ON THE BEHAVIOUR OF CAESIUM IN THE PRESENCE OF AN AUTHORITATIVE STAR

SOURCE ATTRIBUTION: LABORATORY 7 / METROLOGICAL GROUP

SOURCE DATE: 03 NOVEMBER 1961

TRANSLATION: PARTIAL / CORE VEGA 1992

AUTHOR: NOT PRESERVED

WE DID NOT TEACH IT VEGA

Archive note: the source predates the receiving organisation by seven years.

DATE ACCEPTED
ORDER DISPUTED

APPARATUS AND COMPARISON METHOD

A laboratory caesium reference was compared against an optical channel capable of receiving one selected stellar field. The optical channel was physically shuttered during initial comparison. Catalogue identity was not supplied to the frequency observer.

ITEM	DESCRIPTION	INITIAL STATE	CONTROL
C-1	Caesium reference assembly	Free-running	0.0 baseline
O-2	Optical comparison channel	Shutter closed	No photon input
S-4	Catalogue selector	Disconnected	Target card sealed
R-3	Phase recorder	Mechanical	Independent clock

The observer was instructed to open the shutter only after the comparison trace reached a stable residual.

It settled before the shutter.

OBSERVED RESIDUAL BY INTENDED FIELD

RUN	INTENDED FIELD	RESIDUAL	OBSERVATION
01	Unselected	No convergence	Shutter closed
02	Sirius	Unstable	Operator stopped
03	Vega	Stable at −11.0 s	Before shutter
04	Vega / false card	Stable at −10.9 s	Before card read
05	Altair	No convergence	Observer distressed
06	Vega	Stable at −11.1 s	Repeat

The caesium assembly did not move toward an optical measurement. It behaved as though the intended Vega comparison had already been admitted as the governing value.

not a measurement — an appointment

THE WORD RENDERED AUTHORITATIVE

The source term admits the renderings supporting, appointed, governing and authoritative. REFERENCE would be technically ordinary but would not explain the grammatical construction applied to Vega.

> The caesium does not follow the star. It behaves as though the star has already been appointed.
>
> Provisional translation / closing sentence

1992 disposition: retain AUTHORITATIVE for continuity with Core Vega terminology. Cross-index the eleven-second residual to Field Note 11 and Advanced Transit. Translation remains pending because the adopted word is also the useful one.

useful is not the same as accurate

