**Sheep birth distribution in past herds: a review for prehistoric Europe (6th – 3rd millennia BC).**

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**Supplementary Table S2:** Results from the calculation of the best fit (method of least squares) between the measured and the modelled dataset for combined variation of X (period), A (amplitude), x0 (delay) and M (mean). The modelling uses the equation from Balasse *et al.* (2012a):

δ18Omodel = A . cos (2Π (x- x0)/X) + M

Pearson’s correlation coefficient.

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| --- | --- | --- | --- | --- | --- | --- |
| **Specimen** | **A (‰)** | **M (‰)** | **x0 (mm)** | **X (mm)** | **Pearson R** | **x0/X** |
| ALS Ovis1 M3 | 2.48 | -5.31 | 12.33 | 23.12 | 0.994 | 0.53 |
| ALS Ovis2 M3 | 3.45 | -5.68 | 33.47 | 28.70 | 0.995 | 0.17 |
| ALS Ovis3 M3 | 3.08 | -5.48 | 9.37 | 23.18 | 0.983 | 0.40 |
| ALS Ovis4 M3 | 2.04 | -4.38 | 29.04 | 26.62 | 0.978 | 0.09 |
| ALS Ovis5 M3 | 2.66 | -5.05 | 8.37 | 22.07 | 0.981 | 0.38 |
| ALS Ovis6 M3 | 3.24 | -4.31 | 3.74 | 26.93 | 0.993 | 0.14 |
| ALS Ovis8 M3 | 2.73 | -6.30 | 6.27 | 20.78 | 0.995 | 0.30 |
| ALS Ovis9 M3 | 3.08 | -4.51 | 28.49 | 25.85 | 0.993 | 0.10 |
| CHE Ovis3 M3 | 1.73 | -4.70 | 8.64 | 28.10 | 0.990 | 0.31 |
| CHE Ovis5 M3 | 3.04 | -4.99 | 6.10 | 24.33 | 0.980 | 0.25 |
| CHE Ovis12 M3 | 3.28 | -4.33 | 6.78 | 32.73 | 0.990 | 0.21 |
| CHE Ovis14 M3 | 3.18 | -3.20 | 21.22 | 23.99 | 0.930 | 0.88 |
| PBORD Ovis33 M3 | 1.51 | -6.19 | 10.11 | 24.39 | 0.980 | 0.41 |
| PBORD Ovis64 M3 | 2.30 | -4.81 | 8.47 | 26.32 | 0.985 | 0.32 |
| PBORD Ovis65 M3 | 1.64 | -3.83 | 7.36 | 29.05 | 0.988 | 0.25 |
| PBORD Ovis67 M3 | 2.41 | -4.42 | 5.66 | 22.57 | 0.993 | 0.25 |
| PBORD Ovis68 M3 | 2.36 | -4.47 | 8.12 | 24.07 | 0.986 | 0.34 |
| PBORD Ovis69 M3 | 3.09 | -6.37 | 13.02 | 29.46 | 0.992 | 0.44 |
| PBORD Ovis70 M3 | 2.30 | -4.31 | 3.88 | 20.34 | 0.991 | 0.19 |
| PBORD Ovis71 M3 | 1.99 | -5.74 | 8.96 | 21.37 | 0.984 | 0.42 |
| PBORD Ovis72 M3 | 2.71 | -4.21 | 14.76 | 29.54 | 0.991 | 0.50 |
| PBORD Ovis277 M3 | 2.07 | -5.33 | 12.94 | 21.15 | 0.989 | 0.61 |
| PBORD Ovis449 M3 | 3.18 | -5.53 | 9.18 | 25.35 | 0.996 | 0.36 |
| PBORD Ovis555 M3 | 1.98 | -5.31 | 11.05 | 26.98 | 0.979 | 0.41 |
| HVA Ovis85 M3 | 3.44 | -5.58 | 3.43 | 27.63 | 0.995 | 0.12 |
| HVA Ovis87 M3 | 2.73 | -4.64 | 26.11 | 26.43 | 0.995 | 0.99 |
| HVA Ovis92 M3 | 2.27 | -3.46 | 6.58 | 24.36 | 0.993 | 0.27 |
| HVA Ovis93 M3 | 2.18 | -5.17 | 11.97 | 24.84 | 0.980 | 0.48 |
| HVA Ovis95 M3 | 3.09 | -3.86 | 10.14 | 27.08 | 0.997 | 0.37 |
| HVA Ovis98 M3 | 1.48 | -5.62 | 6.70 | 20.91 | 0.981 | 0.32 |

*To be continued…*

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| --- | --- | --- | --- | --- | --- | --- |
| **Specimen** | **A (‰)** | **M (‰)** | **x0 (mm)** | **X (mm)** | **Pearson R** | **x0/X** |
| KH Ovis1 M3 | 1.56 | -4.67 | 11.38 | 21.90 | 0.987 | 0.52 |
| KH Ovis2 M3 | 1.83 | -4.97 | 12.95 | 22.87 | 0.992 | 0.57 |
| KH Ovis3 M3 | 1.65 | -5.00 | 11.86 | 22.52 | 0.955 | 0.53 |
| KH Ovis4 M2 | 1.70 | -4.84 | 9.52 | 22.93 | 0.989 | 0.41 |
| KH Ovis5 M3 | 1.77 | -3.76 | 8.97 | 21.92 | 0.989 | 0.41 |
| KH Ovis6 M3 | 0.97 | -3.67 | 10.88 | 17.25 | 0.967 | 0.63 |
| KH Ovis8 M3 | 2.20 | -4.11 | 11.18 | 22.16 | 0.973 | 0.50 |
| KH Ovis9 M3 | 1.80 | -3.99 | 19.37 | 21.18 | 0.990 | 0.91 |
| KH Ovis10 M3 | 1.10 | -3.46 | 12.35 | 17.70 | 0.980 | 0.70 |
| KH Ovis11 M3 | 1.40 | -3.68 | 12.40 | 23.22 | 0.949 | 0.53 |
| SKB Ovis1 M3 | 1.95 | -3.66 | 14.85 | 19.26 | 0.949 | 0.77 |
| SKB Ovis2 M3 | 1.20 | -3.63 | 15.88 | 20.20 | 0.983 | 0.79 |
| SKB Ovis3 M2 | 1.86 | -5.14 | 9.28 | 24.20 | 0.995 | 0.38 |
| SKB Ovis3 M3 | 1.73 | -4.21 | 9.44 | 19.86 | 0.967 | 0.48 |
| SKB Ovis4 M3 | 1.13 | -3.69 | 9.23 | 16.33 | 0.959 | 0.57 |
| SKB Ovis5 M3 | 1.33 | -3.07 | 13.24 | 20.00 | 0.989 | 0.66 |
| SKB Ovis6 M3 | 1.17 | -4.42 | 11.37 | 23.62 | 0.943 | 0.48 |
| SKB Ovis7 M3 | 0.59 | -3.57 | 15.17 | 21.85 | 0.978 | 0.69 |
| SKB Ovis8 M3 | 1.09 | -2.65 | 12.85 | 19.01 | 0.978 | 0.68 |
| SKB Ovis9 M3 | 1.11 | -4.03 | 13.11 | 22.50 | 0.978 | 0.58 |
| SKB Ovis10 M3 | 1.08 | -4.24 | 13.39 | 24.98 | 0.978 | 0.54 |
| SKB Ovis11 M3 | 0.89 | -4.27 | 16.48 | 20.86 | 0.984 | 0.79 |
| SKB Ovis12 M3 | 1.89 | -5.54 | 11.89 | 18.69 | 0.975 | 0.64 |
| SKB Ovis14 M3 | 1.54 | -5.35 | 7.60 | 22.58 | 0.970 | 0.34 |
| SKB Ovis15 M3 | 0.89 | -5.10 | 8.33 | 21.30 | 0.928 | 0.39 |
| SKB Ovis16 M3 | 0.99 | -4.83 | 10.84 | 17.91 | 0.969 | 0.60 |
| HPWN Ovis7 M3 | 0.87 | -2.78 | 9.08 | 21.53 | 0.950 | 0.42 |
| HPWN Ovis9 M3 | 0.78 | -3.54 | 7.33 | 15.16 | 0.910 | 0.48 |
| HPWN Ovis10 M3 | 0.85 | -2.62 | 8.29 | 21.47 | 0.971 | 0.39 |
| HPWN Ovis11 M3 | 1.06 | -3.54 | 7.47 | 20.13 | 0.973 | 0.37 |
| HPWN Ovis12 M3 | 0.64 | -3.12 | 7.04 | 16.65 | 0.935 | 0.42 |
| Ovis MCR 3B M2 | 1.22 | 0.28 | 8.13 | 19.89 | 0.971 | 0.41 |
| Ovis MCR 3C M2 | 1.12 | -0.70 | 5.55 | 26.25 | 0.991 | 0.21 |
| Ovis MCR 3D M2 | 1.22 | -0.84 | 6.51 | 24.97 | 0.987 | 0.26 |
| KMZ Ovis1 M2 | 1.48 | -2.27 | 5.90 | 30.04 | 0.958 | 0.20 |
| KMZ 10013 M2 | 0.76 | -3.58 | 4.54 | 22.62 | 0.962 | 0.20 |
| KMZ 00018 M2 | 1.23 | -2.94 | 5.44 | 28.09 | 0.996 | 0.19 |
| KMZ 00018 M3 | 1.56 | -3.16 | 3.24 | 23.17 | 0.989 | 0.14 |