		Means...	Could this trend be an effect of climate warming?	Could this trend also be contributing to more climate warming in the region?	Could this trend also be contributing to less climate warming in the region?	Other reasons for the trend?
Higher values of...	**Precipitation amount in places with wet climates**	Wetter climate	Some predict that global warming will make these places even wetter because the warmer water will hence evaporate more and lead to greater amounts of moisture in the air and more precipitation. In addition, there is evidence that global warming may cause fewer but more extreme storms, so look for signs of increased month to month precipitation differences. Trends showing a shift from relatively even amounts of precipitation to wildly uneven amounts from month to month could indicate this.	Yes, because precipitation cannot occur without clouds, and clouds contain water vapor, a greenhouse gas.	Yes. Clouds block incoming solar radiation from hitting the Earth's surface, so greater cloudiness could contribute less local climate warming as well.	Scientists know that the wind-ocean oscillations known as El Nino and La Nina have major relatively predictable effects on regional weather from year to year. These oscillations are caused by wind patterns pertaining to heat transport from low (tropical) latitudes to high (arctic and antarctic) latitudes and the upwelling of ocean water from the depths to the surface. Scientists also know that there have been extreme weather events going far back in time before the modern era. Hence, because of these not-well-understood oscillations, they are reluctant to assume strong correlations between annual changes in weather and global warming. (For an overview of El Nino/LaNina, see http://www.nws.noaa.gov/om/brochures/climate/El_NinoPublic.pdf).

		Means...	Could this trend be an effect of climate warming?	Could this trend also be contributing to more climate warming in the region?	Could this trend also be contributing to less climate warming in the region?	Other reasons for the trend?
Higher values of...	**Precipitation amount in places with clear, dry climates**	Wetter climate	Yes, if global warming is inducing changes in ocean temperatures, ocean currents, or the directions of major Earth system wind patterns. In addition, there is evidence that an effect of global warming will be fewer storms but more extreme ones in some regions, so look for signs of increased month to month variability in storm intensity. Trends showing shifts from relatively even amounts of precipitation falling month to month to lots of precipitation one months in little or no precipitation the next month would indicate this.	Yes, because precipitation cannot occur without clouds, and clouds contain water vapor, a greenhouse gas.	Yes. clouds block solar radiation from hitting the Earth's surface, so greater cloudiness could contribute to less local climate warming as well	Same as above

		Means...	Could this trend be an effect of climate warming?	Could this trend also be contributing to more climate warming in the region?	Could this trend also be contributing to less climate warming in the region?	Other reasons for the trend?
Lower values of...	**Precipitation amount in places with cloudy wet climates**	Drier climate	Unlikely	Less precipitation in currently wet climates could contribute to warming by making cloudy periods less frequent and hence allowing more incoming shortwave solar radiation to reach the Earth and be re-emitted as heat. If in addition the surfaces are currently white from snow or ice, the greater heat could help melt those surfaces and hence change their color, which leads to more absorbed and re-emitted heat (i.e., longwave radiation)	Drier climate also means less water vapor in the air, which leads to less of a greenhouse effect, since water vapor is a greenhouse gas	Same as above
Lower values of...	**Precipitation amount in places with clear, dry climates**	Drier climate	It is predicted that global warming will make many dry areas even drier because the warmer air will cause whatever water is on the surface to evaporate and disperse too quickly to condense in sufficient quantity to produce precipitation	Less precipitation in already-dry climates could contribute to more warming by making cloudy periods less frequent, hence allowing more incoming shortwave solar radiation to reach the Earth and be re-emitted as heat. If in addition the surfaces are white from snow or ice, the greater heat could melt those surfaces, and hence change their color, which leads to even more heat.	Drier climate also means less water vapor in the air, which mitigates against the greenhouse effect, since water vapor is a greenhouse gas	Same as above

		Means...	Could this trend be an effect of climate warming?	Could this trend also be contributing to more climate warming in the region?	Could this trend also be contributing to less climate warming in the region?	Other reasons for the trend?
Higher values of...	**Rainfall rate**	More intensely falling precipitation, on average	Yes because some scientists believe that global warming could be contributing to more extreme weather. Warmer air temperatures mean greater amounts of water vapor need to be in the air for The air to reach saturation and resulting precipitation. This could cause the precipitation to be heavier when it finally occurs. Hence this trend could be characterized by fewer yet heavier precipitation events.	Unlikely	Unlikely	Same as above
Lower values of...	**Rainfall rate**	Less intensely falling precipitation, on average	Yes because global warming in some regions could be inducing greater dryness and drought and one sign of this could be lower average rainfall rates.	Unlikely	Unlikely	Same as above