

# DATA MINING Workshop



Nantucket October 17, 2008

## Some Useful Past/Current Surveys and Databases

- **microlensing (EROS, MACHO, OGLE); small area-bulge-LMC, 1 image/day/field for years**
- **asteroids (LONEOS, LINEAR, CSS); ecliptic, 1000's deg/night, shallow**
- **other wavelengths (X-ray[HEASARC], UV[MAST], IR[IPAC], radio[NRAO]): sporadic**
- **variability (FSVS [23 sq deg, 24 mag], DLS[4 deg<sup>2</sup>, 5 yrs], SDSS Stripe 82 [300 deg<sup>2</sup>, 7 yrs], SCP [SN], ROTSE, ASAS [GRB], Palomar-Quest [500 deg<sup>2</sup>/night])**

## Upcoming Future Surveys

- **Pan-Starrs(Hawaii) -2009 start with one 1.8m, 3 more planned, 6000deg<sup>2</sup>/night; 3 times/month, 24th mag**
- **LSST(Chile) - 2015 start, 8.4m, 20,000 sq deg 1000 times over 10 yrs, 27th mag - 50 million variables predicted**

# **Some Advantages of Databases:**

# **Some Advantages of Databases:**

- **gives you something to do on cloudy nights**

# **Some Advantages of Databases:**

- **gives you something to do on cloudy nights**
- **gives you sky access with no equipment**

# **Some Advantages of Databases:**

- gives you something to do on cloudy nights**
- gives you sky access with no equipment**
- gives you a lot of information you cannot get from the ground (space databases)**

# **Some Advantages of Databases:**

- **gives you something to do on cloudy nights**
- **gives you sky access with no equipment**
- **gives you a lot of information you cannot get from the ground (space databases)**
- **there is a lot of data**

# **Some Disadvantages of Databases:**

# **Some Disadvantages of Databases:**

- **there is a lot of data**

# **Some Disadvantages of Databases:**

- **there is a lot of data**
- **it may not be easy to access it**

# **Some Disadvantages of Databases:**

- **there is a lot of data**
- **it may not be easy to access it**
- **it may not be the cadence you want/need**

# **Some Disadvantages of Databases:**

- there is a lot of data**
- it may not be easy to access it**
- it may not be the cadence you want/need**
- you don't know the details of night,etc**

## **Workshop Schedule**

**09:00-09:15**    **Intro - Paula Szkody**

**09:15-10:00**    **AAVSO and ASAS Databases - Aaron Price**

**10:00-10:20**    **Introduction to the VO - Doc Kinne**

**10:20-10:50**    **Coffee Break**

**10:50-11:20**    **OpenSkyQuery & ADQL - Doc Kinne**

**11:20-11:35**    **SDSS & GALEX Databases - Paula Szkody**

**11:35-12:00**    **Palomar-Quest & other New Surveys- Arne Henden**

**Saturday**      **Astrometry.net & OpenSource - David Hogg**

**Chandra database - Joy Nichols**