## 掌控天气 Controlling the weather

Hello. This is 6 Minute English from BBC Learning English. I'm Sam.

大家好。这里是 BBC 学习英语栏目的六分钟英语。我是萨姆。

And I'm Neil.

我是内尔。

Agh, it's raining again, Sam! I've had enough!

啊,又下雨了,萨姆!我受够了!

It's been drizzling, that's raining lightly, all week.

整个星期都在下毛毛雨。

I know what you mean, Neil.

我明白, 内尔。

Living in a wet country like Britain I sometimes wish I could push a magic button and stop it raining.

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And ironically, people living in hot, dry countries need rain but don't get it. 讽刺的是,生活在炎热干燥国家的人们需要雨水,却没有。

If only we could control the weather.

如果我们能控制天气就好了。

It's funny you should say that, Neil, because you're not the first person to have that idea.

好巧啊, 内尔, 有人也这样想过。

In this programme, we'll be hearing about 'cloud-seeding' and 'geoengineering', two controversial methods scientists are using to manipulate or change the weather.

在本期节目中,我们将了解科学家们用来操纵或改变天气的两种颇具争议的方法——"人工降水"和"气候工程"。

And as usual, we'll be learning some new vocabulary as well.

像往常一样,我们也将学习一些新的词汇。

Anything that stops it drizzling sounds good to me, Sam.

任何能让这雨停下的东西都不错, 萨姆。

I hate to disappoint you, Neil, but these ideas involve making more, not less, rain.

我不想让你失望,内尔,但这些方法是用来促进而不是阻止降雨的。

## 添加的词汇



每日英语听力

We'll learn the details soon but first I have a question for you about the wettest place in the world, a village which gets nearly twelve metres of rain a year.

一会我们将进一步讨论,但首先我要问你一个问题。世界上最潮湿的地方是一个村庄,那里一年的降水量接近12米。

But where is it?

那么它在哪里呢?

Is the wettest village on earth found in: a) Ireland? b) New Zealand? or c) India?

地球上最潮湿的村庄是在 a)爱尔兰? b) 新西兰? 还是 c) 印度?

Well, it rains a lot in Ireland doesn't it, so I'll say that's where the wettest place on earth is.

爱尔兰经常下雨,不是吗,所以我觉得地球上最潮湿的地方在那里。

OK, Neil. We'll find out if that's the correct answer later in the programme. 好的,尼尔。稍后我们将在节目中揭晓这是不是正确答案。

The first type of weather manipulation we'll hear about is a way of getting snow and rain out of clouds known as 'cloud seeding'.

下面将介绍的第一种操纵天气的方法是为了从把雪和雨从云里弄出来,被称为"人工降水"。

Airplanes fly through the clouds and spray chemicals to make water particles freeze and stick together as snowflakes.

飞机在云层中飞行,喷洒化学物质,使水滴结成冰并相互粘连,形成雪花。

These then fall as snow which builds up during winter before melting in spring to help water crops.

然后,它们会以雪的形式落下,在冬天形成积雪,在春天融化,来灌溉庄稼。

Listen as Charmaine Cozier, presenter of BBC World Service programme, The Inquiry, speaks with Professor Katja Friedrich, an atmospheric scientist at the University of Colorado.

请听BBC世界服务栏目的《调查》节目的主持人夏尔曼·卡泽鄂与科罗拉多大学大气科学家卡特娅·弗里德里希教授的对话。

The first cloud seeding experiments took place in the 1940s.

第一次人工降水实验是在20世纪40年代进行的。

In the years since, scientists are often accused of meddling with nature. 那之后的几年里,科学家们经常被指责干预自然。

People are thinking, yeah, you're putting some substances in the atmosphere that should not be there.

人们认为科学家们在大气中添加了一些本不存在的物质。

Usually I respond and say, every time you get into your car, every time you get on an airplane you put substances in the air that don't belong, so you're also playing God.

通常我会回答说,你每次上车,每次上飞机,都会把不属于自然的东西放进大气中,所以你也 在干预自然。 Because everyone needs water, cloud seeding is becoming more and more popular, with scientists from over fifty countries using the method to extract rain from clouds.

因为每个人都需要水,所以人工降水变得越来越流行,来自50多个国家的科学家都使用这种方法从云中获得雨水。

But some critics accuse these scientists of meddling with nature – trying to change something which it's not their responsibility to change.

但有些人指责这些科学家干预自然、试图改变一些他们没有权力改变的事情。

In other words, they're accused of playing God – acting as if they have unlimited power and can do whatever they want.

换句话说,他们被指责扮演上帝的角色,好像他们拥有无限的力量,可以做任何他们想做的事情。

Unlike cloud-seeding, the next type of weather modification has never been tested and is still just a theory.

与人工降水不同,第二种操纵天气的方法从未经过测试,仍然停留在理论阶段。

'Solar geo-engineering' aims to reduce global warming by reflecting sunlight away from the Earth, back into space.

"太阳能地球工程"旨在通过将太阳光从地球反射回太空来减缓全球变暖。

This involves putting tiny particles called aerosols into the stratosphere - the band of sky twenty kilometres above the surface of the earth, about twice as high as airplanes fly.

这个方法需要把气溶胶这种微小颗粒放入平流层,就是地球上方20公里处的大气层,大约是飞机飞行高度的两倍。

Although it's never been tested, the method is controversial, as Charmaine Cozier discussed with Harvard University professor of engineering, David Keith, for BBC World Service's, The Inquiry.

尽管这种方法从未被测试过,但它仍然存在争议,正如夏尔曼·卡泽鄂与哈佛大学工程学教授戴维·基思在BBC世界服务栏目的《调查》节目中所讨论的那样。

How controversial is this area?

关于它的争论有多激烈呢?

There's lots of controversy around solar geo-engineering and for good reason.

围绕太阳能地球工程有很多争议,这也是应该的。

People are, I think, sensibly scared that this could provide an excuse that allows countries or companies to avoid doing the work that has to be done to cut emissions.

人们担心,这可能会成为一些国家或公司不减排的借口。这种担心很有道理。

But in fact, controversy has really waxed and waned over time.

但其实, 有关争议一直在演化。

So in the early work on climate change in the 1960s, and 70s and early 80s, these ideas were just part of the way we talked about what might happen about climate change.

所以在20世纪60年代、70年代和80年代初有关气候变化问题的研究中,这些想法只是我们对可能发生的事情的一些猜测。

And then, as climate change became more politically central, say in the 90s and 2000s, there was really a taboo.

之后,大约从90年代至今,随着气候变化在政治上越来越重要,太阳能地球工程真的成了一个禁忌。

David Keith believes that geo-engineering could provide an excuse for inaction on climate change, a reason for countries to explain why they did not take action.

戴维·基思认为,气候工程可以为人们在气候变化问题上的不所作为提供借口,也就是各国不 采取行动的理由。

He says controversy over the method has waxed and waned, an idiom connected with the cycle of the moon which describes something that increases then decreases over time.

他说,关于这种方法的争议不断演化。"wax and wane"是一个与月亮周期有关的俚语,描述的是随着时间的推移,某些东西会时而增加,时而减少。

In the 1960s for example, geo-engineering was uncontroversial, but by the 1990s it had become taboo - a subject that is avoided for social or religious reasons.

例如,在20世纪60年代,气候工程是没有争议的,但到了90年代,它已经成为禁忌,也就是一个出于社会或宗教原因而避而不谈的话题。

While these ideas to change the weather have potential benefits, other suggestions, for example to position a giant floating mirror between the earth and sun, are highly controversial Although personally, I think the idea of giant floating umbrella above Britain would be good! Ha!

以上这些操纵天气的方法都有潜在的好处,而其他方法极具争议。比如,在地球和太阳之间放一个巨大的镜子,悬浮在太空中。但我个人认为,可以在英国上空放一个飘浮的巨型雨伞!哈哈!

Well, just think, there are even rainier places to live Neil, as I asked in my question: in which country is the world's rainiest village?

但你想想看,内尔,世界上还有更多雨的地方呢,就像我问的: 世界上最多雨的村庄在哪个国家?

I guessed it was in Ireland. Which was... the wrong answer, I'm afraid. 我猜是在爱尔兰。很遗憾,回答错误。

In fact, Mawsynram, the world's wettest village, is in the Khasi hills of northeastern India.

其实,世界上最潮湿的村庄毛辛拉姆位于印度东北部的卡西山区。

With around twelve metres of rain a year, I guess it's not somewhere you'll be visiting, Neil!

那里一年中降水大约12米, 我想你是不会去了, 内尔!

OK, let's recap the vocabulary we've learned starting with drizzling which means raining lightly.

好了,让我们来回顾一下本期词汇,从"drizzling"开始,意为下小雨。

If you're meddling you're trying to change something which is not your responsibility or without being asked to.

"meddle"意为,不经允许就改变一些自己分外的事情。

Someone who is playing God is acting as if they control everything and can do whatever they want.

"play God"意为,某人表现得好像自己控制了一切,可以做自己想做的任何事情。

An excuse is a reason you give to explain why you did something wrong.

"excuse"就是你给出的犯错理由。

If something waxed and waned, it grew stronger then weaker over time.

"wax and wane",形容某事随着时间的推移,时而变强,时而变弱。

And finally, a taboo is a subject that avoided for social or religious reasons.

最后,"taboo"是指出于社会或宗教原因而避而不谈的话题。

Once again, our six minutes are up!

我们的六分钟又到了!

Bye for now! Bye!

下期再见! 再见!