A longitudinal study of dental arch dimensions in Australian Aboriginals using 2D and 3D digital imaging methods

A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Dentistry (Orthodontics)

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9. APPENDICES

9.1 Human Research Ethics Committee Approval of Project

THE UNIVERSITY OF ADELAIDE
AUSTRALIA

OFFICE OF THE DEPUTY VICE-CHANCELLOR (RESEARCH)

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Applicant: Professor WJ Sampson

Department: Dentistry

Project Title: *A longitudinal study fo interproximal attrition and tooth wear rates in modern native Australians*

THE UNIVERSITY OF ADELAIDE HUMAN RESEARCH ETHICS COMMITTEE

Project No: **H-079-2006** RM No: 0000007044

APPROVED for the period until: 30 June 2007

It is noted that this project will be conducted by Dr Ramya Thiyagarajan, Doctor of Clinical Dentistry candidate.

Refer also to the accompanying letter setting out requirements applying to approval.

Associate Professor Garrett Cullity
Convenor
Human Research Ethics Committee

Date: 7 JUN 2006

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9.2 Descriptive Statistics - equations

Mean

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i$$

Where $\bar{x}$ is the mean, *n* is the sample and

$\sum_{i=1}^{n} x_i$ is the sum of all values $x_1 + x_2 + \ldots + x_n$

Standard deviation (SD)

$$s = \sqrt{\frac{1}{n-1}\left(\sum x_i^2 - \left(\sum x_i\right)^2 / n\right)}$$

Where $\sum x_i^2$ is the sum of each observation squared,

$\left(\sum x_i^2\right)$ is the square of the sum of all observations, and *n* is the sample size

Range (Min, Max)

This is simply the difference between the largest and smallest value for each variable.

Method Error

Mean diff

mean of differences between paired values from the two determinations

SD diff

standard deviation of paired differences between the two determinations

***t*-test**

value of *t* as derived from Student's *t*-test (described below)

To determine systematic error, the use of paired *t*-tests between the two measurements in the error study allowed the determination of any significant differences (at $p<0.05$ level)

The *t* value was calculated as:

$$t = \frac{Mean\ diff}{SD\ diff\ /\ \sqrt{n}}$$

***p* value**

The statistical association between two means (Mean diff)

S(i)

Dahlberg statistic

To determine the magnitude of the random error of landmark location the Dahlberg statistic [117] was calculated as:

$$S(i) = \sqrt{\frac{\sum diff^2}{2n}}$$ where n = number of double determinations

E(var)

Error variance; the variance due to measurement error expressed as a percentage of the total observed variance.

$$E(var) = \frac{S(i)^2}{S_{obs}^{\ 2}} \times 100$$ (i.e.. expressed as a percentage)

Where:

$S(i)^2$ = variance due to measurement error, based on the Dahlberg statistic, S(i)

And S_{obs}^2 = observed variance of sample as determined by calculating the average of the original T1 values for the total sample (i.e. observed SD of variable at T1, squared). This value would include true sample variance and variance due to measurement error.

9.3 Descriptive statistics for mesio-distal crown widths at age 8 and age 15+ years of the pooled sample

Table 14: Descriptive statistics for mesio-distal tooth widths at age 8 years.

Age 7-9 (T1)			
MD Tooth Widths		**Upper RHS (mm)**	
Tooth	**N**	**Mean**	**SD**
11	43	9.1	0.7
12	31	7.1	0.7
13	4	7.9	0.3
14	4	7.3	0.7
15	2	8	0.2
16	44	11	1
MD Tooth width		**Upper LHS (mm)**	
Tooth	**N**	**Mean**	**SD**
21	42	8.9	0.7
22	32	7	0.8
23	4	7.6	1
24	4	7.3	0.9
25	2	7.8	0.6
26	44	11	1
MD Tooth width		**Lower RHS (mm)**	
Tooth	**N**	**Mean**	**SD**
31	45	5.6	0.4
32	44	6.1	0.5
33	5	6.9	0.6
34	4	7.3	0.5
35	2	7.4	0.3
36	46	11.5	1.0
MD Tooth width		**Lower LHS (mm)**	
Tooth	**N**	**Mean**	**SD**
41	45	5.5	0.5
42	44	6.2	0.4
43	6	6.5	0.8
44	4	7.8	1.4
45	3	7.6	0.7
46	47	11.7	0.9

Table 15: Descriptive statistics for mesio-distal tooth widths at age 15+ years.

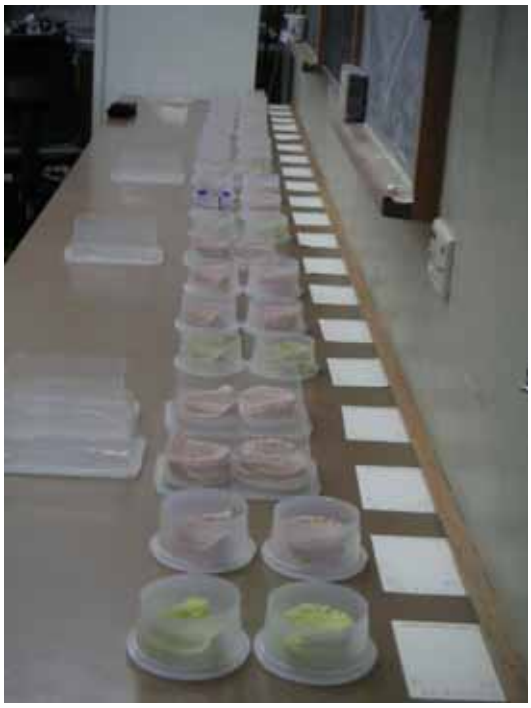
Age 15+ (T3)			
MD Tooth Widths		**Upper RHS (mm)**	
Tooth	**N**	**Mean**	**SD**
11	36	9.1	0.6
12	39	7.5	0.5
13	39	8	0.5
14	39	7.5	0.5
15	39	7.1	0.4
16	39	11.7	0.6
MD Tooth width		**Upper LHS (mm)**	
Tooth	**N**	**Mean**	**SD**
21	39	9.1	0.5
22	39	7.1	0.8
23	39	8	0.6
24	39	7.5	0.5
25	39	7	0.5
26	39	11.4	0.6
MD Tooth width		**Lower RHS (mm)**	
Tooth	**N**	**Mean**	**SD**
31	44	5.6	0.4
32	44	6.4	0.5
33	44	7.2	0.5
34	44	7	0.4
35	43	7.3	0.5
36	44	11.5	0.6
MD Tooth width		**Lower LHS (mm)**	
Tooth	**N**	**Mean**	**SD**
41	44	5.6	0.4
42	44	6.3	0.4
43	44	7	0.5
44	43	7.1	0.4
45	43	7.3	0.5
46	43	11.5	0.5

9.4 2D Images of the sample obtained in this study.

(See end of document)

9.5 Duplication of subset

Subset of study models for duplication prior to 3D scanning and analysis:



Silicone impression material – Wirosil:

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Δ184 ♂ Age R12.55 Yr


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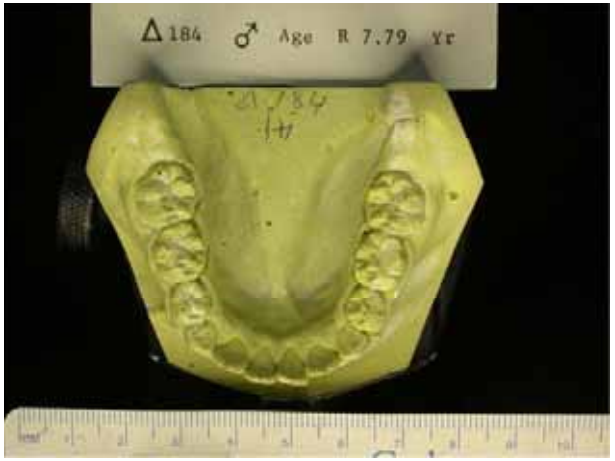
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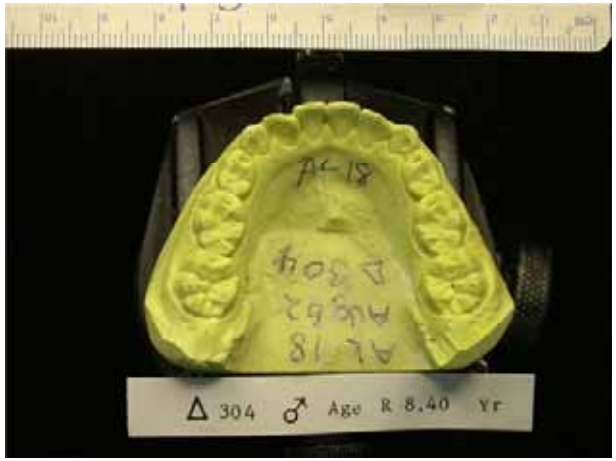
Δ303 A358
Δ 303 ♂ Age R12.68 Yr

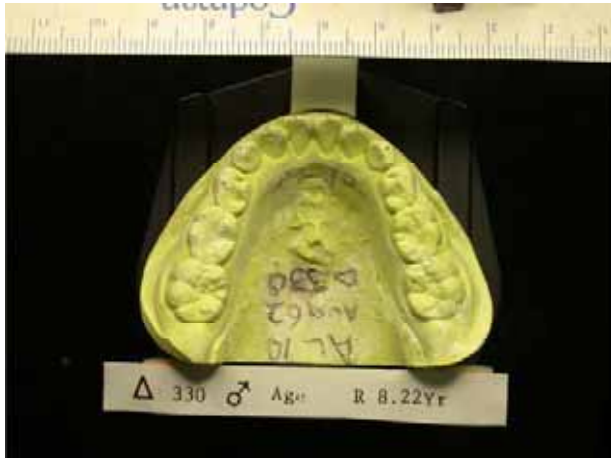

AL 18
Δ 304 ♂ Age R 8.40 Yr


Δ 304 ♂ Age R 6.82 Yr


AL
97
Δ 303 ♂ Age R 8.90 Yr


Δ 304 ♂ Age R 6.82 Yr


Δ 304 ♂ Age R15.18 Yr


Δ 330 ♂ Age R 8.22Yr


Δ 330 ♂ Age R 8.22Yr


73
Δ 330 ♂ Age R15.00 Yr


Δ 304 ♂ Age R15.18 Yr


Δ 330 ♂ Age R15.00 Yr


73
Δ 330 ♂ Age R15.00 Yr


Δ 304 ♂ Age R12.18 Yr


Δ 330 ♂ Age R12.00 Yr


AS63
Δ330 AS63
Δ 330 ♂ Age R12.00 Yr


Δ 357 ♂ Age R15.74 Yr


Δ 357 ♂ Age R15.74 Yr


Δ 359 ♂ Age R11.04 Yr


Δ 357 ♂ Age R12.74 Yr


AV31
Δ357 AV31
Δ 357 ♂ Age R12.74 Yr


Δ 359 ♂ Age R 8.04 Yr


Δ 357 ♂ Age R 8.74 Yr


AP211Δ357
Δ 357 ♂ Age R 8.74 Yr


Δ 359 ♂ Age R 6.25 Yr


Δ 359 ♂ Age R 8.04 Yr


Δ 361 ♂ Age R12.73 Yr


Δ 361 ♂ Age R15.73 Yr


Δ 359 ♂ Age R 6.25 Yr


Δ 359 ♂ Age R15.04 Yr


Δ 361 ♂ Age R 8.73 Yr


Δ 359 ♂ Age R15.04 Yr


Δ 359 ♂ Age R11.04 Yr


Δ 361 ♂ Age R 6.94 Yr


Δ361 AV74
Δ 361 ♂ Age R12.73 Yr


Δ 362 ♂ Age R 8.39 Yr


Δ 362 ♂ Age R 6.61 Yr


AP212Δ361
Δ 361 ♂ Age R 8.73 Yr


Δ 362 ♂ Age R 6.61 Yr


Δ 362 ♂ Age R15.39 Yr


Δ 361 ♂ Age R 6.94 Yr


Δ 361 ♂ Age R15.73 Yr


Δ362 AV47
MAY 1968
Δ 362 ♂ Age R12.39 Yr


Δ 362 ♂ Age R13.39 Yr


Δ 363 ♂ Age R12.83 Yr


AP63Δ363
Δ 363 ♂ Age R 8.83 Yr


Δ362 AV47
Δ 362 ♂ Age R12.39 Yr


Δ 363 ♂ Age R 8.83 Yr


AL42
AL42 Δ363
Δ 363 ♂ Age R 7.05 Yr


AP84Δ362
Δ 362 ♂ Age R 8.39 Yr


Δ 363 ♂ Age R 7.05 Yr


Δ 363 ♂ Age R15.83 Yr


Δ 366 ♂ Age R 6.47 Yr


Δ 366 ♂ Age R15.25 Yr


Δ366 AV32
Δ 366 ♂ Age R12.25 Yr


Δ 363 ♂ Age R15.83 Yr


Δ 366 ♂ Age R12.25 Yr


AP95Δ366
Δ 366 ♂ Age R 8.25 Yr


AV68
Δ363 AV68
Δ 363 ♂ Age R12.83 Yr


Δ 366 ♂ Age R 8.25 Yr


AL
67
Δ 366 ♂ Age R 6.47 Yr


Δ 367 ♂ Age R12.40 Yr


Δ 367 ♂ Age R12.40 Yr


Δ 368 ♂ Age R12.69 Yr


Δ 367 ♂ Age R 7.62 Yr


Δ 367 ♂ Age R 7.62 Yr


Δ 368 ♂ Age R 7.91 Yr


Δ 366 ♂ Age R15.25 Yr


Δ 367 ♂ Age R15.40 Yr

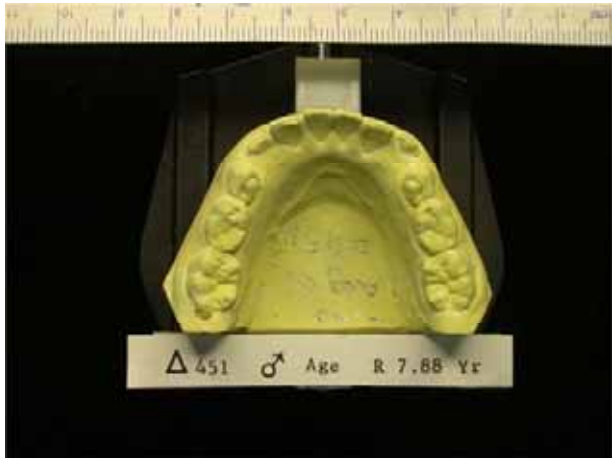

Δ 367 ♂ Age R15.40 Yr


Δ 368 ♂ Age R12.69 Yr


Δ 451 ♂ Age R12.67 Yr


Δ 451 ♂ Age R12.67 Yr


Δ 368 ♂ Age R 7.91 Yr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Δ 451 ♂ Age R 7.88 Yr


Δ 368 ♂ Age R15.69 Yr


Δ 368 ♂ Age R15.69 Yr


Δ 451 ♂ Age R15.69 Yr


Δ 525 ♂ Age R 8.02 Yr


Δ 525 ♂ Age R 6.02 Yr


Δ 525 ♂ Age R14.02 Yr


Δ 525 ♂ Age R 6.02 Yr


Δ 525 ♂ Age R14.02 Yr


Δ 525 ♂ Age R12.02 Yr


Δ 451 ♂ Age R15.67 Yr


Δ 525 ♂ Age R12.02 Yr


Δ 525 ♂ Age R 8.02 Yr


Δ 572 ♂ Age R15.12 Yr


Δ 572 ♂ Age R15.12 Yr


Δ 574 ♂ Age R15.81 Yr


Δ 572 ♂ Age R12.12 Yr


Δ 572 ♂ Age R12.12 Yr


Δ 574 ♂ Age R12.81 Yr


Δ 572 ♂ Age R 8.12 Yr


Δ 572 ♂ Age R 8.12 Yr


Δ 574 ♂ Age R 8.03 Yr


Δ574
Δ 574 ♂ Age R15.81 Yr


Δ581
Δ 581 ♂ Age R15.73 Yr


Δ581
Δ 581 ♂ Age R15.73 Yr


Δ574 AU71
Δ 574 ♂ Age R12.81 Yr


Δ581 AU98
Δ 581 ♂ Age R12.73 Yr


Δ581 AU98
Δ 581 ♂ Age R12.73 Yr


AL45 Δ574
Δ 574 ♂ Age


Δ 581 ♂ Age R 7.95 Yr


AL68 Δ581
Δ 581 ♂ Age R 7.95 Yr


Δ 600 ♂ Age R15.95 Yr


Δ 600 ♂ Age R12.95 Yr


Δ600 AV36
Δ 600 ♂ Age R12.95 Yr


Δ 600 ♂ Age R 8.95 Yr


AP96 Δ 600
Δ 600 ♂ Age R 8.95 Yr


Δ 40 ♀ Age E16.14 Yr


Δ 40 ♀ Age E16.14 Yr


Δ 155 ♀ Age R15.25 Yr


Δ 40 ♀ Age E12.53 Yr


Δ 40 ♀ Age E12.53 Yr


Δ 155 ♀ Age R12.25 Yr


Δ 40 ♀ Age E 8.90 Yr


Δ 40 ♀ Age E 8.90 Yr


Δ 155 ♀ Age R 8.88 Yr


Δ155 AQ25
Δ 155 ♀ Age R15.25 Yr


Δ252AQ37 MAY68
Δ 252 ♀ Age R15.47 Yr


Δ 252 ♀ Age R15.47 Yr


AP53
AP53Δ155
Δ 155 ♀ Age R12.25 Yr


Δ252 AQ78 MAY 65
Δ 252 ♀ Age R12.47 Yr


Δ252AQ78
Δ 252 ♀ Age R12.47 Yr


Δ 155 ♀ Age R 8.88 Yr


Δ 252 ♀ Age R 8.11 Yr


Δ 252 ♀ Age R 8.11 Yr


Δ 313 ♀ Age R15.24 Yr


87
Δ 313 ♀ Age R15.24 Yr


Δ 321 ♀ Age R15.86 Yr


Δ 313 ♀ Age R12.24 Yr


Δ313 A553
Δ 313 ♀ Age R12.24 Yr


Δ 321 ♀ Age R12.86 Yr


Δ 313 ♀ Age R 6.88 Yr


Δ 313 ♀ Age R 6.88 Yr


Δ 321 ♀ Age R 8.49 Yr


Δ321 AV89
Δ 321 ♀ Age R15.86 Yr


Δ 322 ♀ Age R15.95 Yr


Δ 322 ♀ Age R15.95 Yr


Δ321 ♀ Age R12.86 Yr


Δ 322 ♀ Age R12.95 Yr


Δ322 AS25
Δ 322 ♀ Age R12.95 Yr


Δ321 ♀ Age R 8.49 Yr


Δ322 ♀ Age R 9.17 Yr


Δ322
Δ 322 ♀ Age R 9.17 Yr


Δ 327 ♀ Age E15.61 Yr


Δ 327 ♀ Age E15.61 Yr


Δ 371 ♀ Age R12.42 Yr


Δ 327 ♀ Age E12.61 Yr


Δ 327 ♀ Age E12.61 Yr


Δ 371 ♀ Age R 8.42 Yr


Δ 327 ♀ Age E 7.85 Yr


Δ 327 ♀ Age E 7.85 Yr


Δ 371 ♀ Age R 6.64 Yr


AP76Δ371
Δ 371 ♀ Age R 6.42 Yr


Δ 376 ♀ Age R 8.99 Yr


AP49Δ376
Δ 376 ♀ Age R 8.99 Yr


76
AL76 Δ 371
Δ 371 ♀ Age R 6.64 Yr


40
Δ 371 ♀ Age R15.42 Yr


Δ 376 ♀ Age R15.99 Yr


Δ 371 ♀ Age R15.42 Yr


Δ371 AV92
Δ 371 ♀ Age R12.42 Yr


Δ 376 ♀ Age R12.99 Yr


Δ 379 ♀ Age R 6.70 Yr


Δ 379 ♀ Age R15.48 Yr


Δ379 AV55
Δ 379 ♀ Age R12.48 Yr


Δ 376 ♀ Age R15.99 Yr


Δ 379 ♀ Age R12.48 Yr


AP72Δ379
Δ 379 ♀ Age R 8.48 Yr


Δ376 AV56
Δ 376 ♀ Age R12.99 Yr


Δ 379 ♀ Age R 8.48 Yr


Δ 379 ♀ Age R 6.70 Yr


Δ 380 ♀ Age R 8.92 Yr


Δ 380 ♀ Age R 6.14 Yr


Δ 380 ♀ Age R15.92 Yr


Δ 380 ♀ Age R 6.14 Yr


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Δ 380 ♀ Age R12.92 Yr


Δ 379 ♀ Age R15.48 Yr


Δ 380 ♀ Age R12.92 Yr


Δ 380 ♀ Age R 8.92 Yr


Δ 381 ♀ Age R15.57 Yr


Δ 381 ♀ Age R15.57 Yr


Δ 413 ♀ Age R15.94 Yr


Δ 381 ♀ Age R12.57 Yr


Δ381 AV95
Δ 381 ♀ Age R12.57 Yr


Δ 413 ♀ Age R12.94 Yr


Δ 381 ♀ Age R 8.57 Yr


Δ 381 ♀ Age R 8.57 Yr


Δ 413 ♀ Age R 8.18 Yr


Δ 413 ♀ Age E15.94 Yr


Δ 415 ♀ Age R15.64 Yr


Δ 415 ♀ Age R15.64 Yr


Δ 413 ♀ Age E12.94 Yr


Δ 415 ♀ Age R12.64 Yr


Δ 415 ♀ Age R12.64 Yr


Δ 413 ♀ Age E 8.18 Yr


Δ 415 ♀ Age R 7.88 Yr


Δ 415 ♀ Age R 7.88 Yr


Δ473 ♀ Age R15.55 Yr


Δ473 ♀ Age R15.55 Yr


Δ479 ♀ Age R14.30 Yr


Δ473 ♀ Age R12.55 Yr


Δ473 ♀ Age R12.55 Yr


Δ479 ♀ Age R12.30 Yr


Δ473 ♀ Age R 7.76 Yr


Δ473 ♀ Age R 7.76 Yr


Δ479 ♀ Age R 8.30 Yr


Δ 479 ♀ Age R14.30 Yr


Δ 507 ♀ Age R12.40 Yr


Δ 507 ♀ Age R 8.40 Yr


Δ 479 ♀ Age R12.30 Yr


Δ 507 ♀ Age R 8.40 Yr


Δ 507 ♀ Age R 6.40 Yr


Δ 479 ♀ Age R 8.30 Yr


Δ 507 ♀ Age R 6.40 Yr


Δ 507 ♀ Age R14.40 Yr


Δ 549 ♀ Age E 8.07 Yr


Δ 549 ♀ Age E18.44 Yr


Δ549 AV 98
Δ 549 ♀ Age E15.44 Yr


BR 13
Δ 507 ♀ Age R14.40 Yr


Δ 549 ♀ Age E15.44 Yr


Δ549 AQ 80
Δ 549 ♀ Age E12.44 Yr


Δ507
Δ 507 ♀ Age R12.40 Yr


Δ 549 ♀ Age E12.44 Yr


Δ 549 ♀ Age E 8.07 Yr


Δ 550 ♀ Age R 8.09 Yr


Δ 550 ♀ Age R 6.51 Yr


Δ550
Δ 550 ♀ Age R15.87 Yr


Δ 550 ♀ Age R 6.51 Yr


Δ550
Δ 550 ♀ Age R15.87 Yr


Δ 550 ♀ Age R12.87 Yr


Δ 549 ♀ Age E18.44 Yr


Δ 550 ♀ Age R12.87 Yr


Δ 550 ♀ Age R 8.09 Yr


Δ 571 ♀ Age R15.72 Yr


Δ571
Δ 571 ♀ Age R15.72 Yr


Δ 585 ♀ Age E12.90 Yr


Δ571RU79
MAY 67
Δ 571 ♀ Age R12.72 Yr


Δ571 RU79
Δ 571 ♀ Age R12.72 Yr


Δ585
RU36
MAY 45
Δ 585 ♀ Age E 8.90 Yr


AL 38
AUG 62
Δ571
Δ 571 ♀ Age R 7.94 Yr


AL
38
Δ 571 ♀ Age R 7.94 Yr


Δ 585 ♀ Age E 6.11 Yr


Δ 585 ♀ Age E 8.90 Yr


Δ 632 ♀ Age R 6.14 Yr


Δ 632 ♀ Age R14.14 Yr


Δ 585 ♀ Age E 6.11 Yr


Δ 585 ♀ Age E14.90 Yr


Δ 632 ♀ Age R12.14 Yr


Δ 585 ♀ Age E14.90 Yr


Δ 585 ♀ Age E12.90 Yr


Δ 632 ♀ Age R 8.14 Yr


Δ632
Δ 632 ♀ Age R12.14 Yr


Δ 632 ♀ Age R 8.14 Yr


Δ 632 ♀ Age R 6.14 Yr


Δ632
Δ 632 ♀ Age R14.14 Yr


Δ 155 ♀ Age R17.25 Yr


Δ155 AV4J
Δ 155 ♀ Age R16.25 Yr


Δ 184 ♂ Age R16.55 Yr


Δ155AV4J
MAY 1968
Δ 155 ♀ Age R16.25 Yr


Δ 155 ♀ Age R 8.88 Yr


Δ155
Δ 155 ♀ Age R18.25 Yr


Δ 155 ♀ Age R 8.88 Yr


Δ 155 ♀ Age R18.25 Yr


52
Δ 155 ♀ Age R17.25 Yr


Δ 252 ♀ Age R16.47 Yr


Δ 184 ♂ Age R17.55 Yr


Δ 184 ♂ Age R17.55 Yr


Δ 252 ♀ Age R17.47 Yr


Δ 184 ♂ Age R18.55 Yr


Δ 184 ♂ Age R18.55 Yr


Δ 252 ♀ Age R18.47 Yr


Δ 252 ♀ Age R 8.11 Yr


Δ 184 ♂ Age R16.55 Yr


Δ 252 ♀ Age R17.47 Yr


Δ 253 ♂ Age R12.50 Yr


Δ 253 ♂ Age R17.50 Yr


Δ 252 ♀ Age R16.47 Yr


Δ 253 ♂ Age R 6.75 Yr


Δ 253 ♂ Age R16.50 Yr


Δ 252 ♀ Age R 8.11 Yr


Δ 252 ♀ Age R18.47 Yr


Δ 253 ♂ Age R15.50 Yr


Δ 253 ♂ Age R12.50 Yr


Δ253
Δ 253 ♂ Age R17.50 Yr


Δ 254 ♂ Age R16.76 Yr


Δ 253 ♂ Age R 6.75 Yr


Δ 253 ♂ Age R16.50 Yr


Δ 254 ♂ Age R15.76 Yr


Δ 253 ♂ Age R18.50 Yr


Δ253 AV6
Δ 253 ♂ Age R15.50 Yr


Δ 253 ♂ Age R18.50 Yr


Δ 254 ♂ Age R16.76 Yr


303
Δ 303 ♂ Age R16.68 Yr


Δ 303 ♂ Age R17.68 Yr


Δ 254 ♂ Age R18.76 Yr


Δ 254 ♂ Age R16.76 Yr


Δ 303 ♂ Age R16.68 Yr


Δ 254 ♂ Age R17.76 Yr


Δ 254 ♂ Age R17.76 Yr


Δ 303 ♂ Age R17.68 Yr


Δ320 ♂ Age R15.27 Yr


Δ320 ♂ Age R18.27 Yr


Δ320 ♂ Age R15.27 Yr


Δ320 ♂ Age R12.27 Yr


Δ320 ♂ Age R17.27 Yr


AP30Δ320
Δ320 ♂ Age R12.27 Yr


Δ320 ♂ Age R 7.52 Yr


Δ320 ♂ Age R16.27 Yr


Δ320 ♂ Age R 7.52 Yr


Δ320
Δ 320 ♂ Age R18.27 Yr


Δ 324 ♀ Age E14.44 Yr


Δ 324 ♀ Age E 8.07 Yr


Δ 320 ♂ Age R17.27 Yr


Δ324
A069
MAY 65
Δ 324 ♀ Age E12.44 Yr


Δ 324 ♀ Age E18.44 Yr


Δ320 AV37
Δ 320 ♂ Age R16.27 Yr


Δ 324 ♀ Age E 8.07 Yr


Δ 324 ♀ Age E16.44 Yr


Δ 324 ♀ Age E16.44 Yr


Δ 413 ♀ Age E16.94 Yr


Δ413 AV22
Δ 413 ♀ Age E16.94 Yr


Δ324 AU26
Δ 324 ♀ Age


Δ 413 ♀ Age E 8.18 Yr


Δ 413 ♀ Age E 8.18 Yr


Δ324 AQ60
Δ 324 ♀ Age E12.44 Yr


Δ 324 ♀ Age E18.44 Yr


Δ413
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Δ 414 ♀ Age R12.18 Yr


Δ 414 ♀ Age R18.18 Yr


Δ 414 ♀ Age R16.18 Yr


Δ 414 ♀ Age R 9.39 Yr


Δ 414 ♀ Age R17.18 Yr


Δ 414 ♀ Age R12.18 Yr


Δ 413 ♀ Age R18.94 Yr


Δ 414 ♀ Age R16.18 Yr


Δ 414 ♀ Age R 9.39 Yr


Δ 479 ♀ Age R14.30 Yr


Δ 549 ♀ Age E17.44 Yr


Δ 549 ♀ Age E16.44 Yr


Δ 414 ♀ Age R18.18 Yr


Δ 549 ♀ Age R16.44 Yr


Δ 549 ♀ Age E 8.07 Yr


Δ 414 ♀ Age R17.18 Yr


Δ 549 ♀ Age E 8.07 Yr


Δ 549 ♀ Age E18.44 Yr


Δ 576 ♀ Age E10.11 Yr


Δ 576 ♀ Age E16.90 Yr


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Δ 549 ♀ Age E18.44 Yr


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Δ 576 ♀ Age E17.90 Yr