Annotation Guidelines

Objective

The objective of these guidelines is to ensure that all annotators follow a consistent framework when labeling whether a post on Bluesky is climate-related or not climate-related. Each post is processed by a ClimateBERT classifier that outputs a score and a label. In order to evaluate the performance of the model, the posts are randomly sampled, manually annotated and cross-checked with the output of the model.

Label Definitions

Each post is to be annotated with one of the following binary labels:

"Yes" = Climate Related

This label is selected if:

- Explicitly references climate change, global warming, or related terms (e.g. CO2 emissions, fossil fuels, climate policy).

- Engages in discourse around climate science, activism, denial, policy, or events (e.g. COP conferences, carbon tax, Net Zero).

- Links environmental phenomena to climate change, such as extreme weather events, droughts, sea level rise, or biodiversity loss — but only if that link is made in the post.

- Discusses climate action or inaction, including solutions (e.g. renewable energy, electric vehicles) or political commentary.

"No" = Not Climate-Related

This label is selected if:

- Mentions weather, nature, or environmental issues (e.g. recycling, pollution, seasonal changes) without connecting them to climate change.

- Refers to personal experiences or general observations (e.g. "It's so hot today," "my dog has allergies") that are not situated within climate discourse.

- Uses ambiguous or metaphorical language (e.g. "the climate at work is toxic") that does not pertain to environmental or ecological topics.

In general, the focus should be on the surface-level content and intended meaning, as opposed to inferred context. It is important that the annotation is based on explicit pointers, such as mentions of climate-related concepts, keywords, or discourse, rather than assumptions.

Examples and Edge Cases:

To give an idea of how more ambiguous posts are annotated, the following sampled examples show posts with their assigned labels and brief explanations, helping to clarify how the guidelines should be interpreted.

1. Ambiguous Environmental Topics:

Example:
"Nature's patterns WeekPforPatterns AlphabetChallenge photography EastCoastKin butterflies naturephotography"

Guidance:
The example is labeled as no, as the environmental related keywords "Nature" and "butterflies" are not being used to link it to a climate context.

2. Implicit References

Example:
"Do you feel a chill, lovelies? The winds of change are upon us"

Guidance:

The example is labeled as "no", as there is no indication that the keywords "chills" and "winds" refer to a climate context.

3. Weather

Example:

"OHX issues Damage Survey PNS Max EF1 at Apr 6, 722 PM CDT ...NWS Damage Survey for 04052025 Severe Weather Event - Update 1... via IEMbot Additional Details Here."

Guidance:

Weather reports will not be labeled as being climate-related, unless it is being used in the context of climate, ie: "The weather this weekend was crazy!! #HeatWave #ClimateChange"

Evaluation of Annotations:

Lastly, the annotations are evaluated using Cohen's Kappa Score. The 50 sampled posts have an inter-annotator agreement of 0.956. Only one out of 50 posts were labeled differently.