

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS

Number 3492

Konkoly Observatory
Budapest
17 July 1990
HU ISSN 0374 - 0676

A Catalog of Contact and Near-Contact Binary Stars

We have compiled a catalog of 1346 contact and near-contact binary system including the class of binaries with the light curves of W UMa and β Lyr types. Some eclipsing systems and systems with Algol type light curves have also been included in the catalog if both components of the system are close in size to their inner critical Roche surfaces, or if the system is similar by physical properties to W UMa type.

The catalog has five tables and individual notes. Stars appear in the catalog in order of their variable star names as in the "General Catalogue of Variable Stars". The first two tables were almost exclusively extracted from the fourth edition of the "General Catalogue of Variable Stars". The first table contains cross references, equatorial coordinates for the equinox 1950.0, the annual precession in the equatorial coordinates for the same equinox, and the type of variability. The second table contains the spectral type, maximum and minimum brightness, and light elements. The remaining part of the catalog contains in three tables information on the available photometric, spectroscopic, orbital and physical properties of the systems. Unfortunately such properties are available only for a small fraction of the known contact and near-contact binary systems. A bibliography and notes for each star are included to direct interested workers to primary references for each of the system.

The catalog is available on request from the authors in Macintosh diskettes.

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