transition-Studies”** weblog as a “portal” to begin your research.

# Next Week.... we will look at:

---

## Climate Change and Transition Studies

### An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC  
as a project of the

Young Scholars' Online Learning Initiative

created by

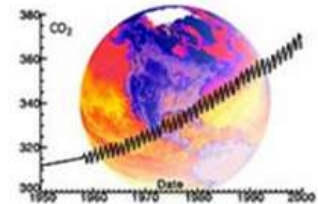
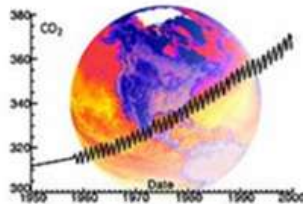
Timothy C. Weiskel

Research Director, *Cambridge Climate Research Associates*

**Climate Science for Human Survival**

Copyright, ©, 2018, Timothy C. Weiskel

---



## Session 2

Some Techniques and Best Practices for Sourcing  
and Properly Citing Climate Science Research

19 July 2018

---



---

# Climate Change and Transition Studies

An Interactive Online Learning Initiative

Designed for IvyMind Consulting, LLC  
as a project of the

Young Scholars' Online Learning Initiative

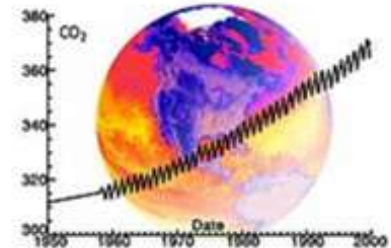
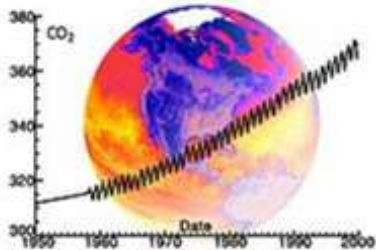
created by

Timothy C. Weiskel

Research Director, *Cambridge Climate Research Associates*

**Climate Science for Human Survival**

Copyright, ©, 2018, Timothy C. Weiskel



## “Where Can We Turn To Learn?”

An introduction to online learning about  
climate change and transition studies

12 July 2018

---

# Where can you turn to learn?

You can begin by exploring the weblog:

[Transition-Studies.net](http://Transition-Studies.net)

## Transition Studies

Exploring the Transition to a Just and Sustainable Future on a Finite Planet

HOME

ABOUT

NEWS CONCERNING....

ONLINE COURSES

OTHER RESOURCES

FILMS

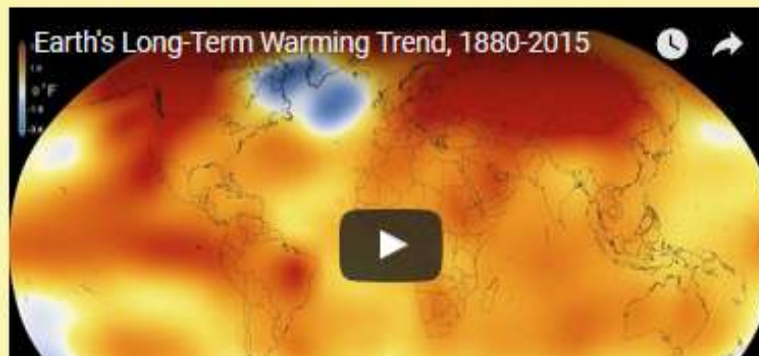
VISIONARIES & INSTITUTIONS

JOBS



### Earth's Long-Term Warming Trend, 1880-2015

Posted on [June 9, 2017](#) | [Leave a comment](#)



### WELCOME....

Welcome to [Transition Studies](#). To prosper for very much longer on the changing Earth humankind will need to move beyond its current fossil-fueled civilization toward one that is sustained on recycled materials and renewable energy. This is not a trivial shift. It will require a major transition in all aspects of our lives.

This weblog explores the transition to a sustainable future on our finite planet. It provides links to current news, key documents from government sources and non-governmental organizations, as well as video documentaries about climate change, environmental ethics and environmental justice concerns.

The links are listed here to be used in whatever manner they may be helpful in public information campaigns, course preparation, teaching, letter-writing, lectures, class presentations, policy discussions, article writing, civic or Congressional hearings and citizen action campaigns, etc. For further information on this blog see: [About this weblog](#), and [How to use this weblog](#).