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CARL AZUZ, CNN 10 ANCHOR: On the vernal equinox, what's officially the first day of spring in the Northern Hemisphere we're thankful you've set

aside 10 minutes to watch CNN 10. I'm Carl Azuz at the CNN Center. In the U.S. Midwest, the north central part of the country there are states of

emergency in Nebraska, Iowa and Wisconsin. Lots of rain plus melting snow, plus a late winter snow storm brought by a bomb cyclone have left many

places underwater. Part of the problem was that the ground was still frozen when the rain came and it wasn't able to absorb the water.

So it found its way to rivers and streams and caused them to burst their banks and spread water all over. On Tuesday morning, the National Weather

Service said more than 8 million people were under flood warnings. Nebraska was hit particularly hard. Its governor said the flooding was the

most widespread disaster Nebraska had ever faced. U.S. Vice President Mike Pence traveled there yesterday to survey the damage. Nebraska's governor

is hoping the Federal government will allow public funding to be used to help those effected.

In 17 places across the state, flood records were broken and in Iowa 41 of the states 99 counties have been declared disaster areas. In addition to

at least four lives that were lost in Nebraska and Iowa, farmers have lost grain and livestock. Fields are underwater. Private water supplies are

threatened. South of Nebraska and Iowa the Missouri and Mississippi Rivers which are already at minor or moderate flood stage are expected to rise

higher in the next few days. So states like Kansas, Missouri and Illinois could see more flooding in the days ahead. In some places farther north,

the water has begun to recede in others the threat remains.

(BEGIN VIDEO CLIP)

UNIDENTIFIED FEMALE: This is Winslow, Nebraska and for several days the

people who live here in the small town of less than 200 people couldn't even get in here to see what it looks like. Now, they're able to clear away some of the debris on the roadway but as you can see, look at the speed limit sign. You can see how high the water still is, how high it is up on these houses and every one of the houses in this town are surrounded

by water. You can see so many things have been pushed away, toys, picnic benches and even stairs moved far away from the homes that they used to stand next to.

Right now, while they're able to get closer they still cannot get into their homes and they don't know when they'll be able to because there's

still so much water in here. And this is just one system where the water is trying to recede where in others, it's still cresting. So this is just

a microcosm, a small picture of what is happening throughout Nebraska with these massive, devastating floods. And I talked to one couple that has

lived here for several decades, over 30 years, and asked them if they were going to rebuild and he said we have nowhere else to go. This is where we

belong.

(END VIDEO CLIP)

(BEGIN VIDEO CLIP)

UNIDENTIFIED MALE: My entire apartment started shaking and there was a huge boom. I was just terrified. I had no idea what was happening.

(END VIDEO CLIP)

AZUZ: So if a meteor explodes in the atmosphere and no one's around to hear it. Does it make a sound? NASA said it did. The fireball that blew

up 16 miles over the earth's surface in December was the second most powerful one to enter our atmosphere in 30 years according to the space

agency. So why wasn't this reported in December? Because scientists just noticed it. It was originally detected by military satellites and reported

to NASA afterward. Why didn't pictures and video go viral on social media like those of other fireballs do?

Because it happened over the Bering Sea in a pretty remote part of the world and relatively few people noticed. What exactly caused a blast that

powerful? A meteor that scientists say was probably a few meters across. That's all it takes to release 173 kilotons of energy and for reference one

kiloton is equivalent to 1,000 pounds of TNT. Should you be worried about another one? Scientists say, no. Most fireball events are smaller. There

have already been five note worthy explosions in 2019.

10 Second Trivia. Where would you be most likely to find mycelium in massive filaments? In granite, on a CT scanner, on body armor, or in

fungi. Vegetative part of a fungus is called mycelium.

A growing number of artists, furniture makers and even clothiers are using mushrooms to make stuff and a big provider of the material for this is a

New York based company called Ecovative. It's a biomaterials organization that's received millions of dollars in grant money from the U.S. government

in addition to private funds from private investors. Its worked on everything from building materials to packaging all based on using part of

the mushroom. When it comes to shipping materials, its not always the perfect substitute for Styrofoam or other plastics. Ecovative's original

mycelium foam could be more expensive so use than traditional materials for light weight packages. But its makers say it is better for the environment

and its changing the way people think about mushrooms.

(BEGIN VIDEO CLIP)

UNIDENTIFIED FEMALE: Since the 1950s`, humans have produced over 9 billion tons of plastic. Most of that is ending up in landfills and could take

centuries to decompose. A miracle material found in nature could be the key to reducing plastic waste, it's called mycelium and it comes from

mushrooms.

EBEN BAYER, ECOVATIVE CEO: Mycelium is like the root structure of a mushroom. You're used to seeing a mushroom above ground. Mycelium is

like

the roots beneath it but no one had ever tried to use them to make materials.

UNIDENTIFIED FEMALE: Eben Bayer is the CEO of Ecovative, a company that has developed a way to grow mycelium into specific shapes and sizes. They

start by taking organic plant waste and mixing it with mycelium cells which act as a sort of natural glue.

BAYER: The mycelium grows through and around those particles and it binds them together and you've got a grown product.

UNIDENTIFIED FEMALE: Ecovative mycelium products provide a natural alternative to packaging materials made out of plastic and Styrofoam.

BAYER: But at the ends of its useful life, you can actually break it up and you can put it in your own garden. So it's - - it's a nutrient not a pollutant.

UNIDENTIFIED FEMALE: Ecovative wants to take mycelium to the next level.

BAYER: Our current technical focus is developing the next generation of mycelium materials from (inaudible) scaffolding, to leather like materials,

even meat replacements.

UNIDENTIFIED FEMALE: AKA, mycelium bacon which is still in its testing phases. The company thinks mycelium could also play a major role in

construction and even in regenerative medicine.

BAYER: It really has boundless possibilities and it comes from its ability to move from the micro scale to the macro scale.

(END VIDEO CLIP)

AZUZ: An astrolabe found off the coast of Oman in the Middle East has just been awarded the title of Worlds Oldest by Guinness World Records. An

astrolabe is an instrument that was used for centuries to mark the positions of the sun and stars. They were first used by astronomers

hundreds of years B.C. and sailors used them in the Middle Ages until astrolabes were replaced by sextants. Today just over 100 mariners

astrolabes are known to exist in the world but add this one to the tally. About five years ago, divers found it in a shipwreck site near Oman.

Researchers believe it was made between 1496 and 1501 and its thought to have been used by Portuguese navigator Vasco de Gama who is the first

European to said from Europe to India. The astrolabe had to be kept in a freshwater bath for two years to get all the salt off it. A symbol of

Portugal`s Royal Coat of Arms helped scientists identify it. They hope its discovery will help them understand more about how ships navigated in the

14th and 15th centuries.

Helisking, using helicopters to reach remote places to ski has been around for decades. As far as we know, zeppelin skiing using a airship to get out

in the backcountry is pretty new. These three Austrian skiers worked on the idea for almost two years before it became reality in February. They

needed cold temperatures, clear skies and no wind. They also needed to descend by rope to the alpine summit they intended to ski.

Was it worth it? You`d better "derigabelieve" it. Of course there were a few "blimps" in the road. Their path to success wasn`t always

"zeppelinier" and it took a while before everything was "air ship" shape. Big dreams often have steep slopes and obstacles to traverse but once

theirs got off the ground, despite the rope that repelled them. They all clearly "descent" on. I`m Carl Azuz and we`ll "ski" you later on CNN.

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