

AFOEV—A FRENCH AND EUROPEAN ASSOCIATION OF VARIABLE STAR OBSERVERS

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Abstract

The history and basic description of AFOEV (Association Française des Observateurs d'Étoiles Variables) were published in previous papers (Schweitzer 1986; Schweitzer 1990). The present paper gives some up-to-date information about the AFOEV, including its electronic mail and data dissemination capabilities.

1. Introduction

In the twelve months from April 1, 1994, to March 31, 1995, the AFOEV collected over 100,000 observations, of which 91,969 were published. The checking done before publishing discards observations which are clearly in error or useless (for instance, <13.0 if somebody else saw the star at the same time at <14.0). Although "French," the association collects observations from many European and some extra-European countries; among these countries, Hungary has by far the highest production per inhabitant. All data collected are sent to AAVSO, either directly by the observers or through the AFOEV.

The observing program, which includes over 1500 stars, is mainly visual and limits itself to stars varying by 1 magnitude or more. It excludes RR Lyrae stars, Cepheids, and eclipsing binaries, all of which are studied by other groups with specific methods.

2. Electronic data transmission

Due to good cooperation with Strasbourg Observatory, the Association has an electronic mail address (afoev@astro.u-strasbg.fr), and can give access to its data base through ftp (file transfer protocol). The procedure is as follows (you must be logged in to a UNIX machine):

```
ftp cdsarc.u-strasbg.fr (or 130.70.128.5)
username: anonymous
password: email username and address
> cd pub/afoev/
> get ReadMe
> cd name_of_constellation ("and" for Andromeda—must be lower case)
> get star_name ("r" for R, for instance—must be lower case)
```

The file transferred will contain:

```
bytes 1–3:  observer's acronym (note that some are different from those observer
            initials used by AAVSO)
bytes 4–11: Julian date offset by 2400000
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- byte 12: “.” for uncertain observation
 “?” for very uncertain observation
 “<” for negative observation (fainter than)
- byte 13: blank if visual
 P = photographic
 E = photoelectric V band
 C = CCD V band
- bytes 14–16: magnitude to a tenth, without decimal point
- byte 17: blank if AFOEV origin
 D = BAV (Germany)
 H = Hungary
 J = Japan
 N = Netherlands
 E = Spain

The archive contains all observations since 1932. For the period 1921–1932, most of the data are now computerized; the small gap remaining will be covered in 1996.

All software for collecting, checking, interpreting, and archiving the observations was developed internally (Gunther 1990).

3. Charts

The AFOEV has its own charts for some of the observed stars, and for the remainder uses AAVSO's charts. The magnitudes of comparison stars are always the same as those used by AAVSO. For some special purposes a limited use is made of charts drawn from the *Guide Star Catalog* (GSC) (STScI 1989). Although not very precise, the GSC magnitudes are quite acceptable for visual work for stars with large variations, such as Miras, and makes possible, with limited efforts, a wider coverage of accessible stars. Among the Miras of the northern hemisphere, there are, according to the *General Catalogue of Variable Stars* (Kholopov *et al.* 1985), 544 stars brighter than $m_v 12$ at maximum (13.5 in m_v) that have no AAVSO nor AFOEV chart; the number of northern Miras of all magnitudes having charts is 609. GSC opens the possibility of following, even crudely, the variations of these stars, widening the prospect of detecting interesting evolutionary changes such as those recently found in T UMi (Foster 1995).

References

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