



GLOBE El Niño Web Chat

20 November 1997 (Chat #2)

[Christos/GLOBE]

RE: [DrBob/cpc] I'm now on-line ready to answer questions.
Dr. Bob, can you please tell us a little about yourself?

[DrBob/cpc]

I guess I should introduce myself. I'm a Senior Research Meteorologist with CPC's Prediction Branch and part of the team that does the official seasonal forecasts. One of my research specialties is North American El Niño impacts -- I am directing the work by Rich Tinker referred to by Paul.

[DrGerry/CPC]

I'm on line now with Dr. Bob

[DrBob/cpc]

RE: [Christos/GLOBE] Dr. Bob, can you please tell us a little about yourself?
Sorry, I forgot to mention my full name, it is Robert Livezey.

[Christos/GLOBE]

RE: [DrGerry/CPC] I'm on line now with Dr. Bob
Hello Dr. Gerry. Could you also introduce your self?

[DrGerry/CPC]

I should also introduce myself. My full name is Gerry Bell. I am a research meteorologist with the Climate Prediction Center's Diagnostics Branch. One of my research specialties is the El Niño. Another is global climate monitoring and understanding large-scale weather patterns that persist for months to seasons.

[KAT/Belgium]

Hi everybody, I'm Joris Lochy, I'm a student of the Royal Atheneum in Tienen, a small city (30,000 inhabitants) in the middle of Belgium.

[KAT/Belgium]

Hasn't El Niño got something to do with the amount of sunspots? They have an 11-year long cycle and can be noticed in the growth rings of trees. So the amount of them affects our climate a great deal. They would also be partly responsible for the ice-ages. Is this correct?

[CHIPANDKENDRA]

WILL EL NIÑO AFFECT US IN ALEXANDRIA? WILL WE GET SNOW?

[classDenaliElemFairbanksAlaska]

How long have you been working on El Nino?

[AndrewandSarah]

What is it's current

[VAL]

HI. I'M A GLOBE TEACHER AT BARD SCHOOL IN PORT HUENEME, CA. MY CLASS WILL BE PARTICIPATING IN THE CHAT THIS MORNING. THANK YOU FOR YOUR HELP IN UNDERSTANDING EL NINO.

[Lindsey]

If the earth spins from east to west the water not being attached to the earth must slosh back toward the east. If the trade winds settle down is this why the warmer surface water pushes back to the east.

[Christos/GLOBE]

RE: [KAT/Belgium] Hi everybody, I'm Joris Lochy, I'm a student of the Royal Atheneum in Tienen, a small city (30,000 inhabitants) in the middle of Belgium.

Hello Joris. We're glad you can join us! Do you have any questions for our experts?

[MiamiGLOBEWorkshop]

Greetings from the GLOBE International Training Workshop in Miami, Florida. We have participants from 21 countries and are happy to have the opportunity to participate in this event.

[adamLeopoldIn]

Will El Nino cause hurricanes and where?

[classDenaliElemFairbanksAlaska]

Dr.Bob how long have you been working on El Nino?

[RyanWI]

Will El Nino affect the whole United States.

[KAT/Belgium]

Val - How long has your school been a Globe school? What measurements do you perform? Have you seen something strange in your measurements, due to El Nino.

[John/Athens/GREECE]

Hello to everyone. We would like to ask you how many people participate on this chat?

[DrBob/cpc]

RE: [Paul/CPC] In my professional opinion, NO! The El Nino event evolves over a period of months, and eventually sea surface temperatures decrease. Global warming refers to a longer-term trend -- decades and beyond. I do not think we have accurate enough measurements to detect global warming because the instrument error is about the same size as the effect (global warming) that we are trying to measure. Nevertheless, research on this subject should continue.

Since nobody has asked a question yet I'll put my two cents in on Jessica's question. Whether or not there is a link between El Nino and global warming is an open question. Work completed recently here has shown that the two signals can be separated from each other over the last 50 years for at least US

temperatures. A global warming has been confidently detected -- its attribution to trace gases in the atmosphere however has not been nailed down tight yet, although a good consensus of researchers agree that they are a cause.

[Paul/CPC]

RE: [AndrewandSarah] What is it's current
Please elaborate on your question. Thank you.

[CHIPANDKENDRA]

WILL EL NINO AFFECT US IN ALEXANDRIA? WILL WE GET SNOW?

[classDenaliElemFairbanksAlaska]

Hey John hello and good morning from Alaska!

[Paul/CPC]

RE: [DrBob/cpc] Since nobody has asked a question yet I'll put my two cents in on Jessica's question. Whether or not there is a link between El Nino and global warming is an open question. Work completed recently here has shown that the two signals can be separated from each other over the last 50 years for at least US temperatures. A global warming has been confidently detected -- its attribution to trace gases in the atmosphere however has not been nailed down tight yet, although a good consensus of researchers agree that they are a cause.
Thank you for your addition! I was hoping you would respond to it!

[Lucas]

Hello from Haw Creek Elementary School. Third graders will now join the chat. This is Lucas. How long does an El Nino last?

[KAT/Belgium]

John/Athens - I've sent an E-Mail to a student of your school, named Kostas, involving the effects of pH and watertemperature on the organisms in the water. Why hasn't he replied?

[ANDREW]

HI. IM FROM BARD SCHOOL IN PORT HUENEME CAL. IS EL NINO GOING TO GO AWAY, AND IF IT IS IT COMING COMING AGAIN? WHY DID YOU NAME IT EL NINO?

[classDenaliElemFairbanksAlaska]

Hello Everbody. Our names are Ryan and Jeremy 5th Grade from Denali Elementry.

[DrBob/cpc]

RE: [CHIPANDKENDRA] WILL EL NINO AFFECT US IN ALEXANDRIA? WILL WE GET SNOW?
Chip and Kendra -- The Washington area should have a warmish December. Otherwise El Nino suggests that overall we can't tilt the odds one way or another for average winter temperature or precipitation. However, El Nino does increase the odds of a big snowstorm in the latter part of the Winter.

[classDenaliElemFairbanksAlaska]

Paul, We have questions here for you to answer!

[Paul/CPC]

RE: [RyanWI] Will El Nino affect the whole United States.

El Nino can cause effects in specific parts of the United States. Enhanced precipitation is frequently reported across the southwestern United States from October through March, and this effect extends across the Southeast from January through March

[Tyrone/ClevelandMS]

I live in Mississippi and I am asking will El Nino produce more or less tornadoes in the coming months and also how will they rate: F1-F5?

[Lucas]

This is Lucas again. I have another question. In what year did El Nino receive its name?

[Ann/GLOBE]

John, every GLOBE school is invited to this chat, but it is not possible to tell how many are watching online since we can only "see" those who join the chat by asking a question. Do you know what the predicted El Nino effects are for Greece?

[DrGerry/CPC]

RE: [KAT/Belgium] Hasn't El Nino got something to do with the amount of sunspots? They have an 11-year long cyclus and can be noticed in the growth rings of trees. So the amount of them affects our climat a great deal. They would also be partly responsible for the ice-ages. Is this correct?

El Nino has nothing whatsoever to do with sunspots. Also, I question your assertion that sunspots affect our climate a great deal. My feeling is that the variations in tree rings are more likely linked to interdecadal variability in known global weather patterns and in the El Nino cycle itself.

[KAT/Belgium]

I think my question got lost between all the other questions and answers: Hasn't El Nino got something to do with the amount of sunspots? They have an 11-year long cyclus and can be noticed in the growth rings of trees. So the amount of them affects our climat a great deal. They would also be partly responsible for the ice-ages. Is this correct? Sorry, if I'm too restless.

[Joe/EastRochesterOH]

Will it affect the traveling in a plane?

[classDenaliElemFairbanksAlaska]

Paul Will El Nino effect the whole world

[Paul/CPC]

RE: [ANDREW] HI. IM FROM BARD SCHOOL IN PORT HUENEME CAL. IS EL NINO GOING TO GO AWAY, AND IF IT IS IT COMING COMING AGAIN? WHY DID YOU NAME IT EL NINO?

The El Nino will eventually dissipate, probably in about six months. The abnormal warming of the sea surface in the eastern tropical Pacific received its name from the Christ Child (El Nino - The Boy) because the warm waters were most frequently observed around Christmas time.

[DrBob/cpc]

RE: [Lucas] Hello from Haw Creek Elementary School. Third graders will now join the chat. This is Lucas. How long does an El Nino last?

Lucas -- El Nino can last anywhere from just a few months to more than a year. Generally it does not stay as strong as it is now for more than about 6 months, but this particular event seems to unusual durability.

[classDenaliElemFairbanksAlaska]

What are the effects of El Nino in Alaska

[Matt]

Haw Creek, Asheville, NC/ How warm is the water in the warmest part of the El Nino?

[classDenaliElemFairbanksAlaska]

Just so Everybody knows there are 2 Denali Elementary people on.

[Paul/CPC]

RE: [classDenaliElemFairbanksAlaska] Paul Will El Nino effect the whole world

Significant effects of El Nino are only observed in certain areas while other meteorological and climatological factors dominate other areas. Good examples of El Nino effects include warm conditions on the west coast of South America, drought in Indonesia, and enhanced precipitation in the southwestern United States.

[DrGerry/CPC]

RE: [lindsey] If the earth spins from east to west the water not being attached to the earth must slosh back toward the east. If the trade winds settle down is this why the warmer surface water pushes back to the east.

There is a bit of sloshing involved, but the main warming across the eastern tropical Pacific is due to reduced oceanic upwelling caused by the weakening of the easterlies. Normally, the strong easterlies across the tropical Pacific act to pull surface ocean water off the equator and into the subtropical latitudes. This results in upwelling of cold ocean waters from below. During El Nino, the trade winds weaken, and so does the upwelling. This reduced upwelling is seen down to the depth of the oceanic thermocline, where ocean waters at depth in the current El Nino are averaging 5-9 C above normal.

[KAT/Belgium]

DrGerry - About these sunspots: I don't really agree that they don't affect our climate, since the sun is the engine of our whole climatic system, it is obvious that if there are changes in the sun, there must be changes in the earth's climate. Since these sunspots are colder, darker areas in the sun, a period with lots of these spots, the sun will give less warmth. Isn't this correct?

[DrBob/cpc]

RE: [Tyrone/ClevelandMS] I live in Mississippi and I am asking will El Nino produce more or less tornadoes in the coming months and also how will they rate: F1-F5?

As far as I know there is no established link between tornadoes and El Nino in the Gulf Coast states, but this is a research area worth looking into.

[lindsey]

Hello Haw Creek Elementary School. Do you collect data for the globe network weather? We put in data every day.

[Connie]

We are an environmental science class interested in the effect of el nino in the western mountains of north carolina. Will the current cycle end in time to give us a normal summer weather pattern or a drier than usual pattern?

[RockbridgeSchool]

What was the shortest El Nino ?

[classDenaliElemFairbanksAlaska]

How much of an effect will El Nino have to the waters of Alaska?

[NickinWisconsinUSA]

Will El Nino affect the precipitation of Wisconsin

[classDenaliElemFairbanksAlaska]

Will El Nino effect the snow in Alaska very much

[DrBob/cpc]

RE: [classDenaliElemFairbanksAlaska] What are the effects of El Nino in Alaska
El Nino is likely to give you a warmer than normal winter.

[DrGerry/CPC]

RE: [Matt] Haw Creek,Asheville,NC/ How warm is the water in the warmest part of the El Nino?
The warmest surface ocean waters are averaging about 4-5 C (or 8-10 F) above normal right now. This is a very strong El Nino that is comparable in magnitude to the strongest previous 1982-83 episode of the century. We expect it to continue at least into next spring, and to weaken during the May-July time frame.

[Paul/CPC]

RE: [classDenaliElemFairbanksAlaska] What are the effects of El Nino in Alaska
I am not aware of any effects of El Nino on Alaska. Please note that Alaska is quite close to Asian Russia, and the extensive land mass of Siberia serves as a source of cold air during the Northern Hemisphere Winter. By the way, I have been to Alaska twice and have enjoyed its great natural beauty!

[KAT/Belgium]

A question, not involving El Nino, but Globe: In which circumstances can we measure a pH of the rainwater higher than 7.0/ We've heard that a pH higher than 7.0 could be blamed to NH₄OH (ammoniahydroxyde) which can come from the excessive use of fertilizers. Is this correct?

[Zikom/JacksonMS]

I want to know how can you stop the EL Nino?

[Patrick]

Haw Creek/ Asheville, NC/Will we have many days off from school this winter in the southeast?

[NIA]

HI.MY NAME IS NIA.I'M FROM BARDSCHOOL IN PORT HUENEME CA.WHY DOES EL NINO CAUSE STUFF LIKE TORNADOS,HURRICANES,AND FLOODS?

[AaroninWIUSA]

How will the El Nino affect winter in Wisconsin?

[KAT/Belgium]

Has everybody already visited our site, which is full of Globe information:

<http://gate.argo.be/scholen/argo0047/index2.htm>

[Paul/CPC]

RE: [Connie] We are an environmental science class interested in the effect of el nino in the western mountains of north carolina. Will the current cycle end in time to give us a normal summer weather pattern or a drier than usual pattern?

My colleague, Rich Tinker, under the direction of Dr. Bob Livezey, studied your question. Conditions frequently observed during El Nino events suggest unusually cold weather during January through April.

[classDenaliElemFairbanksAlaska]

Paul the weather has been warmer here than in the past is that totally the effect of El Nino?

[Christos/GLOBE]

RE: [KAT/Belgium] A question, not involving El Nino, but Globe: In which circumstances can we measure a pH of the rainwater higher than 7.0/ We've heard that a pH higher than 7.0 could be blamed to NH₄OH (ammoniahydroxyde) which can come from the excessive use of fertilizers. Is this correct?

KAT, this is correct. Have you taken rainwater pH measurements higher than 7.0?

[DrBob/cpc]

RE: [Connie] We are an environmental science class interested in the effect of el nino in the western mountains of north carolina. Will the current cycle end in time to give us a normal summer weather pattern or a drier than usual pattern?

We expect this El Nino to start losing its strength rapidly sometime in the spring. The only likely impact of El Nino in western NC during that time of year -- late winter/early spring -- are cooler than normal conditions.

[AlexWisconsinUSA]

How will El Nino affect the animals in north central Wi. ?

[Paul/CPC]

RE: [Zikom/JacksonMS] I want to know how can you stop the EL Nino?

You cannot stop El Nino. It is a large-scale natural process, and not all of its effects are bad. Good policy and decision-making can lead to enhancing the benefits of an El Nino while mitigating its adverse effects.

[Laura]

How does El Nino affect our weather in North Carolina?

[BransonKingsburgCA]

Hi, I live in the Central San Joaquin Valley of California. Dr. Bob, will the amount of snow on the Sierra Nevada range be affected this snow-boarding season?

[RockbridgeWI]

How many states or countries get affected by El Nino?

[Paul/CPC]

RE: [classDenaliElemFairbanksAlaska] Thanks

You are most welcome. Thank you for chatting, and more important, thank you for patiently waiting while we fielded questions. Please do enjoy your beautiful state!

[KENYA]

HI.MY NAME IS KENYA .I'M FROM BARD SCHOOL IN PORT HUENEME CA.WHERE IS EL NINO GOING TO HIT NEXT?

[DrGerry/CPC]

RE: [RockbridgeSchool] What was the shortest El Nino ?

El Ninos are not measures in that way. Typically, an El Nino will begin to develop in the Spring or Summer, and then really start to intensify during November. They last in this strong phase until April-May. They then start to weaken. Sometimes the El Nino conditions will continue in this weak state until the next winter, when strong conditions then redevelop. This happened during the 1991-93 El Nino. Also, there are decades in which El Nino is particularly active and decades in which it is not very active. The 1980's and 1990's have been an active El Nino period

[KAT/Belgium]

Christos - I'm not sure, but I believe we had twice a pH higher than 7.0 this year (7.2 and 7.5). Belgium is known for its intensive use of fertilizer, which can be seen in the amount of nitrates, nitrites and ammonia in the water of the Belgian sources.

[KelyLosAngeles]

What is causing the trade winds to slacken and has this been established?

[John/Athens/GREECE]

Ann/Globe. We don't know exactly the effects of El Nino on Greece, but we suspect that El Nino won't affect our country too much, because Greece is not in a tropical zone of our planet.

[DrBob/cpc]

RE: [AaroninWIUSA] How will the El Nino affect winter in Wisconsin?

Wisconsin is likely to have a warmer than normal winter as a result of El Nino. We can't make as confident a statement about precipitation.

[Paul/CPC]

RE: [AlexWisconsinUSA] How will El Nino affect the animals in north central Wi. ?

No. I feel the animals will migrate to a suitable environment.

[RockbridgeSchool]

When does it start and when does it end?

[JRSDenaliElemFairbanksAlaska]

Alright, in how many years will El Nino be gone and how long until it comes back?

[Connie]

Does El Nino affect only the north and south american continents, or does it hit europe and africa as well??

[BransonKingsburgCA]

Dr. Bob, I am from the central San Joaquin valley of California. Will El Nino affect our snow-boarding weather this season in the central Sierra Nevadas?

[DrBob/cpc]

RE: [classDenaliElemFairbanksAlaska] Dr.Bob how long have you been working on El Nino?
Since 1984.

[classDenaliElemFairbanksAlaska]

I have a challenge the first person to answer this question gets my respect Ok,How many degrees has El Nino effected Alaska?

[Megan]

Haw Creek, Asheville, NC/Does El Nino ever come to the Atlantic Ocean?

[KAT/Belgium]

Is there also a change in Ph, conductivity, amount of NO3-, NO2-, Cl-... in the ocean water during an El Nino.

[Paul/CPC]

RE: [KENYA] HI.MY NAME IS KENYA .I'M FROM BARD SCHOOL IN PORT HUENEME CA.WHERE IS EL NINO GOING TO HIT NEXT?

Kenya. El Nino is not a storm like a hurricane or tornado, but rather an abnormal warming of the waters in the eastern tropical Pacific. The effects attributed to El Nino are frequently a result of changed atmospheric circulation -- the winds, etc. A good example is enhance precipitation across the southern United States.

[NIA]

HI.I'M FOM BARD SCHOOL IN PORT HUENEME.WHY DOES EL NINO WORST THIS YEAR?

[RockbridgeWI]

What effect does El Nino have on ships in the area?

[Christos/GLOBE]

RE: [John/Athens/GREECE] Ann/Globe. We don't know exactly the effects of El Nino on Greece, but we suspect that El Nino won't effect our country too much, because Greece is not in a tropical zone of our planet.

John, I think that you are correct. What GLOBE measurements do you take in your school?

[Zikom/JacksonMS]

I want to know how the El Nino is going to affect Gulf states.

[RockbridgeSchool]

How will El Nino effect other parts of the world like Mongolia?

[Paul/CPC]

RE: [classDenaliElemFairbanksAlaska] I have a challenge the first person to answer this question gets my respect Ok,How many degrees has El Nino effected Alaska?

To my knowledge, El Nino does not affect the temperature in Alaska. Too many other factors, like its Arctic and sub-Arctic environment, have a stronger influence on Alaska.

[KAT/Belgium]

Christos - Precipitation completely saturated with CO₂ (which forms H₂CO₃, slightly acid) gives a pH of 5.6. Is rain water always completely saturated with CO₂?

[AracelyLosAngeles]

Since El Nino hasn't came yet does this mean that when it does come , will it come stronger?

[DrBob/cpc]

RE: [Laura] How does El Nino affect our weather in North Carolina?

There are three effects of El Nino on North Carolina -- a warm early winter and a cool late winter/early spring along with odds of more precipitation for the winter as a whole at least east of the mountains.

[MEGAN]

ASHEVILLE,NC/ HOW BIG CAN THE WAVES GET WHEN EL NINO IS AROUND?

[Paul/CPC]

RE: [RockbridgeWI] What effect does El Nino have on ships in the area?

El Nino has little or no effect on ship at sea other than the usual hazards associated with thunderstorms. Most ship are equipped with radar and suitable navigation aids so they can avoid trouble.

[classDenaliElemFairbanksAlaska]

very goodjob Dr.Bob I'm glad we have sciencetist like you in the USA!!!!

[KENYA]

HI.I'M FROM BARD SCHOOL IN PORT HUENEME CA. WHY CAN'T WE HAVE SNOW DURING EL NINO?

[DrGerry/CPC]

RE: [Zikom/JacksonMS] I want to know how can you stop the EL Nino?

You cannot stop the El Nino and should not want to. It is a naturally occurring part of our global climate system and is crucial for contributing to the necessary variability of this climate system. It brings abundant rainfall to places, and makes winters milder in others. Yes, there are sometimes floods and droughts during El Nino. However, in the middle latitudes where we live, these areas are only a small part of the total area that is impacted in a good way by the El Nino. All that you hear about in the press is the bad things caused by El Nino, and this gives a very misleading view of the total phenomenon.

[Connie]

DrBob-What about west of the mountains?Its already cold--will we get more snow than usual?

[Paul/CPC]

RE: [RockbridgeSchool] How will El Nino effect other parts of the world like Mongolia?

I am not aware of any effects of El Nino on Mongolia. I suggest that the large Eurasia landmass contributes more to conditions in Mongolia. By the way, they have a very continental or highly variable climate, characterized by strong contrasts and short-term extremes.

[RockbridgeSchool]

How will El Nino effect the Monarch butterfly?

[Christos/GLOBE]

RE: [KAT/Belgium] Christos - Precipitation completely saturated with CO₂ (which forms H₂CO₃, slightly acid) gives a pH of 5.6. Is rain water always completely saturated with CO₂?

KAT, yes it is. CO₂ in solution forms carbonic acid which then lowers the pH of rain water to 5.5-5.6.

However, carbonic acid is a very weak acid and the presence of other substances in solution may counteract its effects on the pH of water.

[kristen/Leopold/In]

How is El Nino affecting South America agricultural wise?

[DrBob/cpc]

RE: [NIA] HI.I'M FOM BARD SCHOOL IN PORT HUENEME.WHY DOES EL NINO WORST THIS YEAR?

We honestly don't know what is so different this time around that this El Nino became so strong so early and why it is maintaining its near-record strength so long.

[JRSDenaliElemFairbanksAlaska]

How long will it be until El Nino leaves and how long until will it come back?

[jJOSEPH]

Why is the sky blue?

[Katie]

Asheville, NC/ Will the beautiful kelp forests in Monterey Bay be all right or El Nino damage them?

[KAT/Belgium]

Everybody - In our school we've started a language project with another Belgian school in Merksem. Our students must correspond by E-Mail in English with the students of Merksem (the language we speak in our part of Belgium in Dutch). Several students would like to correspond now with students from other countries, like the USA. Isn't anybody interested (age of the students 15 to 18 years)?

[classDenaliElemFairbanksAlaska]

Actually Paul El Nino has effected Alaska very much, in Valdez we've been getting tuna and here in Fairbanks it has effected us 20F!

[DrBob/cpc]

RE: [classDenaliElemFairbanksAlaska] very goodjob Dr.Bob I'm glad we have scientecist like you in the USA!!!!!!

Thanks!

[DanielLosAngeles]

Hello my name is Daniel from Foshay Learning Center and I want to ask a question about El Nino. The question is, how will El Nino affect us? We have already had storms here and expecting more. But can El Nino bring more than just rain? Like droughts or other weather cahanges?

[Paul/CPC]

RE: [AracelyLosAngeles] Since El Nino hasn't came yet does this mean that when it does come , will it come stronger?

El Nino is not a storm, like a hurricane or tornado, but rather an abnormal warming of the waters of the eastern tropical Pacific. El Nino effects are caused by changes in atmospheric circulation. Good examples include warmth in Peru, drought in Indonesia, and enhanced precipitation in the southern United States.

[Chelsi]

How were they able to precict it this time?

[DrGerry/CPC]

RE: [AracelyLosAngeles] Since El Nino hasn't came yet does this mean that when it does come , will it come stronger?

There is currently a major El Nino under way. It began in March, and was very strong by June. We expect these very strong conditions to continue at least into next Spring. It is the expanse and magnitude of the El nino that will have substantial impacts on our weather this winter and early Spring. It has already significantly modified rainfall patterns throughout the global tropics, and it is these changes in tropical rainfall that ultimately will cause changes in our weather patterns.

[James]

Asheville, NC/ How far away is El Nino from land?

[Whitney]

What causes the El Nino to form and why in the Pacific?

[LizLosAngeles]

Since it hasn't come yet will it be possible never to see it?

[Paul/CPC]

RE: [jJOSEPH] Why is the sky blue?

The sky is blue because particles in the air scatter the blue component of natural light more than the red component. This becomes quite evident a sunrise or sunset, when the sun appears quite red.

[classDenaliElemFairbanksAlaska]

But it we've had 20.02 inches of snow.

[KAT/Belgium]

MaxandPeter - Which letter do we have to respond to?

[LASHUNDALyNCH]

Why does El Nino hit every where?

[RockbridgeWI]

Can we keep El Nino from effecting land?

[Clint/Leopold/In]

Does space travel affect climate by opening the ozone?

[DrGerry/CPC]

RE: [KENYA] HI.I'M FROM BARD SCHOOL IN PORT HUENEME CA. WHY CAN'T WE HAVE SNOW DURING EL NINO?

I,m not sure of your area, but lots of places get snow during El Nino, especially the California mountains. El Nino causes changes in the storm tracks, with the regions of major winter storminess shifted farther south than normal. This southward shift produces increased precipitation along the southern tier of the United States. Now, since these areas are further south, there can be less snowfall with these individual storms.

[JRSDenaliElemFairbanksAlaska]

Bob, Why does El Nino happen?

[classDenaliElemFairbanksAlaska]

How many years have you people been working on El Nino

[EvertfromNamibia]

I accept that the El Nino affects the Americas on its eastern side. But surely the drought in Southern Africa is because of the conditions in the Atlantic Ocean?

[Patrick]

Can El Nino begin in other oceans besides the Pacific Ocean?

[Christos/GLOBE]

RE: [classDenaliElemFairbanksAlaska] But it we've had 20.02 inches of snow. ClassDenali, how many centimeters is 20.02 inches?

[Paul/CPC]

RE: [LizLosAngeles] Since it hasn't come yet will it be possible never to see it?

El Nino is not a storm like a hurricane or tornado. It is a warming of the waters of the eastern tropical Pacific which in turn affects atmospheric circulation.

[KAT/Belgium]

If El Nino gives more rain in some areas and less rain in others, doesn't El Nino then a lot soil erosion?

[DrBob/cpc]

RE: [lindsey] Hello Haw Creek Elementary School. Do you collect data for the globe network weather? We put in data every day.

Global data is collected by the National Weather Service, but not by our particular group. We use the results of the folks who do.

[Ansara]

Greetings everyone from all of us at the International Globe international conference in Miami. We have participants here from more than 20 countries. It's very energizing to get to know people from around the world interested in science. Dr. Bob, I was hoping you could give us a definition of the term "el viejo" or "la nina". What happens during this "cold" time period?

[MaryluLosAngeles]

What city or state are you communicating from?

[Connie/NC]

DrBob-You said something earlier about the east of the mountains being affected by El Nino--Will it affect the western part of the mountains? Will we get more snow than usual??

[Paul/CPC]

RE: [Clint/Leopold/In] Does space travel affect climate by opening the ozone?

Not to my knowledge. Except for launch and reentry all operations are conducted outside our atmosphere.

[DrGerry/CPC]

RE: [James] Asheville, NC/ How far away is El Nino from land?

The El Nino refers to an abnormal warming of the ocean waters in the eastern half of the tropical Pacific that typically lasts a year or more. In the present episode, the area of warming extends from the international date line to the west coast of South America. This distance spans more than 1/4 of the distance around the globe.

[ThirdGraders]

We have to leave the web chat now to practice our computer skills in a Mac Lab. Thank you for your time and we enjoyed our chat with you. Come to Asheville, North Carolina for a visit!

[Paul/CPC]

RE: [MaryluLosAngeles] What city or state are you communicating from?

The panel of scientists for this El Nino chat are located in suburban Washington, DC, about 10 miles (16 km) southeast of the White House.

[andrea/Leopold/In]

Can El Nino cause eclipses?

[AMANDALOSALAMITOSCA]

HI! How does El Nino start?

[John/Athens/GREECE]

Christos/Globe. We measure the air temperature, rain and snow precipitation, rain PH, wind direction, cloud cover, temperature and PH of the water of Kifisos river and the soil moisture with gypsum blocks. We have found the PH of the water 7.9-8.9 and the PH of rain 5.5-8.2.

[DanielLosAngeles]

How will El Nino affect the East Coast and West Coast?

[KAT/Belgium]

How long is the Globe project planning to collect measurements? We see that the Globe program constantly grows: new schools, new countries, new measurements, expansion of the site.... Is this a good sign? Last year there was a problem of fundings. Is this solves?

[Connie/NC]

You said something earlier about the east of the mountains being affected by El Nino--Will it affect the western part of the mountains? Will we get more snow than usual??

[DanielLosAngeles]

Can El Nino cause earthquakes?

[JRSDenaliElemFairbanksAlaska]

Hey Paul 80.08 centimeters!

[Paul/CPC]

RE: [andrea/Leopold/In] Can El Nino cause eclipses?

NO. The positions of the earth, moon, and sun with respect to each other determine the occurrence and type of eclipse. El Nino is confined to the earth. Think of the two as independent processes.

[RockbridgeWI]

What effect does it have on Pacific storms

[DrGerry/CPC]

RE: [RockbridgeWI] Can we keep El Nino from effecting land?

El Nino affects the global pattern of tropical rainfall. These changes in rainfall ultimately affect the weather patterns in both hemispheres. Since we cannot control the weather, we cannot control the weather patterns caused by El nino. We can however mitigate the impacts of the El Nino by knowing the type or strain of crop to plant, by shoring up piers in affected areas, and by generally adjusting things to fit the expected weather patterns. As I noted earlier, the El Nino and its impacts are a very important part of our climate system. Our world might be a far different place if we did not have the El nino/ la Nina cycle.

[EvertfromNamibia]

Lately vegetation features very strongly in literature as a factor contributing to the water cycle. Some even advocate the planting of trees to increase the rainfall. But this contribution can only be very small. Surely rain is caused by a favourable airmass moving in over an area and NOT the respiration of plants available?

[DanielLosAngeles]

How can we be prepared for when El Nino comes? And how do you know?

[KAT/Belgium]

John - A pH of the rain of 8.2 is a bit too high I think. We've got one measurement of 7.5, but we think that there is a great chance that this is a fault measurement. Will you talk to Kostas about the project of effects of watertemperature and pH on the water?

[SteveLosAngeles]

Before when you said the El Nino is caused by a slacking of trade winds in the tropical Pacific I asked what causes the slacking of the winds?

[Connie/NC]

DrGerry--Why have you just referred to the cycle as El Nino/La Nina??

[Paul/CPC]

RE: [DanielLosAngeles] Can El Nino cause earthquakes?

NO. The El Nino will effect atmospheric circulation -- the winds. These changes in circulation have an effect on the weather. In contrast, earthquakes result from geological processes below the ground.

[DavidSLOSALAMITOSCA]

What causes El Nino?

[DrBob/cpc]

RE: [Christos/GLOBE] ClassDenali, how many centimeters is 20.02 inches?

I don't know about Paul and Dr Jerry but I am losing track fast of what questions have or have not been answered. Perhaps things could get slowed down a little so that we can catch up. We really do want to answer everybody's questions.

[Christos/GLOBE]

John/Athens, you guys are doing a great job! By the way, what's the weather like in Athens today?

[JRSDenaliElemFairbanksAlaska]

80.08!

[RockbridgeSchool]

How will it effect the Amazon rain forest?

[Paul/CPC]

RE: [EvertfromNamibia] Lately vegetation features very strongly in literature as a factor contributing to the water cycle. Some even advocate the planting of trees to increase the rainfall. But this contribution can only be very small. Surely rain is caused by a favourable airmass moving in over an area and NOT the respiration of plants available?

The amount of water given off by leaves is small compared to the amount of water stored in our oceans. Air masses traversing the seas bring the moisture we need to grow crops.

[John/Athens/GREECE]

We have to leave now because it's late and the school close. We look forward for the next web chat. Goodbye everybody!

[Paul/CPC]

RE: [JRSDenaliElemFairbanksAlaska] nobody is answering me!!

Greetings from Washington, DC. Please submit or resubmit your question.

[JRSDenaliElemFairbanksAlaska]

Bob, how long will El Nino Be here and how long until it leaves?

[Ansara]

For KAT/Belgium - As far as I know, the GLOBE program is continuing to grow and will grow as long as more countries wish to adopt it. The funding for GLOBE comes from the individual countries that adopt the program. It's really very exciting and there are now 62 countries involved (Pakistan signed on yesterday).

[MikeLosAngeles]

Is the weather in Washinton DC worse then the weather in Los Angeles?

[JBurnnett]

Our Data For today is in farenheit so don't read it wrong Please. We found no precipitation ice snow or dew.For our temperatures it was strang for a day such as this one. Current: 48 degress farenheit Maximum: 51 degress farenheit Minimum: 28 degress farenhiet Our cloud cover is scatterd with lots of wispy cirrus clouds perhaps indicating ice or snow tonight. Also we saw some stratus. Thanks.

[NickinWisconsinUSA]

Will El Nino affect the size of the waves on the coast of California?

[Paul/CPC]

RE: [JRSDenaliElemFairbanksAlaska] 80.08!
Snow or rain?

[KingsburgHighCA]

We are a biology class at Kingsburg High School in Central California. Paul, do you think El Nino will affect the snow season here in the Central Sierra Nevada range? We have curious snow-boarders here.

[JRSDenaliElemFairbanksAlaska]

ok, how long until El Nino leaves and how long until it leaves?

[NickyLosAlamitosCA]

Who invented the buoys and sensors in the water on the equator?

[DanielLosAngeles]

Hello my name is Daniel from Foshay Learning Center and I want to ask a question about El Nino. The question is, how will El Nino affect us? We have already had storms here and expecting more. But can El Nino bring more than just rain? Like droughts or other weather cahanges?

[JRSDenaliElemFairbanksAlaska]

snow

[Paul/CPC]

RE: [MikeLosAngeles] Is the weather in Washinton DC worse then the weather in Los Angeles?
It depends on what you define as worse. The Los Angeles area was noted for its fine climate, but its is not as fascinating as weather in Washington, DC. variety is the spice of life!

[John/CrescentCity]

Hello everyone...we are finally connected..technology glitches. I have several students here anxious to chat.Hello out there to all my GLOBE friends.

[ClassDenaliElemFairbanksAlaska]

We what to join you people.

[KAT/Belgium]

Kingsburgh - Your school is famous for its soil moisture measurements. How many gravimetical measurements have you taken for your calibration curve. Is the graphic strongly increasing from the value 0 to 100 on your gypsum block measuring instrument?

[DrBob/cpc]

RE: [BransonKingsburgCA] Dr. Bob, I am from the central San Joaquin valley of California. Will El Nino affect our snow-boarding weather this season in the central Sierra Nevadas?

Because we expect precipitation to be above normal this winter throughout California I wouldn't be surprised if at least the southern part of the Sierra got more snowfall than usual.

[MikeLosAngeles]

are you guys going to experiance bad weather in Washington D.C.

[DrGerry/CPC]

RE: [andrea/Leopold/In] Can El Nino cause eclipses?

El Nino does not cause eclipses, or earthquakes, or sunspots, or volcanoes, nor is it affected by these. It causes changes in weather patterns and ocean temperatures, thus affecting people, fish, wildlife, etc.

[Paul/CPC]

RE: [KingsburgHighCA] We are a biology class at Kingsburg High School in Central California. Paul, do you think El Nino will affect the snow season here in the Central Sierra Nevada range? We have curious snow-boarders here.

California normally has enhanced precipitation during their wet season. In higher elevations, that means snow. Enjoy the sporting activities, but please heed advisories and warnings issued by the National Weather Service.

[KingsburgHighCA]

We are a biology class at Kingsburg High School in Central California. Paul, do you think El Nino will affect the snow season here in the Central Sierra Nevada range? We have curious snow-boarders here.

[LombardosFifthGradeinEverettWashington]

A marlin was caught off the coast of Washington. Can we expect to start fishing for tropical fish over the winter?

[Christos/GLOBE]

RE: [KAT/Belgium] How long is the Globe project planning to collect measurements? We see that the Globe program constantly grows: new schools, new countries, new measurements, expansion of the site.... Is this a good sign? Last year there was a problem of fundings. Is this solves?

KAT, hopefully for a long-long time! We all hope that GLOBE will continue to grow until most schools from around the world join!

[DavidRLosAlamitosCA]

Do the effects of El Nino vary or do they remain the same over several years? How long will this one last?

[Paul/CPC]

RE: [MikeLosAngeles] are you guys going to experience bad weather in Washington D.C.
By bad, I assume you mean severe. The episodic nature of severe weather contrasts sharply with the slow evolution of an El Nino. It is really hard to predict.

[james/Poway]

Will it snow in San Diego?

[marianne/okemosMI]

What kind of effects will El Nino have on Michigan this winter? One model predicted very little effect. Does everyone agree?

[ShannonTiffanyCrystal/CrescentCity]

Who lives in Washington DC?

[John/Athens/GREECE]

Cristos/Globe. The weather is cloudy and the temperature now is 17 degrees C and strong S winds.

[DrGerry/CPC]

RE: [Connie/NC] DrGerry--Why have you just referred to the cycle as El Nino/La Nina??
The El Nino is part of the ocean-atmospheric coupled phenomenon known as the El Nino/ Southern Oscillation (ENSO). El Nino refers to the condition when the tropical Pacific ocean waters are warmer than normal. La Nina refers to the state when the ocean waters are colder than normal. Both have global weather impacts.

[DanielLosAngeles]

HI! I am from Foshay and no one has answered my question yet!!!

[KAT/Belgium]

Thank you very much, everybody. I really have to go now, but I will read the chat text tomorrow.

[JRSDenaliElemFairbanksAlaska]

what do u guys think the low for Alaska is With El Nino

[Paul/CPC]

RE: [LombardosFifthGradeinEverettWashington] A marlin was caught off the coast of Washington. Can we expect to start fishing for tropical fish over the winter?
During an El Nino fish will migrate to more favorable waters. In fact, aquatic animals will always seek the most amicable environment for growth.

[DanielLosAngeles]

Can El Nino be deadly?

[Paul/CPC]

RE: [James/Poway] Will it snow in San Diego?

I doubt it very much. You would have to watch for snow in the higher elevations of the Sierra Nevada.

[ShannonTiffanyCrystal/CrescentCity]

Do you know where Crescent City California is? We are wondering how El Nino will affect the Northern California coastline?

[Shane/Poway]

How much rain will fall in San Diego?

[ClassDenaliElemFairbanksAlaska]

How many states are going to be affected about El Nino

[RON]

HI.I'M FROM BARD SCHOOL IN PORT HUENEME CA. IS EL NINO GOING TO KILL US?

[DrGerry/CPC]

RE: [DavidRLosAlamitosCA] Do the effects of El Nino vary or do they remain the same over several years? How long will this one last?

Yes, the El nino affects vary from one event to the next. Remember that El Nino is only one component of our climate system, and is only one player in the climate game. There is also substantial natural variability due to the normal chaotic nature of our atmosphere. Variations in the intensity and expanse of the El nino, along with this natural variability, contribute to sometimes large variations in weather patterns from one El Nino to the next. However, there are many areas that do receive the same systematic rainfall or temperature patterns from El Nino to the next.

[Brittany/Poway]

Why is everyone so scared of El Nino?

[ShannonTiffanyCrystal/CrescentCity]

We have a few questions. Will the El Nino be greater or smaller in the Northern US? How does El Nino affect the vegetation on land and in water?

[LombardosFifthGradeinEverettWashington]

A marlin was caught off the coast of Washington. Can we expect to start fishing for tropical fish over the winter?

[Paul/CPC]

RE: [DanielLosAngeles] Can ElNino be deadly?

Severe weather, like thunderstorms or heavy rains, can threaten life or property. An El Nino can enhance conditions favorable for severe weather, but other factors are also involved. An El Nino can also affect life and property by engendering droughts, like in Indonesia.

[HERBERT]

HOW DOES EL NINO CAUSE SO MUCH DAMAGE?

[DrBob/cpc]

RE: [Connie] DrBob-What about west of the mountains?Its already cold--will we get more snow than usual?

The mountains of North Carolina are perched right between a region to the north and west that experiences a dryer than normal winter and a region to the south and east where the opposite is the case. In fact the Appalachians interacting with the El Nino favored storm tracks are part of the reason for this pattern. So precip in the Smokies and Nantahalas is up for grabs this winter.

[DanielFoshayLearnigCenterLA]

Well how can El Nino effect other countries like China, Austrlia..... So on???

[ShannonTiffanyCrystal/CrescentCity]

Brittany/Poway, I don't think anyone is scared of El Nino unless they don't know very much about it. There are storms and rain, drought, but alot of things caused by El Nino can happen anyway.

[ShannonTiffanyCrystal/CrescentCity]

Brittany/Poway, I don't think anyone is scared of El Nino unless they don't know very much about it. There are storms and rain, drought, but alot of things caused by El Nino can happen anyway.

[Chris/Poway]

How did you get involved with studying El Nino?

[RON]

HOW LONG IS IT GOING TO LAST?

[DerickLosAlamitosCA]

can we get a model of the buoy and sensors used to study EL NINO? Where can we get it?

[Paul/CPC]

RE: [Brittany/Poway] Why is everyone so scared of El Nino?

I believe that people are afraid of rhings they do not know about. When you learn about a hazrad you can mitigate it. By learning about an El Nino you can decide how to prevent any problems that may occur and take advantage of any benefits that might result.

[Andrew/Poway]

Do you want El Nino to happen?

[HERBERT]

WILL HEAVY RAIN APPEAR WHILE EL NINO IS HAPPENING?

[MaryWI]

How long have El Nino cycles been tracked?

[Connie/WNC]

Does El Nino affect only the north and south american continents, or does it hit europe and africa as well??

[ShannonTiffanyCrystal/CrescentCity]

We have more questions. Will El Nino affect inland areas? Where does El Nino hit hardest? What happens? What affect will El Nino have on ice caps? When did the first El Nino occur?

[DrGerry/CPC]

RE: [DanielLosAngeles] Can ElNino be deadly?

Any weather extreme can be deadly. During El Nino, most of these extremes are confined to the tropics. One horrible consequence of this El Nino are the raging wildfires in indonesia, which have resulted from severe drought, combined with man's insatiable appetite to burn down the tropical rainforests and grow food in the mist of that major drought. These fires have already killed countless thousands of animals, and probably made a few others extinct. In the U.S., some deaths will likely occur in California this winter if indeed we get the flooding and mudslides there. Also, the Sierra Nevada Range is expected to get significantly above-normal snowfall this winter. That type of thing usually leads to more traffic accidents, sometimes resulting in death. But, in general, El nino itself is not a death-causing type of phenomenon.

[Shane/Kentucky]

How would El Nino affect theSoutheast United States?

[KingsburgHighCA]

KAT, nice to hear from you. I met your teacher last summer in VA. You have an excellent program going; keep up the good work. About soil moisture... We have about 40 readings for our calibration curve. We tend to have dry soils (sand and silt) and the highest % we ever got was 9% moisture which was a raw reading of 97. How about your curve? How moist is your soil?

[Christos/GLOBE]

RE: [RON] HOW LONG IS IT GOING TO LAST?

RON, this web chat will last for another 40 minutes (until 2:00 pm eastern time).

[Paul/CPC]

RE: [HERBERT] HOW DOES EL NINO CAUSE SO MUCH DAMAGE?

I believe the damage results from the large scale of the event. Indonesia has been abnormally dry for six months, and has endured fires because of the dry vegetation. In contrast, the southwestern United Sates has to prepare for enhanced precipitation. This could be a blessing because the resrvoirs could be filled up, providing a plentiful supply of water next summer.

[Cori/Poway]

Does El Nino(warm water) have anythig to do with storms?

[MoniqueLosAlamitosCA]

Why does El Nino bring so much rain?

[RONNESTER]

IS EL NINO GOING TO KILL US?

[DanielFoshayLearnigCenterLA]

So how does El Nino Affect the west coast of Cal

[ShannonTiffanyCrystal/CrescentElkCrescentCityCA]

Hey How's it goin', Kingsburg? We haven't talked in a while. What's the weather like?

[Paul/CPC]

RE: [Shane/Kentucky] How would El Nino affect the Southeast United States?

During El Nino events the southeastern United States generally experiences more precipitation and colder temperatures from January through March. The colder temperatures may be a result of increased cloud cover.

[Zeke/Poway]

What was the worst El Nino in history?

[Dakota/Kentucky]

Which would the El Nino affect more, the Northeast or the Southeast U. S?

[John/EastRochesterOH]

Will El Nino affect any melting in Antarctica?

[RONNESTER]

HOW LONG IS EL NINO GOING TO LAST

[DrGerry/CPC]

RE: [RON] HI.I'M FROM BARD SCHOOL IN PORT HUENEME CA. IS EL NINO GOING TO KILL US?

El Nino is not going to kill you. The press has hyped the awful impacts of El Nino beyond belief, resulting in misinformation and disinformation on a large scale. If you ever become a reporter, please try to be even handed and not to only write about the one-sided awful stuff. That type of reporting only leads to ignorance, as it already has in the case of this major El Nino.

[Caroline/Poway]

How often does the El Nino happen?

[HERBERT]

WHEN WILL EL NINO'S EVENTS TAKE PLACE?

[DrGerry/CPC]

RE: [John/EastRochesterOH] Will El Nino affect any melting in Antarctica?

El Nino is not known to affect the Antarctic ice caps, or the polar region of South America.

[ShannonTiffanyCrystal/CrescentElkCrescentCityCA]

RONNESTER- El Nino can kill people, if it causes severe weather. But the chances of you being killed are probably slim.

[Susan/HuntsvilleAL]

I am Susan, just joining the web chat. In the Southeast we are expecting a wetter and colder December-February season. What effect do you predict this will have on the emergence of mosquiatos?

[MrR/Poway]

How will you use the data that we send you?

[Paul/CPC]

RE: [Cori/Poway] Does El Nino(warm water) have anything to do with storms?

The warming of Pacific waters above 28C (82F) enhances convection -- it stimulates thunderstorm activity over the warm waters. Elsewhere, say in Indonesia, storm activity is suppressed. Meteorologists observe these conditions and provide advice on how to best respond to them.

[AngelinaandEmily/PetalumaCA]

How is the El Nino related to the ocean animals and their effect on their offspring?

[DrGerry/CPC]

RE: [Zeke/Poway] What was the worst El Nino in history?

The 1982/83 was the previous strongest in the century. The current episode is comparable to that event. In some areas, the impacts from the current El Nino are worse than those observed in 1982/83. This one will certainly go down in the record books as a major event.

[ShannonTiffanyCrystal/CrescentElkCrescentCityCA]

PAUL- Is there more or less sealife since El Nino?

[Amy]

What is El Nino?

[Connie/WNC]

how does el nino affect europe and africa, if at all?

[Paul/CPC]

RE: [Susan/HuntsvilleAL] I am Susan, just joining the web chat. In the Southeast we are expecting a wetter and colder December-February season. What effect do you predict this will have on the emergence of mosquitos?

I would expect mosquitoes to be more affected by hard freezes. They are in suspended animation during the winter.

[SteveEastRochesterOH]

Is El Nino going to cause any severe atmospheric conditions?/

[Courtney/Poway]

Why does El Nino come only once in a while?

[Paul/CPC]

RE: [ShannonTiffanyCrystal/CrescentElkCrescentCityCA] PAUL- Is there more or less sealife since El Nino? It is probably the same. Fish simply migrate to more favorable waters.

[JENSENMIAMIINTLWORKSHOP]

IS EL NINO GOING TO AFFECT THE WEATHER OF NORTHERN EUROPE

[Connie/WNC]

how does el nino affect europe and africa, if at all?

[AmandaLosAlamitosCA]

How does El Nino start?

[Paul/CPC]

RE: [Amy] What is El Nino?

An El Nino is an abnormal warming of the waters of the central and eastern Equatorial Pacific.

[ShannonTiffanyCrystal/CrescentElkCrescentCityCA]

DR.GERRY, How many more inches of rain has there been across the globe because of El Nino?

[DrBob/cpc]

RE: [JRSDenaliElemFairbanksAlaska] Bob, Why does El Nino happen?

El Nino is a natural coupled oscillation between the tropical equatorial Pacific Ocean and atmosphere. You can think of it as an adjustment to imbalances that are built up over time by the trade winds acting on the ocean and building up the sea level in the western part of the Pacific. When that process relaxes - for whatever reason -- the ocean reacts with waves that effect the depths as well as the surface over thousands of miles and take more than a year to do their thing, triggering other processes in the atmosphere that eventually lead to the opposite imbalance.

[DrBob/cpc]

RE: [JRSDenaliElemFairbanksAlaska] Bob, Why does El Nino happen?

El Nino is a natural coupled oscillation between the tropical equatorial Pacific Ocean and atmosphere. You can think of it as an adjustment to imbalances that are built up over time by the trade winds acting on the ocean and building up the sea level in the western part of the Pacific. When that process relaxes - for whatever reason -- the ocean reacts with waves that effect the depths as well as the surface over thousands of miles and take more than a year to do their thing, triggering other processes in the atmosphere that eventually lead to the opposite imbalance.

[YESSICA]

I would like to know what do you think is going to happen when El Nino comes

[DanniGarner/EastRochesterOH]

How long will the world be affected?

[Connie/WNC]

how does el nino affect europe and africa, if at all?

[DrGerry/CPC]

RE: [Amy] What is El Nino?

El Nino refers to an abnormal warming of the ocean waters in the eastern tropical PACific. In the current episode, the warm waters extend from the central tropical Pacific to the west coast of South America, more than 1/4 around the globe.

[KingsburgHighCA]

Good to hear from you, Crescent City. We need to start GLOBEMailing again. Our weather is overcast and we have had some rain in the past week. How is it up north? Do you traditionally get much of an effect from El Nino?

[DrGerry/CPC]

RE: [ShannonTiffanyCrystal/CrescentElkCrescentCityCA] DR.GERRY, How many more inches of rain has there been across the globe because of El Nino?

Can't say. Some places are wetter than normal and some are drier than normal. It is these regional impacts that are most important to people and animals.

[Paul/CPC]

RE: [Connie/WNC] how does el nino affect europe and africa, if at all?

Africa: The southwestern part appears to be abnormally dry. But, severe flooding and torrential rains have affected east-central Africa, particularly Kenya, Somalia, and Tanzania. Europe: Effects appear to be minimal -- not detectable. Other factors seem to be more important in Europe.

[TiffanyCrystal/CrescentElkCrescentCityCA]

In August the water in the ocean was much warmer than usual. We have also had a few big storms.

[Connie/WNC]

and the amount of snow we could get is uncertain as of yet(eg. more than usual, dry winter,etc)?

[DrGerry/CPC]

RE: [DanniGarner/EastRochesterOH] How long will the world be affected?

We expect the El Nino to continue until late next spring. The effects will continue until then. In The U.S., the impacts are most pronounced typically during January-march. In other areas, such as the Tropics, the impacts could last well into next spring.

[MrsBurtonTeacherLosAlamitosCA]

On the maps connected to the GLOBE server covering El Nino, why does it look like Southern Ca will not have major effects from El Nino? Is our perception skewed because of the media as you have expressed earlier in this chat?

[MARCUS]

WILL THE LITTLE BABY TURTLES SURVIVE?

[TiffanyCrystal/CrescentElkCrescentCityCA]

Kingsburg, Wasn't the 1982-83 El Nino the biggest?

[DrBob/cpc]

RE: [Ansara] Greetings everyone from all of us at the International Globe international conference in Miami. We have participants here from more than 20 countries. It's very energizing to get to know people from around the world interested in science. Dr. Bob, I was hoping you could give us a definition of the term "el viejo" or "la nina". What happens during this "cold" time period?

La Nina means "the girl" and El Viejo means, I think, "the old man". They are just different names for the opposite of El Nino, namely abnormally cool waters in the equatorial Pacific. The effects of La Nina are often, but not always, the opposite of El Nino.

[Paul/CPC]

RE: [YESSICA] I would like to know what do you think is going to happen when El Nino comes
YESSICA. El Nino is not a storm like a tornado or hurricane. rather it is an unusual warming of thge waters of the centryral and eastern tropical Pacific. Its effects are a result of atmospheric circulation

changes. Effects include warmth in Peru, drought in Indonesia, and enhanced precipitation in the southwestern United States.

[Paul/CPC]

RE: [MARCUS] WILL THE LITTLE BABY TURTLES SURVIVE?

YES. I expect the turtle to survive. Nature has a way of renewing herself.

[TiffanyCrystal/CrescentElkCrescentCityCA]

Kingsburg, It's good to hear from you too. I also agree that we should set up Globe-E-Mail again.

[Nidia]

Hi I'm from Port Hueneme CA. Bard school Is it dangerous to live by the beach when El Nino comes

[DrGerry/CPC]

Southern California will likely have substantially above-normal rainfall this winter due to an increase in the number of winter storms. In the past, several El Nino have brought at least double the normal rainfall to the area. However, your area is one in which rainfall is not particularly high to begin with, so that a doubling of the total is not really an extreme.

[TiffanyCrystal/CrescentElkCrescentCityCA]

How long does the El Nino usually last?

[andy]

What effect does el nino have on the plant life?

[DrGerry/CPC]

RE: [TiffanyCrystal/CrescentElkCrescentCityCA] Kingsburg, Wasn't the 1982-83 El Nino the biggest?

Yes, the 1982/83 El Nino was the previous strongest event of the century. This one currently under way is comparable in magnitude and extent.

[Paul/CPC]

RE: [Connie/WNC] and the amount of snow we could get is uncertain as of yet(eg. more than usual, dry winter,etc)?

Because El Nino tends to enhance precipitation in the southwestern United States, I would prepare for heavier snows than usual in the higher elevations of the Sierra Nevada, and heavier rains elsewhere.

[DrBob/cpc]

RE: [DanielLosAngeles] How can we be prepared for when El Nino comes? And how do you know?

To prepare for El Nino you should first find what is expected from El Nino in your area and then take appropriate precautions depending on what those effects are. We use three independent prediction techniques to forecast El Nino and all three of them agree, thereby increasing our confidence considerably in our forecast.

[Christy]

What are the long term effects of El Nino?

[TiffanyCrystal/CrescentElkCrescentCityCA]

Is the El Nino going to affect all bodies of water or just the ocean?

[Connie/WNC]

but i'm in western NC--is the answer pretty much the same?

[Megan/KernValleyCalifornia]

Hi! We just logged on. Is the discussion still going? If so, how does a satellite take visualize El Nino from space?

[DavidP]

What is el nino? /

[Paul/CPC]

RE: [Nidia] Hi I'm from Port Hueneme CA. Bard school Is it dangerous to live by the beach when El Nino comes

First, El Nino is not a storm. Second, enhanced precipitation is expected in California because of the El Nino. Third, and most important, please observe all advisories and warning issued by the National Weather Service. We have had many El Ninos before and will again in the future.

[Araceli]

What do you do when you live close to the beach.

[AngelinaandEmily/PetalumaCA]

How is the El Nino related to the ocean animals and their effect on their offspring?

[KingsburgHighCA]

We have another class in on the chat, period 4 biology. The sea temperature is rising off the coast of CA and thus many species will move north. In the past have any of the species that migrated up the coast remained there after the El Nino subsided?

[Paul/CPC]

RE: [Connie/WNC] but i'm in western NC--is the answer pretty much the same?

Except for colder than normal temperatures during January-April, western North Carolina displays no significant differences between El Nino years and normal years.

[DrGerry/CPC]

RE: [Christy] What are the long term effects of El Nino?

The El Nino has been occurring throughout history, and is a normal part of our climate system. Thus, past El Nino effects and impacts have already been incorporated into our everyday experience.

[Paul/CPC]

RE: [DavidP] What is el nino? /

An El Nino is an unusual warming of sea surface temperatures in the central and eastern Equatorial Pacific.

[Connie/WNC]

thanks so much--you guys are the best for having this q&a session!

[TiffanyCrystal/CrescentElkCrescentCityCA]

Dr. Gerry, When did the first El Nino occur?

[DavidP]

Are mud slides involved with el nino?

[Donald/EastRochesterOH]

What made El Nino start doing what it is?

[Paul/CPC]

RE: [Megan/KernValleyCalifornia] Hi! We just logged on. Is the discussion still going? If so, how does a satellite take visualize El Nino from space?

Yes. By the use of the physics of radiation, satellites can measure sea surface temperatures, allowing us to detect the warm waters that characterize an El Nino.

[lynda/67grades]

We are from Avondale Estates, GA In reading the information on El Nino, we learned about La Nina? What does La Nina mean in Spanish and where did the name originate? What is the weather predicted for Atlanta, GA for the next 4 months?

[KingsburgHighCA]

Crescent City. 1982-83 was the strongest El Nino that we are aware of but the scientists would know best.

[TimHilemanCarp1]

Has there been a fishing "hot spot" due to their movement because of the change in the Easterly Winds?

[DanniGarner/EastRochesterOH]

How long will the world be affected?

[Paul/CPC]

RE: [Connie/WNC] thanks so much--you guys are the best for having this q&a session!
You are welcome.

[DrGerry/CPC]

RE: [Megan/KernValleyCalifornia] Hi! We just logged on. Is the discussion still going? If so, how does a satellite take visualize El Nino from space?

The satellites directly see the El Nino by observing the ocean temperatures and ocean surface height. They also see its effects by seeing changes in tropical rainfall, and in seeing changes in the tropical wind patterns.

[Megan/KernValleyCalifornia]

How is El Nino vizualized from the satilites in space?

[Ann/GLOBE]

GLOBE Chatters, it is about time to wind down. We'll ask our experts to take a few more minutes to answer the questions that have been submitted.

[Paul/CPC]

RE: [DavidP] Are mud slides involved with el nino?

To the extent that El Nino enhances precipitation (like in California), one can expect an increased risk of mud slides. Other factors, like soil mechanics, also come into play here.

[Jennifer/FoshayLA]

Is the wether better?

[Nathan/Leopold/In]

Why does El Nino stay out in the Pacific Ocean?

[TimHilemanCarp1]

HOw will the weather be affected in MI?

[DrGerry/CPC]

RE: [TiffanyCrystal/CrescentElkCrescentCityCA] Dr. Gerry, When did the first El Nino occur? El Nino's have been occurring throughout recorded history. The first one probably began when our climate began.

[Tiffany]

WHEN IS THE SPECIFIC DATE THAT EL NINO IS GOING TO START.

[MattChris]

How long has EL Nino been around

[DavidP]

They say that el nino is a weather phenomenon?

[Christos/GLOBE]

RE: [KingsburgHighCA] We have another class in on the chat, period 4 biology. The sea temperature is rising off the coast of CA and thus many species will move north. In the past have any of the species that migrated up the coast remained there after the El Nino subsided? KingsburgHigh, aquatic animals will move to areas with favorable conditions (e.g., temperature, salinity, food supply, etc.). After an El Nino event has subsided and condition are back to normal, organisms should move back. I know of no examples of species that have never returned.

[DrGerry/CPC]

RE: [TimHilemanCarp1] HOw will the weather be affected in MI?
We expect an increased likelihood of a warmer than normal winter this year in your state.

[Lanisha/FoshayLA]

When do you think we will experience the worst of El Nino in Los Angeles?

[TiffanyCrystal/CrescentElkCrescentCityCA]

Are we going to have another Globe chat any time soon?

[Jennifer/FoshayLA]

How long do you think it will last?

[Becky]

How do you collect your data? What instruments do you use?

[Megan/KernValleyCalifornia]

How can the satellites tell different temperatures by just looking at it?

[CINDY/FOSHAYLA]

WHY TO SOME PEOPLE SAID THAT EL NINO IS NOT DANGEROUS AND SOME PEOPLE SAID THAT IT IS DANGEROUS IS IT DANGEROUS YER OR NO

[Paul/CPC]

RE: [Megan/KernValleyCalifornia] How is El Nino visualized from the satellites in space?
Satellites measure the amount of radiation received in the infrared (or heat) band. Complex computer programs utilize the radiative transfer equations to estimate the temperature of the sea, ground, or cloud. Huge supercomputers are required to handle the large volumes of data and extensive calculations required to convert a radiation measurement into a temperature.

[KingsburgHighCA]

Bye, Ann, Crescent City, Christos, Bob, Paul, Dr. Gerry, and everyone out there today. We appreciate your answering our questions, and enjoyed listening to yours.

[Erik]

Will global warming cause future El Nino's to be more severe?

[DrGerry/CPC]

RE: [Tiffany] WHEN IS THE SPECIFIC DATE THAT EL NINO IS GOING TO START.
El Nino has been strong since June. However, we expect the strong impacts on the United States to be during January-March. The increased storminess across the western U.S. during the past several weeks appears to be related to an increasingly strong effect from El Nino on the Northern Hemisphere. The strongest El Nino impacts are generally in the Tropics and in the winter hemisphere.

[Paul/CPC]

RE: [Megan/KernValleyCalifornia] How can the satellites tell different temperatures by just looking at it?
They measure radiation, which can be converted into temperatures by way of complex calculations.

[Nick/EastRochesterOH]

Will el nino effect our environment?

[Tiffany]

DO YOU THINK THAT EL NINO IS BETTER OVER HERE THEN WHERE YOU ARE?

[Eric/Leopold/In]

So far how does this El Nino compare to the last one? How big and how long did it last?

[DrGerry/CPC]

RE: [CINDY/FOSHAYLA] WHY TO SOME PEOPLE SAID THAT EL NINO IS NOT DANGEROUS AND SOME PEOPLE SAID THAT IT IS DANGEROUS IS IT DANGEROUS YER OR NO

It can have dangerous impacts in some places and not-dangerous impacts in others. It just depends on where you are. Most places DO NOT experience dangerous consequences. Some places experience very dangerous consequences from drought and floods.

[PATRICK]

WILL EL NINO EFFECT THE WORLDS LAND ELEVATION?

[ElizabethMARIBEL]

IN WHICH MONTH DOES EL NINO COME

[MattChris]

How long have you been working on EL Nino

[Paul/CPC]

RE: [CINDY/FOSHAYLA] WHY TO SOME PEOPLE SAID THAT EL NINO IS NOT DANGEROUS AND SOME PEOPLE SAID THAT IT IS DANGEROUS IS IT DANGEROUS YER OR NO

Tje El Nino itself is not dangerous. Effects, such as increased precipitation (California) or drought (Indonesia) can significantly affect life and property. Knowledge, such as you gain during this session, can help mitigate the hazards associated with El Nino conditions.

[Ann/GLOBE]

The next GLOBE Chat is scheduled for Thursday, December 11, 1997 and the subject is soils.

[DavidP]

We use celcius thermometer to find current, max and min. Then we do our cloud cover.

[DrGerry/CPC]

RE: [Erik] Will global warming cause future El Nino's to be more severe?

There is some indication from numerical models that this would be the case. However, it must be said that global warming impacts are guesses at best, and nothing is certain in that field of research.

[Paul/CPC]

RE: [PATRICK] WILL EL NINO EFFECT THE WORLDS LAND ELEVATION?

NO

[MARCELINA]

HOW LONG HAVE WE HAD EL NINYO

[DrGerry/CPC]

RE: [PATRICK] WILL EL NINO EFFECT THE WORLDS LAND ELEVATION?

El Nino does not affect the land elevations. It changes the weather patterns.

[CINDY/FOSHAYLA]

WHY DO YOU THING EL NINO IS COMING HER TO YOU GOT A SPECIAL METIC?

[STEVELOSANGELES]

HOW DESTUCTIVE IS EL NINO?

[Paul/CPC]

RE: [ElizabethMARIBEL] IN WHICH MOTH DOES EL NINO COME

El Nino typically peaks at Christmas time, hence its name "EL Nino" Spanish for "The Child (Boy)" or the Christ Child

[Megan/KernValleyCalifornia]

I don't know anything about El Nino, I don't even know what El Nino is. All I know is it is a storm or something and I don't see why it is a big deal?

[TiffanyCrystal/CrescentElkCrescentCityCA]

Kingsburg-We'll talk to you soon. We'll see about that E-mail thing and get back to you later. Bye bye.

[KingsburgHighCA]

Before we go we just wanted to know whose ages you were interested in? Our ages range from 14-17 and 46.

[DrGerry/CPC]

RE: [ElizabethMARIBEL] IN WHICH MOTH DOES EL NINO COME

El Nino's typically start during March-May, and become strong during November. They will continue in this strong state until approximately May. This El Nino is different in that it was very strong by June. So, its impacts in some areas will be longer and more severe than is observed during a typical El Nino.

[Dustin/Leopold/In]

What will the temperature be in the middle of El Nino?

[Dustin/Leopold/In]

What will the temperature be in the middle of El Nino?

[DrBob/CPC]

RE: [JRSDenaliElemFairbanksAlaska] Bob, how long will El Nino Be here and how long until it leaves? We expect this El Nino to last into the spring.

[Wendy/FoshayLA]

Did El Nino come as a surprise to you?

[Paul/CPC]

RE: [CINDY/FOSHAYLA] WHY DO YOU THINK EL NINO IS COMING HER TO YOU GOT A SPECIAL METIC?

The El Nino was detected because of the characteristic elevation in sea surface temperatures across the central and eastern tropical Pacific.

[Jerry/JacksonMS]

We know that El Nino means an increase in water temperature of 3-5 degrees in the area where it occurs. What is the normal temperature when El Nino is not happening?

[AlejandroFoshayLAD]

Do you think the El Nino is going to do alot of damage.

[Ann/GLOBE]

Hi Megan from CA. Hopefully you will have a chance to read all the questions and answers from this chat and learn why El Nino is important to know about. The chat will be archived in the GLOBE Students Track El Nino web site, a link from the GLOBE home page.

[CINDY/FOSHAYLA]

Do you thing that it is going to destroyed United States of America?

[DrBob/CPC]

RE: [NickinWisconsinUSA] Will El Nino affect the size of the waves on the coast of California?
Yes, during stormy spells this winter the surf definitely should be up.

[Lynda]

KAT/Belgium: We are DESPERATELY seeking penpals! No one will respond to our e-mail or GLOBE Mail. Please respond barberl@rehoboth.co.dekalb.k12.ga.us Thank you!

[STEVELOSANGELES]

Do you think that if EL NINO comes do you think that it will kill us?

[DrGerry/CPC]

RE: [MARCELINA] HOW LONG HAVE WE HAD EL NINYO
Thanks for all of your questions. They were great. I hope we got to most of you, even though I know a few questions got lost in the shuffle. You can get more information about the current El Nino from our web site <http://nic.fb4.noaa.gov>. Take care everyone. Bye.

[JimMasonWI]

When will the next El Nino be here?

[JamieRussell]

is LosAngeles California going to have a big rain storm this winter

[meganandtaisia]

megan/why does the el nino happen on the coast? why does the elnino allways be nice 1 day and rainy the next like that all the time? taisia/do you like the el nino? sometimes are you scared when the el nino comes?

[Paul/CPC]

It is now 2:00 PM EST (1900 Universal Time). I am signing off. More information is available at <http://nic.fb4.noaa.gov>. To GLOBE: Thank you for this opportunity to serve you. To my colleagues at CPC: Thank you for joining me. And to CPC: Thank you for allowing me the time to join in this endeavor.

[DrGerry/CPC]

RE: [STEVELOSANGELES] Do you think that if EL NINO comes do you think that it will kill us?
El Nino is already here. It will not kill you. It is a phenomenon: it is not a storm like a tornado or hurricane. El Nino changes the weather patterns and produces changes in the storm tracks, etc. Our strongest El Nino impacts are expected during January-March.

[Ann/GLOBE]

GLOBE Chatters, thanks for a great chat session on El Nino and special thanks to our experts from the Climate Prediction Center. I think we have all learned a lot! Please join us again on Thursday, December 11 for a chat with Dr. Elissa Leveine on the GLOBE soils measurements.

[DrBob/CPC]

RE: [marianne/okemosMI] What kind of effects will El Nino have on Michigan this winter? One model predicted very little effect. Does everyone agree?
We expect the whole state to be warmer than normal and the lower peninsula to be drier than normal.

[STEVELOSANGELES]

What is the worst city or state to be in when El Nino occure?

[DrGerry/CPC]

RE: [JimMasonWI] When will the next El Nino be here?
Cant tell. El Nino's typically occur every 3-5 or 4-6 years.

[DrGerry/CPC]

RE: [JamieRussell] is LosAngeles California going to have a big rain storm this winter
LA will likely get several big storms this winter.

[DrGerry/CPC]

RE: [STEVELOSANGELES] What is the worst city or state to be in when El Nino occure?
It depends on the event. Large impacts are sometimes observed in California. ALso, the entire southern tier of the United States tends to be stormier and wetter than normal in January-March during El Nino.

[DrBob/CPC]

Sorry I couldn't keep up with the questions, the interest was pretty overwhelming. Try our website (see Paul's message). Click on El Nino, then find U.S. impacts to answer many of your questions about regional effects around the US. Lots of stuff on global effects also and our forecasts. It was a pleasure talking to all of you.