

Weather Terms and Our Forecast Language

Action Flooding Stage: Water runs higher than normal, though results in minimal to no flooding

Black Ice: A thin layer of ice that forms as a result of:

1. Rain followed by remaining wet areas freezing when surfaces drop below 32°
2. Freezing fog
3. Pavement frost

Clipper: A fast moving low-pressure system that originates from Canada (often Alberta or Saskatchewan). Typically occurs in the winter and results in minor accumulation from an event that generally lasts 4-12 hours

Derecho: A long-lived cluster of thunderstorms (often fast-moving) that results in widespread damaging winds impacting many locations

Drizzle: Rain composed of tiny drops. While this leads to small rain amounts (Trace to < 0.05") and is typically light, drizzle intensity can range from light to heavy

Embedded: A localized phenomena occurring within a more widespread area of consistent weather

- Example: "Embedded areas of heavy rain within a general, widespread area of light rain"
- Example: "Embedded rumbles of thunder within a general, widespread area of light rain"

Flash Freeze: A rapid drop in air temperature to below 32 degrees that results in a quick occurrence of residual water on pavements turning into ice

Flurry: Small and very intermittent snowflakes. Flurries almost always lead to no accumulation

Freeze-up: The freezing of slush and/or melted snow immediately following a wintry event. This may be referred to as a "hard freeze up" when temperatures sharply drop below freezing

Freezing Fog: Fog that forms when temperatures are below 32°. This can occasionally result in black ice

Freezing Rain: Plain rain, however falls onto a surface at or below 32°, resulting in a layer of ice

Heat Index: The "feels like" temperature that takes into account air temperature and relative humidity

High Clouds: Generally referring to clouds above 20,000 feet. These typically look thin and wispy and often results in partial or "filtered" sunshine days

Isolated or Slight Chance: Refers to a 15-30% chance in precipitation, and / or precipitation with minimal, very hit or miss coverage

Lake Effect Snow: The process of creating snow when cold air moves over relatively warm water (barring other conditions). Consequently, this can happen not just over lakes, but also other bodies of water

- Lake (ocean or bay) effect snow can produce narrow bands of snow, that are isolated in coverage. Often, lake effect snow is locally heavy and can produce varying accumulations over small distances
- The resulting snow is often low-density (fluffy)

Leaning Early / Leaning Late: Used within Start/End Times for wintry precipitation. This indicates if the meteorologist is favoring a certain portion of the Start/End Time. Example: Forecast is for a start time of accumulating snow 11 AM - 2 PM, “Leaning Early” means the meteorologist is favoring a start closer to 11 AM as opposed to 2 PM.

Likely: A greater than 50% chance that precipitation will occur

Localized: This word is intended to mean limited or confined to a few areas. Typically used in the winter to depict a few locations may see more snow than the average (i.e. elevation), and in the summer to describe downpours or flooding.

Minor Flood Stage: Prone areas (generally roads, not buildings) experience ponding.

- For Coastal flooding, this is a fairly common occurrence, especially around the new / full moon.

Moderate Flood Stage: More significant flooding begins to occur. Prone roads may be closed, and few buildings may become inundated.

- For Coastal flooding, this occurs generally 1 - 3 times per year

Major Flood Stage: Significant flooding, including widespread road closures, building inundation, and a potentially life threatening situation.

- For Coastal flooding, this is very rare, usually a few times per decade

“Not Ruled Out” or “Likely Dry”: The meteorologist is not expecting precipitation to occur, but it is not with 100% confidence

Pop-up: Describes the radar appearance in that precipitation generally does not move in from another location, but rather, small-scale showers or storms develop over the area. Coverage is often isolated

Rain Rate: A measure of the intensity of rainfall by determining the amount of rain that *would fall* over a given interval of time *if* that rainfall intensity were constant over that period.

- For instance, a rainfall rate of 2.00” / hr does not necessary mean 2.00” will fall over 1 hour, but the rate rain is falling (over 10, 30 mins, etc) will be that intense, and if continued for 1 hour would lead to 2.00”.

Refreeze: Snowpack that melts during the day and then the subsequent melt-water freezes on paved surfaces as temperatures get colder late-day or at night

Rotation (in a thunderstorm): Thunderstorms can occasionally rotate and this is the first step for tornado formation. However, not all storms that exhibit rotation produce tornados

- Rotation in a thunderstorm is also a sign of a mature and strong storm
- When rotation is present, severe hail, wind and/or torrential rainfall is more likely

Scattered: Approximately a 30-50% chance for precipitation. Mainly used in association with showers or thunderstorms

Shower: Areas of precipitation that do not last for an extended length of time and do not affect a large area geographically

Sleet: Essentially an ice pellet (or a tiny ball of ice). Accumulating sleet is approximately 3 times more dense than snow

Snow Squall: Similar to a snow shower, except briefly very heavy. Can also result in gusty winds and extremely low visibility. Squalls are often fast-moving.

Spotty: Spotty is similar to isolated and is often used interchangeably

Start Time / End Time: The timeframe (typically a 2 or 3 hour window) when the potential for snow, sleet or ice accumulating on any type of surface is expected to begin or end.

Threat Window: Used in wintry situations, when the arrival of snow is not uniform. Most often used in snow shower events to show the timeframe when an area has the chance to see a snow shower

Thundershower: A shower that may include a rumble of thunder or two. This term may be used in place of “thunderstorm” when precipitation is expected to be rather brief and light-moderate

Time Periods: Below are common descriptors for certain periods of a day

- Afternoon: Generally 12 to 5 PM
- Day (ex. Monday): Generally sunrise to sunset
- Evening: Generally 6 PM to Midnight
- Morning: Generally sunrise to 12 PM
- Night (ex. Monday Night): Generally sunset to sunrise
- Overnight: Generally midnight to sunrise
- Pre-Dawn: Generally 3 or 4 AM to sunrise

Total Ice Accretion: The amount of ice buildup on an untreated, undisturbed surface. Potential, notable differences on paved surfaces are noted in a separate comment

Total Snow/Sleet Accumulation: The accumulation of snow and/or sleet on an official measuring surface (ex. a snowboard). Potential, notable differences on paved surfaces are noted in a separate comment

Trace: Rainfall accumulation less than 0.01 inches

Virga: When rain or snow that falls from a cloud evaporates before hitting the ground

Wind Chill: Uses the actual temperature and wind speed to produce a wind chill temperature. Similar to heat index in that it calculates a “feels like” temperature

Non-Winter Alert Descriptions

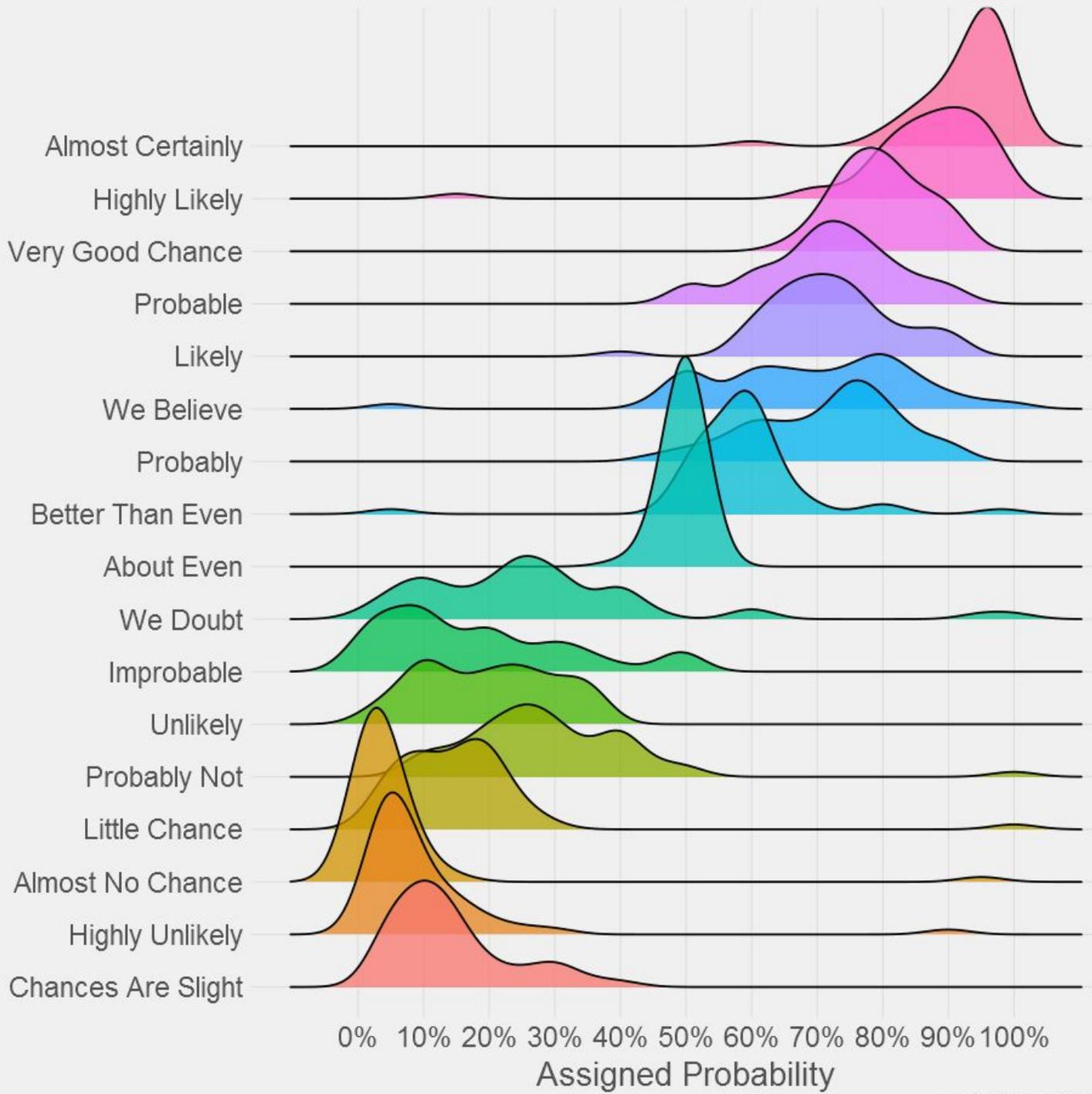
| | Wind Damage | Hail | Tornado |
|-------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Minimal | Not expected, but it can't be completely ruled out. | Not expected, but it can't be completely ruled out. | Not expected, but it can't be completely ruled out. |
| Isolated | Just a few instances of damage due to wind. | Only a few storms will have the capability of producing hail. | There is the slight chance a tornado or two could occur. |
| Scattered | An increased chance to have wind damage. Often used in "standard" severe storm threats. | There is a higher than normal potential that a storm will produce hail. | Conditions are more favorable for multiple tornadoes... Occurs once every few years. |
| Numerous | A more significant event is expected with wind damage somewhere in the region anticipated. | Many of the storms that occur will have hail. This is a very rare event. | A tornado outbreak is expected and precautions should be made to be prepared for the threat of a tornado... Extremely rare. |
| Widespread | Refers to either a severe weather outbreak or a very strong low pressure system with frequent gusts >60 mph. | N/A | N/A |
| Extreme | A historic event with major wind damage implications (ex. hurricane). | N/A | N/A |

Types of Flooding

1. Poor Drainage / Road
 - a. Occurs when rainfall accumulates faster than roads/drainage systems can drain
2. Stream / Creek
 - a. Occurs when rainfall creates an excess amount of runoff that causes rapid rises of streams and creeks. This often also leads to more significant poor drainage / road flooding as well.
3. Major River
 - a. The flooding of large rivers (generally more than 15 feet wide)
 - b. Mainly occurs after long-duration rain events, or after multiple rain events
4. Coastal Flooding (where applicable)
 - a. The process where tidal-influenced bodies of water inundate normally dry locations
 - b. Can occur from an ocean, bay, sound or river
 - c. Takes place during times of High Tide and/or in Storm Surge situations

| | Poor Drainage/Road | Stream/Creek | Major River | Coastal |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimal | Minor ponding on roads. Problems unlikely | Minor stream/creek rises. Problems unlikely | Minor rises within rivers. Problems unlikely | Slightly higher than normal. Problems not expected |
| Isolated | Just a few instances of poor drainage / road flooding, typically areas prone to minor problems | Streams and creeks rise just enough to create a few areas of flooding. | Major rivers rise just enough to create a few areas of flooding. | A few minor issues possible in normally problematic locations ~ Action stage ~ |
| Scattered | An increased chance to see poor drainage / road flooding. Often used in standard flooding threats. | An increased chance for some areas to see stream/creek flooding. | An increased chance for some areas to see river flooding. | Likely experiencing areas of flooding, mainly confined to prone areas... Fairly common occurrence, especially around new / full moon. ~ Minor Flood Stage ~ |
| Numerous | Numerous locations experience poor drainage/road flooding. Flooding is moderate to significant. | Numerous locations experience stream/creek flooding. Flooding is moderate to significant. | Numerous locations experience river flooding. Flooding is moderate to significant. | Significant areas of flooding, including spots that seldom have problems... Typically occurs 1-3 times per year. ~ Moderate Flood Stage~ |
| Widespread | Flooding is likely with a significant area experiencing poor drainage/road flooding. Road closures and water rescues possible. | Streams and creeks rise significantly, with many areas experiencing flooding. Road closures and water rescues possible. | Major rivers rise significantly, with many areas experiencing flooding. Multi-day road closures and water rescues possible. | Major flooding across many areas near the body of water... Only occurs a few times a decade. ~ Major Flood Stage ~ |
| Extreme | Almost all areas will experience poor drainage/road flooding. Road closures and water rescues likely. | Almost all areas will experience stream/creek flooding. Road closures and water rescues likely. Flood levels break records. | Almost all areas will experience river flooding. Multi-day road closures and water rescues likely. Flood levels break records. | Record flooding. In addition, water and structural damage is likely in areas nearest to the body of water |

Perceptions of Probability



created by /u/zonination