Observation Step Distance from Jupiter (in (in Hours) Jupiter Diameters) 0 0.98

1.78

2.33

2.78

2.95

2.83

2.48

1.9

1.18

-0.53

-1.38

-2.1

-2.58

-2.88

-2.98

-2.83

-2.33

-1.7 -0.95

-0.05

0.8

1.6

2.28

2.73

2.9

2.93

2.55

2.08

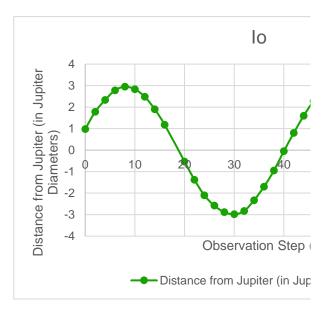
1.3

0.53 -1.15

-1.95

-2.5

-2.88



<u>Period</u>

t1: (16, 1.18) **t2:** (58, 1.3)

in hours: 42 in days: 1.75 in years: 0.0048



in Jupiter diameters: 2.98

in AU: 0.00284441

Mass of Jupiter: 1.898 x 10^27

in Solar Masses: $(0.00284441)^3/(0.0048)^2 = 0.0009988$

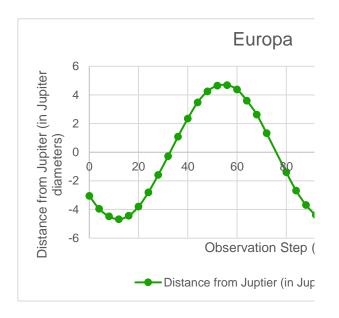
in Earth Masses: $(0.0009988)/3.0x10^{-6} = 332.93$

(0.00284441)/3.0x10^-6 = 948.1367

(1.898 x 10^27)/3.0x10^-6 = 6.3267x10^32

Percent error:

| (in Hours) (in Jupiter Diameters) 0 -3.05 4 -3.95 8 -4.48 12 -4.68 16 -4.43 20 -3.8 24 -2.8 28 -1.58 |
|--|
| 4 -3.95 8 -4.48 12 -4.68 16 -4.43 20 -3.8 24 -2.8 28 -1.58 |
| 8 -4.48 12 -4.68 16 -4.43 20 -3.8 24 -2.8 28 -1.58 |
| 12 -4.68 16 -4.43 20 -3.8 24 -2.8 28 -1.58 |
| 16-4.4320-3.824-2.828-1.58 |
| 20 -3.8 24 -2.8 28 -1.58 |
| 24 -2.8 28 -1.58 |
| 28 -1.58 |
| |
| |
| -0.28 |
| 36 1.08 |
| 40 2.35 |
| 44 3.48 |
| 48 4.25 |
| 52 4.65 |
| 56 4.68 |
| 60 4.38 |
| 64 3.6 |
| 68 2.63 |
| 72 1.33 |
| 80 -1.4 |
| 84 -2.68 |
| -3.68 |
| 92 -4.38 |
| 96 -4.65 |
| 100 -4.58 |
| 104 -4.05 |
| 108 -3.15 |
| 112 -2.05 |
| 116 -0.78 |
| 120 0.65 |
| 124 1.95 |
| 128 3.13 |
| 132 4 |
| 136 4.53 |
| 140 4.73 |



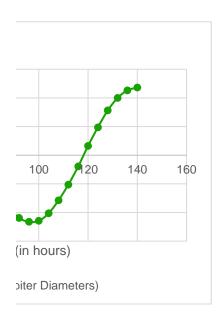
<u>Period</u>

t1: (32, -0.28)

t2: (116, -0.78) in hours: 84

in days: 3.5

in years: 0.00959



in Jupiter diameters: 4.73

in AU: 0.004514785

Mass of Jupiter: 1.898 x 10^27

in Solar Masses: (0.004514785)^3/(0.00959)^2 = 0.001000631121

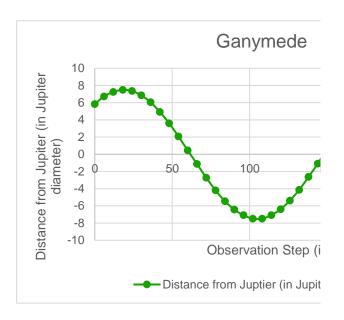
in Earth Masses: (0.001000631121)/3.0x10^-6 = 333.5437071

(0.004514785)/3.0x10^-6 = 1504.928333

(1.898 x 10^27)/3.0x10^-6 = 6.3267x10^32

Percent error:

| Observation Step | Distance from Juptier |
|------------------|------------------------|
| (in Hours) | (in Jupiter Diameters) |
| 0 | 5.83 |
| 6 | 6.73 |
| 12 | 7.25 |
| 18 | 7.48 |
| 24 | 7.35 |
| 30 | 6.85 |
| 36 | 6.05 |
| 42 | 4.93 |
| 48 | 3.6 |
| 54 | 2.08 |
| 60 | 0.45 |
| 66 | -1.13 |
| 72 | -2.73 |
| 78 | -4.2 |
| 84 | -5.45 |
| 90 | -6.43 |
| 96 | -7.08 |
| 102 | -7.48 |
| 108 | -7.48 |
| 114 120 | -7.08 -6.38 |
| 126 | |
| 132 | -5.38 -4.13 |
| 138 | -2.63 |
| 144 | -1.08 |
| 150 | 0.63 |
| 156 | 2.2 |
| 162 | 3.7 |
| 168 | 5.03 |
| 174 | 6.13 |
| 180 | 6.88 |
| 186 | 7.38 |
| 192 | 7.5 |
| 198 | 7.23 |
| 204 | 6.68 |
| 210 | 5.75 |
| _ | |



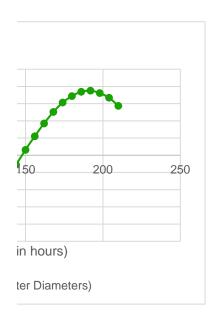
<u>Period</u>

t1: (60, 0.45) **t2**: (150, 0.63)

 in hours:
 90

 in days:
 3.75

 in years:
 0.01



in Jupiter diameters: 7.5

in AU: 0.00715875

Mass of Jupiter: 1.898 x 10^27

in Solar Masses: (0.00715875)^3/(0.01)^2 = 0.003668694836

in Earth Masses: (0.003668694836)/3.0x10^-6 = 1222.898279

(0.00715875)/3.0x10^-6 = 2386.25

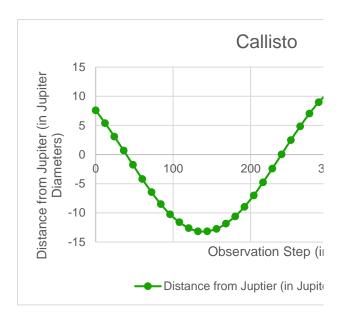
(1.898 x 10^27)/3.0x10^-6 = 6.3267x10^32

Percent error:

| Observation Step (in Hours) | Distance from Juptier (in Jupiter Diameters) |
|--------------------------------|--|
| 0 | 7.6 |
| 12 | 5.4 |
| 24 | 3.1 |
| 36 | 0.7 |
| 48 | -1.75 |
| 60 | -4.18 |
| 72 | -6.43 |
| 84 | -8.5 |
| 96 | -10.25 |
| 108 | -11.6 |
| 120 | -12.6 |
| 132 | -13.15 |
| 144 | -13.15 |
| 156 | -12.75 |
| 168 | -11.85 |
| 180 | -10.6 |
| 192 | -8.95 |
| 204 | -7 |
| 216 | -4.75 |
| 228 | -2.4 |
| 240 | 0.05 |
| 252 | 2.5 |
| 264 | 4.85 |
| 276 | 7.05 |
| 288 | 9 |
| 300 | 10.6 |
| 312 | 11.9 |
| 324 | 12.75 |
| 336 | 13.25 |
| 348 | 13.15 |
| 360 | 12.7 |
| 372 | 11.85 |
| 384 | 10.45 |
| 396 | 8.8 |
| 408 | 6.85 |
| 420 | 4.55 |
| 432 | 2.25 |

456

-2.63



Period t1: (24, 3.1) t2: (432, 2.25) in hours: 408 in days: 17

0.047

in years:



in Jupiter diameters: 13.25

in AU: 0.012647125

Mass of Jupiter 1.898 x 10^27

in Solar Masses: $(0.012647125)^3/(0.047)^2 = 0.02022904745$

in Earth Masses: (0.02022904745)/3.0x10^-6 = 6743.015815

 $(0.012647125)/3.0x10^{-6} = 4215.708333$

Percent error: $(1.898 \times 10^2)/3.0 \times 10^6 = 6.3267 \times 10^3$