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| **Picture** | **Description** |
|  | * Measures solar radiation * Placed on a flat surface to gain exposure to the full electromagnetic spectrum * The more sunlight that strikes it, the more energy it produces |
|  | * The measure of the distance something can be seen without distortion * Measurements of less than 330 feet usually reported as zero * Measurements usually reported in miles or meters |
|  | * Measure is subjective * Can be very descriptive * Not quantifiable * Provides additional perspective |
|  | * Used to photograph and track large-scale air movements * May use infrared cameras to determine relative warmth of objects * Can be polar orbiting or geo-stationary |
|  | * Determines direction from which wind is blowing * Weight is evenly distributed on each side, but the surface area is unevenly divided with the pointer always on the side with the smaller surface area * Not always reliable in small, gentle winds |
|  | * Measures relative humidity using the cooling effect of evaporation * Made of two thermometers mounted together, one with a wet cloth wick over the bulb * Differences in readings determine relative humidity—the greater the difference in readings, the less relative humidity |
|  | * Measures rain or snow over a set period of time * Usually measured in millimeters but reported in inches * Limitations include: collection during high wind events such as hurricanes can be unreliable; freezing temperatures can cause the funnel to freeze, preventing subsequent precipitation from collecting * Variety of types |
| * Measures wind speed or velocity * Measures the strength of air’s motion * Measured 33 feet above ground level * on buildings or airports * Several cups catch the wind and spin * around a pole * Measured by the number of revolutions over a set period of time | * Measures humidity or amount of water vapor in the air * Measures absolute (the amount of water vapor in a unit volume of air) or relative (the ratio of moisture in the atmosphere to the maximum moisture the atmosphere can hold) humidity * Humans feel comfortable with a relative humidity between 30% and 60% |
|  | * Measures air pressure * Weighs the amount of air in a specific place * Usually measures between 28-31 inches of mercury * A falling measurement usually means a storm is approaching |
|  | * Measures heat content of air * Measures in Celsius or Fahrenheit * Measurement usually taken 5 feet above ground in a shelter * Liquid expands or contracts causing it to move up and down a tube |

