Backcountry Lightning Risk Management

No place outdoors is safe from lightning when thunderstorms are in the area. Lightning is an *objective hazard*. Your behavior can reduce the *risk* of that hazard harming you. This diagram is specific to a continental (dry) climate. This diagram is part of the paper "Backcountry Lightning Risk Management" (Gookin, 2010): use of this diagram without the paper's context may increase the risk of lightning injury.

Terrain lightning safety factors

0 1 2 **Extreme risk**: avoid these areas if there are any signs of thunderstorms

High risk Be gone from these areas before a storm hits.
Move through high risk terrain quickly to reduce exposure time.

3 **Least objectionable alternatives**, but still much riskier than inside of modern buildings

10 Getting inside an enclosed metal topped vehicle can avoid many lightning hazards.

10 Inside a modern building is very safe if you take a few simple precautions.

Higher strike densities are...

1) On or near high terrain like peaks and ridges (often reversed in the Appalachians)
2) On or near tall objects like relatively taller trees
3) On the windward sides of mountains, where the storms come from
4) On wide open water and in trees at the edge of open water

Reduce lightning risk by...

1) Timing visits to high risk areas with local weather patterns
2) Finding safer terrain if you hear thunder
3) Avoiding trees and long conductors once lightning gets close
4) Getting in the lightning position if lightning is striking nearby

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