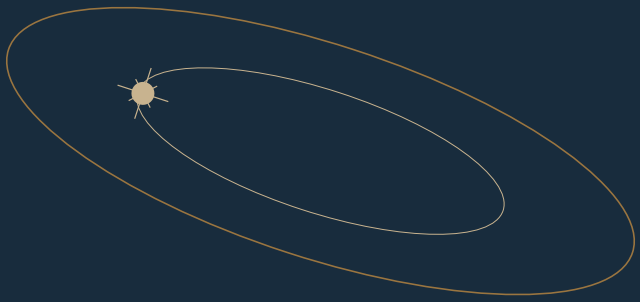
ISDORA

CELESTIAL LIBRARY

HIP 940

HIP 940

A light for our story



ISDORA · CELESTIAL LIBRARY

A story among the stars

Celestial Library edition

HIP 940

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

ISDORA-LIBRARY

CONTENTS

A story beneath the stars

One light among many 4

The colour of its fire 5

The journey ending here 6

A landscape for imagination 7

A dated spectroscopic campaign on HD 698 8

A life opening out 9

Measuring with two glances 10

Nothing stands still 11

The night of finding it 12

Somewhere to return 13

ISDORA CELESTIAL LIBRARY

ISDORA-LIBRARY

HIP 940

One light among many

Some nights begin when we stop hurrying. The day withdraws, our eyes learn the darkness and, little by little, the stars appear. Among them is HIP 940. Until now it may have been another distant light; pausing to look is the beginning of giving it a place in our own story.

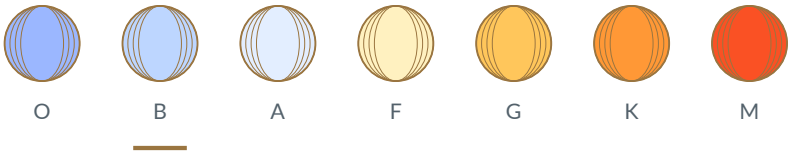
A dedication begins with that simple gesture: choosing something beautiful and wanting to share it. The star will continue on its way, beyond our calendars, while here below its light can accompany a date, a name or words we wish to keep. Immensity takes on an intimate measure: the measure of what matters to us.

The colour of its fire

The light of HIP 940 has a character of its own. The B family carries the blue tint of hot surfaces in its light. Imagine a clear radiance, like the first brightness over snow. Its beauty comes from the same matter that, under other conditions, can kindle an amber-coloured star.

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 940 has a journey behind it. Before touching our eyes it has crossed space, carrying the trace of its origin. The sky is filled with arrivals: every point appearing in the darkness offers a meeting with another place and another moment.

Perhaps that is one of distance's gentlest gifts: allowing something born far away to become part of what is close. While the Sun carries its planets around the galaxy, we keep receiving these silent messages. Night gathers the journeys; our gaze gives them somewhere to arrive.

THE JOURNEY OF LIGHT



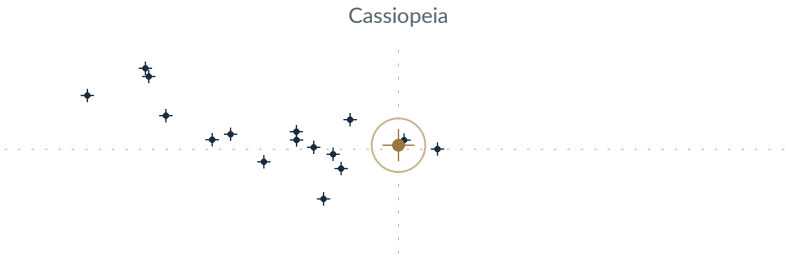
Its origin Here

From its sky to our night.

A landscape for imagination

HIP 940 lies in the region of Cassiopeia. Cassiopeia has a name that seems made to be spoken softly. Its figure invites us to imagine a seat before the immensity, and enough time to contemplate it.

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 dated spectroscopic campaign on HD 698

HD 698 (V742 Cas; HIP 940) was examined with 78 high-resolution spectra: 71 from Three College Observatory during 2014–2025 and seven from Kernersville Observatory during 2016–2018. Combining the radial velocities with interferometric data, the 2025 study derived a 55.927-day orbit and dynamical component masses. These campaign ranges date the observations; 2025 dates the research report, not a single observing night.

The result matters because the companion appears inflated and consistent with a stripped star, placing this Be binary in a short-lived post-mass-transfer stage before the donor contracts toward a subdwarf. That evolutionary reading is model-supported, not a direct discovery claim. The authors build on earlier work; the system was already known as a single-lined binary since 1932.

We may picture the discovery as a second candle becoming visible beside a brighter flame. The image gives depth to a light we thought we knew. It also leaves room for an intimate thought: sometimes companionship is understood slowly, through small signs gathered with care. The sky offers the scene; we bring the memories that make its two presences matter to us.

A life opening out

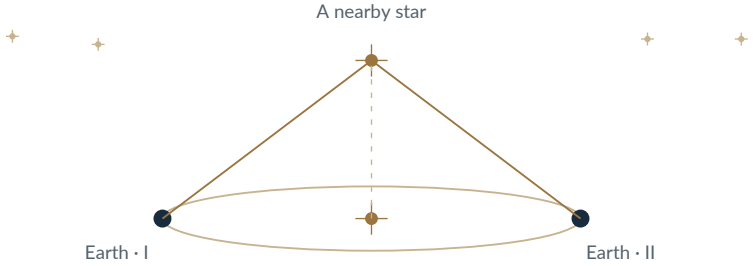
The word giant speaks of a star that has moved beyond the appearance of its first long stage. Its envelope has expanded and the interior has changed the way it supports itself. We can imagine a life opening its rooms, a light taking up more space while writing a different chapter of its story.

To approach HIP 940, 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.



Two positions of Earth, six months apart.

Nothing stands still

Although it seems still, HIP 940 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

We can begin with something simple: looking into a starry sky and letting our eyes grow used to darkness. The dedication page lets us choose a place and time to find where to look. Recognising the constellation first turns a distant map into a familiar landscape.

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 close this booklet and let HIP 940 become a small light in an enormous night again. Something, though, will have changed. We now know part of its journey, a shade of its colour and a way to find it. What seemed far away has a place in our memory.

There will be clear nights and others when clouds keep the sky. Not every night will allow observing, but each can bring back the memory of this gesture. Sometimes a name is enough to return to a date, a voice, a few shared words. And when the light appears again, we will have one more reason to pause and look.

The traces of this story

ESA Hipparcos / VizieR
https://vizier.cds.unistra.fr/viz-bin/VizieR-5?-source=I/239/hip_main&HIP=940

NASA · Our Sun
https://science.nasa.gov/sun/facts/

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

CDS/SIMBAD identifier output for HIP 940
https://simbad.cds.unistra.fr/simbad/sim-id?Ident=HIP+940&output.format=ASCII

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

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/

ESA · Measuring stellar distances by parallax
https://www.esa.int/ESA_Multimedia/Images/2013/06/Measuring_stellar_distances_by_parallax

Dynamical Masses and Radiative Transfer Modeling of HD 698: a Be Binary in Evolutionary Transition
https://arxiv.org/html/2511.02523

Rivinius et al. 2025, A&A 694 A172: V742 Cas binary context
https://www.aanda.org/articles/aa/pdf/2025/02/aa47275-23.pdf



May there always be a night to look again.

HIP 940

HIP 940 · ISDORA-LIBRARY

A STORY OF LIGHT