

Readmefirst_planetary_photometry_data

Purpose of this archive

The purpose of this web archive section is to offer the data archive and explanatory documents resulting from nearly 40 years of Strömgren b, y photometry of Uranus, Neptune, and Saturn's satellite Titan. While nearly all the data (except for the most recent few years) have been published, mostly in the journal *Icarus* in the form of annual mean magnitudes, certain auxiliary information such as a long series of atmospheric extinction measurements have never been published in their entirety. In particular, the actual nightly observations (as opposed to annual means) are provided here for the first time.

Each data collection consists of two parts, a pdf (Portable Document Format) document containing descriptive information and an ASCII text file of mostly tabular data with a few explanatory comments at the beginning. The latter can thus be edited and downloaded for inspection and further analysis.

Access and usage

A digital copy of these files is intended to be available via the Lowell Observatory Archives subject to the Observatory's access policies. Collaborative use is hereby offered by the author subject to mutual agreement. Note that all the data herein have been obtained under sponsorship of the National Science Foundation Solar-Terrestrial Program or the National Aeronautics and Space Administration Planetary Astronomy Program.

Disclaimer

Although I've made every feasible effort to root out errors there are bound to be some that I've missed. Also, the data included herein are subject to later revision or retraction without notice.

Contents

Readme_intro_planetary_data_files.pdf A description of the planetary data files listed below

The planetary data text files:

Titan_by_season.txt and subsidiary files: **Titan_nights.txt** **Titan_summary.txt**

Uranus_by_season.txt and subsidiary files: **Uranus_nights.txt** **Uranus_summary.txt**

Neptune_by_season.txt and subsidiary files: **Neptune_nights.txt** **Neptune_summary.txt**

The following will be added soon:

Readme_all_coefficients.pdf. Description and some time series and statistical analysis charts of extinction and photometric transformation coefficients obtained in the course of all-sky Strömgren measurements of planetary comparison stars from 1972 through 2012.

all_coefficients.txt. ASCII tabular text file of extinction and photometric transformation coefficients preceded by some explanatory material