MISR Ancillary Climatology Product Quality Statement February 16, 2001

This statement applies to the MISR Ancillary Climatology Product (ACP), version F02_0002 of the Aerosol Physical and Optical Properties (APOP) file, and version F02_0003 of the Aerosol Mixture file, installed at the Langley ASDC prior to February 16, 2001.

The quality of the ACP pure aerosol particle data is dependent upon the quality of the ACP input data, which were obtained from the scientific literature. (See the Level 2 Ancillary Products and Datasets Algorithm Theoretical Basis document for literature references.) In addition to pure particle data, mixtures of commonly-occurring aerosol pure particles are reported in the ACP.Initial quality assessments show that the current list of aerosol mixtures is insufficient to adequately represent global aerosol mixtures. The mixture list is expected to improve in quality as experience with the data is gained. Note that the ACP product consists of three parts: the Aerosol Physical and Optical Properties (APOP) file, the Aerosol Mixture file, and the Aerosol Clim-Likely file.

The list below highlights major known problems with the product.

AEROSOL PHYSICAL AND OPTICAL PROPERTIES (a.k.a. APOP, MIANACP)

LIMITED SET OF AEROSOL PURE PARTICLES

The aerosol pure particles which are combined to produce aerosol mixtures represent an initial guess at characterizing commonly-occurring particles in the atmosphere. An improved set of pure particles will be utilized in future versions.

AEROSOL MIXTURE FILE (a.k.a. MIANACP)

LIMITED SET OF AEROSOL MIXTURE TYPES

The aerosol mixture types which are reported in the product are limited in number. This is due to the early maturity level of the product. Adequate time to study a large suite of aerosol mixture types has not yet been spent. Once more study has been completed, a more comprehensive set of aerosol mixtures will be used.

AEROSOL CLIM-LIKELY FILE (a.k.a. MIANACP)

AEROSOL CLIM-LIKELY INFORMATION NOT YET AVAILABLE

Information regarding the climatological-likelihood of the occurrence of various aerosol types around the globe is not presently included in the Ancillary Climatological Product (ACP).