An entity is CLIMATE-HAZARDS (hazards with potential negative impact on climate, such as floods, wildfires, droughts, and heatwaves), CLIMATE-IMPACTS (effects of hazards, primarily negative effects on humans, but also negative impacts on livestock such as infectious diseases, food crisis, disruptions, damage, disaster), CLIMATE-ASSETS (objects or services of value to humans that can get destroyed or diminished by climate-hazards, such as health, buildings, infrastructure, and crops or livestock. Examples include cattle, transport infrastructure, air quality, electricity grids etc.), CLIMATE-DATASETS (specific collections of climate data with a name. A climate dataset can be the result of observations or of a model, e.g., as a prediction or reanalysis. The data may be lists, tables, databases, inventories or historical records, where the data dominate over attached code. Some examples include AeroCom, Monitoring Trends in Burn Severity, WorldClim etc.), CLIMATE-GREENHOUSE-GASES (gases that cause heating of the atmosphere, such as carbon dioxide (CO_2), methane (CH_4), octadecafluorooctane (C_8F_{18})), CLIMATE-MITIGATIONS (activities to reduce climate change or to better deal with the consequences, such as electric vehicles, bioethanol, carbon tariffs, clothing insulation etc.), CLIMATE-MODELS (specific physical, mathematical, or artificial intelligence objects, nowadays always computer-executable, used to analyze and usually predict climate parameters, such as the Community Climate System Model (CCSM), Dyna - CLUE, Decision Support System for Agrotechnology Transfer), CLIMATE-NATURE (aspects of nature that are not alive, such as oceans, rivers, the atmosphere, winds, and snow), CLIMATE-OBSERVATIONS (climate observation tools, such as satellites, radiospectrometers, rain gauges, wildlife cameras, and questionnaires, with a name. Examples are the DLR Falcon research aircraft, UKCEH Countryside Survey, Analytical Spectral Device (ASD) Field Spec Pro etc.), CLIMATE-ORGANISMS (animals, plants, and other organisms that are considered for their own sakes (in contrast to as food for humans) as climate organisms, such as freshwater fish, Joshua trees, herbivorous species etc.), CLIMATE-ORGANIZATIONS (real-world organizations with climate-related interests, such as the Intergovernmental Panel on Climate Change, United Kingdom Meteorological Office, the Kuwait Institute for Scientific Research etc.), CLIMATE-PROBLEM-ORIGINS (problems that describe why the climate is changing, such as fossil fuel, deforestation as well as sectors that can be cited as causes of energy use, such as the transport sector, animal agriculture or fuel imports), CLIMATE-PROPERTIES (properties of the climate itself (not abstract objects like models and datasets) that typically come with values and units, such as solar radiation, annual precipitation, surface roughness, aridity index etc.).

Named entity categories, definitions, and real-world examples.

Example 1: Further it seems that the characteristics of aerosols change with the season , and hence the influence impact of aerosols over the climate also varies according to the season .
Answer:
aerosols (CLIMATE-NATURE)
aerosols (CLIMATE-NATURE)

Example 2: Consistent with previous studies , we find that basin - wide and landfalling tropical cyclone counts are significantly correlated with one another , lending further support for the use of paleohurricane landfall records to infer long - term basin - wide tropical cyclone trends .
Answer:
landfalling (CLIMATE-HAZARDS)
tropical cyclone (CLIMATE-HAZARDS)
paleohurricane (CLIMATE-HAZARDS)
landfall (CLIMATE-HAZARDS)
tropical cyclone (CLIMATE-HAZARDS)

Example 3: In this study , we assess potential changes in fire weather conditions for the contiguous United States using the Haines Index (HI) , a fire weather index that has been employed operationally to detect atmospheric conditions favorable for large and erratic fire behavior .
Answer:
fire (CLIMATE-HAZARDS)
Haines Index (CLIMATE-PROPERTIES)
HI (CLIMATE-PROPERTIES)
fire (CLIMATE-HAZARDS)
fire (CLIMATE-HAZARDS)

Examples of the task. The LM is given a list of indices and tokens, and is expected to retrieve the NE instance, NE category, and NE indices.

In this example, the model is presented with 3 similar example sentences.

Task:
Detect the named entities in the sentence: Particularly , air – surface fluxes of methane and carbon dioxide are of interest as recent observations suggest that the vast stores of soil carbon found in the Arctic tundra are becoming more available to release to the atmosphere in the form of these greenhouse gases .
Produce an answer in the same format as the answer in the examples.
Return 'no entities' if there are no named entities in the sentence.
DO NOT HALLUCINATE

Instructions: The LM needs to follow the output guidelines and generate an answer in the appriate format.