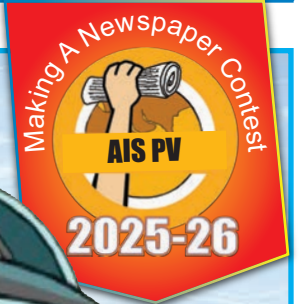


Text: Avika Gupta, XI B | Graphic: Kyna Agarwal, XI F; AIS Pushp Vihar



# Weather Bubble Backpack



Meet Weather Bubble Backpack, a breathable smart pack that builds a personalised microclimate bubble around you. Basically, the weather listens to you for a change.

## Choose your vibe



**Hot girl summer**  
Warm sunshine, zero sweating. We fixed it.



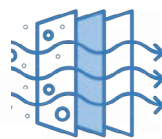
**Soft monsoon aesthetic**  
Light drizzle, perfect for overthinking and playlists.



**Winter-core fantasy**  
Instant chilly air? Ice cream in a hoodie? Yes.



**Spring picnic energy**  
Gentle breeze, no bugs, no chaos.



**Air that passes the vibe check**  
Mini HEPA filter keeping things fresher than your group chat discussions.

## The main character bubble

- Projects cinematic scenic backgrounds
- Self-cleaning, since maintenance isn't your thing
- Durable enough to survive your clumsiest moments
- Battery that simply doesn't quit
- Solar panels for eco-friendly flex
- Smart sensors adjusting everything, so you don't have to



**Science, but make it fun**  
Peltier modules = temperature God mode.  
You decide the weather now. Nature can take notes.

**DISCLAIMER: Real scientific principles. Fictional ideas with a potential future.**

# Say hello to the halo

## The Ring That Inspired The Myth Of Ixion

Vaanya Jain, AIS Saket, X C

In art, angels are depicted with halos to symbolise holiness and divine light. The sun and moon are two such symbols, often-times accompanied by a halo-like glowing ring. This halo, however, is not always associated with angels. In Greek mythology, Ixion, a mythical king, was punished by Zeus. His fate was to be tied to a burning wheel that rolls forever. Some ancient folklore link the 22-degree halo to Ixion spinning eternally. Let's unveil the true story behind this golden ring.

### The glowing circle

The halo appears as a bright circle with a 22-degree radius around the sun or moon as the ice particles

suspended in the upper troposphere act like 60-degree prism faces, refracting sunlight or moonlight at the minimum deviation angle of light which forms a precise 22-degree angle. So, light enters one face, refracts, reflects off another, then exits: concentrating rays at this angle and darkening the inner sky. Although a global phenomenon, it shines more prominently in colder regions, like Russia, Antarctica, and northern Scandinavia, as they have a higher prevalence of cirrus clouds with ice crystals.

### Cloud magic

But this awe-inspiring sight requires a very particular environment in order to appear. It can be seen whenever thin cirrus clouds

populate the sky. These clouds, composed of hexagonal ice crystals, are thin and wispy, often resembling delicate strands of hair spread all across the sky. While perfectly shaped crystals produce the sharpest halos, even slightly distorted ones can create the effect.

### Rainbow circle

Like yin and yang, solar halos glow brighter and more colourful as the intense sunlight reveals the full spectrum due to dispersion, while lunar halos typically remain faint as moonlight is dimmer, making it hard for the human eye to discern colours. It is also known as a rainbow circle with red colour inside as red light deviates less, and blue violet outside as it deviates more.



### Natural weather report

Aside from their visual beauty, 22-degree halos can signal upcoming weather changes. Since cirrus clouds often precede storm systems, a halo's appearance may hint that rain or snow is just round the

corner. For centuries, both humans and animals have used such atmospheric cues to anticipate the weather. Thus, this halo is not just a phenomenon; it holds mythological allure and broader relevance for humanity.