23 Jun 2008

Sub group -

WISE - What is it?
Background?
Similar to Supernova Asteroid Search.
TRACKING & SEARCHING

ASTEROID LIGHT CURVE

IASC - IS THERE ANY CURRICULUM
ASTRONOMICA 1-2 classes.

GENERAL GOAL FOR CURRICULUM for students
ELEMENTARY LEVEL.
MAKE MOVIE OF ASTEROID.
ALIGN & STACK IMAGES.

ENERGY & LIGHT
Solar System
TECHNOLOGY STANDARDS.

WHAT CAN WE DO?
START WITH LAB EXERCISES?
FIGURE OUT GOALS -
PINCKEY NELSON address - help teachers teacher

STDS
ORIGINS OF UNIVERSE
ORIGINS OF SOLAR SYSTEM & MAIN FOR HS
ORIGINS OF ELEMENTS
OBJ in Sol System regular motion ← main for Mid. Sch.
There are things in Solar System ← main for Elem. Sch.

Significance of mission for asteroids.
"NO BUCKS. NO BUCK ROGERS."
PR.

Subgroup - cont'

HS teachers - students making a difference. . beyond grade in classroom.

measure + interpret light.

What does it tell us?

light curves.

Science Fairs?

Shape?

Rotation Rate → Do we need more?

What ~~will~~ do we need to find rotation rate.

NASA + Amateurs.

David Levy

Steve Astronomy Kahler

- Light Curves
- Diameters
- Composition (Color?) Composition BVRI ~~B~~ B-V and R-I
- Albedo (Black Body)
- Magnitude
  - Distance
  - Differentiating + cosmic ray (Signal to noise ratio.) Artifact
  - Visual Observation
  - Asteroid Detection - why better than optical?
  - Reflected vs. Emitted Light ☆
    - Use Jupiter?
    - Should be able to see Earth sized out to 60 AU.
  - Error + uncertainty. Comfort with uncertainty.
    - Evidence - convict of being asteroid Pot. Hazardous.
    - Teachers must have right answer. Science Build
    - ← Build on evidence - Science supported by evidence.
  - Pattern Recognition
  - IR and visible light
  - Temperature.

Globe

Goals

- PR
- STDS
- Engage kids in real-life questions

Wise Measurement

Position + Brightness at time + wavelength.

Orbit - position over time

↳ Dist at time of obs. + Black Body curve. (could use 4 λ to find black body)

↳ Temp + Brightness + Dist to Asteroid.

↳ Diameter.

- Curriculum allow to take to sciencefair

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Subgroup WISE conf

Is it appropriate for teachers?

From diameter → albedo → composition (silicate vs metallic)
NEO Wright - knows everything.

Light curves → rotation → shape
14 obs 90 min ~~apart~~ apart. (average) (21 hrs)
NEOs → fewer.