

# Ajuste

$$p[0] \sin \left( \frac{2\pi}{p[1] * 365.25} \times (t - 2451544.5) + p[2] \right) + p[3] \sin(f) + p[4] \cos(f) + p[5]$$

(1)

# Ananke

## Ascensão Reta

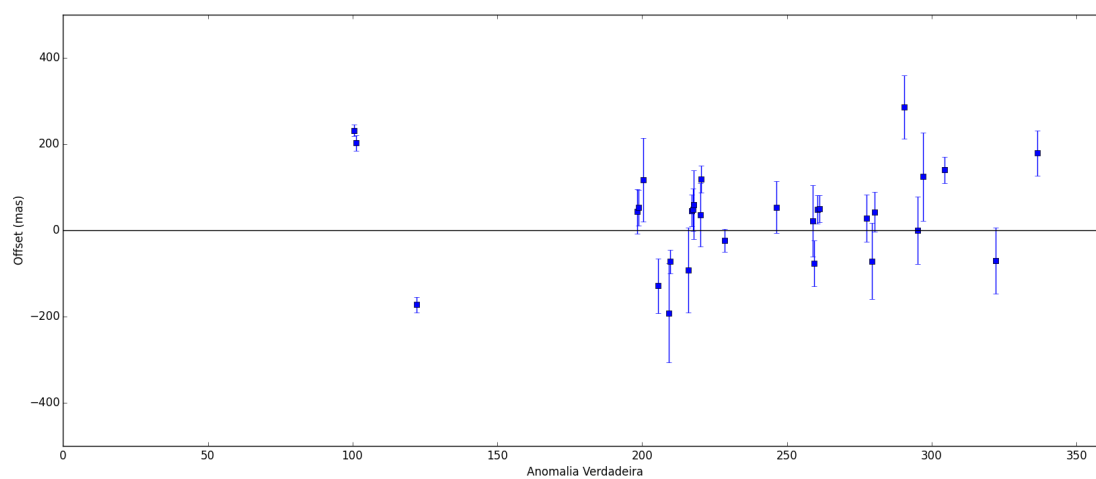
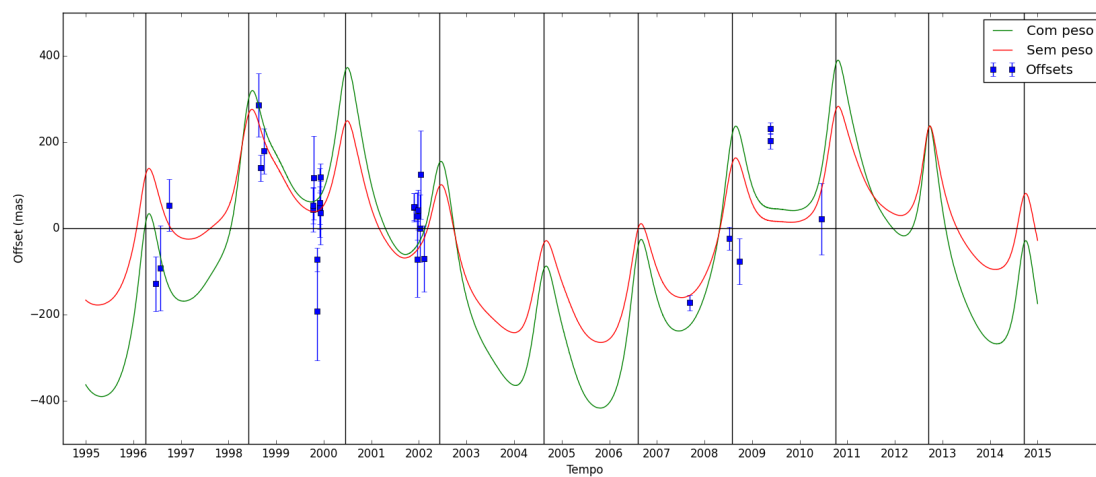


Tabela 1: Resultados dos ajustes para Ananke - RA

| Parâmetro | Com peso        | Sem peso       | Unidade |
|-----------|-----------------|----------------|---------|
| p[0]      | $246 \pm 39$    | $160 \pm 43$   | mas     |
| p[1]      | $10.8 \pm 0.5$  | $12.0 \pm 0.9$ | anos    |
| p[2]      | $0.09 \pm 0.15$ | $0.4 \pm 0.1$  | rad     |
| p[3]      | $60 \pm 29$     | $44 \pm 39$    | mas     |
| p[4]      | $152 \pm 37$    | $111 \pm 32$   | mas     |
| p[5]      | $-20 \pm 37$    | $5 \pm 37$     | mas     |
| Residuo   | 571             | 451            | mas     |

## Declinação

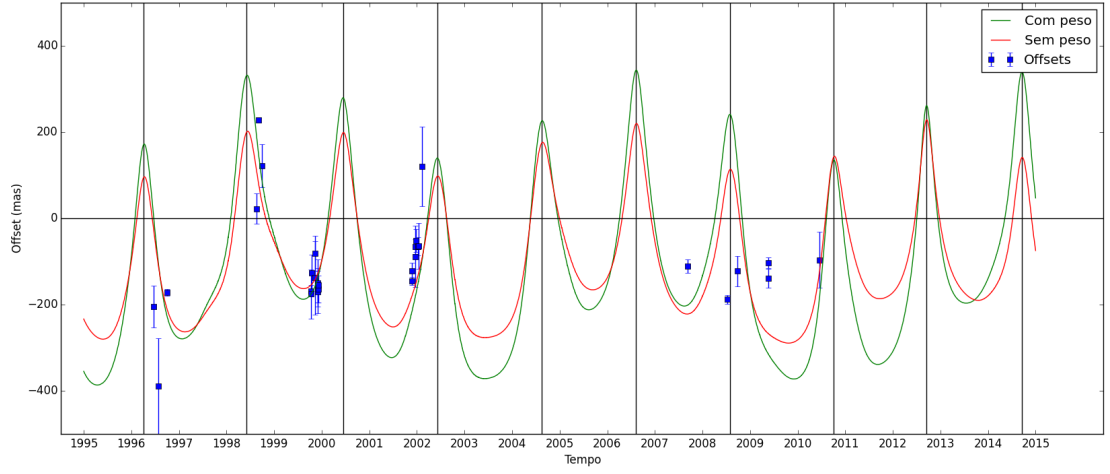
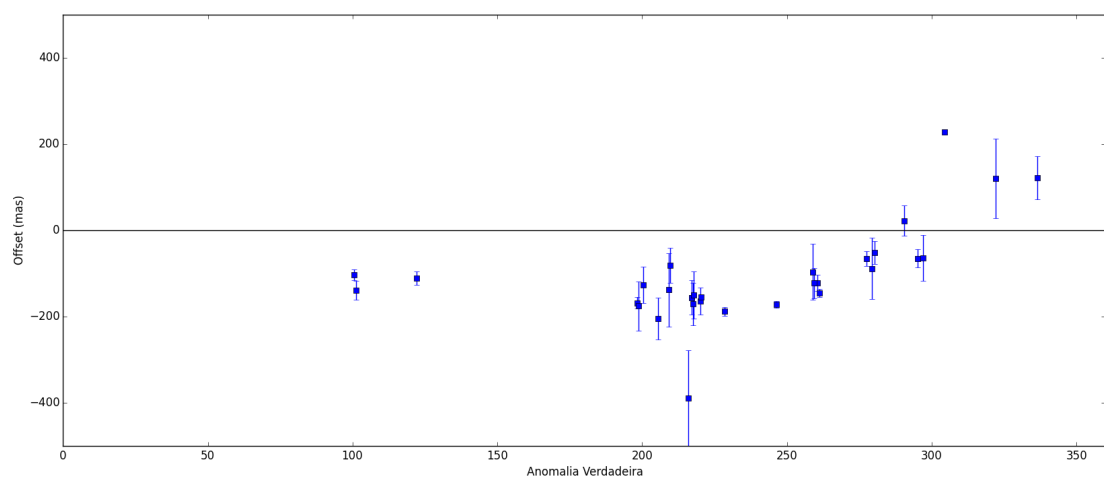


Tabela 2: Resultados dos ajustes para Ananke - DEC

| Parâmetro | Com peso        | Sem peso      | Unidade |
|-----------|-----------------|---------------|---------|
| p[0]      | $105 \pm 8$     | $66 \pm 12$   | mas     |
| p[1]      | $7.6 \pm 0.2$   | $6.6 \pm 0.4$ | anos    |
| p[2]      | $0.80 \pm 0.08$ | $0.5 \pm 0.3$ | rad     |
| p[3]      | $9 \pm 11$      | $18 \pm 18$   | mas     |
| p[4]      | $260 \pm 10$    | $194 \pm 19$  | mas     |
| p[5]      | $-22 \pm 13$    | $-34 \pm 16$  | mas     |
| Residuo   | 338             | 253           | mas     |



# Carme

## Ascensão Reta

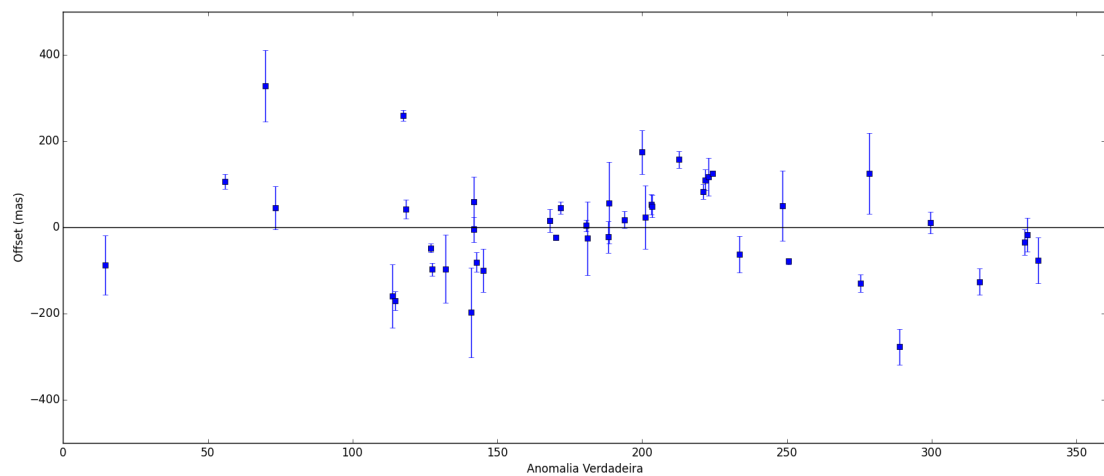
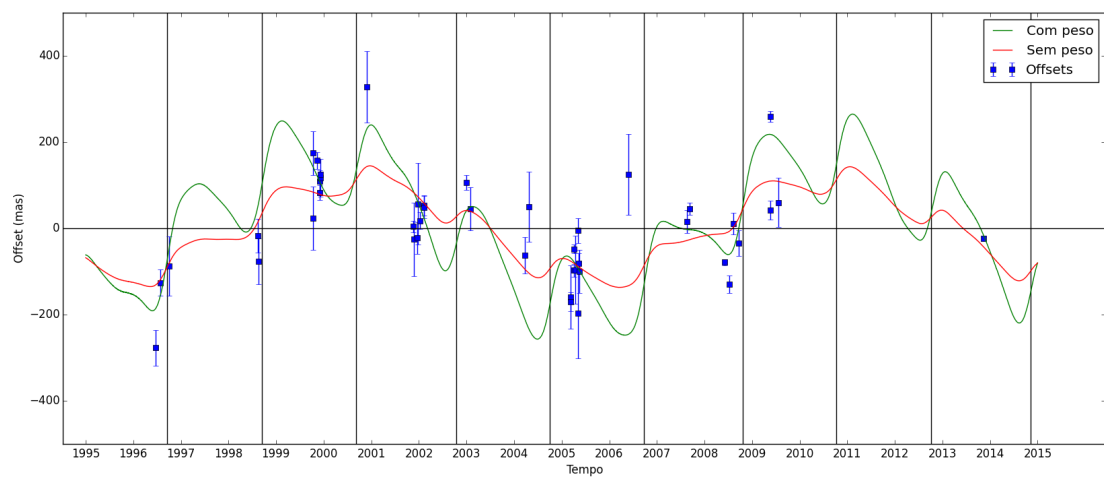


Tabela 3: Resultados dos ajustes para Carne - RA

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $167 \pm 14$   | $112 \pm 20$   | mas     |
| p[1]      | $10.7 \pm 0.2$ | $9.9 \pm 0.7$  | anos    |
| p[2]      | $0.0 \pm 0.1$  | $-0.4 \pm 0.3$ | rad     |
| p[3]      | $104 \pm 16$   | $33 \pm 22$    | mas     |
| p[4]      | $-17 \pm 20$   | $0 \pm 24$     | mas     |
| p[5]      | $-4 \pm 15$    | $0 \pm 17$     | mas     |
| Residuo   | 662            | 556            | mas     |

## Declinação

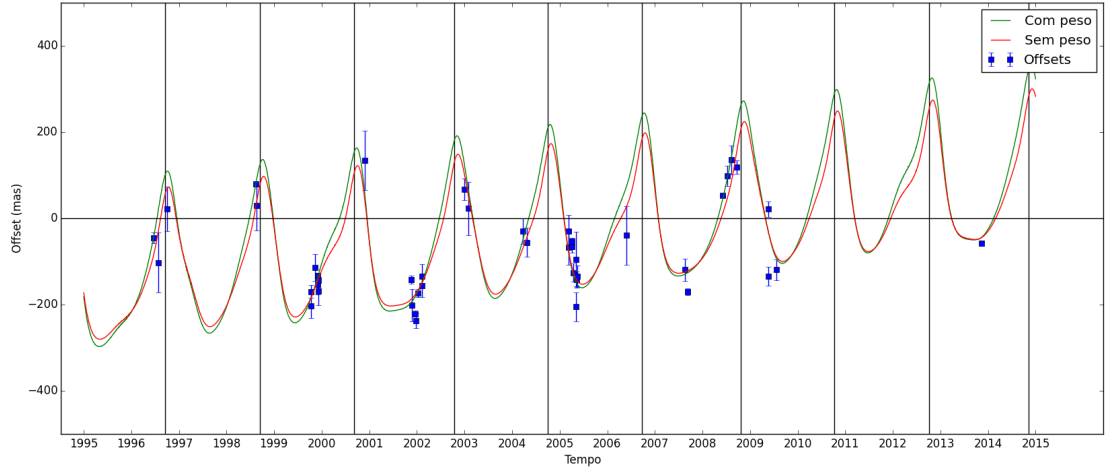
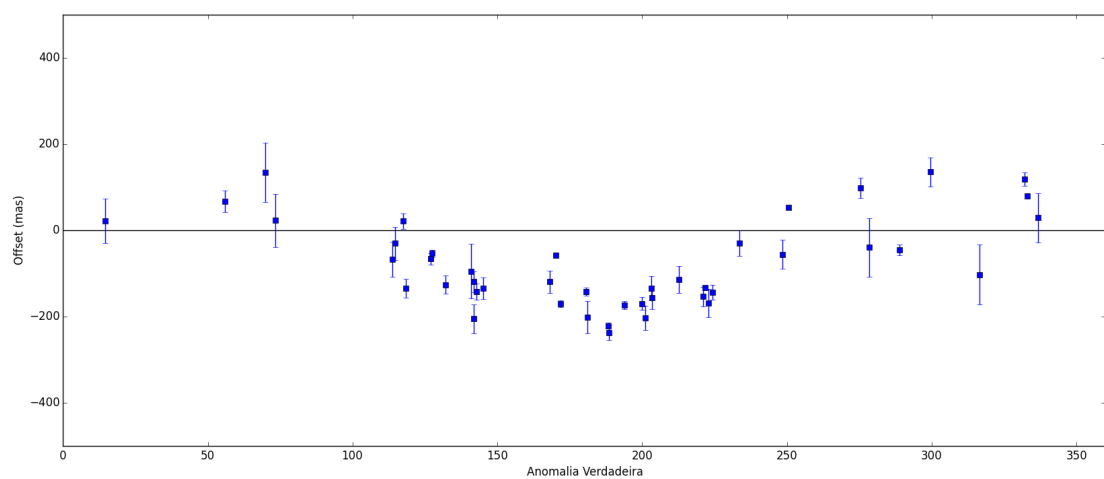


Tabela 4: Resultados dos ajustes para Carne - DEC

| Parâmetro | Com peso          | Sem peso          | Unidade |
|-----------|-------------------|-------------------|---------|
| p[0]      | $0.036 \pm 0.003$ | $0.034 \pm 0.005$ | mas     |
| p[1]      | $70 \pm 30$       | $71 \pm 22$       | anos    |
| p[2]      | $-8 \pm 18$       | $9 \pm 11$        | rad     |
| p[3]      | $182 \pm 15$      | $153 \pm 11$      | mas     |
| p[4]      | $-39 \pm 11$      | $-58 \pm 10$      | mas     |
| Residuo   | 325               | 281               | mas     |



# Elara

## Ascensão Reta

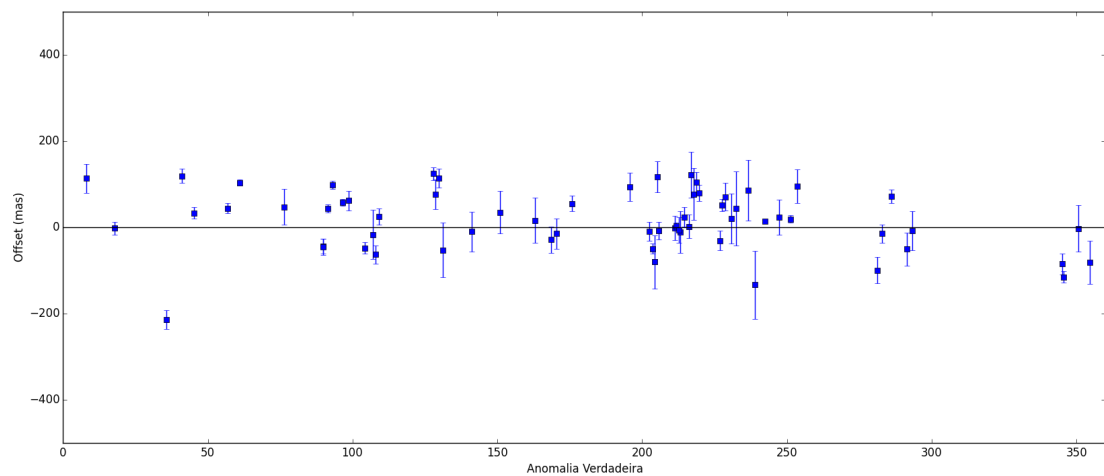
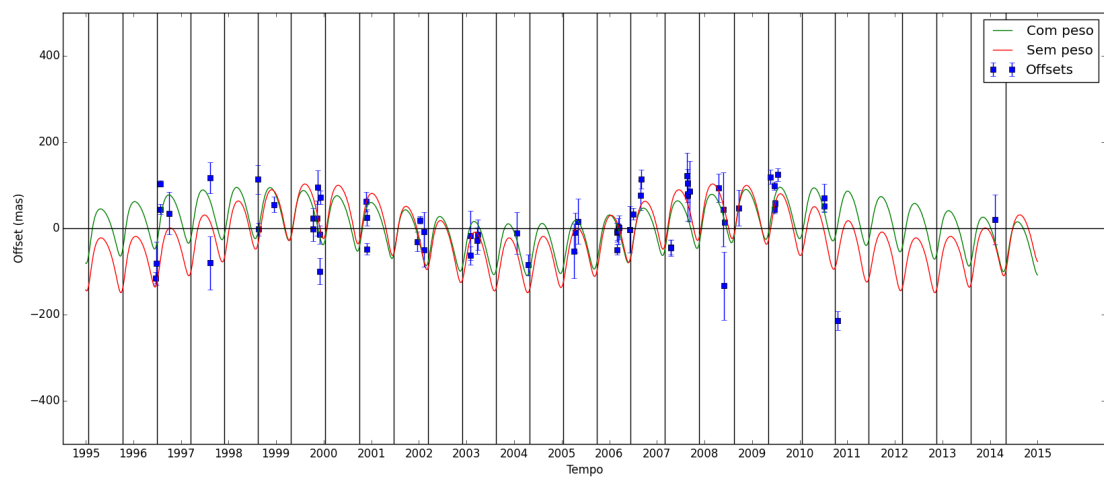




Tabela 5: Resultados dos ajustes para Elara - RA

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $-42 \pm 17$   | $-63 \pm 20$   | mas     |
| p[1]      | $11 \pm 2$     | $8.5 \pm 0.8$  | anos    |
| p[2]      | $-0.7 \pm 0.4$ | $-1.4 \pm 0.4$ | rad     |
| p[3]      | $33 \pm 13$    | $27 \pm 18$    | mas     |
| p[4]      | $-49 \pm 23$   | $-57 \pm 21$   | mas     |
| p[5]      | $-7 \pm 14$    | $-23 \pm 15$   | mas     |
| Residuo   | 848            | 792            | mas     |

## Declinação

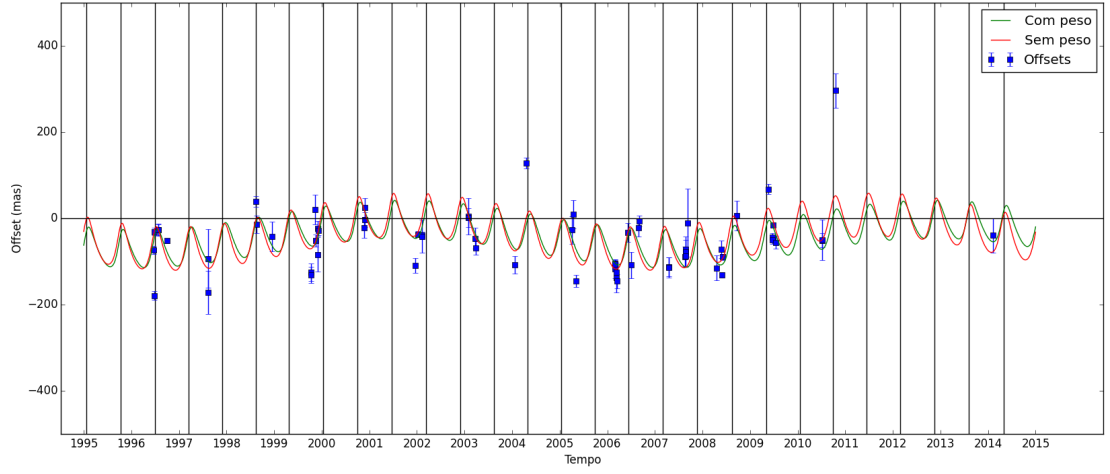
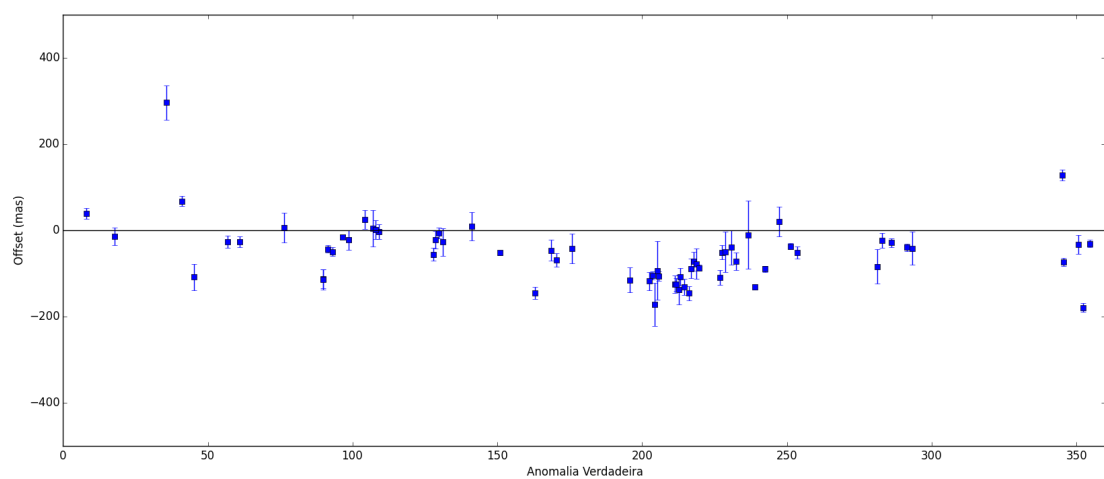


Tabela 6: Resultados dos ajustes para Elara - DEC

| Parâmetro | Com peso       | Sem peso      | Unidade |
|-----------|----------------|---------------|---------|
| p[0]      | $34 \pm 8$     | $39 \pm 10$   | mas     |
| p[1]      | $11.1 \pm 1.2$ | $9.8 \pm 0.9$ | anos    |
| p[2]      | $0.6 \pm 0.4$  | $0.4 \pm 0.4$ | rad     |
| p[3]      | $32 \pm 8$     | $26 \pm 10$   | mas     |
| p[4]      | $29 \pm 8$     | $42 \pm 11$   | mas     |
| p[5]      | $-37 \pm 7$    | $-31 \pm 8$   | mas     |
| Residuo   | 461            | 445           | mas     |



# Himalia

## Ascensão Reta

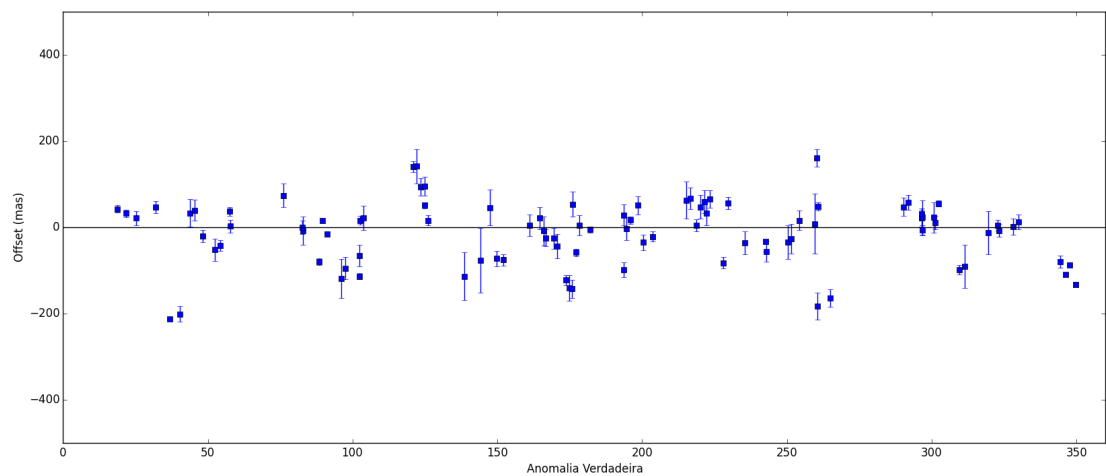
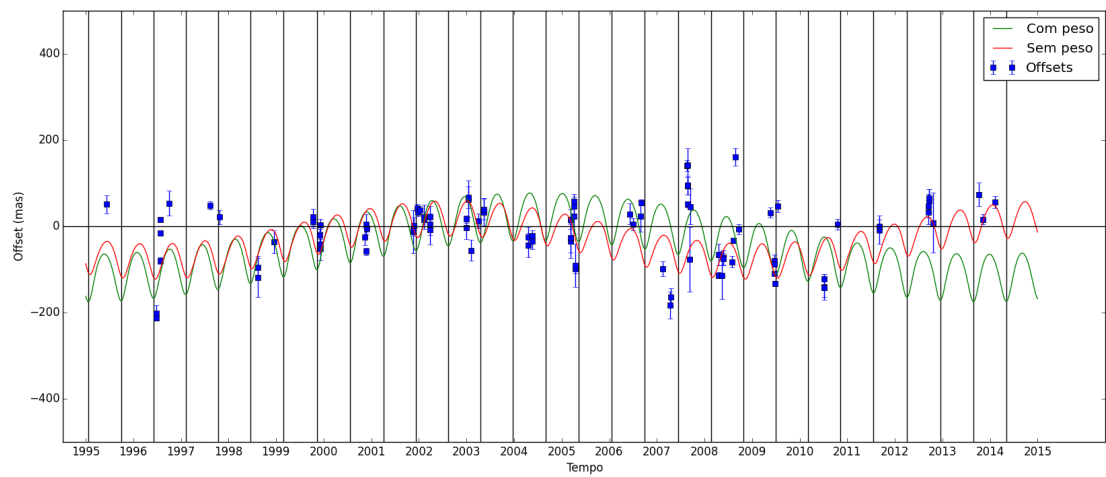


Tabela 7: Resultados dos ajustes para Himalia - RA

| Parâmetro | Com peso      | Sem peso      | Unidade |
|-----------|---------------|---------------|---------|
| p[0]      | $71 \pm 24$   | $49 \pm 19$   | mas     |
| p[1]      | $18 \pm 8$    | $12 \pm 2$    | anos    |
| p[2]      | $0.1 \pm 0.8$ | $0.2 \pm 0.7$ | rad     |
| p[3]      | $0 \pm 21$    | $-17 \pm 21$  | mas     |
| p[4]      | $-55 \pm 17$  | $-36 \pm 21$  | mas     |
| p[5]      | $-49 \pm 36$  | $-32 \pm 14$  | mas     |
| Residuo   | 1388          | 1348          | mas     |

## Declinação

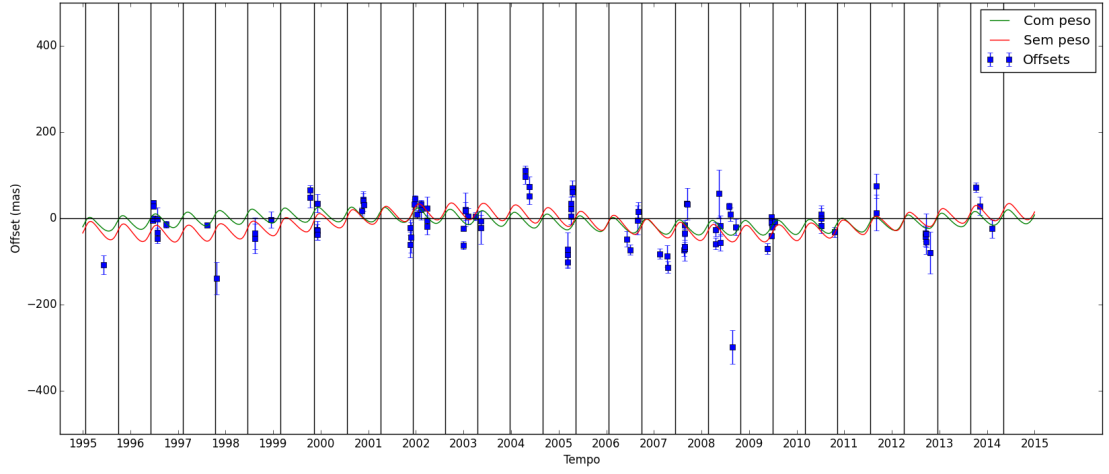
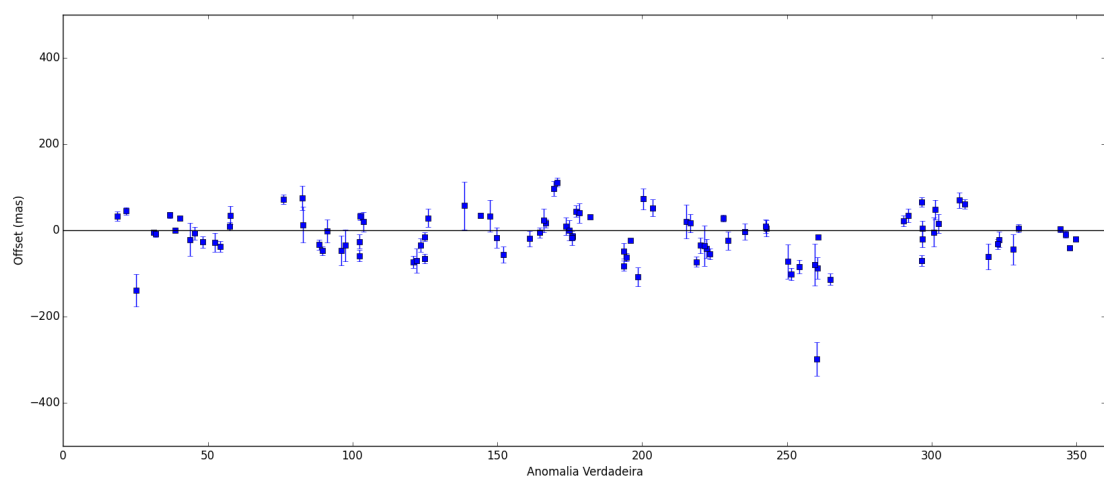


Tabela 8: Resultados dos ajustes para Himalia - DEC

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $15 \pm 5$     | $2 \pm 7$      | mas     |
| p[1]      | $16 \pm 3$     | $12.2 \pm 1.6$ | anos    |
| p[2]      | $1.3 \pm 0.43$ | $0.0 \pm 0.5$  | rad     |
| p[3]      | $15 \pm 6$     | $19 \pm 8$     | mas     |
| p[4]      | $7 \pm 5$      | $7 \pm 5$      | mas     |
| p[5]      | $-7 \pm 4$     | $-7 \pm 4$     | mas     |
| Residuo   | 533            | 513            | mas     |



# Lysithea

## Ascensão Reta

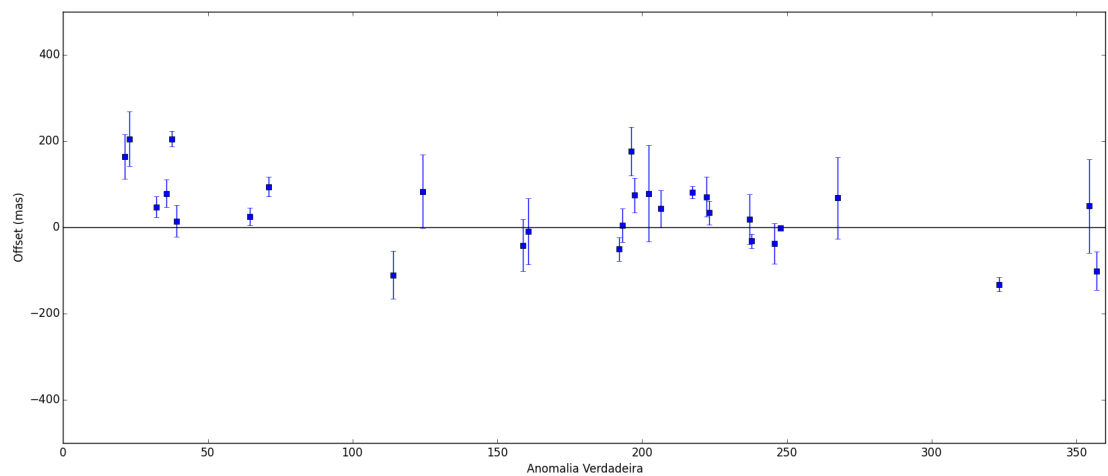
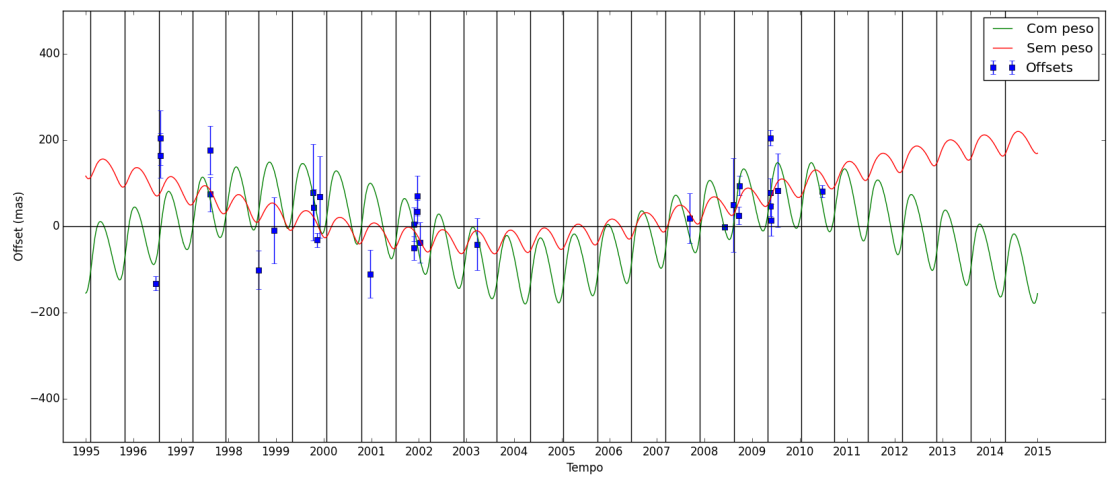


Tabela 9: Resultados dos ajustes para Lysithea - RA

| Parâmetro | Com peso       | Sem peso      | Unidade |
|-----------|----------------|---------------|---------|
| p[0]      | $88 \pm 37$    | $117 \pm 350$ | mas     |
| p[1]      | $10.8 \pm 0.9$ | $24 \pm 49$   | anos    |
| p[2]      | $0.5 \pm 0.4$  | $2.3 \pm 1.6$ | rad     |
| p[3]      | $67 \pm 27$    | $12 \pm 28$   | mas     |
| p[4]      | $-38 \pm 33$   | $-24 \pm 26$  | mas     |
| p[5]      | $-16 \pm 28$   | $79 \pm 370$  | mas     |
| Residuo   | 494            | 397           | mas     |

## Declinação

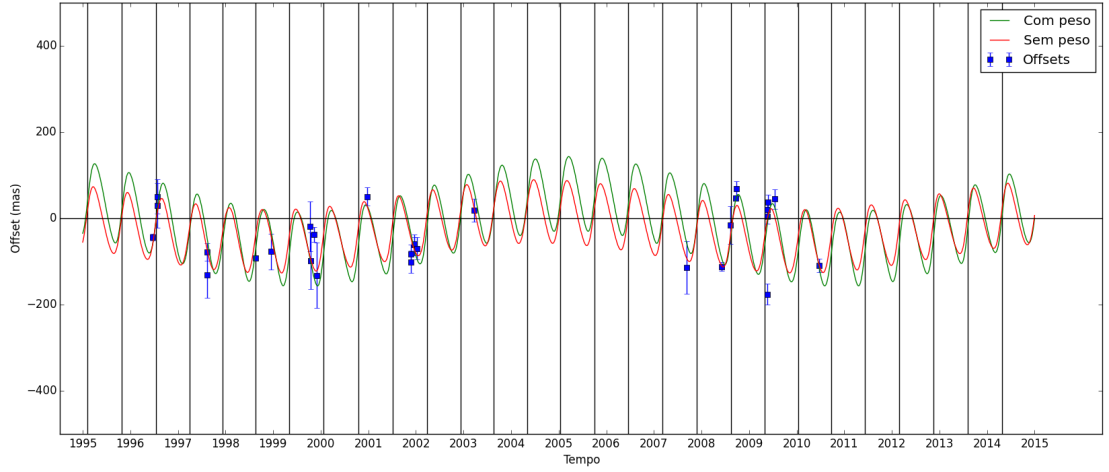
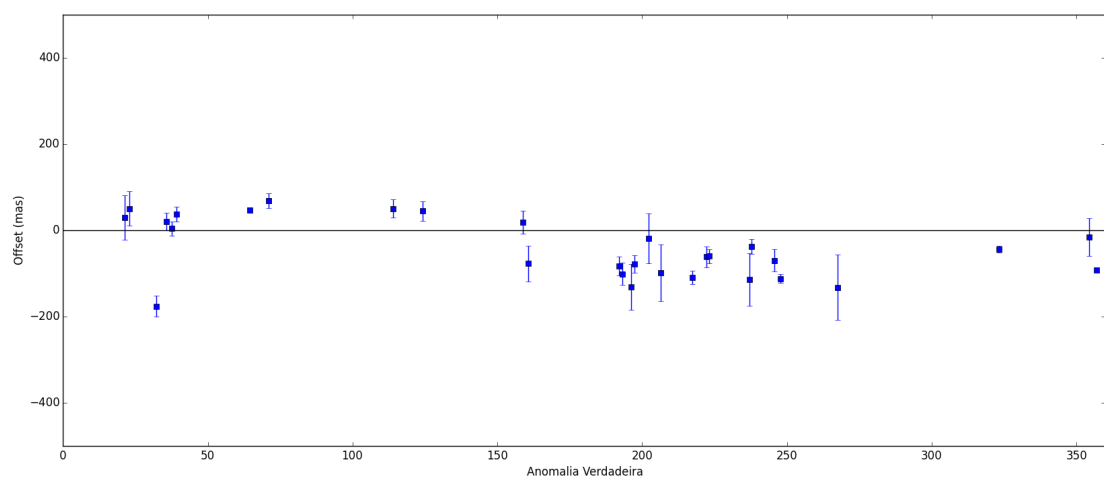


Tabela 10: Resultados dos ajustes para Lysithea - DEC

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $64 \pm 20$    | $34 \pm 24$    | mas     |
| p[1]      | $11.3 \pm 0.7$ | $11.1 \pm 1.9$ | anos    |
| p[2]      | $-1.3 \pm 0.3$ | $-1.0 \pm 0.5$ | rad     |
| p[3]      | $85 \pm 14$    | $72 \pm 17$    | mas     |
| p[4]      | $-12 \pm 15$   | $11 \pm 16$    | mas     |
| p[5]      | $-8 \pm 14$    | $-19 \pm 15$   | mas     |
| Residuo   | 267            | 249            | mas     |





# Sinope

## Ascensão Reta

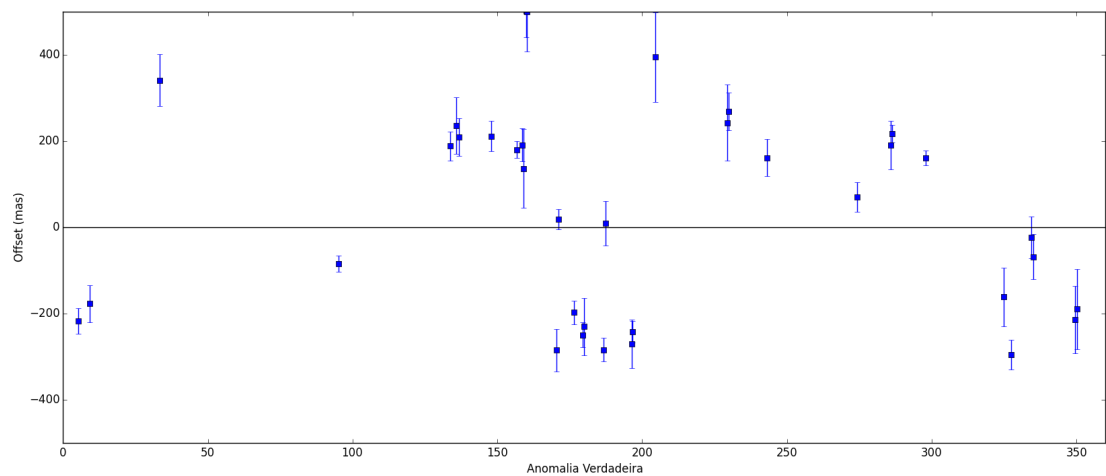
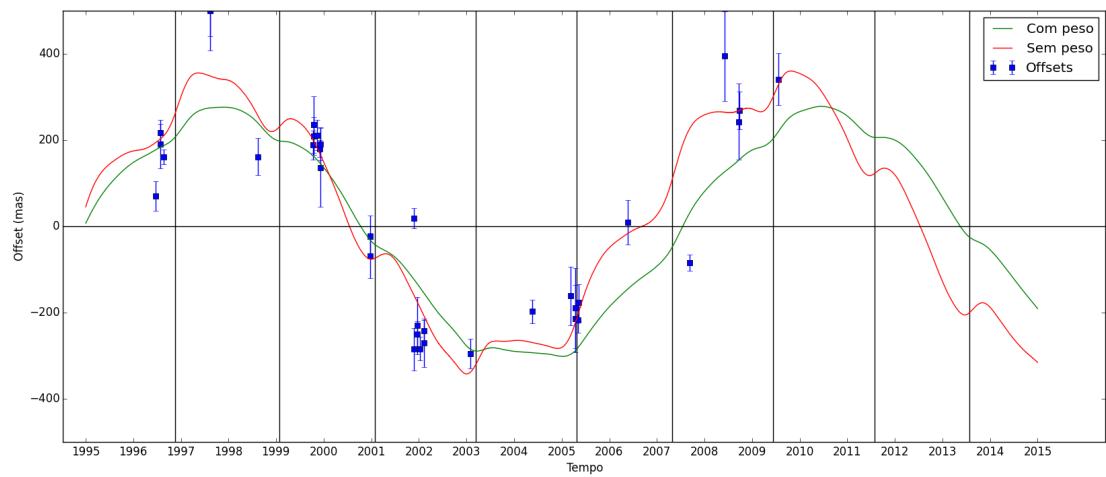


Tabela 11: Resultados dos ajustes para Sinope - RA

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $-284 \pm 28$  | $-316 \pm 25$  | mas     |
| p[1]      | $12 \pm 1$     | $11.7 \pm 0.7$ | anos    |
| p[2]      | $-0.5 \pm 0.1$ | $-0.4 \pm 0.1$ | rad     |
| p[3]      | $10 \pm 48$    | $44 \pm 37$    | mas     |
| p[4]      | $-15 \pm 31$   | $-18 \pm 24$   | mas     |
| p[5]      | $-26 \pm 21$   | $1 \pm 21$     | mas     |
| Residuo   | 671            | 532            | mas     |

## Declinação

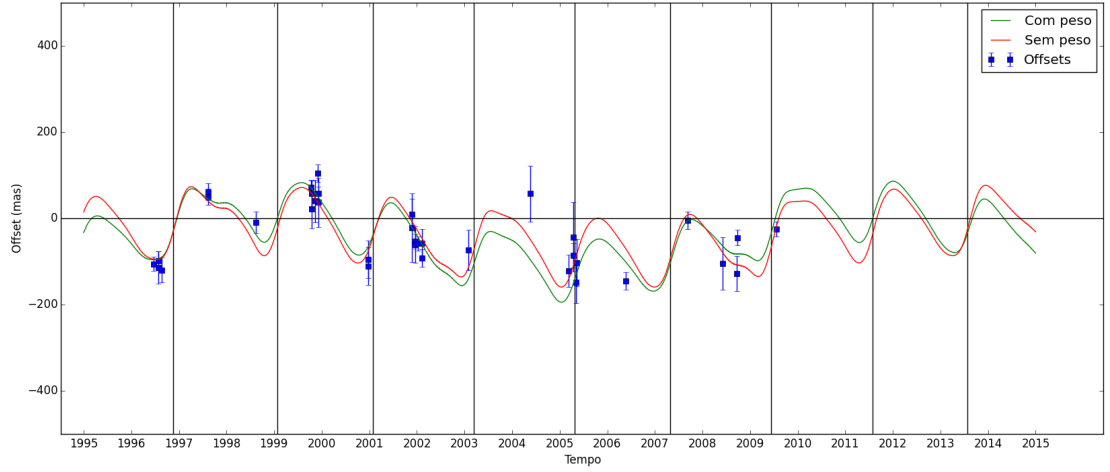
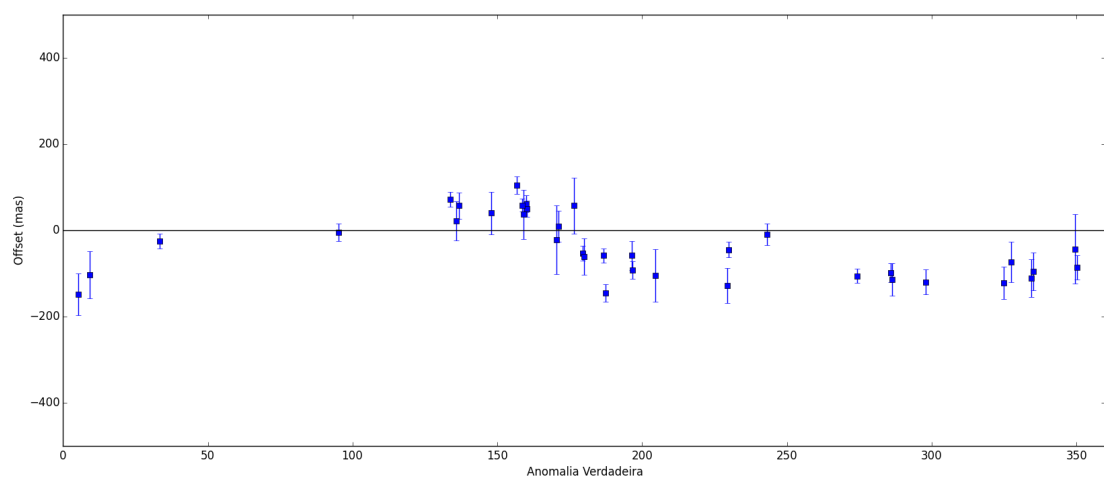


Tabela 12: Resultados dos ajustes para Sinope - DEC

| Parâmetro | Com peso       | Sem peso      | Unidade |
|-----------|----------------|---------------|---------|
| p[0]      | $-69 \pm 11$   | $-38 \pm 11$  | mas     |
| p[1]      | $12.7 \pm 0.7$ | $15 \pm 3$    | anos    |
| p[2]      | $5.2 \pm 0.1$  | $5.4 \pm 0.4$ | rad     |
| p[3]      | $69 \pm 11$    | $79 \pm 15$   | mas     |
| p[4]      | $-18 \pm 9$    | $-19 \pm 10$  | mas     |
| p[5]      | $-54 \pm 7$    | $-43 \pm 8$   | mas     |
| Residuo   | 266            | 229           | mas     |



# Pasiphae

## Ascensão Reta

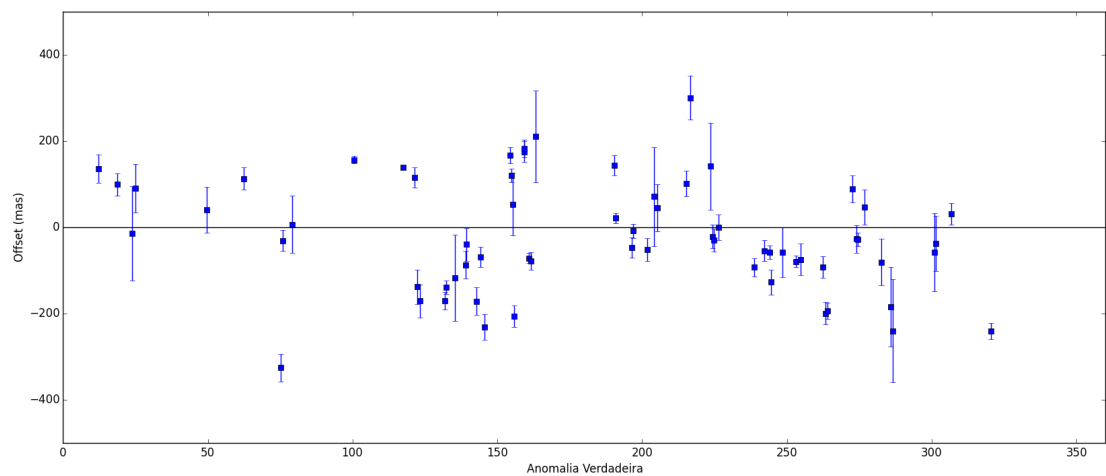
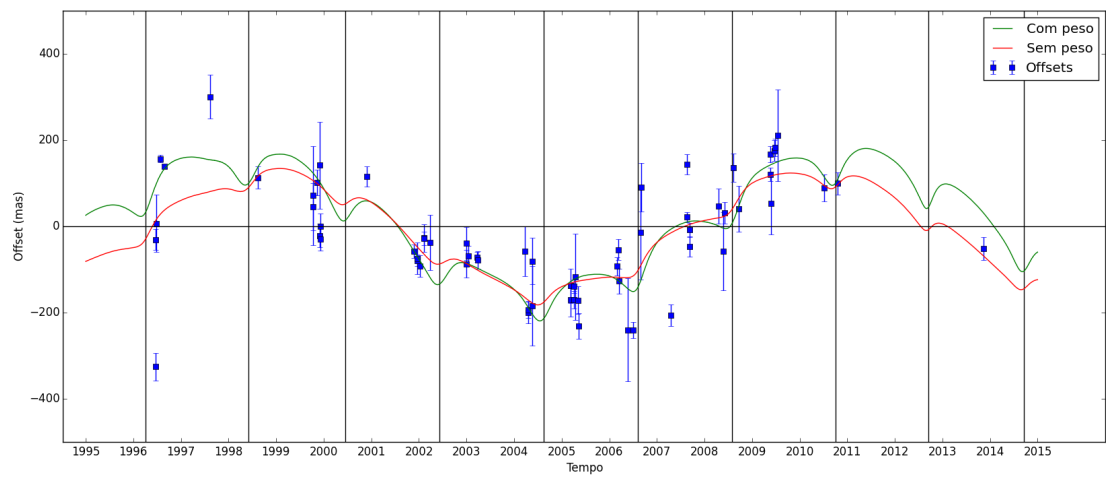


Tabela 13: Resultados dos ajustes para Pasiphae - RA

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $-157 \pm 14$  | $-136 \pm 15$  | mas     |
| p[1]      | $12.7 \pm 0.4$ | $11.3 \pm 0.6$ | anos    |
| p[2]      | $-0.6 \pm 0.1$ | $-1.0 \pm 0.1$ | rad     |
| p[3]      | $20 \pm 16$    | $15 \pm 17$    | mas     |
| p[4]      | $-39 \pm 19$   | $-16 \pm 19$   | mas     |
| p[5]      | $-17 \pm 12$   | $-24 \pm 13$   | mas     |
| Residuo   | 733            | 679            | mas     |

## Declinação

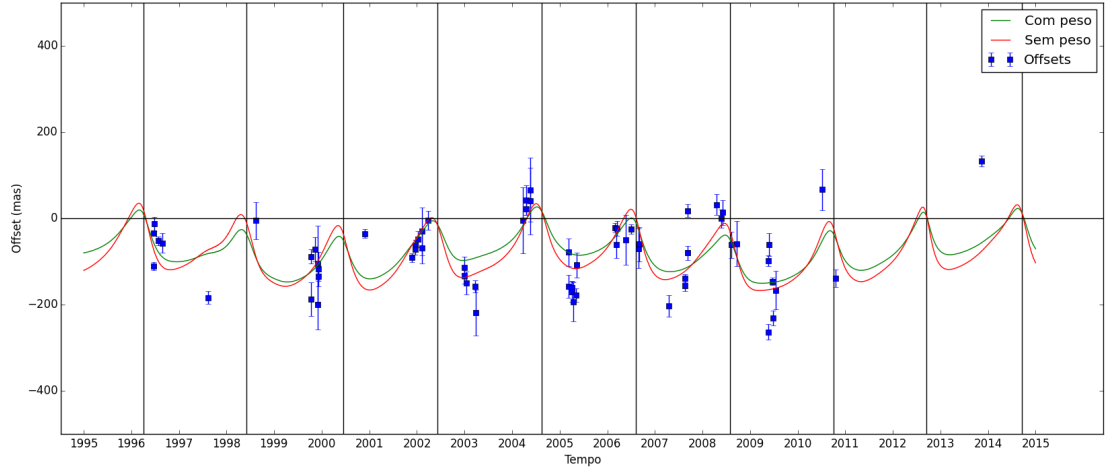
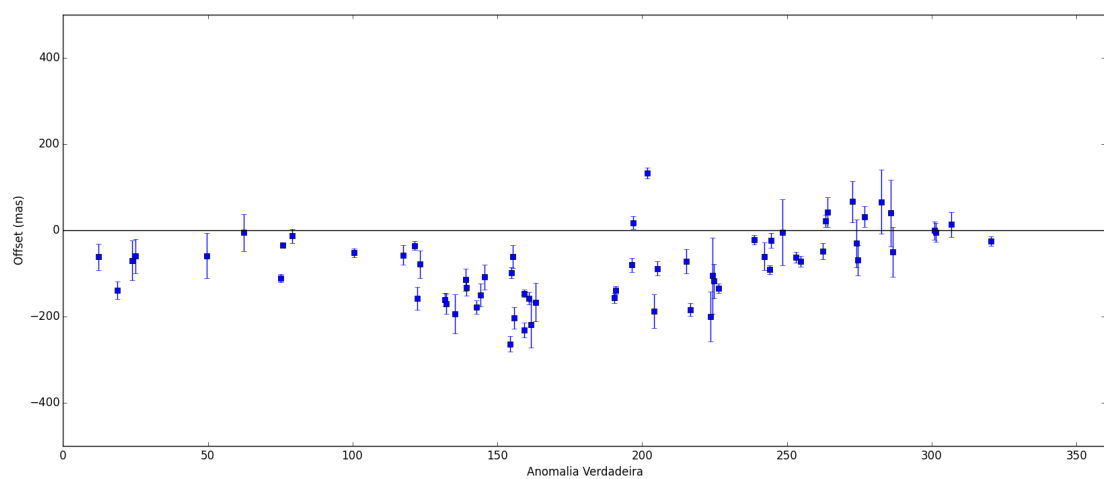


Tabela 14: Resultados dos ajustes para Pasiphae - DEC

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $35 \pm 13$    | $26 \pm 10$    | mas     |
| p[1]      | $9 \pm 1$      | $8 \pm 2$      | anos    |
| p[2]      | $-1.5 \pm 0.5$ | $-1.9 \pm 0.8$ | rad     |
| p[3]      | $-30 \pm 14$   | $-48 \pm 11$   | mas     |
| p[4]      | $44 \pm 16$    | $58 \pm 13$    | mas     |
| p[5]      | $-62 \pm 10$   | $-67 \pm 9$    | mas     |
| Residuo   | 513            | 488            | mas     |



# Phoebe

## Ascensão Reta

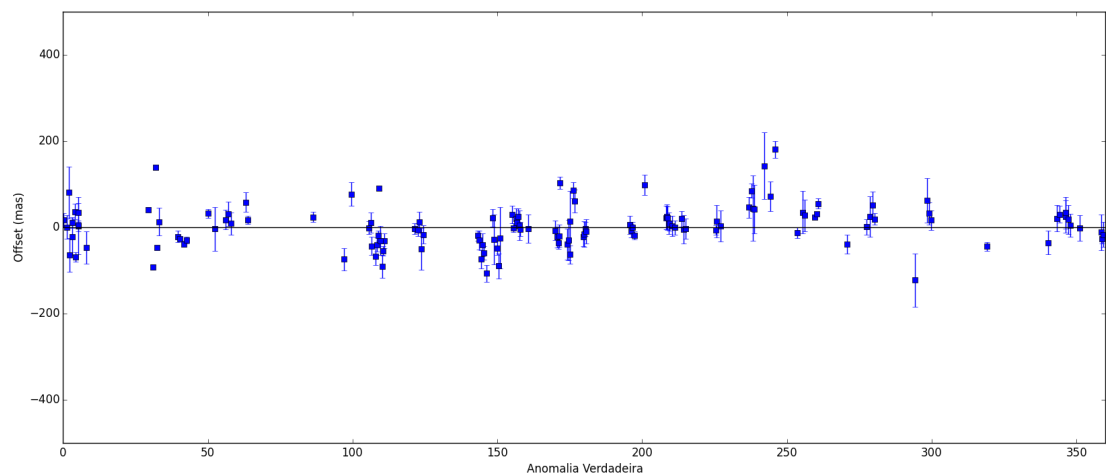
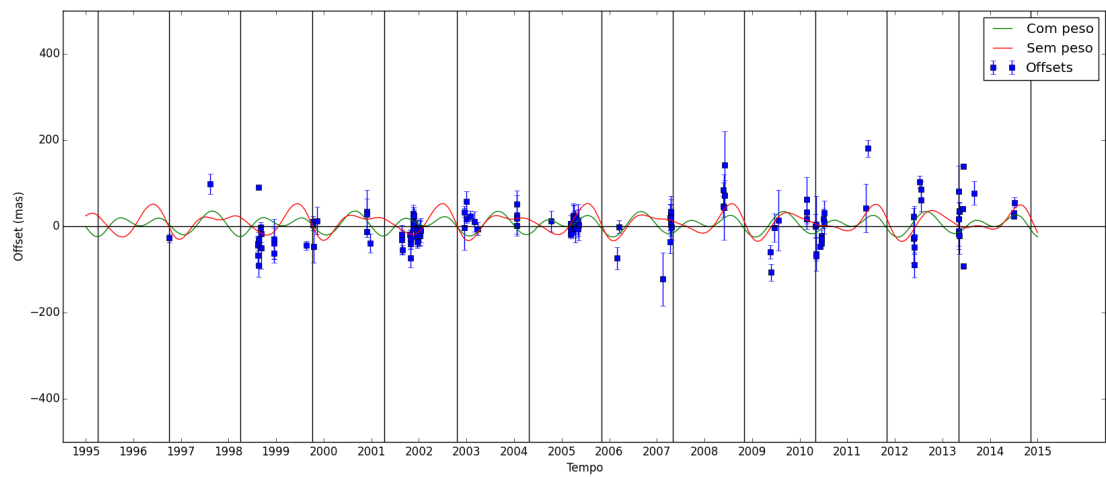


Tabela 15: Resultados dos ajustes para Phoebe - RA

| Parâmetro | Com peso        | Sem peso        | Unidade |
|-----------|-----------------|-----------------|---------|
| p[0]      | $-17 \pm 8$     | $-17 \pm 8$     | mas     |
| p[1]      | $0.99 \pm 0.01$ | $1.01 \pm 0.01$ | anos    |
| p[2]      | $0.6 \pm 0.8$   | $1.9 \pm 0.5$   | rad     |
| p[3]      | $-8. \pm 7$     | $-26 \pm 6$     | mas     |
| p[4]      | $-12 \pm 8$     | $1 \pm 5$       | mas     |
| p[5]      | $2 \pm 9$       | $8 \pm 8$       | mas     |
| Residuo   | 551             | 505             | mas     |

## Declinação

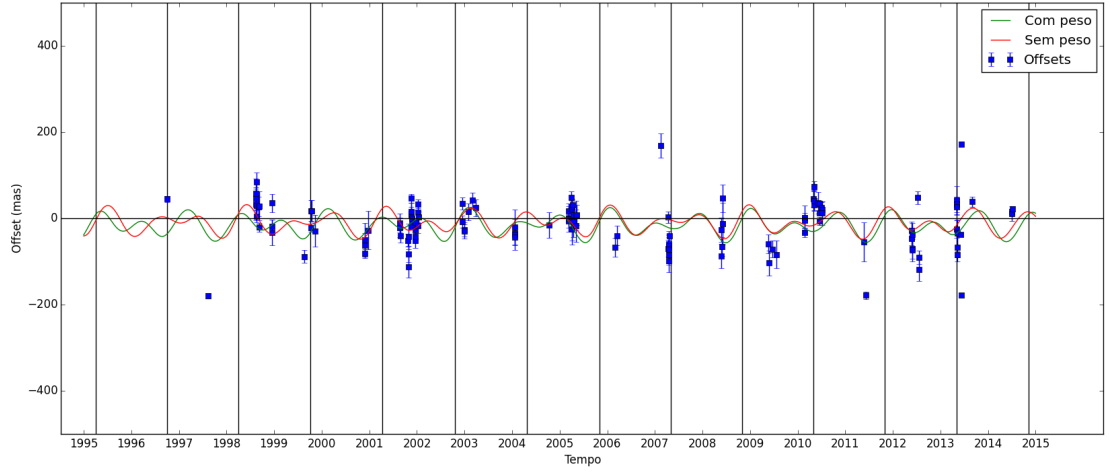
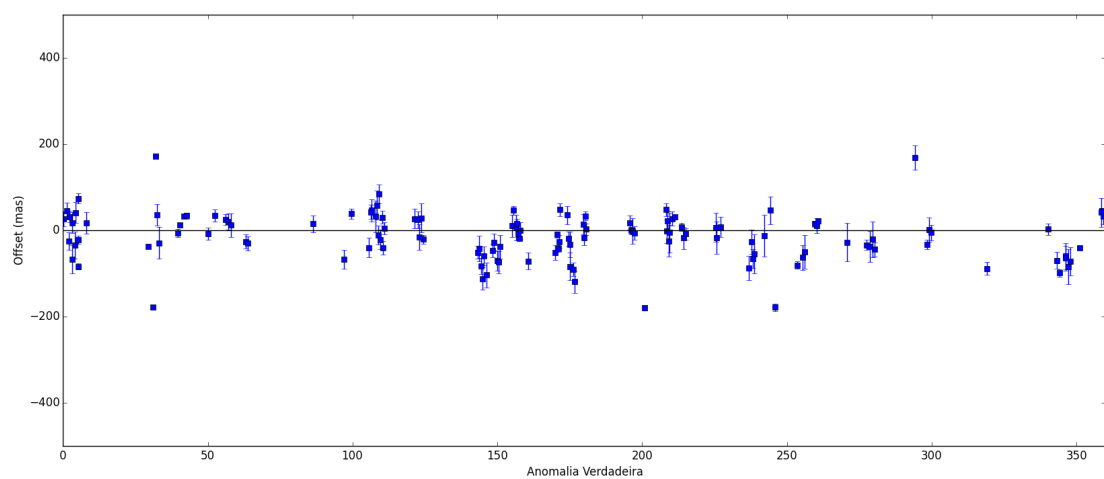


Tabela 16: Resultados dos ajustes para Phoebe - DEC

| Parâmetro | Com peso        | Sem peso        | Unidade |
|-----------|-----------------|-----------------|---------|
| p[0]      | $22 \pm 14$     | $20 \pm 8$      | mas     |
| p[1]      | $0.97 \pm 0.01$ | $0.95 \pm 0.01$ | anos    |
| p[2]      | $0.4 \pm 0.7$   | $-0.6 \pm 0.4$  | rad     |
| p[3]      | $17 \pm 12$     | $16 \pm 7$      | mas     |
| p[4]      | $2 \pm 10$      | $10 \pm 6$      | mas     |
| p[5]      | $-16 \pm 8$     | $-9 \pm 5$      | mas     |
| Residuo   | 618             | 594             | mas     |





# Nereida

## Ascensão Reta

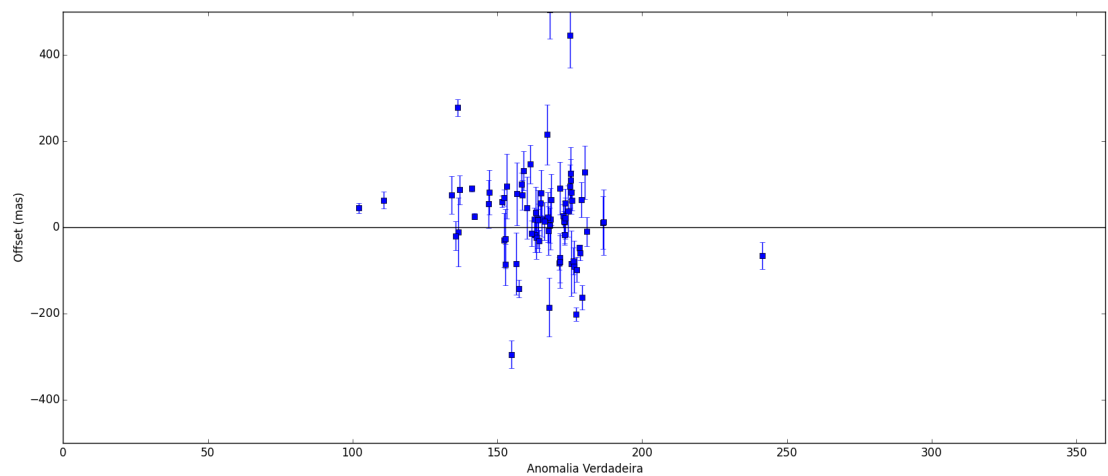
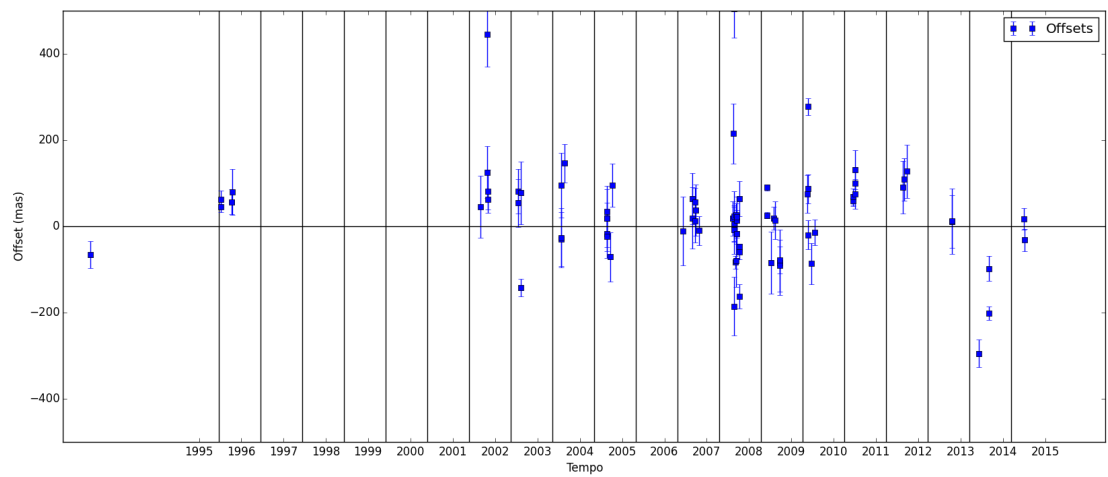


Tabela 17: Resultados dos ajustes para Nereida - RA

| Parâmetro | Com peso       | Sem peso       | Unidade |
|-----------|----------------|----------------|---------|
| p[0]      | $-130 \pm 29$  | $-46 \pm 25$   | mas     |
| p[1]      | $11.3 \pm 0.7$ | $8 \pm 1$      | anos    |
| p[2]      | $-0.8 \pm 0.3$ | $-2.8 \pm 0.9$ | rad     |
| p[3]      | $39 \pm 81$    | $39 \pm 81$    | mas     |
| p[4]      | $193 \pm 119$  | $-27 \pm 130$  | mas     |
| p[5]      | $123 \pm 125$  | $-21 \pm 130$  | mas     |
| Residuo   | 1427           | 1154           | mas     |

## Declinação

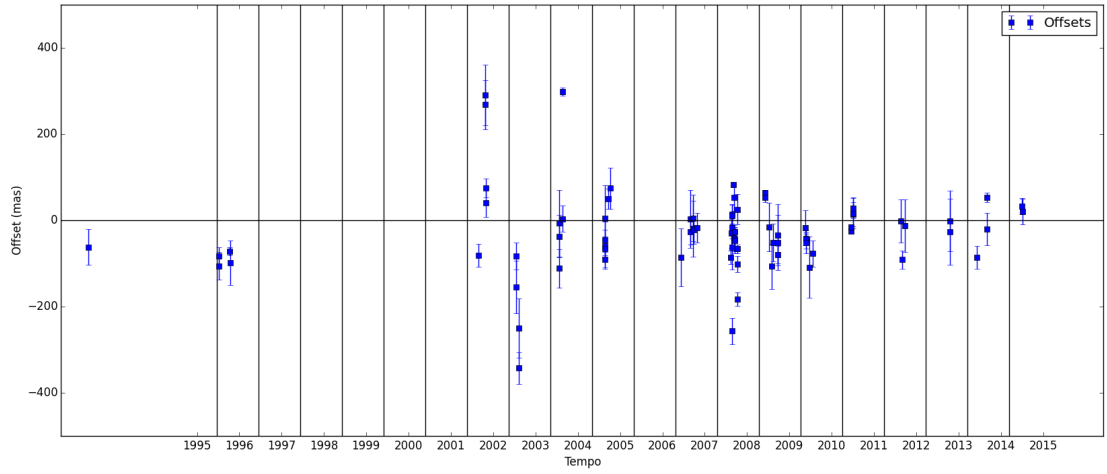


Tabela 18: Resultados dos ajustes para Nereida - DEC

| Parâmetro | Com peso       | Sem peso      | Unidade |
|-----------|----------------|---------------|---------|
| p[0]      | $83 \pm 19$    | $21 \pm 17$   | mas     |
| p[1]      | $14 \pm 2$     | $-14 \pm 7$   | anos    |
| p[2]      | $-0.1 \pm 0.6$ | $1.9 \pm 1.7$ | rad     |
| p[3]      | $165 \pm 87$   | $-40 \pm 51$  | mas     |
| p[4]      | $-186 \pm 158$ | $-63 \pm 92$  | mas     |
| p[5]      | $-182 \pm 172$ | $-70 \pm 93$  | mas     |
| Residuo   | 1120           | 820           | mas     |

