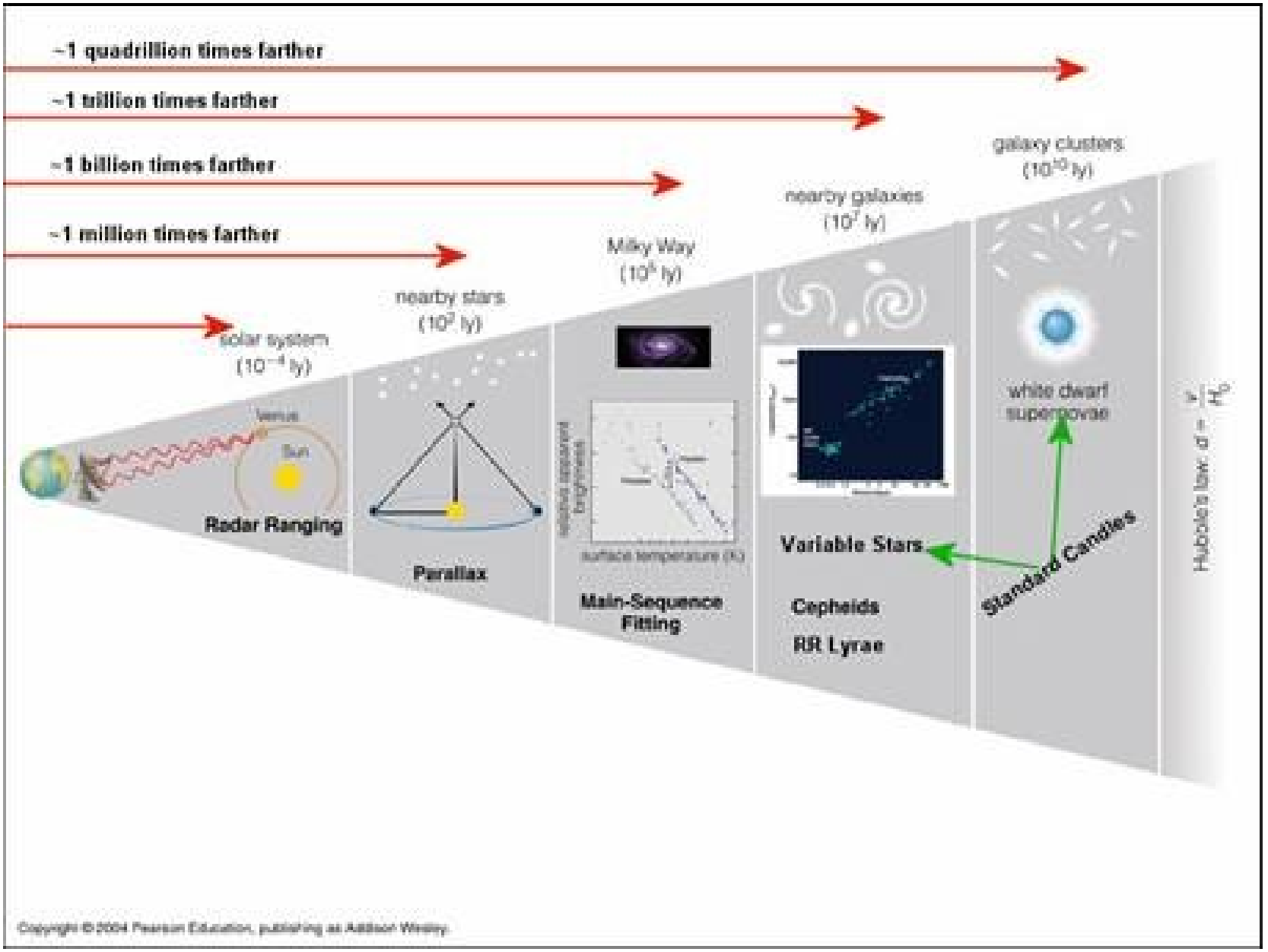
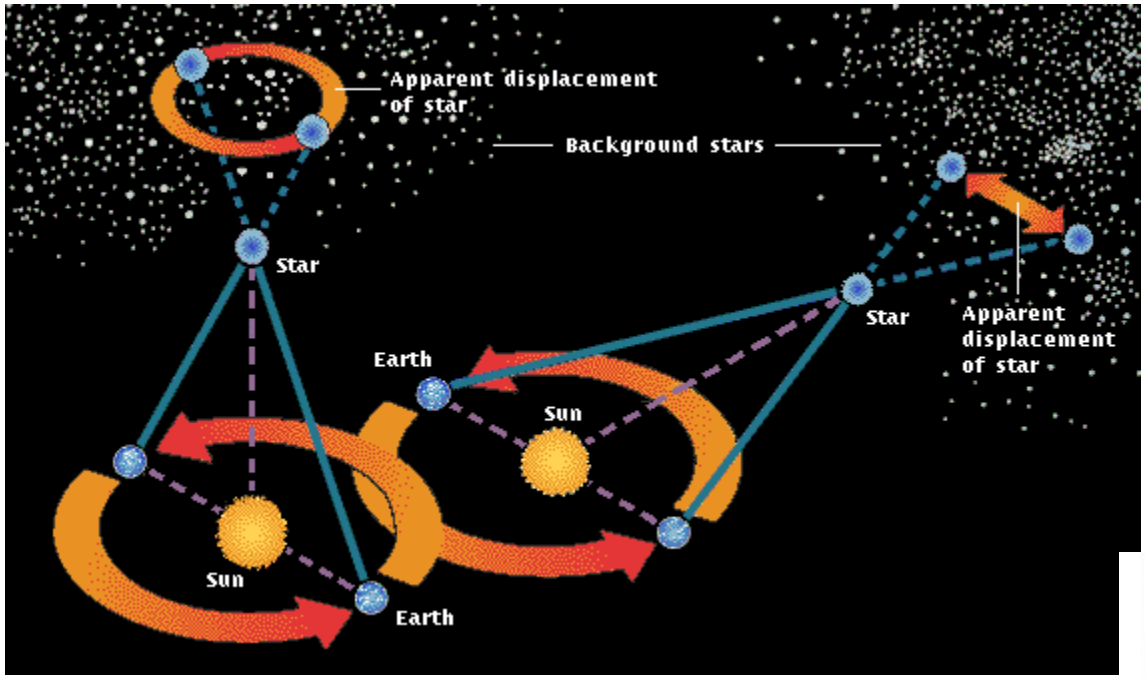
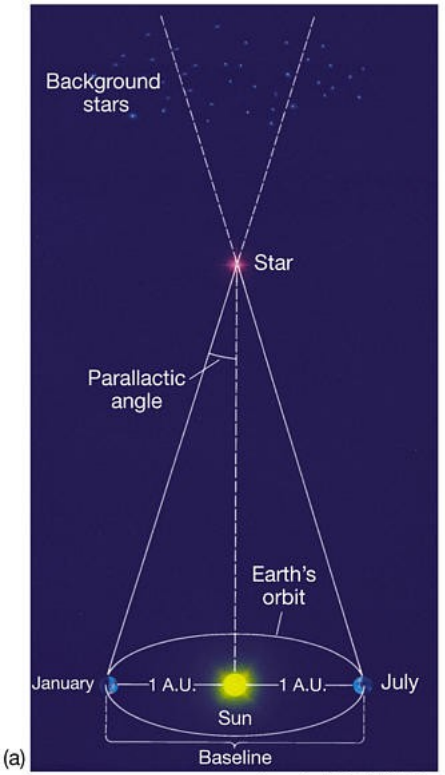
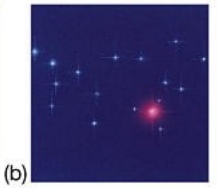


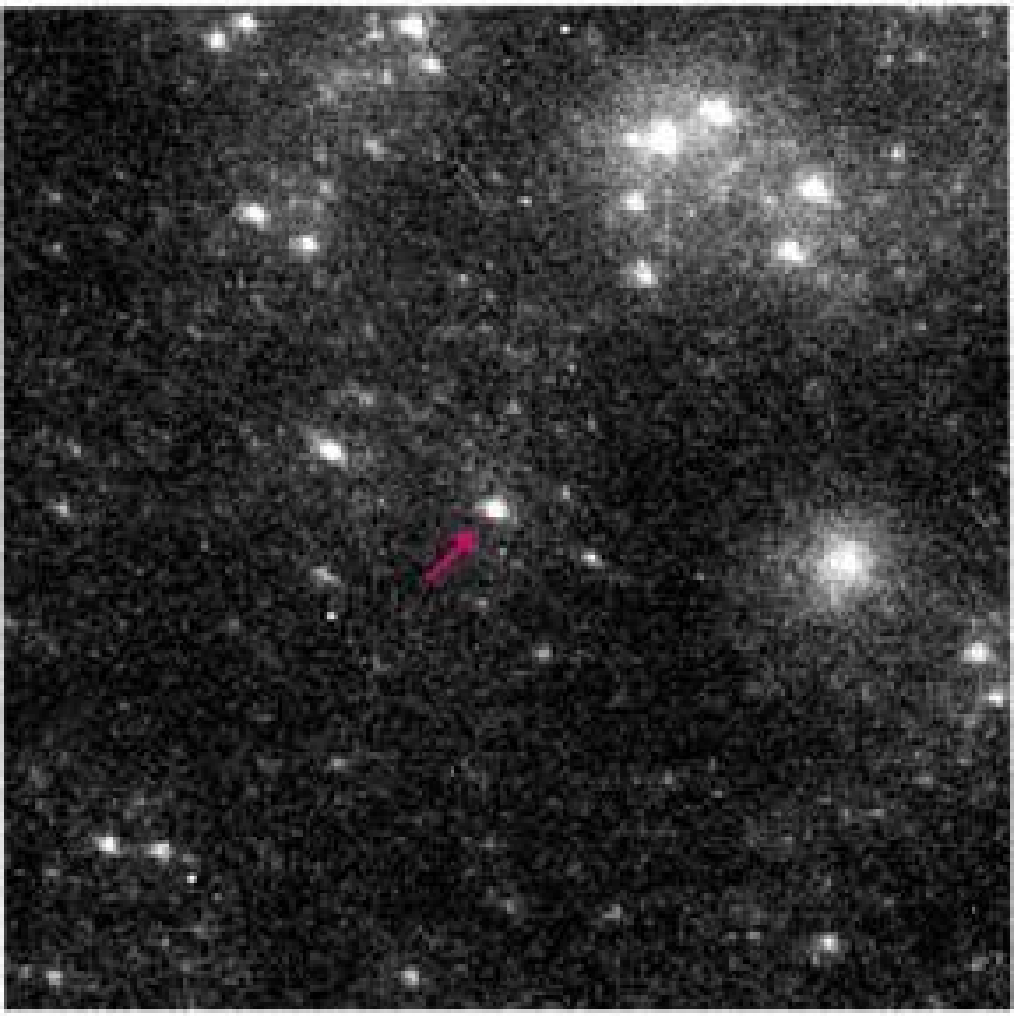
Paralaxe

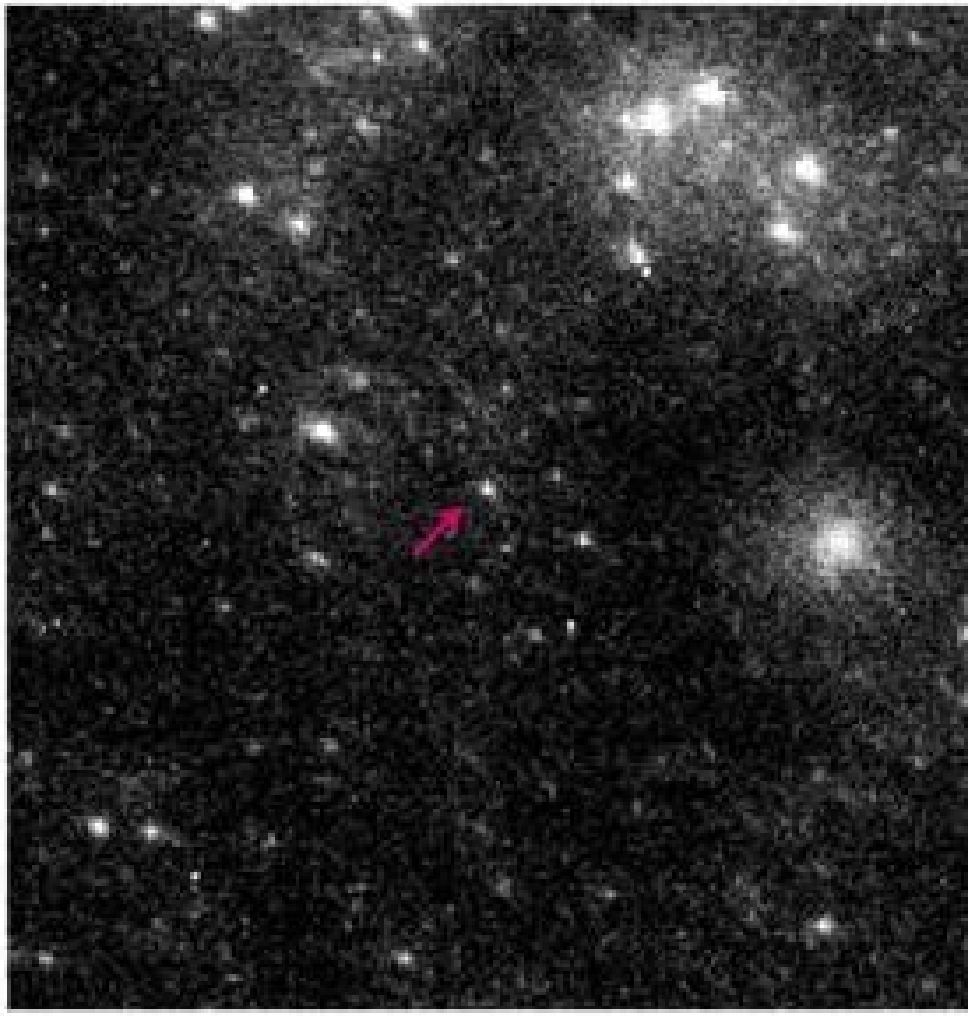


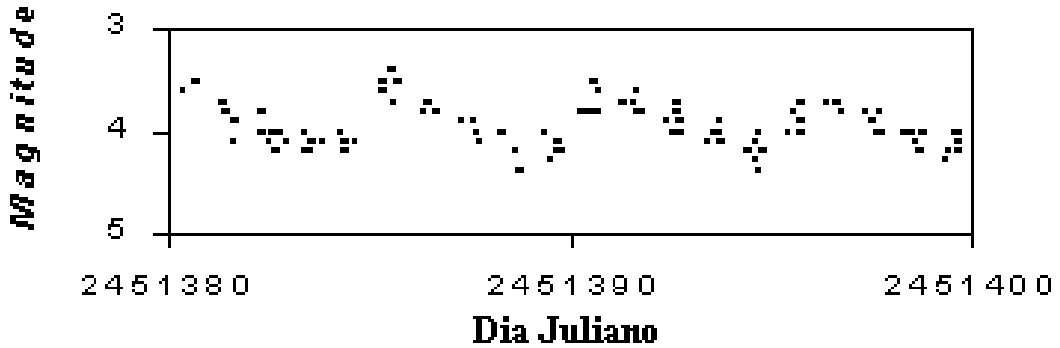


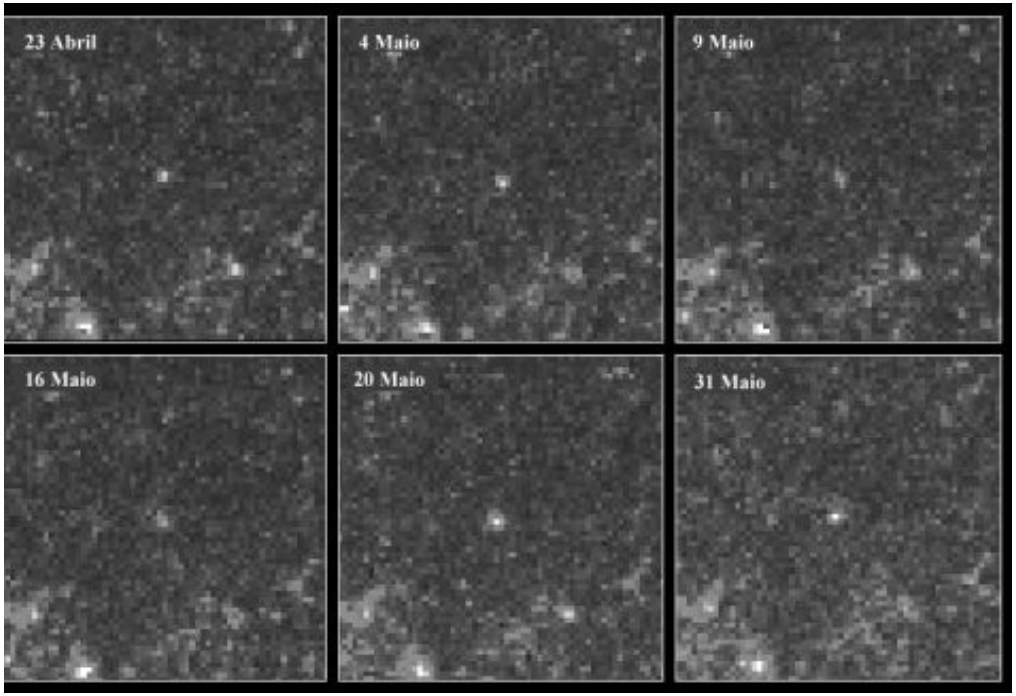


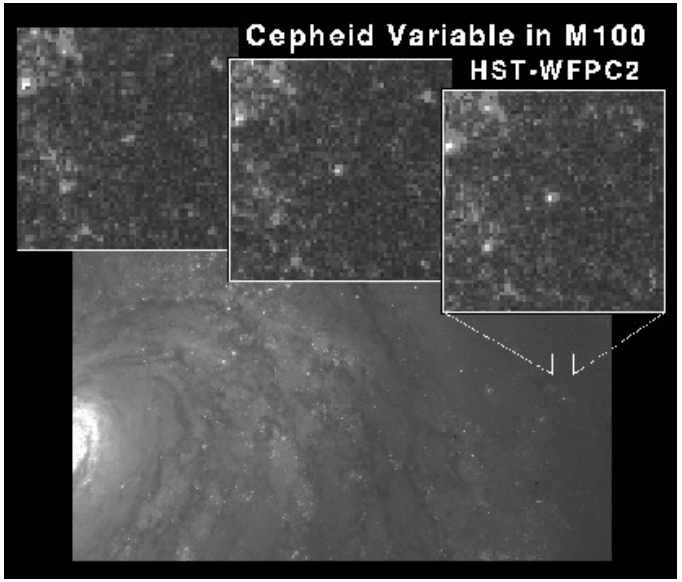
A estrela δ Cephei muda de brilho em 5.4 dias



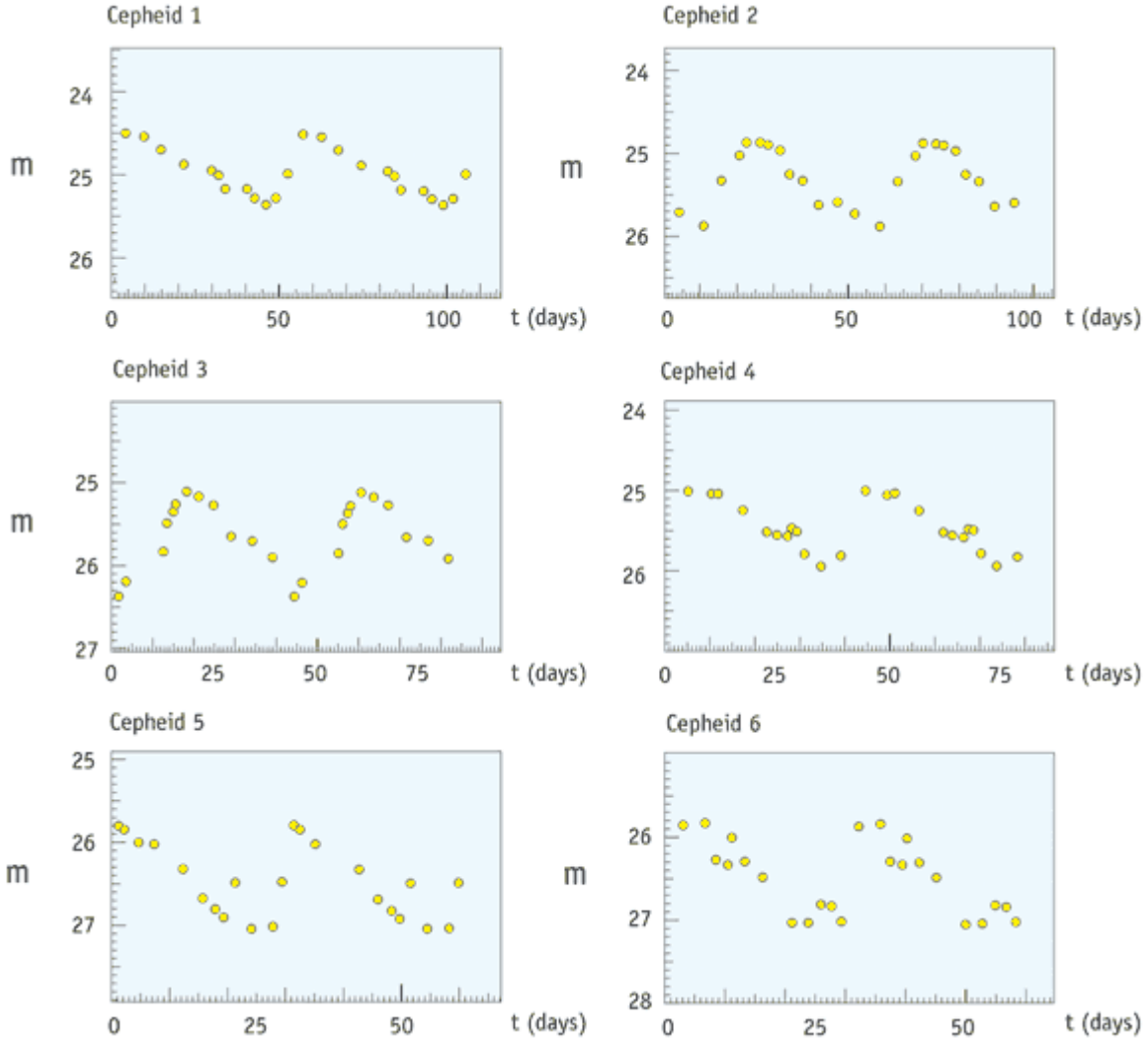


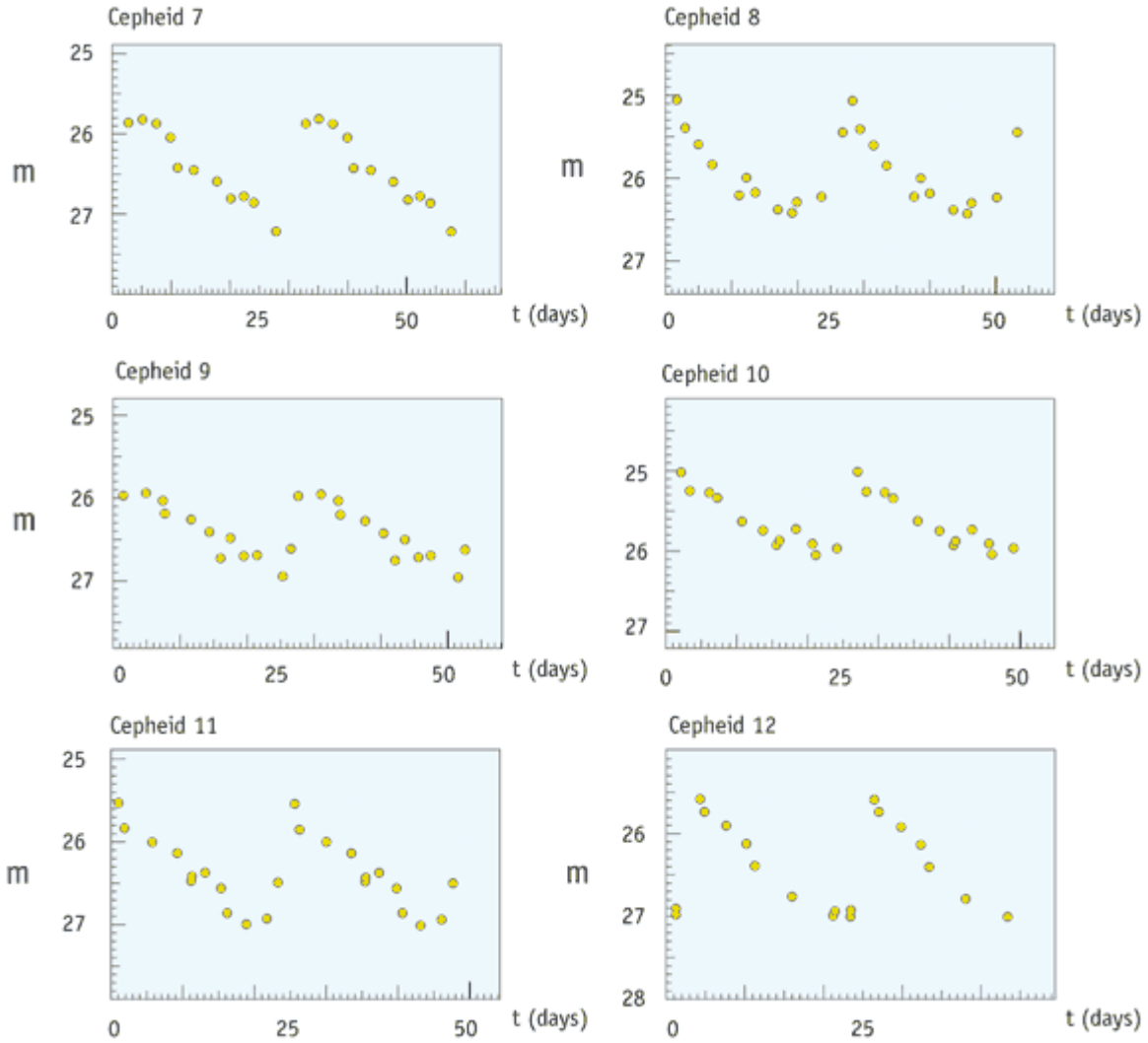






Estrela Cefeida na galáxia M100, a d = 56M anos-luz.
A estrela dobra de brilho (passando de 24.5 para 25.3 mag) em 51.3 dias. P = 102.6 dias.


Cepheid 1
m
24
25
26
0
50
100
t (days)
Cepheid 2
m
24
25
26
0
50
100
t (days)
Cepheid 3
m
25
26
27
0
25
50
75
t (days)
Cepheid 4
m
24
25
26
0
25
50
75
t (days)
Cepheid 5
m
25
26
27
0
25
50
t (days)
Cepheid 6
m
26
27
28
0
25
50
t (days)


Cepheid 7
Cepheid 8
Cepheid 9
Cepheid 10
Cepheid 11
Cepheid 12
m
t (days)
25
26
27
28
0
25
50

http://spiff.rit.edu/classes/phys240/lectures/lmc/lmc.html

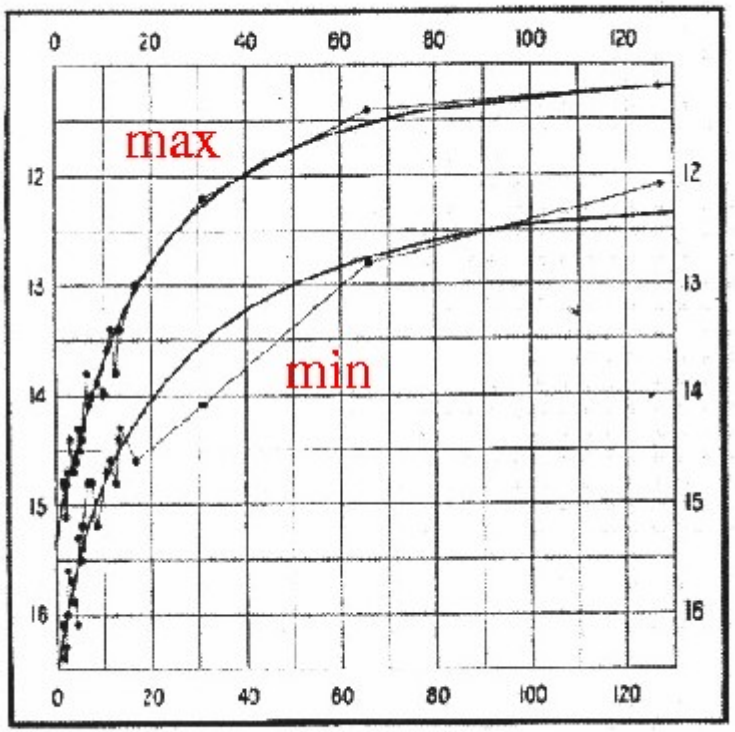


FIG. 1.

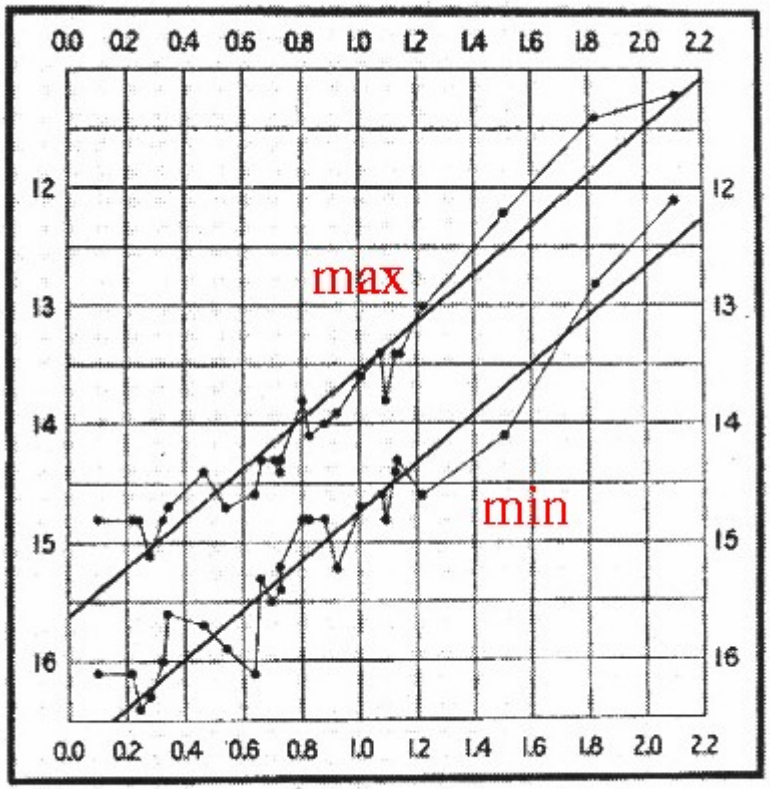
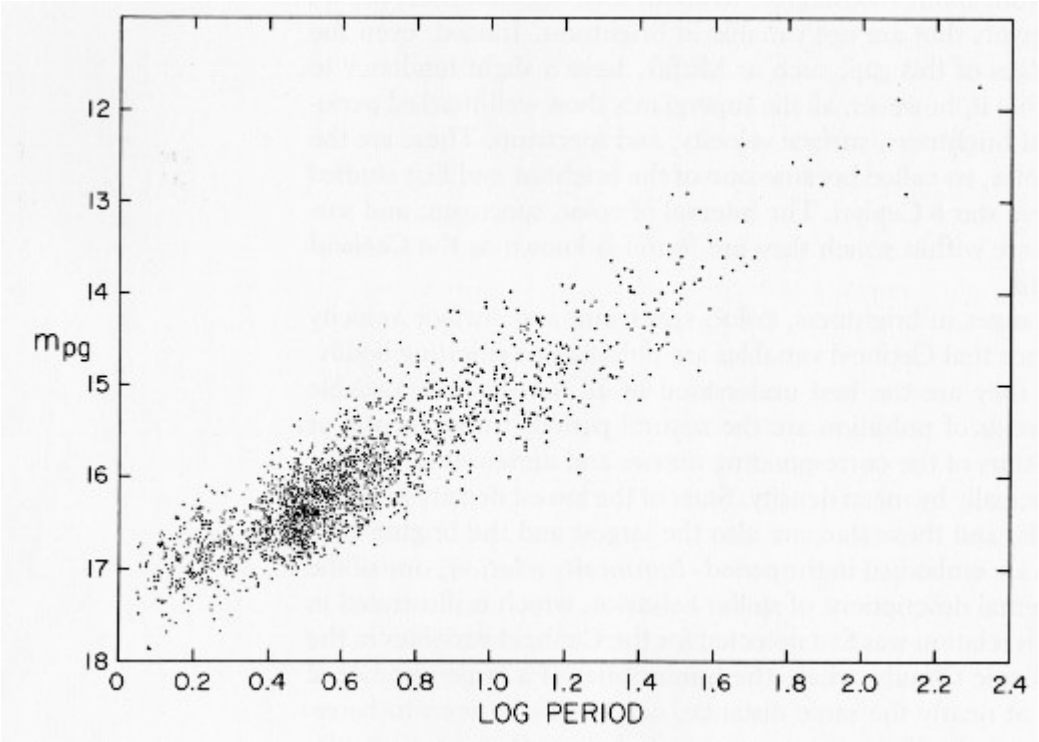
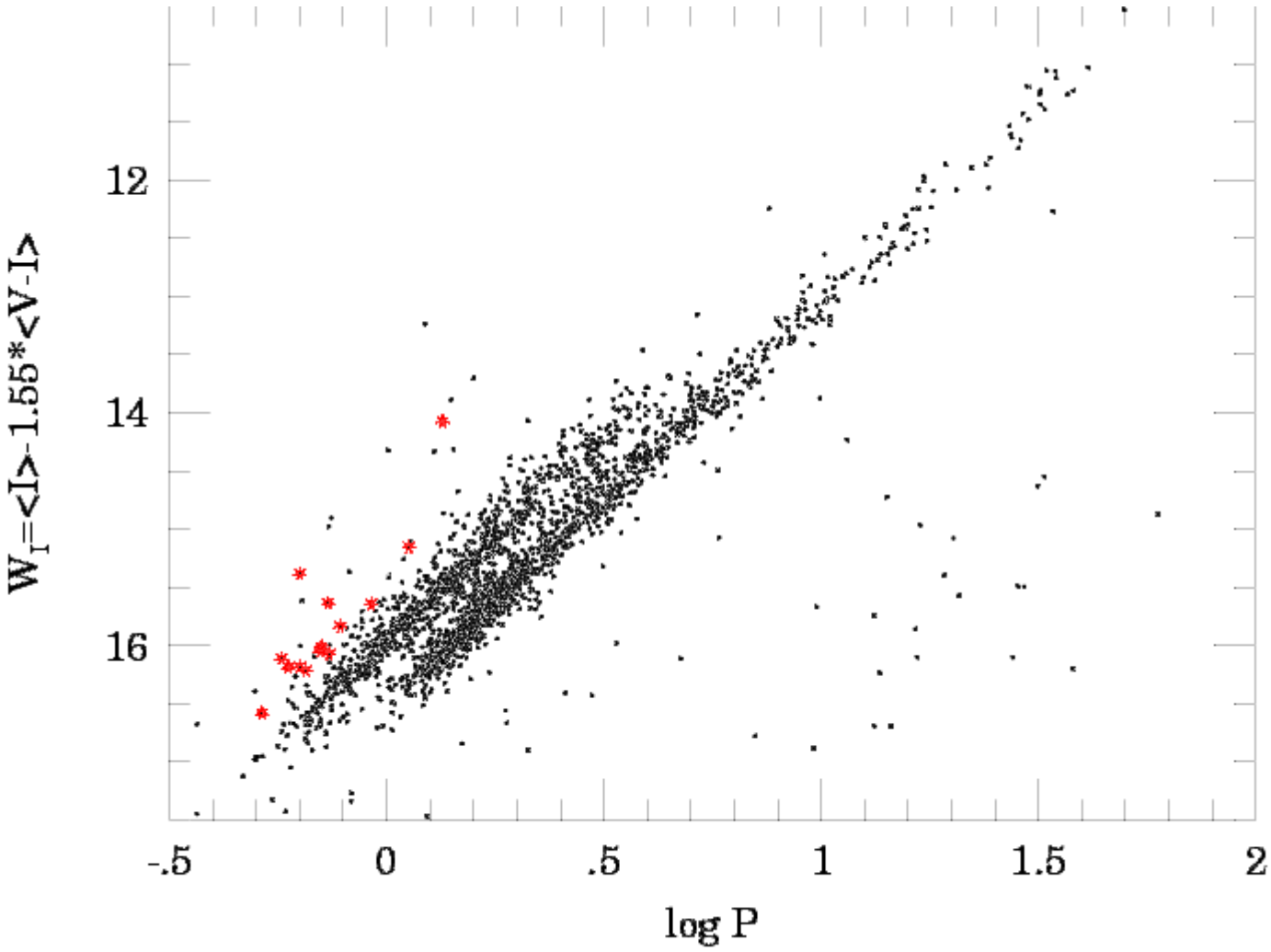


FIG. 2.



Dados fotográficos, década de 1960



Dados CCD, década de 1990

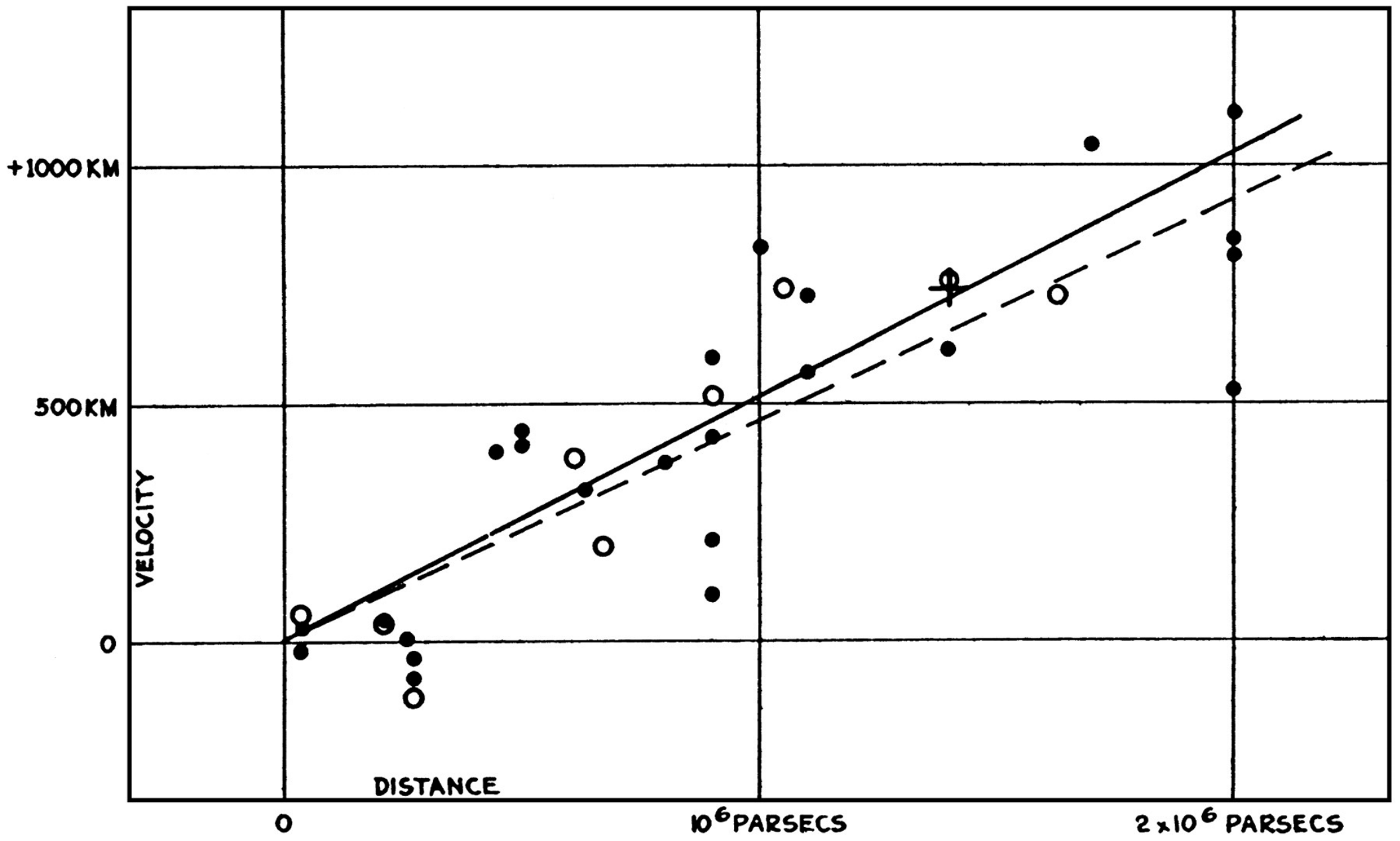
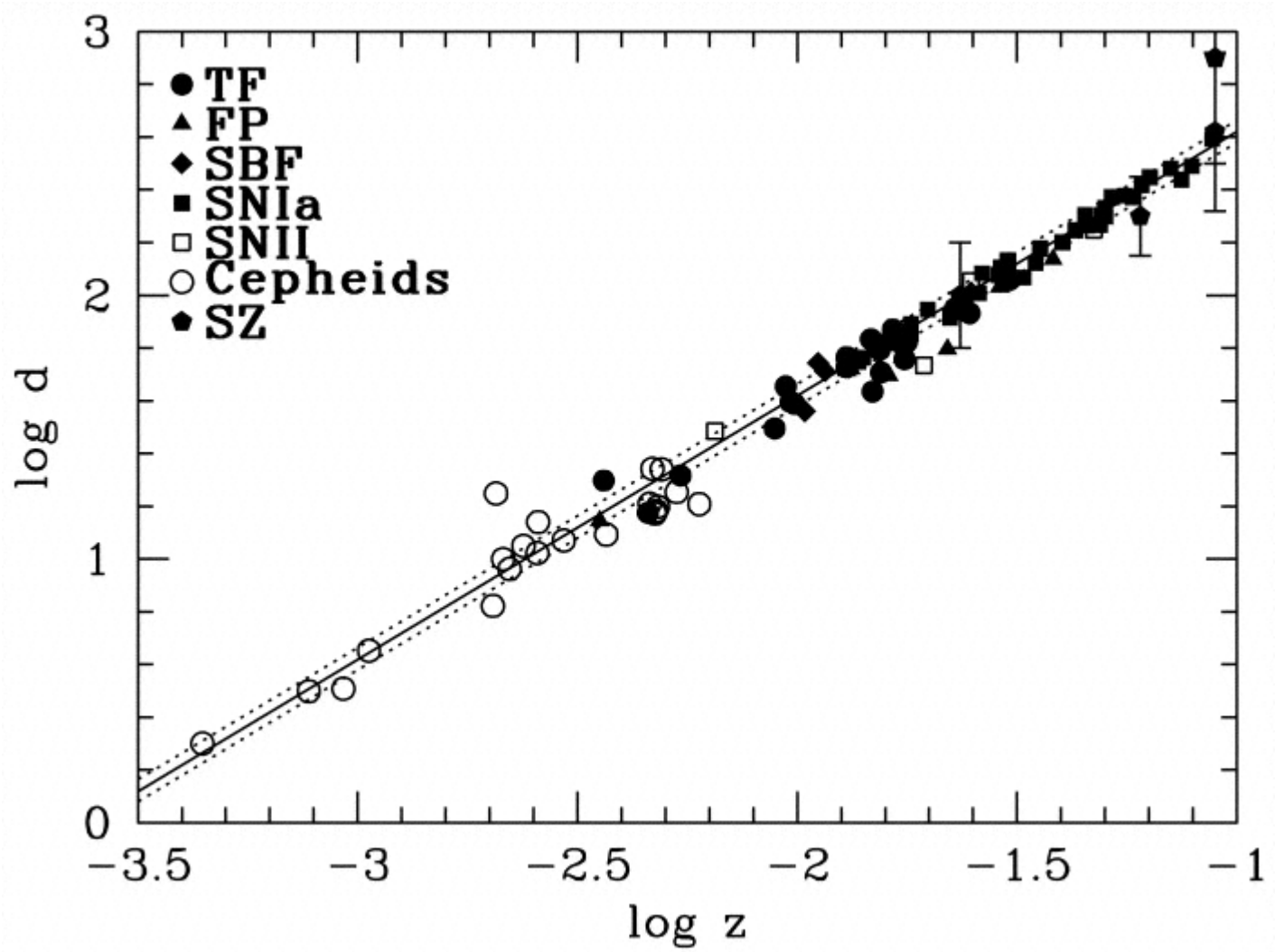
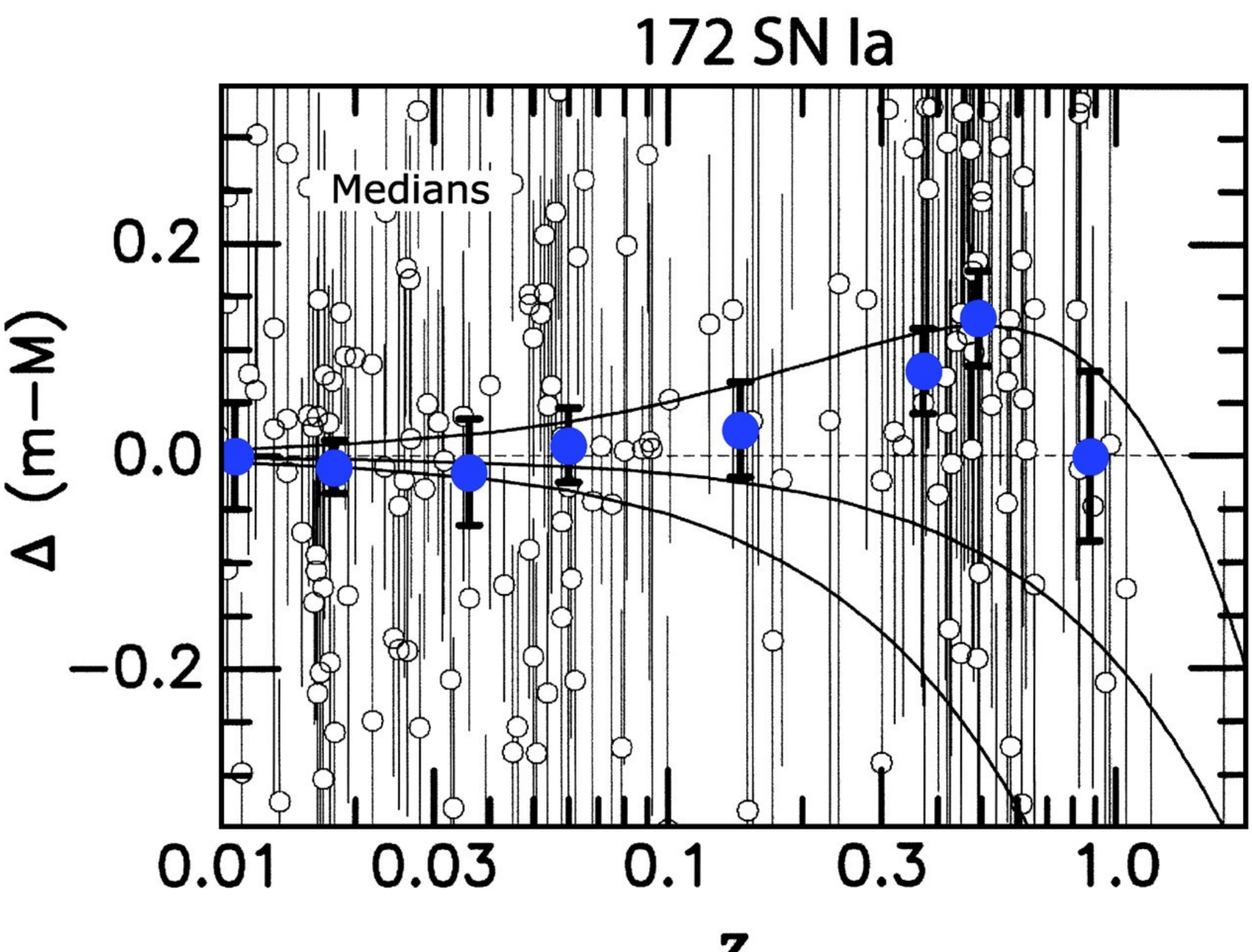
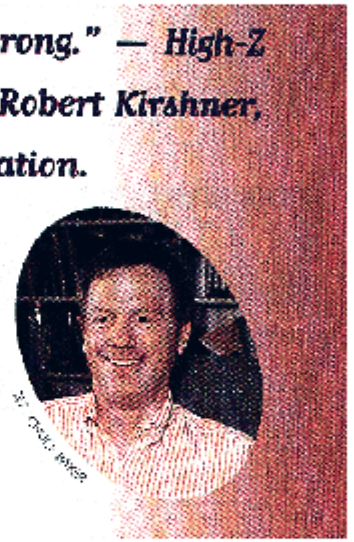


Fig. 1. Velocity-distance relation among extra-galactic nebulae. Radial velocities, corrected for solar motion (but labeled in the wrong units),are plotted against distances estimated from involved stars and mean luminosities of nebulae in a cluster. The black discs and full line represent the solution for solar motion by using the nebulae individually; the circles and broken line represent the solution combining the nebulae into groups; the cross represents the mean velocity corresponding to the mean distance of 22 nebulae whose distances could not be estimated individually. [Reproduced with permission from ref. 1 (Copyright 1929, The Huntington Library, Art Collections and Botanical Gardens).


TF
FP
SBF
SNIa
SNII
Cepheids
SZ
log d
log z
3
2
1
0
−3.5
−3
−2.5
−2
−1.5
−1


172 SN Ia
Medians
0.2
0.0
−0.2
Δ (m−M)
0.01
0.03
0.1
0.3
1.0
z

"In your heart, you know it's wrong." — High-Z Supernova Search Team member Robert Kirshner, on the prospect of cosmic acceleration.



— *Sky & Telescope*, September 1998