



Staying in front of the weather



What you need:

RED AND BLUE FOOD COLORING
ICE CUBE TRAY
ONE CLEAR BOWL
ICE AND WATER
SMALL GLASS BOTTLE
ICE CUBE TRAY

I'M JUST TRYING TO STAY
ON *TOP* OF THIS...

What to do:

PLACE A DROP OF BLUE COLORING IN THE CUP OR ICE CUBE TRAY, ADD WATER, AND FREEZE UNTIL YOU HAVE A BLUE ICE CUBE.
FILL THE BOWL 2/3 WITH ROOM TEMPERATURE WATER.
LET THE WATER REST FOR A FEW MINUTES.
INSERT THE BLUE ICE CUBE AT ONE END OF THE CONTAINER.
ADD A DROP OR TWO OF RED FOOD COLORING INTO THE GLASS BOTTLE AND FILL IT WITH WARM WATER.
PLACE THE RED COLORING CONTAINER ON THE BOTTOM OF THE BOWL.
OBSERVE THE MOTION OF THE RED COLORING AS IT TRAVELS TO THE SURFACE AND PUSHES THE COLDER BLUE COLORING TO THE BOTTOM OF THE BOWL

What's going on?

THIS IS A MODEL FOR HOW A THUNDERSTORM DEVELOPS. AS WARMER AIR SPREADS OUTWARDS HORIZONTALLY (RED COLORING) HIGH IN THE ATMOSPHERE, IT PUSHES COOLER AND MORE DENSE AIR (BLUE COLORING) DOWNWARDS VERTICALLY. IF ENOUGH WATER-FILLED AIR CURRENTS ARE IN MOTION, THE COOLER AIR TURNS INTO RAIN AND POTENTIALLY A THUNDERSTORM!