

Fire Weather and Fire Behavior Impacts from Clouds



H1: Cirrus Streaks
Single or multiple bands across sky indicating Jet Stream aloft - Possible instability or surface winds increasing fire behavior



H2: Cirrus
Dense, in patches or sheaves, not increasing, or with tufts - No significant fire weather or fire behavior expected



H3: Cirrus
Anvil shaped remains of a cumulonimbus - Watch for gusty winds from nearby decaying thunderstorms



H4: Cirrus
In hooks or filaments, increasing, becoming denser - Often indicates cold air aloft, watch for possible instability leading to more active fire



H5: Cirrostratus
Cirrus bands, relatively near the horizon - Indicates weather fronts are typically 2 to 3 days away



H6: Cirrostratus
Cirrus bands, covering a significant portion of the sky with sun mostly obscured - Typically indicates weather fronts are one day or less away



H7: Cirrostratus
Translucent, completely covering the sky - No significant impact on fire weather or fire behavior



H8: Cirrostratus
Not increasing, not covering the whole sky - No significant impact on fire weather or fire behavior



H9: Cirrocumulus
Alone or with some cirrus or cirrostratus - very high instability, usually little impact on surface conditions



M1: Altostratus
Semi-transparent, sun or moon may be dimly visible - No fire weather impacts, expect reduced fire activity from added shading



M2: Altostratus or Nimbostratus
Dense enough to hide the sun or moon - Often contains steady rain, watch for slippery footing, expect minimal fire activity



M3: Altocumulus
Semi-transparent, one level - Indicates weak mid-level instability and increasing moisture, possible monsoon thunderstorm development within 24 hours



M4: Altocumulus
Lens-shaped, or continually changing shape and size - Results from strong mid-level winds that may surface under the right conditions resulting in running fire



M5: Altocumulus
One or more bands or layers, expanding, thickening - Indicates instability present, monitor for additional development



M6: Altocumulus
From the spreading of cumulus or cumulonimbus - Could indicate presence of a nearby thunderstorm, caution for gusty winds generally from the direction of the clouds



M7: Altocumulus
Generally opaque layers, possibly containing rain shafts - Weak instability, shafts may result in gusty winds, cloud density will usually inhibit further convection



M8: Altocumulus Castellanus/ Altocumulus Floccus
With cumulus-like tufts or turrets - When observed in morning hours, often a precursor to afternoon/evening thunderstorms



M9: Altocumulus
Chaotic sky, cloud bases at several levels - Lower cloud base may block view of higher based storms, hides potential for lightning and gusty winds



L1: Fair Weather Cumulus
Flattened Appearance - Weak instability present, but rarely results in further development, active fire behavior still possible, especially under low humidity



L2: Cumulus
Moderate/strong vertical development, or towering cumulus - Atmosphere is unstable, pay close attention for further storm development and increased fire activity



L3: Cumulonimbus (aka Cb)
Tops not fibrous, outline not completely sharp, no anvil - Significant vertical motion present, gusty downdrafts likely, thunderstorms are possible, erratic fire activity



L4: Stratocumulus
Moderate instability - Showers and downdrafts likely, thunderstorms possibly hidden, variable fire behavior



L5: Stratocumulus
Flat appearance, usually associated with cool moist weather - Light showers possible, fire generally inactive



L6: Stratus
Smooth appearance, continuous low layer - Often inhibits aircraft use, minimal fire activity



L7: Stratus Fractus and/or Cumulus Fractus
Occurs with rain or snow - Usually associated with cold front, winds may push fire



L8: Cumulus & Stratocumulus
Usually associated with cool coastal influence - Fire activity may increase with afternoon heating and instability



L9: Mature Thunderstorm
Strong downdraft winds, lightning, heavy rain, and hail possible underneath - Strong terrain channelled winds and lightning possible at some distance



Pyrocumulus
Unstable conditions where smoke moisture condenses to form cumulus - Downdrafts, rain, lightning possible under extreme conditions



Tornado
Rapidly rotating column under a cumulonimbus cloud that touches the ground



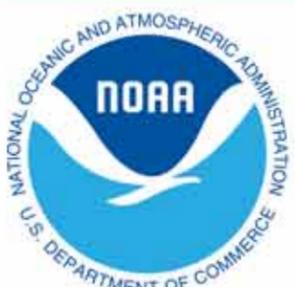
Wall Cloud
Lowering of the rain free base of a thunderstorm, often prior to tornado formation



Shelf Cloud
Represents the leading edge of strong winds in advance of a thunderstorm



Wave Cloud
Formed by strong winds over uneven terrain, often repeating downstream - These strong winds may surface resulting in running fire



Special photo credit thanks to Jim W. Lee, Eric Kurth, Brian Klimowski, Eric Helgeson, Mike Richmond, Coleen Decker, and Julia Ruthford