

cHAINES: Introduction to the Continuous Haines Index

What is cHaines?

The continuous Haines Index, or cHaines, was developed by the Centre for Australian Weather and Climate Research. They found that the Haines Index was too often at 5 or 6 over large geographical areas, and thus wasn't very useful for identifying 'extreme' or anomalous days.

How does it differ from the Haines Index?

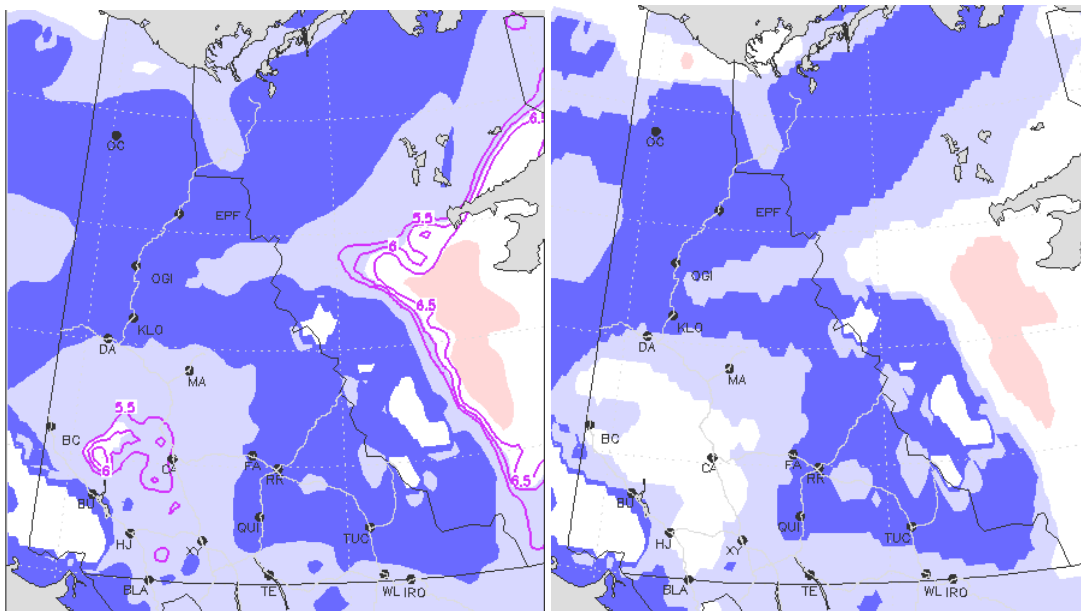
The cHaines Index uses the same inputs as the Haines Index:

- 700mb (~3km ASL) temperature
- 850mb (~1.5km ASL) temperature
- 850mb dewpoint

Like the Haines, the cHaines combines a moisture term and a stability term to predict the potential for fire spread if ignition occurs. The difference is that rather than assigning a score to each term and getting a value between 2 and 6, the cHaines simply adds the terms together, producing a value between 0 and 16.

Why use cHaines?

The cHaines index eliminates abrupt transitions between categories and offers greater discrimination at high values, rather than topping out at 6. It also allows a more realistic evaluation of the contributions of atmospheric instability and dewpoint depression to the overall score.



cHaines (left) and Haines (right) for the same forecast time.