

Showalter Index

From the user, an environmental temperature (T_{env}) and a parcel temperature (T_{parcel}) in degrees Celsius ($^{\circ}\text{C}$).

If the user needs to convert the temperatures from degrees Fahrenheit ($^{\circ}\text{F}$), see the link below.

<http://www.srh.noaa.gov/elp/wxcalc/formulas/tempConvert.pdf>

Then, the Showalter Index ($Index_{showalter}$) can be calculated using the formula below:

$$Index_{showalter} = T_{env} - T_{parcel}$$