MAMMOGRAPHIC IMAGE ANALYSIS SOCIETY

MiniMammographic Database

Thank you for downloading the MIAS MiniMammographic Database. By

popular request the original MIAS Database (digitised at 50 micron

pixel edge) has been reduced to 200 micron pixel edge and

clipped/padded so that every image is 1024 pixels x 1024 pixels.

Feel free to use the database in any of your scientific research,

but please read the licence agreement first (Licence.txt).

If you have have any questions/comments about the data or would like

information on how to get the original MIAS Database please contact

me at the address below. You will be put on a mailing list for further

information about any upgrades of this database. See also our WWW-page

at http://skye.icr.ac.uk/miasdb/miasdb.html for updated information.

John Suckling

Department of Physics

Royal Marsden Hospital

Fulham Road, London.

SW3 6JJ, UK.

Email: j.suckling@rmh\_lon.icr.ac.uk

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CREDITS:

Organiser: J Suckling

Truth-Data: C R M Boggis and I Hutt

Co-Workers: S Astley, D Betal, N Cerneaz, D R Dance, S-L Kok, J Parker,

I Ricketts, J Savage, E Stamatakis and P Taylor.

Special Thanks: N Karrsemeijer.

Pilot European Image Processing Archive (PEIPA) Orgainser: A Clark.

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REFERENCE:

J Suckling et al (1994) "The Mammographic Image Analysis Society Digital

Mammogram Database" Exerpta Medica. International Congress Series

1069 pp375-378.

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INFORMATION:

This file lists the films in the MIAS database and provides

appropriate details as follows:

1st column: MIAS database reference number.

2nd column: Character of background tissue:

F - Fatty

G - Fatty-glandular

D - Dense-glandular

3rd column: Class of abnormality present:

CALC - Calcification

CIRC - Well-defined/circumscribed masses

SPIC - Spiculated masses

MISC - Other, ill-defined masses

ARCH - Architectural distortion

ASYM - Asymmetry

NORM - Normal

4th column: Severity of abnormality;

B - Benign

M - Malignant

5th,6th columns: x,y image-coordinates of centre of abnormality.

7th column: Approximate radius (in pixels) of a circle enclosing

the abnormality.

NOTES

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1) The list is arranged in pairs of films, where each pair

represents the left (even filename numbers) and right mammograms

(odd filename numbers) of a single patient.

2) The size of ALL the images is 1024 pixels x 1024 pixels. The images

have been centered in the matrix.

3) When calcifications are present, centre locations and radii

apply to clusters rather than individual calcifications.

Coordinate system origin is the bottom-left corner.

4) In some cases calcifications are widely distributed throughout

the image rather than concentrated at a single site. In these

cases centre locations and radii are inappropriate and have

been omitted.

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mdb001 G CIRC B 535 425 197

mdb002 G CIRC B 522 280 69

mdb003 D NORM

mdb004 D NORM

mdb005 F CIRC B 477 133 30

mdb005 F CIRC B 500 168 26

mdb006 F NORM

mdb007 G NORM

mdb008 G NORM

mdb009 F NORM

mdb010 F CIRC B 525 425 33

mdb011 F NORM

mdb012 F CIRC B 471 458 40

mdb013 G MISC B 667 365 31

mdb014 G NORM

mdb015 G CIRC B 595 864 68

mdb016 G NORM

mdb017 G CIRC B 547 573 48

mdb018 G NORM

mdb019 G CIRC B 653 477 49

mdb020 G NORM

mdb021 G CIRC B 493 125 49

mdb022 G NORM

mdb023 G CIRC M 538 681 29

mdb024 G NORM

mdb025 F CIRC B 674 443 79

mdb026 F NORM

mdb027 F NORM

mdb028 F CIRC M 338 314 56

mdb029 G NORM

mdb030 G MISC B 322 676 43

mdb031 G NORM

mdb032 G MISC B 388 742 66

mdb033 D NORM

mdb034 D NORM

mdb035 D NORM

mdb036 D NORM

mdb037 D NORM

mdb038 D NORM

mdb039 D NORM

mdb040 D NORM

mdb041 G NORM

mdb042 G NORM

mdb043 G NORM

mdb044 G NORM

mdb045 G NORM

mdb046 G NORM

mdb047 G NORM

mdb048 G NORM

mdb049 G NORM

mdb050 G NORM

mdb051 G NORM

mdb052 G NORM

mdb053 D NORM

mdb054 D NORM

mdb055 G NORM

mdb056 G NORM

mdb057 D NORM

mdb058 D MISC M 318 359 27

mdb059 F CIRC B

mdb060 F NORM

mdb061 D NORM

mdb062 D NORM

mdb063 D MISC B 546 463 33

mdb064 D NORM

mdb065 D NORM

mdb066 D NORM

mdb067 D NORM

mdb068 D NORM

mdb069 F CIRC B 462 406 44

mdb070 F NORM

mdb071 G NORM

mdb072 G ASYM M 266 517 28

mdb073 G NORM

mdb074 G NORM

mdb075 F ASYM M 468 717 23

mdb076 F NORM

mdb077 F NORM

mdb078 F NORM

mdb079 F NORM

mdb080 F CIRC B 432 149 20

mdb081 G ASYM B 492 473 131

mdb082 G NORM

mdb083 G ASYM B 544 194 38

mdb084 G NORM

mdb085 G NORM

mdb086 G NORM

mdb087 F NORM

mdb088 F NORM

mdb089 G NORM

mdb090 G ASYM M 510 547 49

mdb091 F CIRC B 680 494 20

mdb092 F ASYM M 423 662 43

mdb093 G NORM

mdb094 G NORM

mdb095 F ASYM M 466 517 29

mdb096 F NORM

mdb097 F ASYM B 612 297 34

mdb098 F NORM

mdb099 D ASYM B 714 340 23

mdb100 D NORM

mdb101 D NORM

mdb102 D ASYM M 415 460 38

mdb103 D NORM

mdb104 D ASYM B 357 365 50

mdb105 D ASYM M 516 279 98

mdb106 D NORM

mdb107 D ASYM B 600 621 111

mdb108 D NORM

mdb109 D NORM

mdb110 D ASYM M 190 427 51

mdb111 D ASYM M 505 575 107

mdb112 D NORM

mdb113 G NORM

mdb114 G NORM

mdb115 G ARCH M 461 532 117

mdb116 G NORM

mdb117 G ARCH M 480 576 84

mdb118 G NORM

mdb119 G NORM

mdb120 G ARCH M 423 262 79

mdb121 G ARCH B 492 434 87

mdb122 G NORM

mdb123 G NORM

mdb124 G ARCH M 366 620 33

mdb125 D ARCH M 700 552 60

mdb126 D ARCH B 191 549 23

mdb127 G ARCH B 523 551 48

mdb128 G NORM

mdb129 D NORM

mdb130 D ARCH M 220 552 28

mdb131 F NORM

mdb132 F CIRC B 252 788 52

mdb132 F CIRC B 335 766 18

mdb133 F NORM

mdb134 F MISC M 469 728 49

mdb135 F NORM

mdb136 F NORM

mdb137 D NORM

mdb138 D NORM

mdb139 F NORM

mdb140 F NORM

mdb141 F CIRC M 470 759 29

mdb142 F CIRC B 347 636 26

mdb143 F NORM

mdb144 F MISC B 233 994 29

mdb144 F MISC M 313 540 27

mdb145 D SPIC B 669 543 49

mdb146 D NORM

mdb147 F NORM

mdb148 F SPIC M 326 607 174

mdb149 F NORM

mdb150 F ARCH B 351 661 62

mdb151 F NORM

mdb152 F ARCH B 675 486 48

mdb153 F NORM

mdb154 F NORM

mdb155 F ARCH M 448 480 95

mdb156 F NORM

mdb157 F NORM

mdb158 F ARCH M 540 565 88

mdb159 F NORM

mdb160 F ARCH B 536 519 61

mdb161 D NORM

mdb162 D NORM

mdb163 D ARCH B 391 365 50

mdb164 D NORM

mdb165 D ARCH B 537 490 42

mdb166 D NORM

mdb167 F ARCH B 574 657 35

mdb168 F NORM

mdb169 D NORM

mdb170 D ARCH M 489 480 82

mdb171 D ARCH M 462 627 62

mdb172 D NORM

mdb173 F NORM

mdb174 F NORM

mdb175 G SPIC B 592 670 33

mdb176 G NORM

mdb177 G NORM

mdb178 G SPIC M 492 600 70

mdb179 D SPIC M 600 514 67

mdb180 D NORM

mdb181 G SPIC M 519 362 54

mdb182 G NORM

mdb183 F NORM

mdb184 F SPIC M 352 624 114

mdb185 G NORM

mdb186 G SPIC M 403 524 47

mdb187 G NORM

mdb188 G SPIC B 406 617 61

mdb189 G NORM

mdb190 G SPIC B 512 621 31

mdb191 G SPIC B 594 516 41

mdb192 G NORM

mdb193 D SPIC B 399 563 132

mdb194 D NORM

mdb195 F SPIC B 725 129 26

mdb196 F NORM

mdb197 D NORM

mdb198 D SPIC B 568 612 93

mdb199 D SPIC B 641 177 31

mdb200 D NORM

mdb201 D NORM

mdb202 D SPIC M 557 772 37

mdb203 F NORM

mdb204 F SPIC B 336 399 21

mdb205 F NORM

mdb206 F SPIC M 368 200 17

mdb207 D SPIC B 571 564 19

mdb208 D NORM

mdb209 G CALC M 647 503 87

mdb210 G NORM

mdb211 G CALC M 680 327 13

mdb212 G CALC B 687 882 3

mdb213 G CALC M 547 520 45

mdb214 G CALC B 582 916 11

mdb215 D NORM

mdb216 D CALC M \*NOTE 3\*

mdb217 G NORM

mdb218 G CALC B 519 629 8

mdb219 G CALC B 546 756 29

mdb220 G NORM

mdb221 D NORM

mdb222 D CALC B 398 427 17

mdb223 D CALC B 523 482 29

mdb223 D CALC B 591 529 6

mdb224 D NORM

mdb225 D NORM

mdb226 D CALC B 287 610 7

mdb226 D CALC B 329 550 25

mdb226 D CALC B 531 721 8

mdb227 G CALC B 504 467 9

mdb228 G NORM

mdb229 F NORM

mdb230 F NORM

mdb231 F CALC M 603 538 44

mdb232 F NORM

mdb233 G CALC M \*NOTE 3\*

mdb234 G NORM

mdb235 D NORM

mdb236 D CALC B 276 824 14

mdb237 F NORM

mdb238 F CALC M 522 553 17

mdb239 D CALC M 645 755 40

mdb239 D CALC M 567 808 25

mdb240 D CALC B 643 614 23

mdb241 D CALC M 453 678 38

mdb242 D NORM

mdb243 D NORM

mdb244 D CIRC B 466 567 52

mdb245 F CALC M \*NOTE 3\*

mdb246 F NORM

mdb247 F NORM

mdb248 F CALC B 378 601 10

mdb249 D CALC M 544 508 48

mdb249 D CALC M 575 639 64

mdb250 D NORM

mdb251 F NORM

mdb252 F CALC B 439 367 23

mdb253 D CALC M 733 564 28

mdb254 D NORM

mdb255 F NORM

mdb256 F CALC M 400 484 37

mdb257 D NORM

mdb258 D NORM

mdb259 D NORM

mdb260 D NORM

mdb261 D NORM

mdb262 D NORM

mdb263 G NORM

mdb264 G MISC M 596 431 36

mdb265 G MISC M 593 498 60

mdb266 G NORM

mdb267 F MISC M 793 481 56

mdb268 F NORM

mdb269 G NORM

mdb270 G CIRC M 356 945 72

mdb271 F MISC M 784 270 68

mdb272 F NORM

mdb273 F NORM

mdb274 F MISC M 127 505 123

mdb275 G NORM

mdb276 G NORM

mdb277 G NORM

mdb278 G NORM

mdb279 G NORM

mdb280 G NORM

mdb281 D NORM

mdb282 D NORM

mdb283 D NORM

mdb284 D NORM

mdb285 D NORM

mdb286 D NORM

mdb287 D NORM

mdb288 D NORM

mdb289 D NORM

mdb290 D CIRC B 337 353 45

mdb291 G NORM

mdb292 G NORM

mdb293 F NORM

mdb294 F NORM

mdb295 D NORM

mdb296 D NORM

mdb297 F NORM

mdb298 F NORM

mdb299 F NORM

mdb300 F NORM

mdb301 F NORM

mdb302 F NORM

mdb303 F NORM

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mdb305 F NORM

mdb306 F NORM

mdb307 F NORM

mdb308 F NORM

mdb309 F NORM

mdb310 F NORM

mdb311 F NORM

mdb312 F MISC B 240 263 20

mdb313 F NORM

mdb314 F MISC B 518 191 39

mdb315 D CIRC B 516 447 93

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