

ABSTRACT

Systems and methods for converting live weather data to a weather index for offsetting weather risk. Weather data source systems generate one or more weather data streams that include weather forecast model and observations data. A data distribution system receives a
5 weather index request, identifies at least one instrument and at least one location associated with the request. Weather risk indication data is extracted among the weather data streams associated with the identified location based on predefined parameters associated with the identified instrument. The extracted data is converted into a set of weather index values
10 corresponding to the location, based on a predetermined algorithm associated with the identified instrument. A weather index presentation package is generated that includes the set of weather index values for distribution to at least one user device. The weather index presentation package being distributed is updated concurrent with changes to weather risk indication data.