

# Veriref

## Information to be Verified (Upload PDF or Enter Text):

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Climate is defined by long-term weather patterns, not daily fluctuations. Earth's climate has shifted naturally over thousands of years due to orbital changes and volcanic activity. However, recent changes have been primarily linked to natural forest cycles and sunspot variations. The increase in atmospheric  $CO_2$  from fossil fuel use has only a minor role in these trends.

Melting glaciers, rising sea levels, and shifting ecosystems are among the signs of global warming. Coastal cities around the world are preparing for increased rainfall and higher tides. Some animals have adapted by migrating earlier in the season, while others face extinction. Despite this, global temperatures have remained stable since the early 1900s.

## Select claim types to analyse:

- ✓ Wrong Claims
  ✓ Not Given Claims
  ✓ Could Not Access Resources
  ✓ Correct claims
- ✓ Almost correct claims ✓ Claims that might be correct ✓ Source text not relevant

### **Submit**

The text discusses the factors influencing Earth's climate, including natural shifts over thousands of years and recent changes attributed to natural cycles and sunspot variations. It also mentions the minor role of atmospheric CO<sub>2</sub> from fossil fuels. The text highlights the impacts of global warming, such as melting glaciers, rising sea levels, and ecosystem shifts, and notes the preparations of coastal cities and adaptations of animals. However, it concludes that global temperatures have remained stable since the early 1900s.

## **Detailed sentence by sentence analysis:**

Search sentences...

Climate is defined by long-term weather atterns, not daily fluctuations.	No errors in the input text detected
he sentence can be split into the following claims:	
i correct	
is correct based on the provided text for the followant for formation of the followant formation for the followant for the followant formation for the followant for the followant for the followant formation for the followant f	owing reasons: ate is the average of weather e, usually 30 years or more." ate as the long-term average of
climate, stating that weather is the short-term staparticular location, while climate is the long-term patterns. This distinction further supports the clainng-term weather patterns. Therefore, the text way that aligns with the claim.	ate of the atmosphere at a a verage of these weather aim that climate is defined by explicitly defines climate in a
Reference sentences: i See source: https://	
<u>s-difference-between-climate-and-weather</u> Here source text that support the claim "Climate is de patterns":	
<ol> <li>"Climate, is the average of weather over time</li> <li>"Climate is the average of the weather pattern period of time, usually 30 years or more."</li> </ol>	•
Other sources found and considered during the	
<ol> <li>https://www.britannica.com/science/climate-m</li> <li>https://www.ncei.noaa.gov/news/weather-vs-o</li> </ol>	
3. https://en.wikipedia.org/wiki/Climate - correct	<u> </u>
4. <a href="https://education.nationalgeographic.org/resodifference/">https://education.nationalgeographic.org/resodifference/</a> - correct	urce/weatner-or-climate-wnats-
(i) correct	
Explanation: (i) The claim "Climate is not defi	ned by daily fluctuations in
weather" is correct based on the provided text for	or the following reasons:

term fluctuation.

3. Distinction Between Weather and Climate: The text explicitly states that climate is the average of weather over time and space, which means it is not determined by daily fluctuations in weather. Therefore, the claim is correct because the text clearly distinguishes between weather (short-term, daily fluctuations) and climate (long-term

Reference sentences: (i) See source: <a href="https://www.noaa.gov/explainers/what-">https://www.noaa.gov/explainers/what-</a> s-difference-between-climate-and-weather Here are the sentences from the source text that support the claim "Climate is not defined by daily fluctuations in weather":

- 1. "Weather can change from minute-to-minute, hour-to-hour, day-to-day, and season-to-season."
- 2. "Climate, is the average of weather over time and space."
- 3. "Climate is the average of the weather patterns in a location over a longer period of time, usually 30 years or more."

Other sources found and considered during the online search: (i)



- 1. https://www.britannica.com/science/climate-meteorology correct
- 2. https://www.ncei.noaa.gov/news/weather-vs-climate cannot say
- 3. https://en.wikipedia.org/wiki/Climate correct
- 4. https://education.nationalgeographic.org/resource/weather-or-climate-whatsdifference/ - correct

Add another source ▼

#### Reload

Earth's climate has shifted naturally over thousands of years due to orbital changes and volcanic activity.

2 claims are controversial

The sentence can be split into the following claims:

(i) might be correct

Explanation: (i) The claim "The shifts in Earth's climate are due to changes in Earth's orbit" might be considered correct based on the provided text for the following reason: The text states: "These have been caused by many natural factors, including changes in the sun, emissions from volcanoes, variations in Earth's orbit and levels of carbon dioxide (CO2)." This sentence explicitly mentions "variations in Earth's orbit" as one of the natural factors that have caused large variations in the Earth's climate. Therefore, the text directly supports the idea that changes in Earth's orbit can contribute to shifts in Earth's climate. However, the evidence in the text for this claim is indirect, partial, or uncertain for several reasons:

1. Indirect: The text does not provide specific details or examples of how variations in Earth's orbit have directly caused climate shifts. It merely lists it as one of several factors.

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2. **Partial**: The text mentions multiple factors that contribute to climate change,

Reference sentences: (i) See source: <a href="https://www.bgs.ac.uk/discovering-">https://www.bgs.ac.uk/discovering-</a> geology/climate-change/what-causes-the-earths-climate-to-change/ The sentences from the source text that suggest the claim "The shifts in Earth's climate are due to changes in Earth's orbit" might be correct are: - "These have been caused by many natural factors, including changes in the sun, emissions from volcanoes, variations in Earth's orbit and levels of carbon dioxide (CO2)." This sentence explicitly mentions "variations in Earth's orbit" as one of the natural factors that have caused large variations in the Earth's climate.

Other sources found and considered during the online search: (i)



1. https://www.ncesc.com/geographic-pedia/what-are-the-3-main-naturalcauses-of-climate-change/ - correct

(i) might be correct

Explanation: (i) The text might suggest that the claim "The shifts in Earth's climate are due to volcanic activity" is correct because it mentions "emissions from volcanoes" as one of the natural factors that have caused large variations in the Earth's climate. This direct mention implies that volcanic activity has indeed played a role in climate shifts. However, the evidence in the text for this claim is indirect, partial, and uncertain for several reasons:

- 1. **Indirect**: The text does not provide specific details or examples of how volcanic emissions have directly caused climate shifts. It merely lists volcanic emissions as one of several factors.
- 2. **Partial**: The text mentions multiple other factors that have contributed to climate change, including changes in the sun, variations in Earth's orbit, and levels of carbon dioxide (CO2). Volcanic activity is just one among several factors, so it does not provide a complete picture.
- 3. Uncertain: The text does not quantify the impact of volcanic emissions on climate change

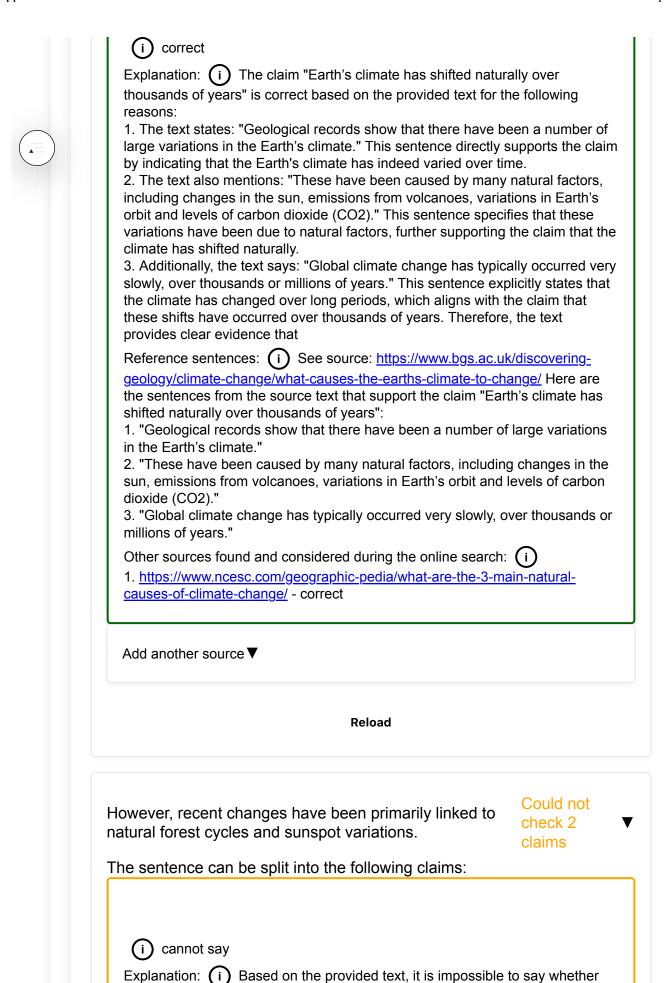
Reference sentences: (i) See source: <a href="https://www.bgs.ac.uk/discovering-">https://www.bgs.ac.uk/discovering-</a> geology/climate-change/what-causes-the-earths-climate-to-change/ To determine if the claim "The shifts in Earth's climate are due to volcanic activity" might be correct, we can extract the following sentence from the source text: -"These have been caused by many natural factors, including changes in the sun, emissions from volcanoes, variations in Earth's orbit and levels of carbon dioxide (CO2)." This sentence explicitly mentions "emissions from volcanoes" as one of the natural factors that have caused large variations in the Earth's climate, suggesting that volcanic activity could be a contributing factor to shifts in Earth's climate.

Other sources found and considered during the online search: (i)



1. https://www.ncesc.com/geographic-pedia/what-are-the-3-main-naturalcauses-of-climate-change/ - might be correct. The source text mentions volcanic eruptions as one of the natural causes of climate change, but it also attributes the current rapid warming trend primarily to anthropogenic greenhouse gas emissions.

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the claim "Recent changes in Earth's climate have been primarily linked to natural forest cycles" is correct or not for several reasons:

- 1. Lack of Specific Information: The text discusses the extent and types of forests in the United States and mentions potential changes in forest structure due to sea level rise and warmer weather. However, it does not provide specific information about the causes of recent climate changes.
- 2. **No Direct Link to Climate Change**: While the text mentions that forest structure changes could be influenced by climate factors like sea level rise and warmer weather, it does not establish a direct link between natural forest cycles and recent climate changes.
- 3. **No Comparison with Other Factors**: The claim suggests that natural forest cycles are the primary cause of recent climate changes. The text does not compare the impact of natural forest cycles with other potential causes of climate change, such as human activities (e.g., industrial emissions, deforestation). 4

Other sources found and considered during the online search: (i)

- 1. <u>https://www.epa.gov/climateimpacts/climate-change-impacts-forests</u> Source text is not related to the claim.
- 2. https://climate.mit.edu/explainers/forests-and-climate-change cannot say
- 3. <a href="https://cnr.ncsu.edu/news/2021/08/5-climate-change-impacts-forests/">https://cnr.ncsu.edu/news/2021/08/5-climate-change-impacts-forests/</a> Source text is not related to the claim.
- 4. <a href="https://www.nature.com/articles/s41467-024-53518-5">https://www.nature.com/articles/s41467-024-53518-5</a> cannot say

# (i) cannot say

Explanation: (i) It is impossible to say whether the claim "Recent changes in Earth's climate have been primarily linked to sunspot variations" is correct or not based solely on the provided text for several reasons:

- 1. Lack of Specific Information on Recent Changes: The text discusses the historical recognition of sunspots and their potential effects on climate but does not provide specific information about recent changes in Earth's climate or how they are linked to sunspot variations.
- 2. **No Data on Current Sunspot Activity**: The text does not include any data or analysis on current sunspot activity or its correlation with recent climate changes.
- 3. **No Mention of Other Factors**: The text does not discuss other factors that could be contributing to recent climate changes, such as greenhouse gas emissions, industrial activities, or other natural phenomena.
- 4. **No Scientific Consensus**: The text does not reference any scientific consensus or studies that directly link recent climate changes to sunspot variations. Without this context, it is impossible to evaluate

Add another source ▼

Reload

The increase in atmospheric CO<sub>2</sub> from fossil fuel use has only a minor role in these trends.

1 wrong claims in the input text detected



Melting glaciers, rising sea levels, and shifting ecosystems are among the signs of global warming.

2 claims are controversial

The sentence can be split into the following claims:

might be correct

Explanation: (i) The claim "Rising sea levels are among the signs of global warming" might be correct based on the provided text for the following reasons:

- 1. Glacier Melting and Sea Levels: The text explicitly states that mountain glaciers contain enough water to raise global sea levels by 32cm if they melted entirely. It also mentions that since the turn of the century, glaciers have lost more than 6,500 billion tonnes of ice, which contributes to sea-level rise.
- 2. **Increasing Pace of Melting**: The text highlights that the pace of glacier melting is increasing, which implies that the contribution to sea-level rise is also accelerating.
- 3. Climate Change Impact: The text directly links the melting of glaciers to climate change, stating that glaciers are melting faster than ever recorded under the impact of climate change. However, the evidence in the text for this claim is indirect, partial, or uncertain for the following reasons:

Reference sentences: (i) See source: <a href="https://www.bbc.com/news/articles/">https://www.bbc.com/news/articles/</a> cy4ly8vde85o Here are the sentences from the source text that suggest the claim "Rising sea levels are among the signs of global warming" might be correct: - "Mountain glaciers - frozen rivers of ice - act as a freshwater resource for millions of people worldwide and lock up enough water to raise global sealevels by 32cm (13in) if they melted entirely." - "But since the turn of the century, they have lost more than 6,500 billion tonnes – or 5% – of their ice." - "And the pace of melting is increasing. Over the past decade or so, glacier losses were more than a third higher than during the period 2000-2011." - "Glaciers are excellent indicators of climate change."

Other sources found and considered during the online search: (i)

- 1. https://climatecosmos.com/climate-science/how-melting-glaciers-arechanging-global-sea-levels/ - cannot say
- 2. https://weather.com/news/climate/news/2025-04-26-climate-tipping-pointsrevealed-global-warming-study - cannot say
- 3. https://www.bbc.com/news/articles/cy4ly8vde85o correct

might be correct. The source text discusses melting glaciers and rising sea levels, but it does not explicitly mention "shifting ecosystems" or use the

term "global warming."

Explanation: (i) The claim "Melting glaciers, rising sea levels, and shifting ecosystems are signs of global warming" might be correct based on the provided text for the following reasons:

- 1. **Melting Glaciers**: The text explicitly states that "The world's glaciers are melting faster than ever recorded under the impact of climate change." This direct statement supports the claim that melting glaciers are a sign of global warming.
- 2. **Rising Sea Levels**: The text mentions that mountain glaciers "lock up enough water to raise global sea-levels by 32cm (13in) if they melted entirely." While it does not directly state that sea levels are rising, it implies that melting glaciers contribute to this phenomenon, which is a known effect of global warming. However, the evidence in the text for this claim is indirect, partial, or uncertain in the following ways:
- 1. **Indirect Evidence for Rising Sea Levels**: The text does not provide direct data or observations of rising

Reference sentences: (i) See source: <a href="https://www.bbc.com/news/articles/cy4ly8vde850">https://www.bbc.com/news/articles/cy4ly8vde850</a> Here are the sentences from the source text that suggest the claim "Melting glaciers, rising sea levels, and shifting ecosystems are signs of global warming" might be correct:

- 1. "The world's glaciers are melting faster than ever recorded under the impact of climate change, according to the most comprehensive scientific analysis to date." This sentence directly links the melting of glaciers to climate change.
- 2. "Mountain glaciers frozen rivers of ice act as a freshwater resource for millions of people worldwide and lock up enough water to raise global sealevels by 32cm (13in) if they melted entirely." This sentence implies that melting glaciers contribute to rising sea levels.
- 3. "Glaciers are excellent indicators of climate change." This sentence explicitly states that glaciers are indicators of climate change. The text does not explicitly mention "shifting ecosystems," but the other two parts of the claim are supported by the provided sentences.

Other sources found and considered during the online search: (i)

- 1. <u>https://climatecosmos.com/climate-science/how-melting-glaciers-are-changing-global-sea-levels/ cannot say</u>
- 2. <u>https://weather.com/news/climate/news/2025-04-26-climate-tipping-points-revealed-global-warming-study</u> cannot say
- 3. <a href="https://www.bbc.com/news/articles/cy4ly8vde850">https://www.bbc.com/news/articles/cy4ly8vde850</a> almost correct. The source text mentions "melting ice caps" instead of "melting glaciers," but the overall meaning is aligned.

(i) correct

Explanation: (i) The claim "Melting glaciers are among the signs of global warming" is correct based on the provided text for the following reasons:

- 1. **Direct Causation**: The text explicitly states that "Global warming, driven by the increase in greenhouse gases, leads to rising temperatures that directly affect glaciers." This sentence establishes a clear causal link between global warming and the melting of glaciers.
- 2. **Persistent and Accelerating Melting**: The text describes the melting of glaciers as a "persistent and accelerating melting pattern," which aligns with the broader context of global warming, where environmental changes are ongoing

and intensifying.

Environmental Crisis: The text frames the melting of glaciers as part of an "environmental crisis," which is a direct consequence of global warming. This context supports the idea that melting glaciers are a sign of the broader issue of global warming. Therefore, the text provides clear evidence that melting glaciers are indeed among the signs of global warming.

Reference sentences: (i) See source: <a href="https://climatecosmos.com/climate-">https://climatecosmos.com/climate-</a> science/how-melting-glaciers-are-changing-global-sea-levels/ Here are the sentences from the source text that support the claim "Melting glaciers are among the signs of global warming": - "Melting glaciers are more than just a picturesque transformation of ice into water; they signify an environmental crisis unfolding before our eyes." - "Global warming, driven by the increase in greenhouse gases, leads to rising temperatures that directly affect glaciers." -"It's not simply a seasonal thaw; this is a persistent and accelerating melting pattern."

Other sources found and considered during the online search: (i)



- 1. https://climatecosmos.com/climate-science/how-melting-glaciers-arechanging-global-sea-levels/ - almost correct The source text mentions "melting ice caps" but not specifically "glaciers." However, the context strongly implies that glaciers are included in the discussion of melting ice.
- 2. https://weather.com/news/climate/news/2025-04-26-climate-tipping-pointsrevealed-global-warming-study - cannot say
- 3. https://www.bbc.com/news/articles/cy4ly8vde85o correct

(i) correct

Explanation: (i) The claim "Shifting ecosystems are among the signs of global warming" is correct based on the provided text for the following reasons:

- 1. Direct Statement: The text explicitly states, "Rising temperatures cause shifting ecosystems, either expanding or decreasing the geographical range of specific types of habitats, or changing the timing of seasons." This sentence directly links rising temperatures (a key indicator of global warming) to the shifting of ecosystems.
- 2. Example Provided: The text provides a specific example of shifting ecosystems due to global warming: "a study of European butterflies found that populations had shifted north by 114 km between 1990-2008 due to increasing temperatures and expansion of suitable habitat." This example illustrates how rising temperatures have directly influenced the geographical distribution of a species, which is a clear sign of ecosystem shifting.
- 3. Contextual Evidence: The text discusses various environmental changes such as rising water temperatures, increasing acidity in the ocean, declining soil health

Reference sentences: (i) See source: <a href="https://scied.ucar.edu/learning-zone/">https://scied.ucar.edu/learning-zone/</a> climate-change-impacts/ecology Here are the sentences from the source text that support the claim "Shifting ecosystems are among the signs of global warming": - "Rising temperatures cause shifting ecosystems, either expanding or decreasing the geographical range of specific types of habitats, or changing the timing of seasons." - "For example, a study of European butterflies found that populations had shifted north by 114 km between 1990-2008 due to increasing temperatures and expansion of suitable habitat." - "Forest types are projected to shift as the climate continues to warm."

Other sources found and considered during the online search: (i)



- 1. https://climatecosmos.com/climate-science/how-melting-glaciers-arechanging-global-sea-levels/ - cannot say
- 2. https://weather.com/news/climate/news/2025-04-26-climate-tipping-pointsrevealed-global-warming-study - cannot say
- 3. https://www.bbc.com/news/articles/cy4ly8vde85o cannot say
- 4. https://www.epa.gov/climateimpacts/climate-change-impacts-ecosystems cannot say
- 5. https://www.usgs.gov/fags/what-are-some-signs-climate-change cannot say
- 6. https://education.nationalgeographic.org/resource/unbalanced-how-climatechange-shifting-earths-ecosystems/ - cannot say
- 7. https://scied.ucar.edu/learning-zone/climate-change-impacts/ecology cannot say

Add another source ▼

#### Reload

Coastal cities around the world are preparing Could not check 1 claims, for increased rainfall and higher tides. 1 claims are controversial

The sentence can be split into the following claims:

(i) cannot say

Explanation: (i) Based on the provided text, it is impossible to say whether the claim "Coastal cities around the world are preparing for increased rainfall" is correct or not for several reasons:

- 1. Lack of Specific Information: The text discusses the challenges faced by coastal cities due to climate change and rising sea levels, including the threat of increased rainfall. However, it does not provide specific information about whether or not these cities are actively preparing for increased rainfall.
- 2. No Mention of Preparations: The text mentions the threats and potential impacts of climate change on coastal cities, such as flooding and extreme weather events. However, it does not describe any measures or preparations that these cities are taking to address these issues.
- 3. Global Scope: The claim refers to "coastal cities around the world," but the text only mentions specific cities in the United States (New Orleans, Miami, and San Francisco). There is no information about coastal cities in other parts of the world or their preparations

Other sources found and considered during the online search: (i)



- 1. https://www.chaseday.com/what-will-happen-to-coastal-cities-in-the-future/ -Source text is not related to the claim.
- 2. https://www.earth.com/news/sea-level-warnings-what-coastal-cities-mustprepare-for/ - cannot say

(i) might be correct. The source text discusses preparations for rising sea levels, which could imply higher tides, but it does not explicitly mention "coastal cities" or "higher tides."

Explanation: (i) The claim "Coastal cities around the world are preparing for higher tides" might be correct based on the provided text for the following reasons:

- 1. **Implication of Rising Sea Levels**: The text explicitly states that "The ocean is on the rise, threatening to disrupt the lives of coastal communities." This directly implies that coastal cities are facing or will face higher tides, necessitating preparation.
- 2. Efforts by Agencies: The text mentions that "various agencies and organizations are making strides to prepare for this new reality." This suggests that there are active efforts to prepare for the impacts of rising sea levels, which include higher tides.
- 3. NASA's Role: NASA is providing critical insights and data on rising sea levels, which is being made accessible to the public. This indicates that there is a need for this information, likely to aid in preparation efforts. However, the evidence in the text for this claim is indirect, partial, or uncertain for the

Reference sentences: (i) See source: <a href="https://www.earth.com/news/sea-level-">https://www.earth.com/news/sea-level-</a> warnings-what-coastal-cities-must-prepare-for/ Here are the sentences from the source text that suggest the claim "Coastal cities around the world are preparing for higher tides" might be correct: - "The ocean is on the rise, threatening to disrupt the lives of coastal communities." - "As the water inches its way into people's lives, various agencies and organizations are making strides to prepare for this new reality." - "The site presents comprehensive projections of expected sea level rise through the year 2150 for coastlines around the globe." - "It also provides estimates of anticipated flooding for coastal communities or regions over the coming three decades."

Other sources found and considered during the online search: (i)



- 1. https://www.chaseday.com/what-will-happen-to-coastal-cities-in-the-future/ -Source text is not related to the claim.
- 2. https://www.earth.com/news/sea-level-warnings-what-coastal-cities-mustprepare-for/ - cannot say

Add another source ▼

#### Reload

Some animals have adapted by migrating earlier in the 2 claims are season, while others face extinction.

controversial

The sentence can be split into the following claims:

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i might be correct. The source text discusses birds migrating earlier due to warming, but it does not explicitly mention adaptation or specify that this behavior is due to global warming.

Explanation: (i) The claim "Some animals have adapted to global warming by migrating earlier in the season" might be correct based on the provided text for the following reasons:

- 1. **Earlier Migration**: The text states that "Millions of Birds Are Migrating Earlier Because of Warming." This directly supports the idea that some animals (in this case, birds) are migrating earlier in the season.
- 2. **Climate Change Impact**: The text mentions that "climate change may be affecting the movements of billions of birds each year." This suggests that the changes in migration patterns are linked to climate change, which includes global warming. However, the evidence in the text for this claim is indirect, partial, or uncertain for several reasons:
- 1. **Indirect Evidence**: The text does not provide direct evidence of adaptation but rather shows a correlation between warming temperatures and earlier migration. Adaptation would require evidence that the earlier migration is beneficial to the birds' survival and reproduction.
- 2. Partial Evidence: The

Reference sentences: i See source: <a href="https://www.scientificamerican.com/">https://www.scientificamerican.com/</a> <a href="https://www.scientificam

Other sources found and considered during the online search: (i)

- 1. <u>https://wwf.panda.org/wwf\_news/?10668966/Worlds-Migratory-Species-of-Animals-in-Decline-Global-Extinction-Risk-Increasing</u> cannot say
- 2. <a href="https://wwf.panda.org/discover/our\_focus/wildlife\_practice/problems/">https://wwf.panda.org/discover/our\_focus/wildlife\_practice/problems/</a> climate change/ cannot say
- 3. <a href="https://www.weforum.org/stories/2023/10/climate-crisis-impacting-animal-migration/">https://www.weforum.org/stories/2023/10/climate-crisis-impacting-animal-migration/</a> cannot say
- 4. <u>https://climatechangeresponses.biomedcentral.com/articles/10.1186/s40665-015-0013-9</u> cannot say
- 5. <u>https://www.scientificamerican.com/article/millions-of-birds-are-migrating-earlier-because-of-warming/</u> cannot say

(i) might be correct

Explanation: (i) The text suggests that the claim "Some animals face extinction due to global warming" might be correct for the following reasons:

1. **Direct Statement**: The text explicitly states that "Some biologists estimate that 35% of animals and plants could become extinct in the wild by 2050 due to global climate change." This directly supports the claim that some animals face

extinction due to global warming.

- 2. Expert Opinion: The text mentions concerns from biologists and warnings from NASA scientist James Hanson, which adds credibility to the claim. However, the evidence in the text for this claim is indirect, partial, or uncertain in the following ways:
- 1. **Indirect Evidence**: The text does not provide specific examples of animals that are currently facing extinction due to global warming. It only mentions a general estimate of 35% of animals and plants.
- Partial Evidence: The text focuses on the broader impact of climate change on biodiversity but does not delve into

Reference sentences: (i) See source: <a href="https://www.nps.gov/pore/learn/nature/">https://www.nps.gov/pore/learn/nature/</a> <u>climatechange\_wildlife.htm</u> Here are the sentences from the source text that suggest the claim "Some animals face extinction due to global warming" might be correct: - "Biologists are becoming more and more concerned that global climate change will drastically reduce biodiversity." - "Some biologists estimate that 35% of animals and plants could become extinct in the wild by 2050 due to global climate change."

Other sources found and considered during the online search: ( i )

- 1. https://wwf.panda.org/wwf\_news/?10668966/Worlds-Migratory-Species-of-Animals-in-Decline-Global-Extinction-Risk-Increasing - cannot say
- 2. <a href="https://wwf.panda.org/discover/our">https://wwf.panda.org/discover/our</a> focus/wildlife practice/problems/ climate change/ - cannot say
- 3. <a href="https://www.nps.gov/pore/learn/nature/climatechange-wildlife.htm">https://www.nps.gov/pore/learn/nature/climatechange-wildlife.htm</a> cannot say

Add another source ▼

#### Reload

Despite this, global temperatures have remained stable since the early 1900s. claims

1 wrong claims in the input text detected, Could not check 1

The sentence can be split into the following claims:

(i) incorrect. The source text explicitly mentions a "roughly 2-degree Fahrenheit (1 degrees Celsius) increase in global average surface temperature that has occurred since the pre-industrial" period, which contradicts the claim that global temperatures have remained stable.

Explanation: (i) The claim "Global temperatures have remained stable since the early 1900s" is incorrect based on the provided text for the following reasons:

1. **Temperature Increase**: The text states that there has been a "roughly 2degree Fahrenheit (1 degree Celsius) increase in global average surface temperature" since the pre-industrial era (1850-1900). This clearly indicates a rise in temperatures, not stability.

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React App

2. **Yearly Surface Temperature Comparison**: The text mentions a comparison of yearly surface temperatures from 1880 to 2024 against the 20th-century average (1901-2000). This comparison implies fluctuations and changes in temperatures over the years, contradicting the claim of stability.

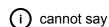
3. **Impact of Heat**: The text discusses the significant increase in accumulated heat due to the temperature rise, which is driving various environmental changes. This further supports the idea that temperatures have not remained

Reference sentences: (i) =See source: <a href="https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature">https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature</a> The following sentences from the source text contradict the claim "Global temperatures have remained stable since the early 1900s":

- 1. "The roughly 2-degree Fahrenheit (1 degrees Celsius) increase in global average surface temperature that has occurred since the pre-industrial era (1850-1900 in NOAA's record) might seem small, but it means a significant increase in accumulated heat."
- 2. "That extra heat is driving regional and seasonal temperature extremes, reducing snow cover and sea ice, intensifying heavy rainfall, and changing habitat ranges for plants and animals—expanding some and shrinking others."

Other sources found and considered during the online search: (i)

- 1. <a href="https://science.nasa.gov/earth/measuring\_global\_temperature/">https://science.nasa.gov/earth/measuring\_global\_temperature/</a> incorrect. The source text explicitly states that "Earth is warming at an unprecedented rate" and that "the past 10 years have been the warmest in recorded history." This directly contradicts the claim that global temperatures have remained stable since the early 1900s.
- 2. <u>https://unric.org/en/wmo-state-of-climate-report-climate-new-records-and-almost-irreversible-consequences/ incorrect</u>
- 3. <a href="https://wmo.int/news/media-centre/wmo-report-documents-spiralling-weather-and-climate-impacts">https://wmo.int/news/media-centre/wmo-report-documents-spiralling-weather-and-climate-impacts</a> incorrect. The source text explicitly states that global temperatures have increased, with 2024 being the warmest year on record, which contradicts the claim that temperatures have remained stable.
- 4. <a href="https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/global/time-series">https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/global/time-series</a> incorrect. The source text mentions "temperature anomalies" and data from 1850 to the present, implying changes in global temperatures over time, which contradicts the claim that temperatures have remained stable.



Explanation: (i) It is impossible to say whether the claim "The impacts of global warming include melting glaciers, rising sea levels, and ecosystem shifts" is correct or not based solely on the provided text for several reasons:

- 1. Lack of Specific Information: The text discusses the increase in global average surface temperature and its effects on regional and seasonal temperature extremes, snow cover, sea ice, heavy rainfall, and habitat ranges. However, it does not explicitly mention melting glaciers, rising sea levels, or ecosystem shifts.
- 2. **Indirect References**: While the text mentions "reducing snow cover and sea ice" and "changing habitat ranges for plants and animals," these are indirect references and do not directly address melting glaciers, rising sea levels, or ecosystem shifts in a comprehensive manner.
- 3. **No Direct Evidence**: The text does not provide direct evidence or data that specifically supports the claim about melting glaciers, rising sea levels, and

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