ground, elevated on towers at a single or multiple levels, and/or placed on moving vehicles (such as drones) to allow for measurements to be taken at different locations at different times during the event.

[0006] Additionally, the system determines correlations between the results of past events and past weather and/or environmental conditions and outputs analysis based on current and/or forecasted weather and/or environmental conditions and the results of past events with the same or similar weather and/or environmental conditions.

[0007] Additionally, prior art systems are only capable of identifying weather and/or environmental conditions that are generally-applicable to an entire event and/or venue. By contrast, the sensor array of the system described herein forms a dense mesonet that can detect and identify changing weather and/or environmental conditions that are only detectable in certain locations of the event and/or venue. While prior art systems simply receive and output weather and/or environmental condition information from a single sensor, the system described herein is able to collect, synthesize, and interpolate weather and/or environmental condition information from a plurality of weather and/or environmental sensors. Finally, the system described herein can use the information from the weather and/or environmental sensors and models of the playing surface and/or venue as well as mathematical models of the atmosphere to determine current and forecasted weather and/or environmental conditions.

[0007A] According to a first aspect, there is provided a system, comprising: a weather/environmental database that stores the data indicative of past weather and/or environmental conditions; an event database that stores data indicative of outcomes of past events; a sensor array comprising a plurality of weather and/or environmental sensors at a venue of an event that detect and output data indicative of the current weather and/or environmental conditions; and an analysis unit that: determines correlations between the past weather and/or environmental conditions and the outcomes of the past events; determines current and/or forecasted weather and/or environmental conditions at locations in the venue based on the data indicative of the current weather and/or environmental conditions; generates analysis based on the current and/or forecasted weather and/or environmental conditions and the correlations between the between the past weather and/or environmental conditions and the outcomes of the past events; and outputs the analysis to a communications network for transmittal to a remote device.

[0007B] According to a second aspect, there is provided a method for outputting analysis regarding weather and/or environmental conditions at an event to a remote device, the method comprising: receiving data indicative of past weather and/or environmental conditions; receiving data indicative of outcomes of past events; determining correlations between the past weather and/or environmental conditions and the outcomes of the past

events; receiving data indicative of the weather and/or environmental conditions from a sensor array comprising a plurality of weather and/or environmental sensors at a venue of the event; determining current and/or forecasted weather and/or environmental conditions at locations in the venue based on the data indicative of the current weather and/or environmental conditions; generating analysis based on the current and/or forecasted weather and/or environmental conditions and the correlations between the between the past weather and/or environmental conditions and outcomes of the past events; and outputting the analysis to a communications network for transmittal to the remote device.

[0007C] According to a third aspect, there is provided a non-transitory computer readable storage medium storing instructions that, when executed by a processor, cause a computing device to: receive data indicative of past weather and/or environmental conditions; receive data indicative of outcomes of past events; determine correlations between the past weather and/or environmental conditions and the outcomes of the past events; receive data indicative of the weather and/or environmental conditions from a sensor array comprising a plurality of weather and/or environmental sensors at a venue of the event; determine current and/or forecasted weather and/or environmental conditions at locations in the venue based on the data indicative of the current weather and/or environmental conditions; generate analysis based on the current and/or forecasted weather and/or environmental conditions and the correlations between the between the past weather and/or environmental conditions and outcomes of the past events; and output the analysis to a communications network for transmittal to the remote device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Aspects of exemplary embodiments may be better understood with reference to the accompanying drawings. The components in the drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles of exemplary embodiments, wherein:

[0009] FIG. 1 is a block diagram illustrating an architecture of a hyper-localized weather and environmental system according to an exemplary embodiment of the present invention;

[0010] FIG. 2 is a block diagram illustrating the hyper-localized weather and environmental system according to an exemplary embodiment of the present invention;

[0011] FIG. 3 is a diagram illustrating a tower that includes a plurality of weather and/or environmental sensors at various levels according to an exemplary embodiment of the present invention;

[0012] FIG. 4 is a drawing illustrating an unmanned aerial vehicle (i.e., drone) according to an exemplary embodiment of the present invention;