

DataStreme ECS

ANNOUNCEMENTS and ANSWER KEY

Week Ten: 7 - 11 November 2016

ANNOUNCEMENTS

11 November 2016

Salute ~~our~~ veterans!

1. The Fall 2016 DataStreme Earth's Climate System course is nearing its “tipping point”. Certificates for participants and LIT leaders and members for distribution at your final meeting will be sent to LIT leaders soon. The packet will also include instructions for how participants may obtain a copy of the *Climate Science for Today's World* teacher guide for use in continuing work as Climate Education Resource Teachers. Please review this guide so that you can introduce it to your participants at your final meeting. [Recall it is linked from the end of the **Additional Extras Links** section of the second public DataStreme ECS webpage (<http://www.ametsoc.org/amsedu/ECS/home.html>), *Extras*.] If you are missing items, contact DataStreme Central **immediately**.
2. With two weeks of DataStreme ECS investigations remaining, please remind participating teachers of their Plan of Action. Guidelines for responding in the survey to their Plan of Action were linked from the course Current Climate Studies activities earlier, is linked below the Learning Files of the course website, and can be downloaded here (<http://www.ametsoc.org/amsedu/ECS/PlanofAction.pdf>). Participants should bring a copy of their proposed Lesson Plan to your final DS ECS course meeting for discussion. Remind participants that they are to provide you with an electronic copy of their Lesson Plan. Send those electronic copies of the Plans to DataStreme Central. You should also discuss the participants' continuing role as Climate Education Resource Teachers.

Lesson Plan files:

a. Naming of files: *name-LITleader.ext*

- Participant's first initial plus last name, (*unique identity of creator*)
- dash, (*set off name from group*)
- Last name of LIT leader, (*so we know where they came from*)
- dot, (*gotta have one of these!*)
- 3 letter file extension (*this is automatically added by the software, don't worry about it*)

Example: **jsmith-perry.doc**

Jane Smith on Dana Perry's Climate LIT submitting a document file

b Submission to DS Central:

- When all received, send in single email as multiple attachments (if possible), to DataStreme Central –
Bob Weinbeck (weinbeck@ametsoc.org), Subject: Lesson Plans
3. LIT leaders should have received an email with instructions and the URL for the *Program Review*, *End-of-Course Survey* and *Participant Evaluation*. Please be sure participants follow the procedures and submit the surveys. Also, they are to notify you that they have completed the surveys and evaluation.
 4. With the Week 11 Answer Key we will provide the link to an electronic evaluation form for LIT members so that you may also comment on the course from your perspective. A "checklist" of tasks for LIT leaders to wrap-up the Fall 2016 DataStreme ECS session, and guidelines for "grade recommendations" will also be included in the Week 11 Answer Key.
 5. The Spring 2017 schedule is available from the Education Program's DataStreme Earth's Climate System information page link: <https://www.ametsoc.org/ams/index.cfm/education-careers/education-program/k-12-teachers/datastreme-program/course-schedule/>. Preview Week begins on 23 January 2017. We will be communicating with LIT leaders when this course concludes regarding arrangements for the Spring DataStreme term.
 6. We always welcome any comments or suggestions on the investigations or any other aspect of the course. These may be emailed to DataStreme Central using the email link at the bottom of the course website.

ANSWER KEY

A. CHAPTER PROGRESS QUESTIONS:

1. Numerical
2. too small to calculate precisely
3. coupling
4. atmospheric lifetime
5. increase through the century
6. 2.1 – 4.7 °C
7. climate extreme
8. both of these
9. Northeast
10. storm surge
11. Atlantic Multidecadal Oscillation
12. more strong but fewer weak
13. more

14. stable
15. ocean acidification
16. [as appropriate by participant]
17. [as appropriate by participant]

Please check for responses to Questions 16 and 17. Mentors should also focus on the answers submitted to these items for dialogue. Please follow up if a participant fails to respond to either item.

B. CONCEPT OF THE WEEK:

1. more
2. increase

C. INVESTIGATIONS RESPONSES

INVESTIGATION 10A:

1. 5.3
2. 2.3
3. natural
4. positive
5. 10.9
6. increases
7. warmer
8. increases
9. solar irradiance
10. the global temperature changes they can cause are typically observable only for a year or two
11. carbon dioxide
12. 2.3
13. warmer than

INVESTIGATION 10B:

1. atmosphere
2. ocean
3. upper
4. all warmed
5. much smaller
6. increasing
7. more
8. rising
9. risen
10. tropical
11. both of these

12. cannot
13. major

CURRENT CLIMATE STUDIES 10

1. elevated in combination with low levels of warming
2. increase
3. corn
4. will
5. negative
6. all these plus other climate change induced stresses
7. are already being
8. can
9. frost-free season length
10. decrease
11. all of these
12. Southeastern
13. all of these
14. all of these
15. both of these
16. reduce
17. "whole"
18. 3
19. Pacific Coastal
20. 16
21. all of these
22. positively or negatively
23. doubled
24. increase

Return to [DataStreme ECS website](#)

©Copyright, 2016, American Meteorological Society