THE CATALOGUE OF THE COMPONENTS OF DOUBLE AND MULTIPLE STARS (C C D M) - First edition.

J.DOMMANGET & O.NYS
Royal Observatory, Belgium
3, avenue Circulaire
1180 - Bruxelles

The Hipparcos mission required the realisation of an Input Catalogue giving the positions of 100.000 stars (single or components of double and multiple systems) to an accuracy better than 1"5. At the start of this work (1981) no specific catalogue of double and multiple stars provided these data. The only general data base on double stars available to us, giving positions to ±1', was the Index (1961,0) updated at the USNO by C.E.Worley till 1976,5 and of which a copy was communicated by P.Muller of the Observatoire de Meudon. It has then been decided to reformat this Catalogue in such a way as to allow the introduction of all necessary information for the mission. This permitted a correct cross-identification with the Hipparcos Input Catalogue (of finally 118.000 stars). It was later called: the *Catalogue of the Components of Double and Multiple stars* (CCDM). Since then, it has been developed and its aim remains to furnish the best accurate locations and descriptions of the double and multiple systems on the sky for all double and multiple star research.

In comparison with the INDEX (1976,5), its completion consisted of 4.700 additional Durchmusterung, 16.200 AGK2/3, 13.100 SAO, 25.500 HD, 3.900 BDS (if the ADS are not given) and 14.700 Hipparcos identificators as well as 45.000 accurate individual positions of components or systemic photocenters. Presently more than half of the 64.000 systems (135.000 records) of this catalogue are correctly located on the sky within an error of generally ±1". This part of the catalogue (34.031 systems) has been made available to the astronomical community: its introduction is published in *Communications de l'Obs. R. de Belg.* (Série A, n°115) and the catalogue it-self is available at the Centre de Données Astronomiques at Strasbourg (France). The remaining part (29.432 systems) for wich accurate positions are still missing, is available on request to the authors.

A further edition will be extensively completed in all data fields and, beside all known double and multiple stars observed by Hipparcos, will contain all those discovered by the satellite.

E. Høg and P. K. Seidelmann (eds.),
Astronomical and Astrophysical Objectives of Sub-Milliarcsecond Optical Astrometry, 395.