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HIP 106044

HIP 106044

A light for our story



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A story among the stars

Celestial Library edition



*Every light holds a story. These pages
follow its journey, from the heart of the
star to the sky we share.*

The sky, page by page

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HIP 106044

One light among many

Pavo spreads its quiet wings across the southern sky. Within it, SX Pav changes brightness in a rhythm of about fifty-one days. This old, cool giant draws us toward a delicate question: when a star pulses, how much matter and dust does it send into the space around it?

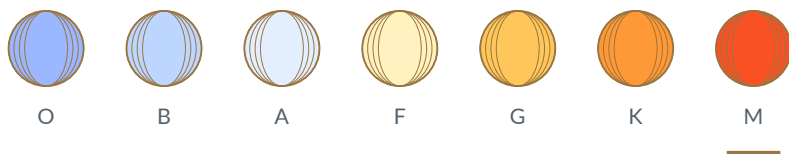
The answer does not always arrive as a clear line in a spectrum. Sometimes the most careful observation is a measured limit—a faint suggestion, kept distinct from a detection. Even that boundary can tell us where to look again, as one star's slow beat meets the uncertain threshold of a stellar wind.

The colour of its fire

The light of HIP 106044 has a character of its own. In the M family, red seems to keep the last colour of sunset. These surfaces are relatively cool among the familiar stellar families. The same tint can clothe very different bodies: colour opens the story while leaving much still to discover.

To the unaided eye, a stellar colour can be little more than a whisper. The atmosphere makes it tremble and our eyes receive it in their own way. Beyond that point we can imagine a living surface of hot matter: the visible beauty of processes working on a scale far greater than ours.

SEVEN FAMILIES OF LIGHT

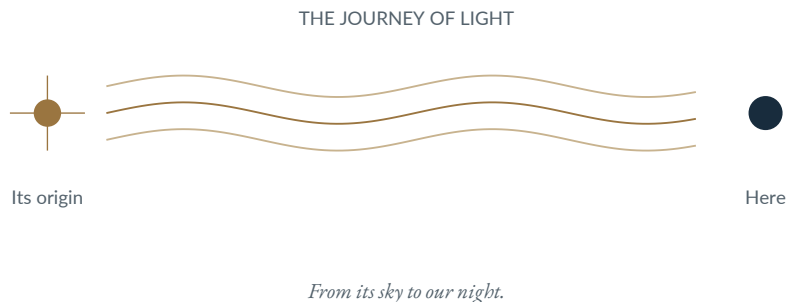


Light keeps the colours of its origin.

The journey ending here

The light of HIP 106044 crosses approximately 396.3 light-years to reach us. The brightness we receive has therefore spent about 396.3 years on its way. Distance becomes time: looking at this star means meeting light that began travelling before this moment. When it set out, the Sun and its planets already shared a history billions of years old. On their scale, this journey is barely a breath.

Its light has crossed the time of several generations. We can imagine hands writing letters, lit windows and voices that now live only in other voices. Through all that passing on, the brightness kept travelling; tonight it reaches us.



A landscape for imagination

HIP 106044 lies in the region of the Peacock. The Peacock invites beauty to unfold slowly. In the imagined sky, each light can be a feather, and each feather a reason to pause and look.

Figures in the sky are a human way of approaching immensity. In our gaze they join lights that may lie at very different distances. Imagination stretches the thread; the stars provide the brightness. A single landscape can therefore keep old images while receiving a story that begins tonight.



Its light, among other lights of the constellation.

A pulse near the dust line

SX Pav is a red giant that brightens and dims on a rhythm of about 51 days. In 2018, an APEX team placed it among eleven nearby, short-period AGB stars and listened for carbon-monoxide emission from their outflows. The table gave SX Pav an infrared colour of 0.480 magnitudes, below the study's 0.55 benchmark, and recorded no clear detection. Yet the spectrum held a faint excess near the star's own velocity—about two standard deviations. The authors resisted turning that hint into a wind measurement: it was too uncertain to determine an expansion speed or mass-loss rate, so they kept the result as a non-detection and reported only an upper limit. In the wider sample, dust production rose around periods near 60 days; SX Pav's 51-day pulse rests close to that changing ground.

We can imagine this light as a melody whose quieter notes took years to hear. The instruments keep the measurements; memory keeps another kind of rhythm. When we return to the star, its small variations invite us to treasure the continuity that survives within change, and the gentle art of recognising a familiar presence in a night that is never quite the same.

A life opening out

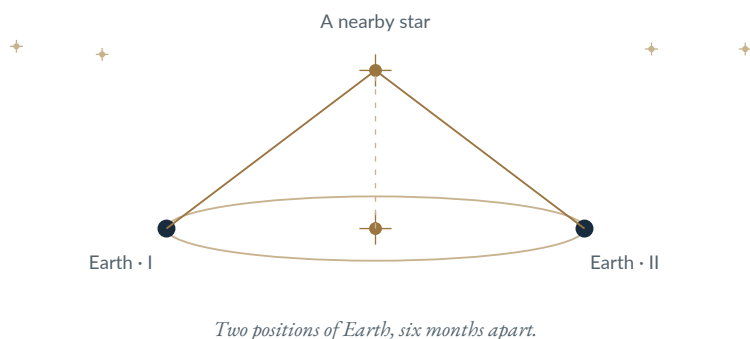
The word giant speaks of a star that has moved beyond the appearance of its first long stage. Its envelope has expanded and the interior has changed the way it supports itself. We can imagine a life opening its rooms, a light taking up more space while writing a different chapter of its story.

To approach HIP 106044, we can let that scale widen our imagination. A stellar age is unlike a birthday: it speaks of changing matter, of energy finding a way out, of a balance sustained and transformed. Tonight's light is one page of that time, and we happen to be here to receive it.

Measuring with two glances

To begin measuring a stellar distance, Earth offers us a movement. We observe from one side of its orbit and look again about six months later from the other. A nearby star seems to shift slightly against more distant ones. That small change of perspective is called parallax.

We can feel the principle by looking at a finger with one eye and then the other. What fits between two glances at home requires our planet's journey in the sky. There is something beautiful in that patience: to learn how far a light is from us, we first learned to look from somewhere else.



Nothing stands still

Although it seems still, HIP 106044 belongs to a moving sky. Stars travel through the galaxy and our own home moves with the Sun. The distances are so great that many of these changes need years of observation to become visible. The serenity we see is really keeping a journey.

We can imagine every night as a meeting between travellers. We arrive with one more day of memories; the star arrives with its light and its path. The meeting seems to repeat, yet it is never quite the same. Perhaps that is why looking again can be such a simple way to celebrate shared time.

The night of finding it

SX Pav, also HIP 106044, HD 203881 and HR 8196, lies in Pavo. At visual magnitude 5.62 it is near the unaided-eye limit under dark skies; binoculars make it easier to find. Use a current chart for the Peacock around J2000 coordinates RA 21h 28m 44.9s, Dec $-69^{\circ} 30' 19''$. Its far-southern position means it is best placed from southern latitudes, with local visibility set by the horizon and season.

If a telescope joins the evening, a wide field is a gentle beginning. As a reference, a 114 mm Newtonian with a 500 mm focal length gives 20× with a 25 mm eyepiece. The star remains a point of light; the instrument gathers more of its brightness. The best memory may be the moment we leave the eyepiece and say: there it is.

Somewhere to return

We can leave SX Pav beneath the Peacock with its fifty-one-day pulse in mind. APEX listened for carbon monoxide in the star's outflow and found only a tentative trace, too faint for a secure wind measurement. The table's upper limit marks what the observation could say, and what it could not.

The wider sample places a rise in dust production near periods of sixty days, but SX Pav alone does not settle that threshold. Its restrained signal invites another observation, another season of patient listening, and a little more room around what we know.

The traces of this story

ESA Hipparcos / VizieR

https://vizier.cds.unistra.fr/viz-bin/VizieR-5?-source=I/239/hip_main&HIP=106044

NASA · Our Sun

<https://science.nasa.gov/sun/facts/>

ESA · Measuring stellar distances by parallax

https://www.esa.int/ESA_Multimedia/Images/2013/06/Measuring_stellar_distances_by_parallax

McDonald et al. (2018) · MNRAS 481, 4984–4999 · §§2–5, Tables 3–4;
APEX observations of SX Pav.

<https://academic.oup.com/mnras/article/481/4/4984/5106872>

ESA Hipparcos catalogue via CDS VizieR · HIP 106044 row; coordinates,
parallax and magnitude.

https://vizier.cds.unistra.fr/viz-bin/asu-tsv?-source=I/239/hip_main&HIP=106044

To keep discovering

NASA · The lives of stars

<https://science.nasa.gov/universe/stars/>

NASA · What is a light-year?

<https://science.nasa.gov/exoplanets/what-is-a-light-year/>

IAU · Constellations and their names

<https://iauarchive.eso.org/public/themes/constellations/>

Celestron · Choosing eyepieces

<https://www.celestron.com/blogs/knowledgebase/how-to-determine-which-eyepieces-to-use-with-your-telescope>

SIMBAD / CDS · SX Pav = HIP 106044 = HD 203881 = HR 8196;
identifiers, M5 III type and astrometry.

<https://simbad.cds.unistra.fr/simbad/sim-id?Ident=SX%20Pav>

Original ISDORA prose and illustrations. Images are artistic evocations or diagrams, not to scale. Distances are approximate. Constellation figures include contemporary literary readings.



May there always be a night
to look again.



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A STORY OF LIGHT