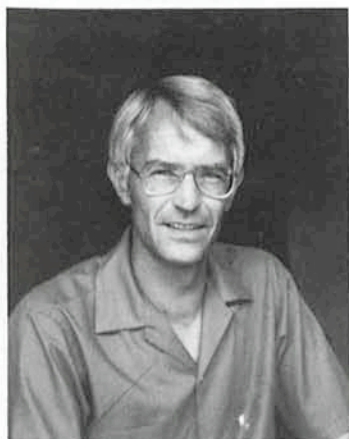




● La Silla
● La Serena
● Santiago

● Munich

FRANK MIDDELBURG 1936–1985



The news of the departure, on November 15, 1985, of Frank Middelburg afflicted the world of astronomy with a special feeling of sadness. Not only was Frank an extremely well-known expert in the field of image processing and a highly respected software system designer, but also a deeply appreciated friend and colleague.

Born on October 8, 1936, in Hong Kong as the son of an ambassador, Frank early became acquainted with an international environment. Newly married to Anita, he joined ESO in 1967 as one of its first European staff members in Chile. The experience he gained at La Silla, first in meteorology and then as an observer, was to become of great value in his subsequent career.

When the first computers came to ESO-Chile, Frank developed into the primary local software expert. He rapidly learned to master not only the computer systems available, but also some of the techniques of image processing, at that time virtually unknown to most people. It was also as an image-processing expert that he left Chile to work at the ESO headquarters, first in Geneva, later in Garching.

Since the beginning of the seventies, software techniques optimized for reduction and analysis of images of celestial objects have been of crucial importance to the explosive development of astrophysics. All over the world, groups of specialists have devoted large amounts of time and effort to improve these techniques.

Frank did it all alone. With a superb grasp of priorities, he designed a versatile and powerful software system with special emphasis on spectral images. The results of Frank's efforts were truly impressive. His Image Handling Programme (IHAP) is still unrivalled for analysis of observations in stellar spectroscopy. At the same time as numerous other software image-processing systems appeared and disappeared, Frank steadily improved the potential of his IHAP. It was a sign of his success that he received so many requests from institutes and individuals to solve also their often quite special problems. A proof of Frank's ability and capacity as well as of his generosity was the fact that he did, indeed, solve virtually all of these problems.

Today, about 15 major institutes have implemented IHAP. Many more institutes dream of having it available, dreams barred by hardware incompatibilities. Currently, the further distribution of IHAP facilities is accelerated through its incorporation into the ESO MIDAS system.

It is difficult to overestimate the importance of Frank's contributions to the European output of astronomical spectrographic data. A large proportion of leading scientists have depended and still depend on the achievements of a single software designer, using IHAP to convert their observations into physically meaningful data.

Those of us who shared the privilege of closer friendship ties with Frank's family also share a common memory of the stimulating atmosphere typical of their home. We will always remember our discussions concerning literature, art, music, politics and other subjects dealt with in the special Middelburg way. Our deep sympathy goes to Anita, Saskia and Miriam, who gave our friend Frank such wonderful support through his difficult last years. Fully aware of how little we can do to console them in their deep loss, we can only assure them that the memory of Frank will be with us forever.

A. ARDEBERG