INTRODUCING THE NEW

CLIMATE CHANGE SERIES

from astrobites

THE ASTRO-PH READER'S DIGEST
SUPPORTED BY THE **AAS**

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HOW DOES ASTROPHYSICS SHAPE OUR UNDERSTANDING OF EARTH?

mission

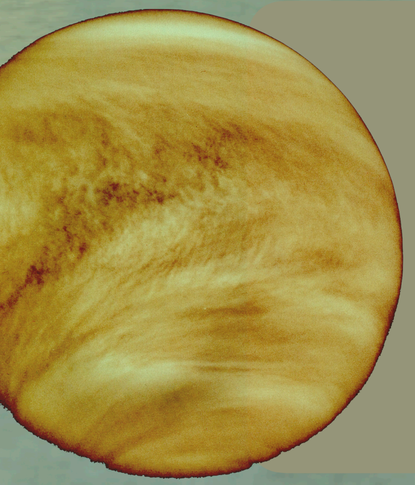
educate the general community about the intersection between astrophysics and the environment

“Why study the Universe when we have so many problems on Earth?”

Astronomers, physicists, and planetary scientists have faced this question at some point in their careers. As exciting and humbling it can be studying the Universe, there is simply no substitute for Earth.

Our planet is dying. Why then should we still focus on studying the cosmos?

Because **astrophysical endeavors** have actually **deepened our understanding of our own Earth.**



Studying **Venus** is how we discovered the **potential runaway greenhouse gas affect** that could affect Earth if we do not significantly curb our carbon emissions. Learning about how other planetary atmospheres formed and evolved allow us to predict the future of our own climate.

Satellites sent by NASA and other space agencies send a **constant flow of information** to scientists who monitor essential variables, **predict critical weather conditions** and live-track our changing climate. This data is **critical to understanding anthropogenic effects on our atmosphere**!

Additionally, **there is still so much to learn about** such as **uncovering the origin of Earth's magnetic field** which protects our atmosphere from dangerous cosmic flares and is **the reason humans can even survive**!

Earth's ever-changing atmosphere and climate, cycling from ice ages to interglacial periods, can only be understood by delving into space.

Studying other planets and our place in the cosmos inherently helps us realize what makes Earth so special.

TO LEARN MORE CHECK OUT THE ASTROBITES ON ECO-ANXIETY AND OUR INTRODUCTION TO THE NOVEL CLIMATE CHANGE SERIES

motivation

As the "gateway" science, astronomy can lead to larger conversations.

The climate crisis is likely the first time people have encountered ***planet-sized problems****.*

In constantly having to **think and solve problems on an astronomical scale, astrophysicists can help our community confront the big questions** of climate science and how studying outer space helps us navigate our Earthly problems.

why astrobites?

As a platform focused on science communication, it is important to not only embrace interdisciplinary science, but also continue to discuss the climate emergency that will leave no one unaffected.

As astronomers, **we reckon with the fragility, beauty, and utter chance of our existence on a daily basis.** All of the **groundbreaking research** we are privileged to do and are surrounded by **does not matter unless we have a planet to live on.**

We owe it to ourselves, our fellow humans, and our future to protect the only planet we have ever called home.

current endeavors

upcoming posts:

Virtual conferences and their effects on emissions,
Satellites and space debris,
Bringing climate change into introductory courses,
Interviews of people who have moved from astro to environmental fields,
Latest NASA Climate research

collaborations

Astronomers for Planet Earth,
Other sister Sci-bites groups,
Science Policy groups

Look out for Earth Week x Astrobites coming to you April 2022…

astrobites

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If you are interested, please connect!

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SCAN ME TO SUGGEST WHAT YOU WOULD LIKE THE CLIMATE CHANGE SERIES TO COVER!