

# What's Up in the Night Sky for JUNE



Presented by

Photonverse

June 2025 Night Sky: Strawberry Moon,  
Meteor Showers & Planet Conjunctions!

<https://www.youtube.com/watch?v=o-k3FG5qoc8>

The Secrets of the Universe

Everything You'll See in the Night Sky in  
June 2025 — It's a Stunning Month

<https://www.youtube.com/watch?v=NZDbKMeUX7Q>

---

## Mars Society Ambassador Program

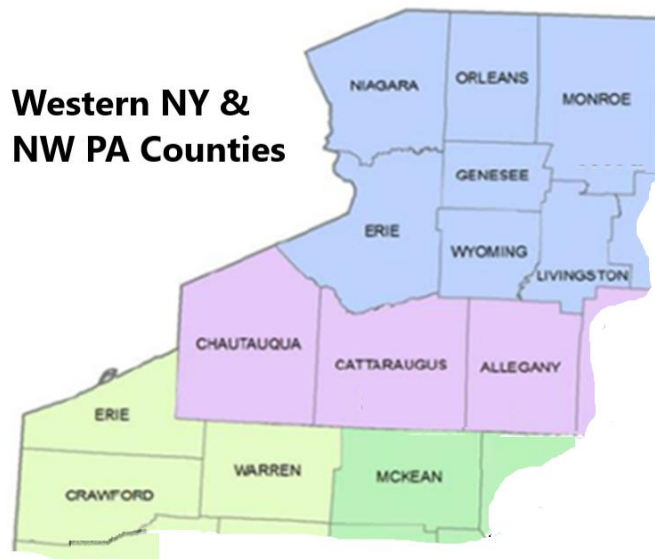


I just want to share that I recently became a member of the Mars Society. In doing so, I have become a Mars Society Ambassador. The **Mars Society Ambassador** program is designed to serve as a professional team of advocates dedicated to elevating public awareness toward landing human explorers on Mars within a decade, leading to the eventual settlement of the red planet in the years to follow. Those accepted into the program, with the assistance of Mars Society leadership, participate in both in-person and virtual speaking

opportunities at organizations, schools, and other public events in order to promote the importance of the humans-to-Mars concept as well as involvement with the Mars Society.

So what is the Mars Society? The Mars Society is the world's largest and most influential space advocacy organization dedicated to the human exploration and settlement of the planet Mars. Established by Dr. Robert Zubrin and others in 1998, the group works to educate the public, the media and the government on the benefits of exploring Mars and creating a permanent human presence on the Red Planet. To learn more about the Mars Society click here: <https://www.marssociety.org/about/>

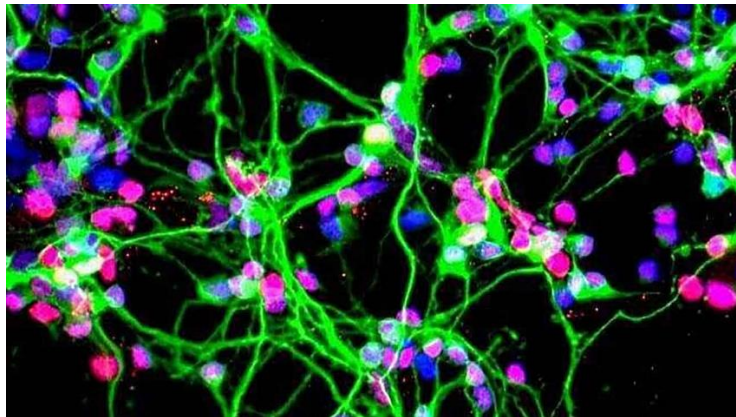
Along with becoming a member and ambassador for the Mars Society, I have started forming a Mars Society chapter in Western New York and Northwestern Pennsylvania. The name of It is, **Lake Erie Mars Society (Western NY-NW PA) Chapter**. If you are on FaceBook you can find our page by clicking this link: <https://www.facebook.com/groups/2154934961613851> Below is a map of the counties included. There are 10 counties in Western New York and 4 in Northwestern Pennsylvania. We will have monthly meetings both in person and virtually. I am also planning to have a monthly newsletter to keep members updated on any Mars related news and chapter events. If anyone in any of those counties or outside would like to learn more and/or get involved, please contact me at [centiastro.space@gmail.com](mailto:centiastro.space@gmail.com) at your convenience.



---

## Neural Organoids in Space: Unlocking the Mysteries of the Brain in Microgravity - ISS National Lab

January 29, 2025 Davide Marotta, Program Director In-Space Biomanufacturing



Dopaminergic neurons growing in a culture dish (20x magnification).  
Media Credit: Aspen Neuroscience

What happens to human brain cells when they grow in space? This might sound like a question from science fiction, but it's a real and exciting area of research.

Before joining the International Space Station (ISS) National Laboratory, I and an incredible team of scientists from National Stem Cell Foundation, the Scripps Research Institute, and The New York Stem Cell Foundation sent 3D models of the human brain, known as neural organoids, to the ISS to study how they develop in microgravity. The condition of perceived weightlessness created when an object is in free fall, for example when an object is in orbital motion. Microgravity alters many observable phenomena within the physical and life sciences, allowing scientists to study things in ways not possible on Earth. The International Space Station provides access to a persistent microgravity environment.. The results, recently published in [Stem Cells Translational Medicine](#), are opening doors to incredible possibilities for health and medicine on Earth. To read more click the link: <https://rb.gy/09sg22>

---

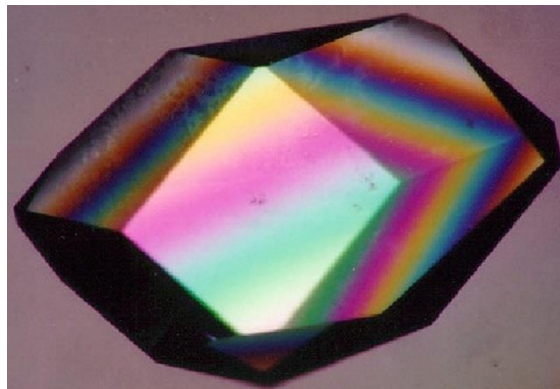
## ISS Medical Monitoring



Medical Monitoring On Board the International Space Station (ISS) (Medical Monitoring) involves the collection of health data at regular intervals from long-duration International Space Station (ISS) crewmembers. Crew health before, during and following space flight is essential to overall ISS mission success. All of the partner agencies recognize the importance of crew health to mission success and are dedicated to maintaining the health of all crewmembers throughout all phases of ISS missions. Click the link to read more: <https://rb.gy/kcc4ps>

---

## 6 NASA Experiments on Materials, Benefitting Space and Earth - NASA Science



A Lysozyme crystal grown in microgravity, viewed under a microscope using X-ray crystallography. NASA



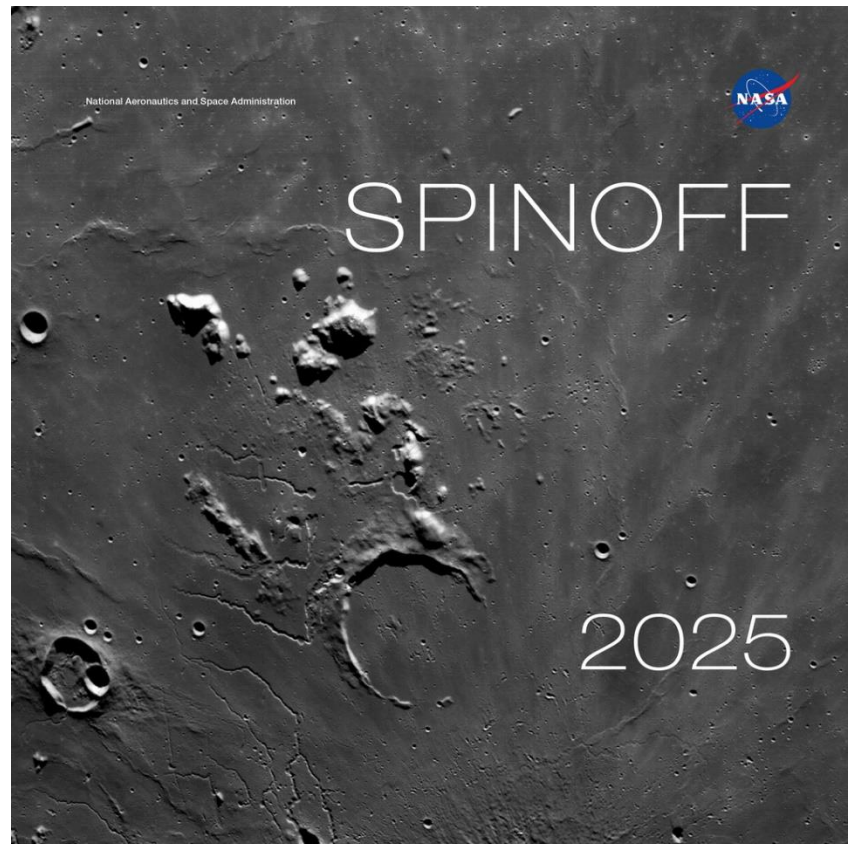
Did you know that NASA conducts ground-breaking research in space on materials like metals, foams, and crystals? This research could lead to next-generation technology that both enables deep-space exploration and benefits humanity.

Here are six studies scientists have conducted on the International Space Station that could have profound implications for future space travel and also improve products widely used on Earth: For more information click the link: <https://rb.gy/ibgw0g>

---

## **NASA's Advancements in Space Continue Generating Products on Earth | NASA Jet Propulsion Laboratory (JPL)**

Feb. 12, 2025



The cover of Spinoff 2025, NASA's annual publication that chronicles commercial products born from space technology, is a detailed view of the lunar surface captured by cameras on the Orion spacecraft on a close approach of the Moon during the Artemis I mission. Credit: NASA

**NASA's Jet Propulsion Laboratory developed or collaborated on multiple technologies highlighted in the agency's annual publication focused on commercial infusions.**

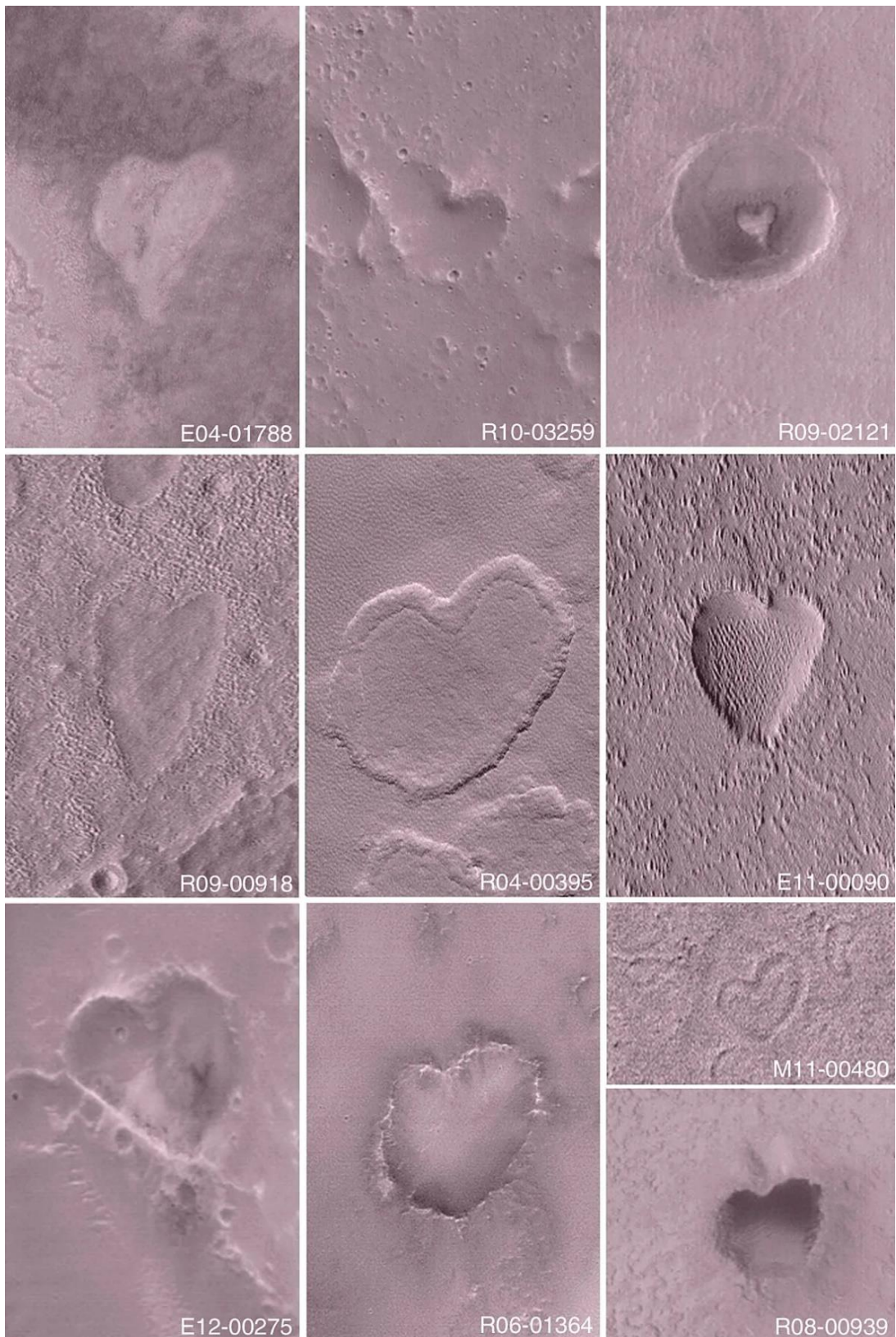
The latest edition of NASA's Spinoff publication, which highlights the successful transfer of agency technology to the commercial sector, is now available online. Click the link to find out more: <https://rb.gy/fl49eu>

---

### **Fact Worth Sharing**

**Earth is slowly shrinking. Every year, our planet gains about 45,000 metric tons of mass from meteorites and dust that falls to the surface. At the same time, Earth loses about 100,000 tons of mass through the escape of atmospheric gases.**

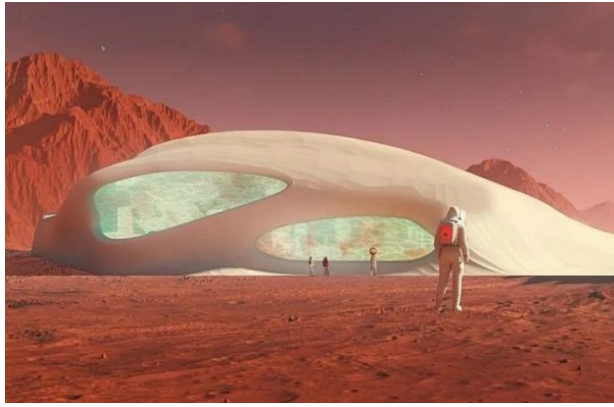
## Hearts on Mars | The Planetary Society



Mars may be named after the god of war, but it seems more like a sappy romantic. NASA's Mars Global Surveyor spacecraft spotted these hearts on the Martian surface throughout its time in orbit. All of them are natural formations, but let's just go ahead and interpret them as love notes from the red planet. *Image credit. NASA/JPL/Malin Space Science Systems.* More info here: <https://rb.gy/qkuhv1>

# How Space Explorers Could Grow Habitats From Fungus

Kate Howells February 13, 2025



**A bio-habitat on Mars** This conceptual drawing shows what an organically grown habitat could look like. Redhouse Architects/NASA.

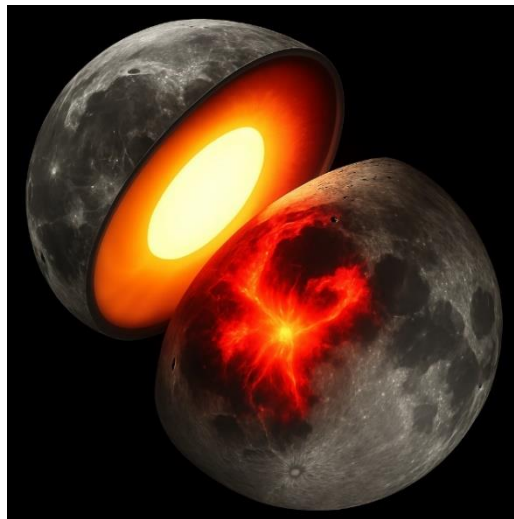
Blurring the line between biology and technology is a classic trope in science fiction. From the biomechanical Xenomorph ships in the “Alien” franchise to the formidable Borg in “Star Trek,” we often imagine advanced, terrifying alien civilizations capable of manipulating living things toward technological ends.

In yet another sci-fi trope, we Earthlings are increasingly turning into the technologically advanced beings we once feared. We’ve learned to harness nature’s processes to produce genetically modified organisms; we’re experimenting with [incorporating living muscle tissue into robots](https://tinyurl.com/578jm5vv); and, in one NASA-funded project, we are developing the ability to grow space habitats from fungi. Read the full article here: <https://tinyurl.com/578jm5vv>

---

## NASA Studies Reveal Hidden Secrets About Interiors of Moon, Vesta

May 14, 2025



This artist's concept shows the Moon's hot interior and volcanism about 2 to 3 billion years ago. It is thought that volcanic activity on the lunar near side (the side facing Earth) helped create a landscape dominated by vast plains called mare, which are formed by molten rock that cooled and solidified. Credit: NASA/JPL-Caltech

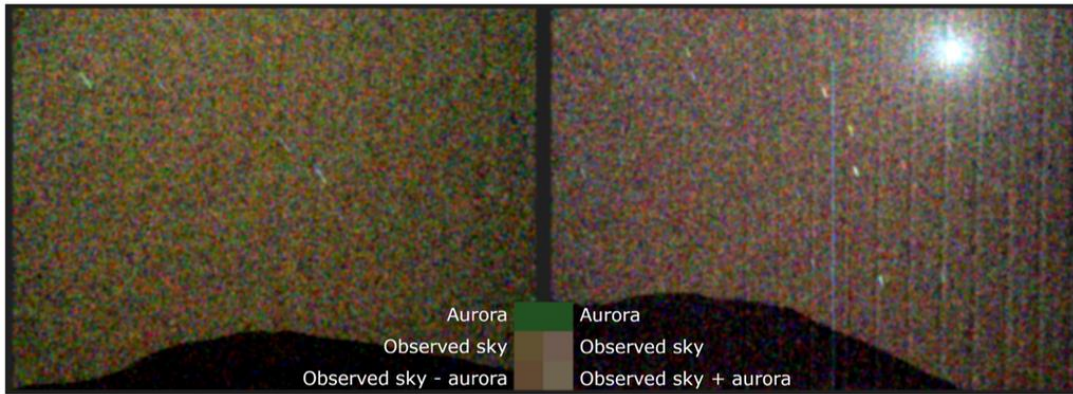
**Analyzing gravity data collected by spacecraft orbiting other worlds reveals groundbreaking insights about planetary structures without having to land on the surface.**

Although the Moon and the asteroid Vesta are very different, two NASA studies use the same technique to reveal new details about the interiors of both. For more info click: <https://tinyurl.com/3a6xn8tk>



# NASA Observes First Visible-light Auroras at Mars

May 14, 2025



The first visible-light image of a green aurora on Mars, left, taken by NASA's Perseverance rover. A comparison image, right, shows the night sky without the aurora but featuring the Martian moon Deimos. Credit: NASA/JPL-Caltech/ASU/MSSS/SSI

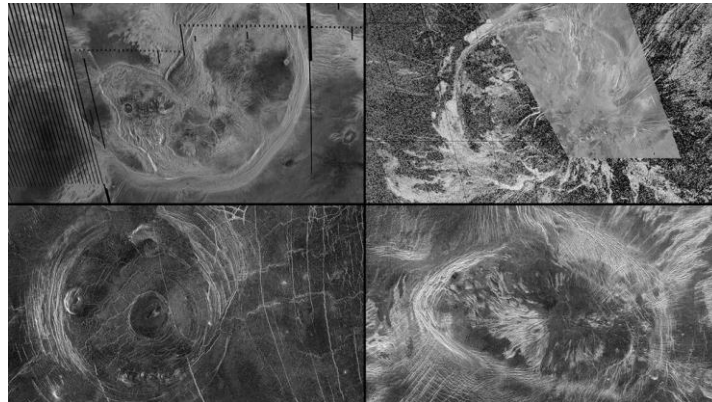
**NASA's Perseverance Mars rover made history by detecting them for the first time from the surface of another planet, and MAVEN confirmed the detection.**

On March 15, 2024, near the peak of the current solar cycle, the Sun produced a solar flare and an accompanying coronal mass ejection (CME), a massive explosion of gas and magnetic energy that carries with it large amounts of solar energetic particles. This solar activity led to stunning auroras across the solar system, including at Mars, where NASA's Perseverance Mars rover made history by detecting them for the first time from the surface of another planet. Click the link to read more: <https://tinyurl.com/5yw96t2p>

---

## NASA's Magellan Mission Reveals Possible Tectonic Activity on Venus

May 14, 2025



New research suggests vast surface features on Venus called coronae continue to be shaped by tectonic processes. Observations of these features from NASA's Magellan mission include, clockwise from top left, Artemis Corona, Quetzalpetlatl Corona, Bahet Corona, and Fotla Corona. Credit: NASA/JPL-Caltech

**Using archival data from the mission, launched in 1989, researchers have uncovered new evidence that tectonic activity may be deforming the planet's surface.**

Vast, quasi-circular features on Venus' surface may reveal that the planet has ongoing tectonics, according to new research based on data gathered more than 30 years ago by NASA's Magellan mission. On Earth, the planet's surface is continually renewed by the constant shifting and recycling of massive sections of crust, called tectonic plates, that float atop a viscous interior. Venus doesn't have tectonic plates, but its surface is still being deformed by molten material from below. For more info click: <https://tinyurl.com/mrxv4899>

# Jupiter Was Formerly Twice Its Current Size and Had a Much Stronger Magnetic Field

May 20, 2025



In a new study published in the journal *Nature Astronomy*, [Konstantin Batygin](#) (PhD '12), professor of planetary science at Caltech; and Fred C. Adams, professor of physics and astronomy at the University of Michigan; provide a detailed look into Jupiter's primordial state. Their calculations reveal that roughly 3.8 million years after the solar system's first solids formed—a key moment when the disk of material around the Sun, known as the protoplanetary nebula, was dissipating—Jupiter was significantly larger and had an even more powerful magnetic field. To read more click: <https://rb.gy/xkpyr4>

---



© Centi Astro-Space Activities 2025

## Centi Astro-Space Activities

91 East Main Street

Brocton, New York 14716

United State of America

716 - 338 - 7596

Emails: [centiastroospace@centiastroospace.com](mailto:centiastroospace@centiastroospace.com)

[centiastroospace@gmail.com](mailto:centiastroospace@gmail.com)

Website: [www.centiastroospace.com](http://www.centiastroospace.com)

If you wish to no longer receive our newsletter or emails from us, please

[Unsubscribe](#)