

In[1]:= << **balmadist99.m**

ALMA Cycle 2 Data

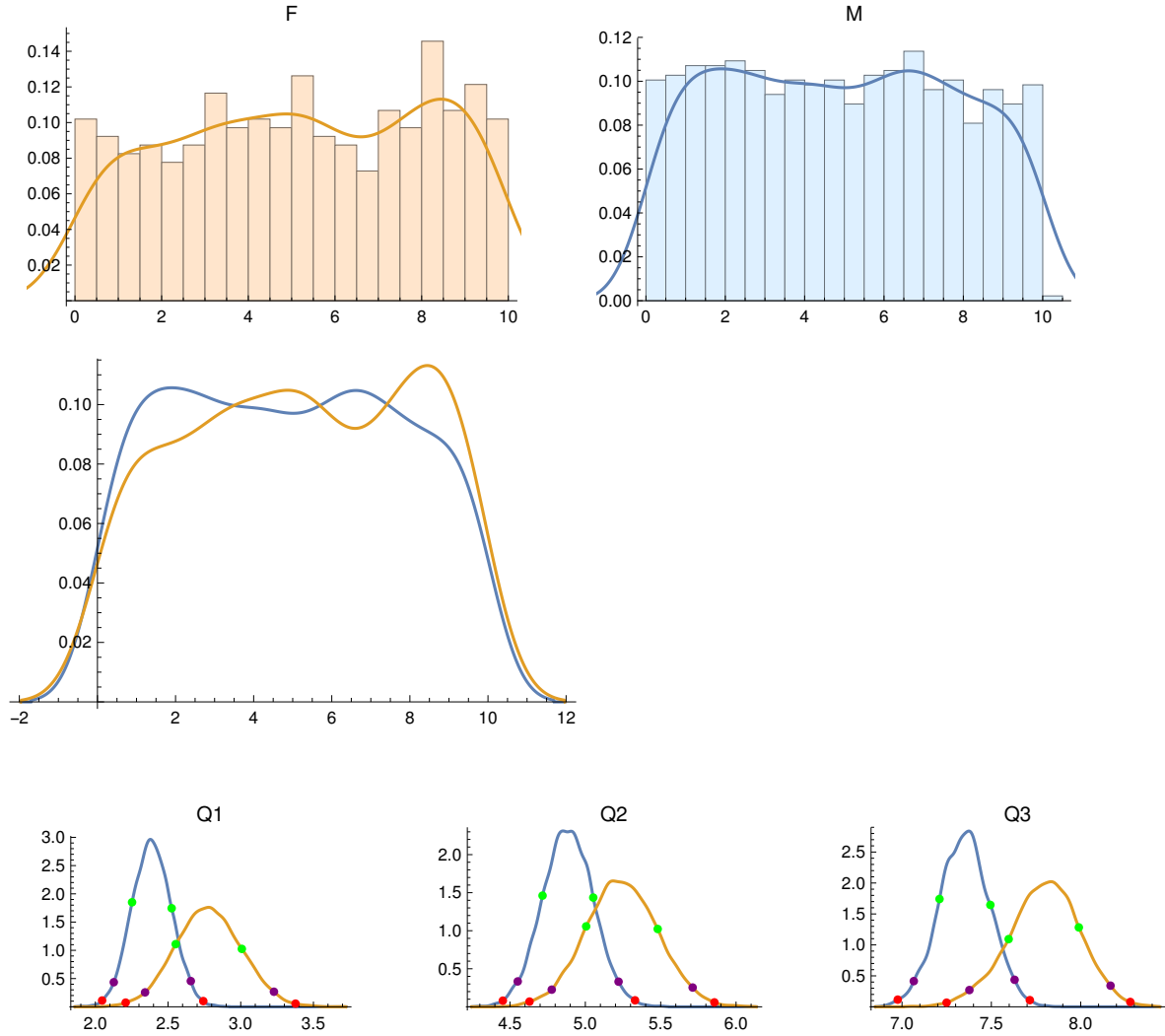
No. Female PIs = 412

No. Male PIs = 915

F PI Quartiles: {2.80166, 5.2451, 7.82805}

M PI Quartiles: {2.36425, 4.87934, 7.33409}

Anderson-Darling two-sample test p-value: 0.0990508



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.364          | 2.252<br>2.525 | 2.127<br>2.657 | 2.046<br>2.742 |
| Quartile 2 | 4.879          | 4.716<br>5.053 | 4.551<br>5.221 | 4.453<br>5.33  |
| Quartile 3 | 7.334          | 7.21<br>7.495  | 7.066<br>7.63  | 6.976<br>7.715 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.802          | 2.553<br>3.008 | 2.342<br>3.228 | 2.208<br>3.377 |
| Quartile 2 | 5.245          | 5.006<br>5.48  | 4.777<br>5.712 | 4.63<br>5.856  |
| Quartile 3 | 7.828          | 7.597<br>7.99  | 7.377<br>8.167 | 7.249<br>8.278 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.4374 | 0.2642<br>-0.266       |
| Quartile 2 | 0.3658 | 0.2944<br>-0.2968      |
| Quartile 3 | 0.494  | 0.2427<br>-0.2443      |

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ALMA Cycle 3 Data

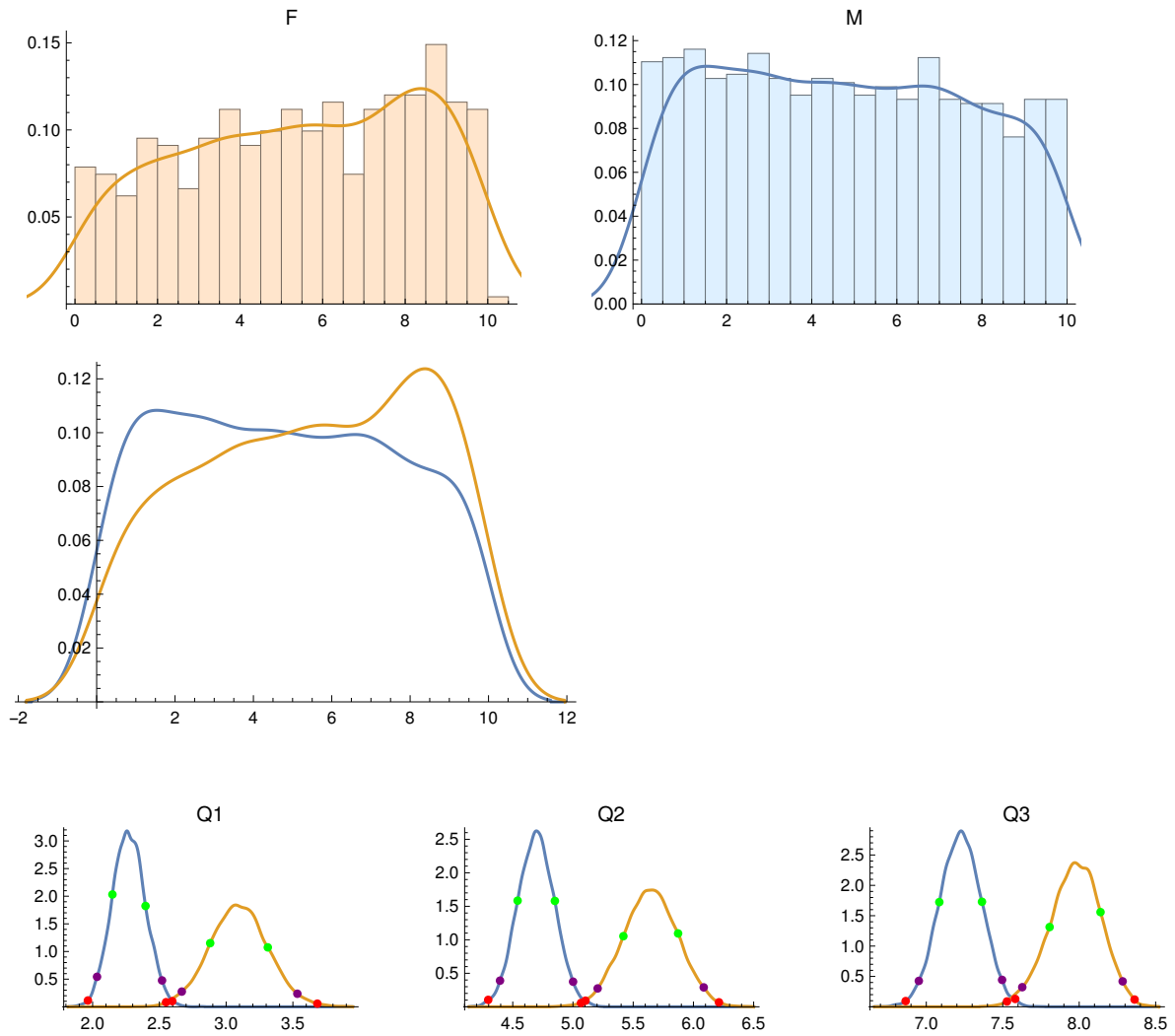
No. Female PIs = 483

No. Male PIs = 1051

F PI Quartiles: {3.2045, 5.64905, 8.02511}

M PI Quartiles: {2.27169, 4.68363, 7.18526}

Anderson-Darling two-sample test p-value: 0.0000225229



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.272          | 2.148<br>2.396 | 2.033<br>2.52  | 1.965<br>2.597 |
| Quartile 2 | 4.684          | 4.54<br>4.85   | 4.394<br>5.001 | 4.296<br>5.104 |
| Quartile 3 | 7.185          | 7.085<br>7.364 | 6.951<br>7.496 | 6.865<br>7.582 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.205          | 2.881<br>3.312 | 2.668<br>3.533 | 2.55<br>3.683  |
| Quartile 2 | 5.649          | 5.418<br>5.873 | 5.205<br>6.085 | 5.067<br>6.212 |
| Quartile 3 | 8.025          | 7.807<br>8.139 | 7.628<br>8.284 | 7.528<br>8.362 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.9328 | 0.2468<br>-0.2466      |
| Quartile 2 | 0.9654 | 0.2708<br>-0.275       |
| Quartile 3 | 0.8399 | 0.2165<br>-0.2149      |

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ALMA Cycle 4 Data

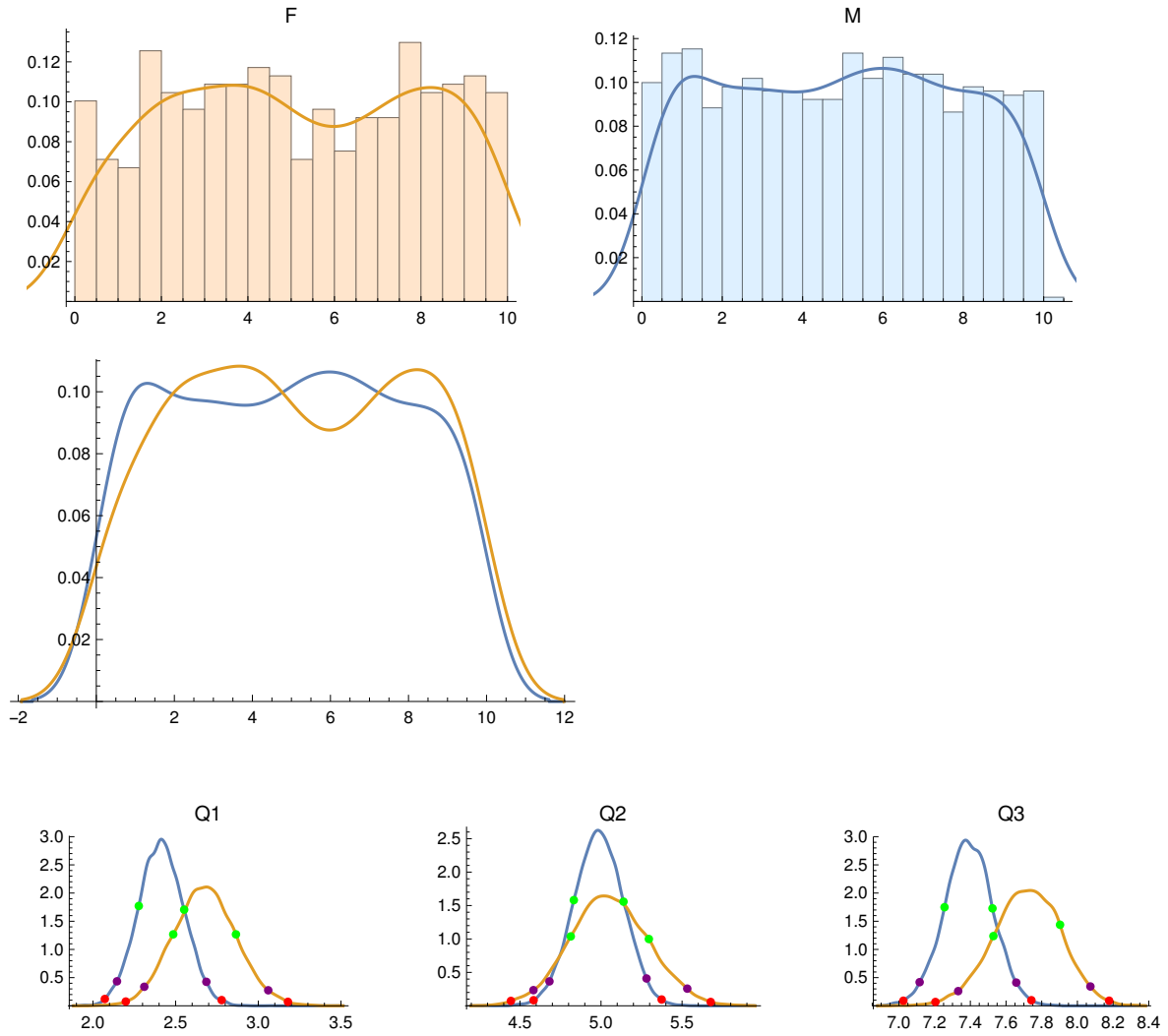
No. Female PIs = 478

No. Male PIs = 1041

F PI Quartiles: {2.68116, 4.96706, 7.7668}

M PI Quartiles: {2.40942, 5.02635, 7.3666}

Anderson-Darling two-sample test p-value: 0.219316



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.409          | 2.277<br>2.552 | 2.145<br>2.686 | 2.072<br>2.779 |
| Quartile 2 | 5.026          | 4.832<br>5.139 | 4.682<br>5.281 | 4.584<br>5.374 |
| Quartile 3 | 7.367          | 7.255<br>7.524 | 7.116<br>7.657 | 7.024<br>7.742 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.681          | 2.486<br>2.865 | 2.31<br>3.06   | 2.199<br>3.179 |
| Quartile 2 | 4.967          | 4.813<br>5.295 | 4.583<br>5.532 | 4.444<br>5.677 |
| Quartile 3 | 7.767          | 7.529<br>7.903 | 7.332<br>8.073 | 7.204<br>8.178 |

## Quartile differences, F minus M:

|            | diff.   | upper/lower error bars |
|------------|---------|------------------------|
| Quartile 1 | 0.2717  | 0.2333<br>-0.2375      |
| Quartile 2 | -0.0593 | 0.2842<br>-0.2838      |
| Quartile 3 | 0.4002  | 0.2294<br>-0.2303      |

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ALMA Cycles 2, 3, and 4 Combined

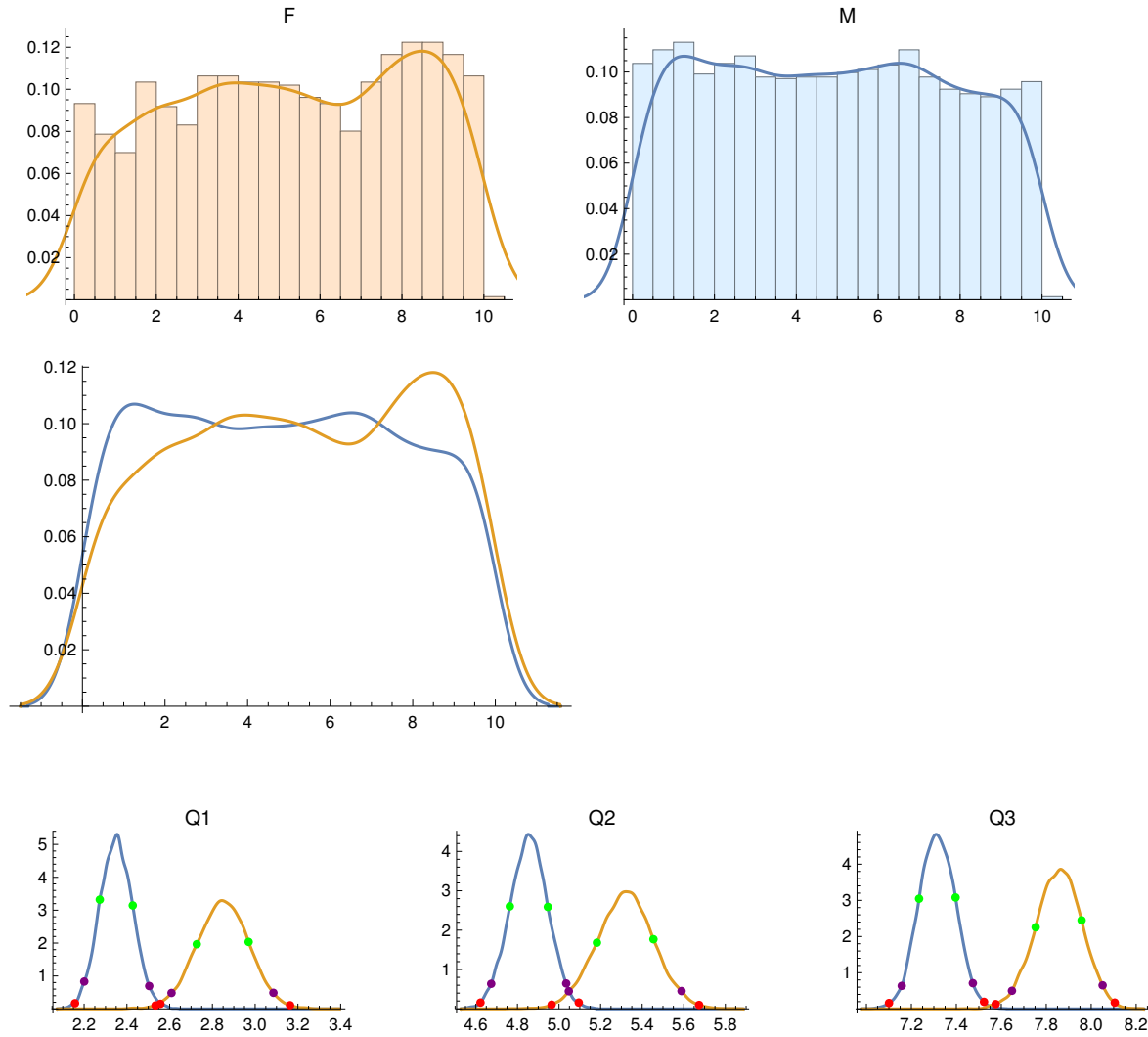
No. Female PIs = 1373

No. Male PIs = 3007

F PI Quartiles: {2.83884, 5.3092, 7.85877}

M PI Quartiles: {2.34598, 4.85671, 7.29988}

Anderson-Darling two-sample test p-value: 0.0000182212



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.346          | 2.273<br>2.427 | 2.201<br>2.504 | 2.157<br>2.557 |
| Quartile 2 | 4.857          | 4.763<br>4.946 | 4.674<br>5.035 | 4.622<br>5.095 |
| Quartile 3 | 7.3            | 7.234<br>7.397 | 7.157<br>7.474 | 7.101<br>7.523 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.839          | 2.727<br>2.97  | 2.609<br>3.085 | 2.534<br>3.163 |
| Quartile 2 | 5.309          | 5.182<br>5.454 | 5.047<br>5.589 | 4.964<br>5.674 |
| Quartile 3 | 7.859          | 7.753<br>7.957 | 7.647<br>8.051 | 7.575<br>8.105 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.4929 | 0.1442<br>-0.1455      |
| Quartile 2 | 0.4525 | 0.1639<br>-0.1628      |
| Quartile 3 | 0.5589 | 0.1298<br>-0.1282      |

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ALMA Cycle 2 Data, Chile

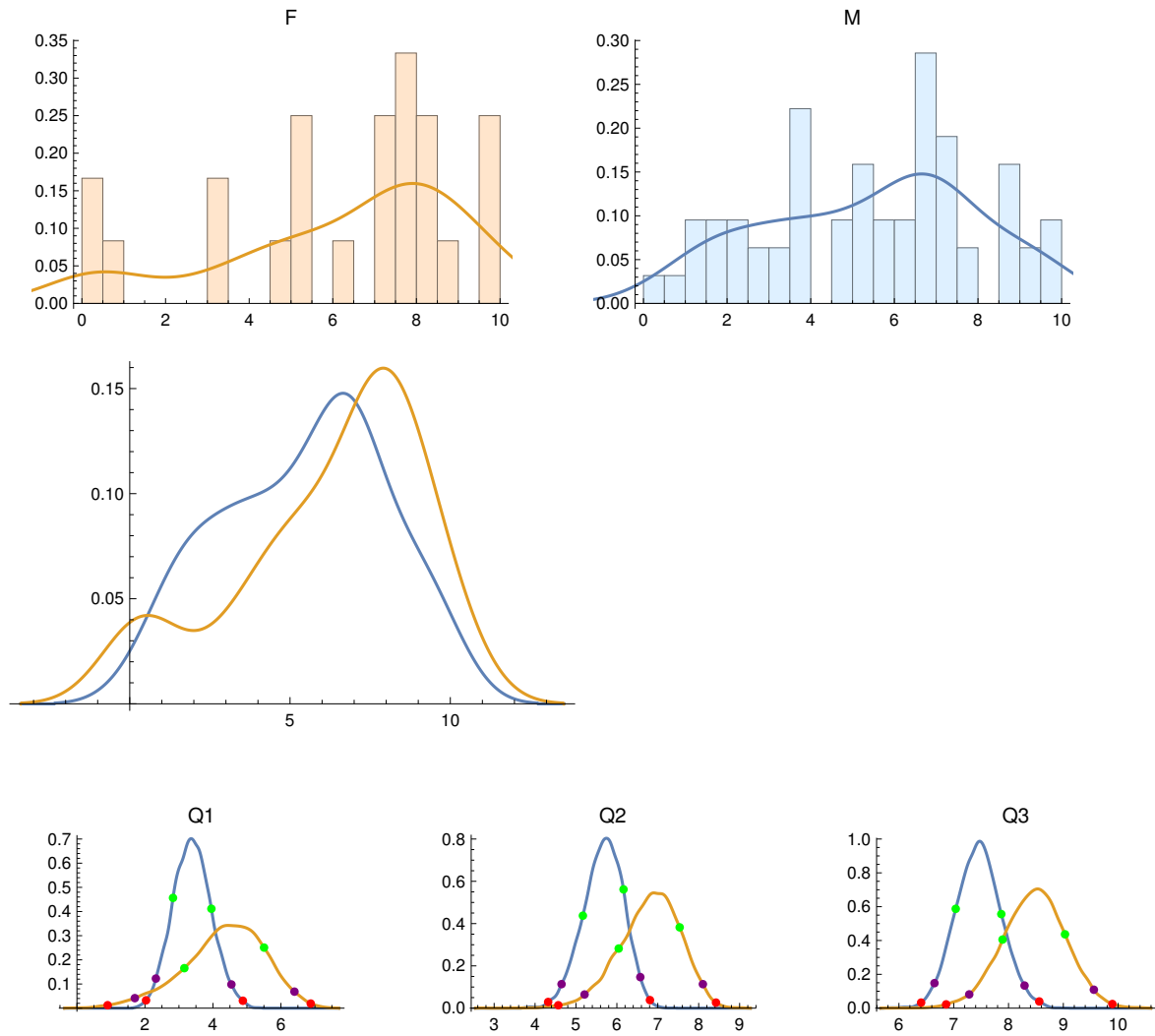
No. Female PIs = 24

No. Male PIs = 63

F PI Quartiles: {4.92081, 7.18326, 8.28054}

M PI Quartiles: {3.56712, 5.7994, 7.0494}

Anderson-Darling two-sample test p-value: 0.0802098



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.567          | 2.826<br>3.955 | 2.322<br>4.543 | 2.033<br>4.881 |
| Quartile 2 | 5.799          | 5.169<br>6.163 | 4.648<br>6.573 | 4.32<br>6.808  |
| Quartile 3 | 7.049          | 7.036<br>7.868 | 6.649<br>8.292 | 6.405<br>8.561 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 4.921          | 3.159<br>5.504 | 1.703<br>6.398 | 0.903<br>6.877 |
| Quartile 2 | 7.183          | 6.045<br>7.535 | 5.21<br>8.102  | 4.568<br>8.423 |
| Quartile 3 | 8.281          | 7.891<br>9.031 | 7.283<br>9.557 | 6.861<br>9.895 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 1.3537 | 1.3073<br>-1.3002      |
| Quartile 2 | 1.3839 | 0.895<br>-0.9012       |
| Quartile 3 | 1.2311 | 0.7029<br>-0.7086      |

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ALMA Cycle 3 Data, Chile

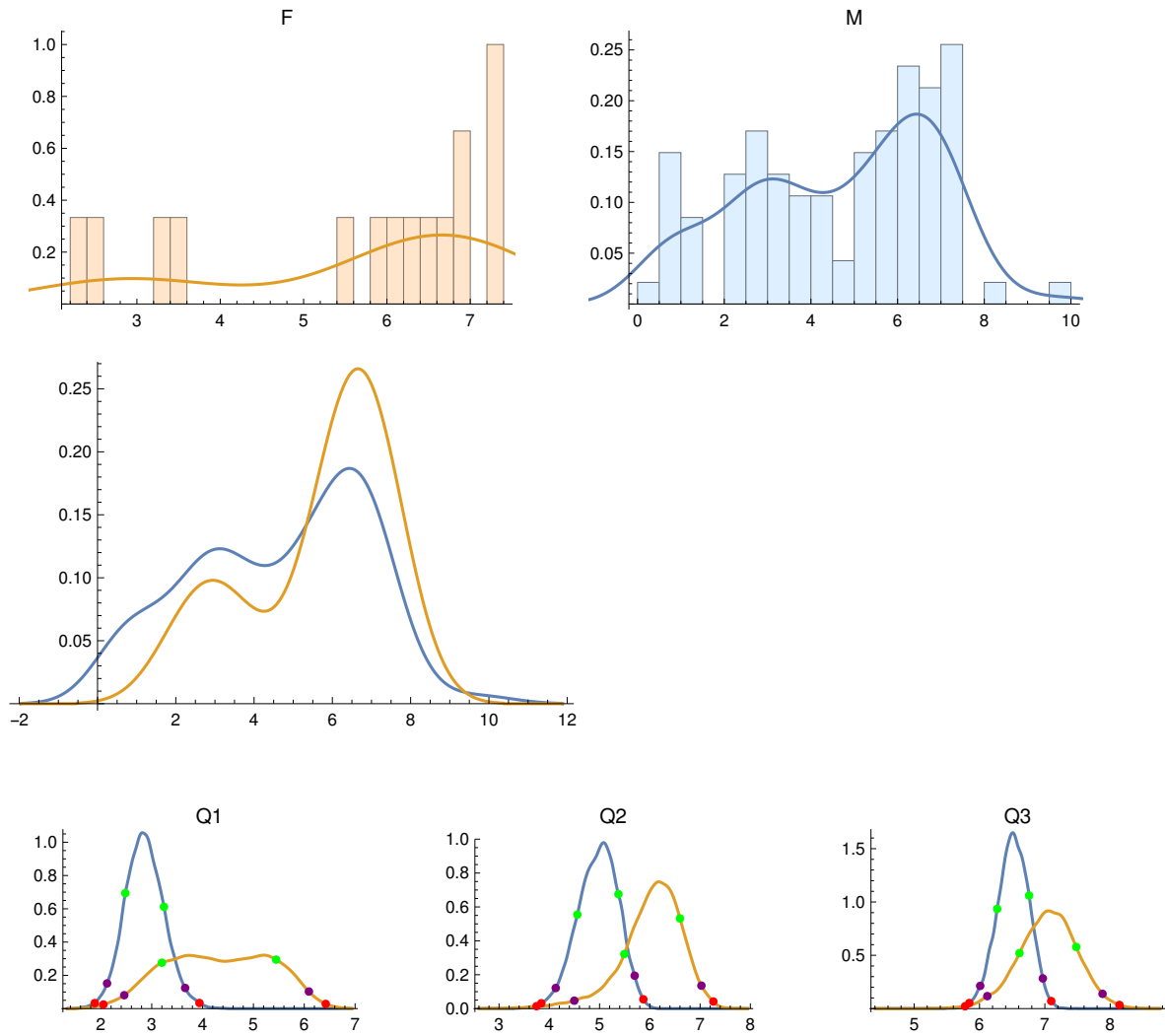
No. Female PIs = 15

No. Male PIs = 94

F PI Quartiles: {4.05251, 6.25571, 6.94553}

M PI Quartiles: {2.9289, 5.18591, 6.51011}

Anderson-Darling two-sample test p-value: 0.132014



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.929          | 2.481<br>3.241 | 2.122<br>3.657 | 1.878<br>3.939 |
| Quartile 2 | 5.186          | 4.558<br>5.375 | 4.128<br>5.698 | 3.841<br>5.871 |
| Quartile 3 | 6.51           | 6.27<br>6.76   | 6.011<br>6.97  | 5.844<br>7.098 |

## Female PIs:

|            | Quartile Score | 68% CI        | 95% CI         | 99% CI         |
|------------|----------------|---------------|----------------|----------------|
| Quartile 1 | 4.053          | 3.2<br>5.447  | 2.459<br>6.091 | 2.049<br>6.423 |
| Quartile 2 | 6.256          | 5.492<br>6.6  | 4.497<br>7.026 | 3.746<br>7.263 |
| Quartile 3 | 6.946          | 6.613<br>7.48 | 6.12<br>7.883  | 5.779<br>8.141 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 1.1236 | 1.1729<br>-1.1665      |
| Quartile 2 | 1.0698 | 0.7058<br>-0.6864      |
| Quartile 3 | 0.4354 | 0.4948<br>-0.4983      |

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ALMA Cycle 4 Data, Chile

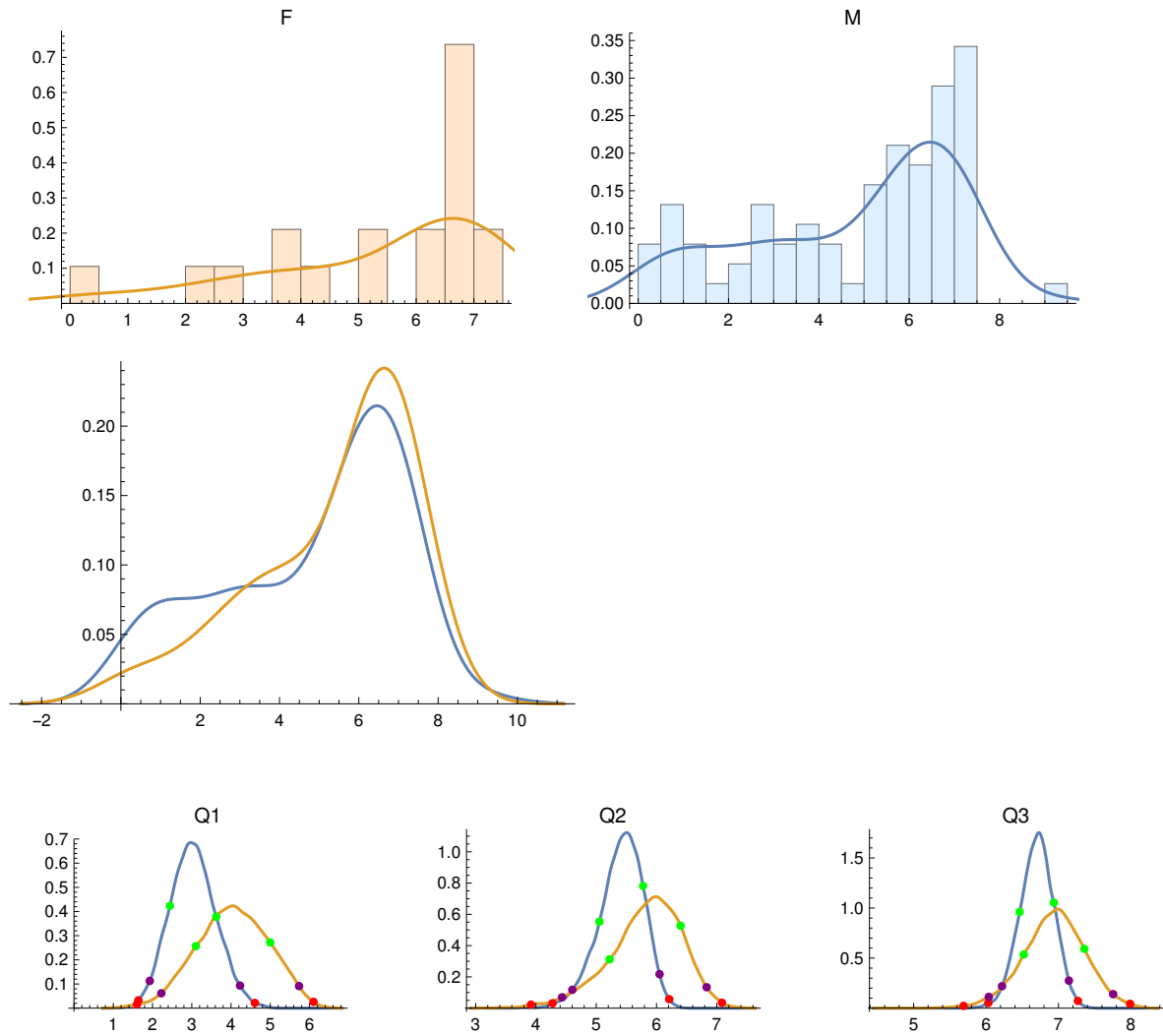
No. Female PIs = 19

No. Male PIs = 76

F PI Quartiles: {3.96904, 6.47563, 6.89559}

M PI Quartiles: {2.96443, 5.72134, 6.82806}

Anderson-Darling two-sample test p-value: 0.473503



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.964          | 2.444<br>3.624 | 1.93<br>4.23   | 1.64<br>4.607  |
| Quartile 2 | 5.721          | 5.053<br>5.777 | 4.603<br>6.051 | 4.275<br>6.212 |
| Quartile 3 | 6.828          | 6.464<br>6.936 | 6.221<br>7.144 | 6.032<br>7.269 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.969          | 3.104<br>4.997 | 2.224<br>5.733 | 1.605<br>6.102 |
| Quartile 2 | 6.476          | 5.223<br>6.401 | 4.433<br>6.832 | 3.917<br>7.085 |
| Quartile 3 | 6.896          | 6.521<br>7.358 | 6.038<br>7.755 | 5.69<br>7.99   |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 1.0046 | 1.0987<br>-1.0842      |
| Quartile 2 | 0.7543 | 0.6793<br>-0.6868      |
| Quartile 3 | 0.0675 | 0.4885<br>-0.4817      |

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ALMA Cycles 2, 3, and 4 Combined, Chile

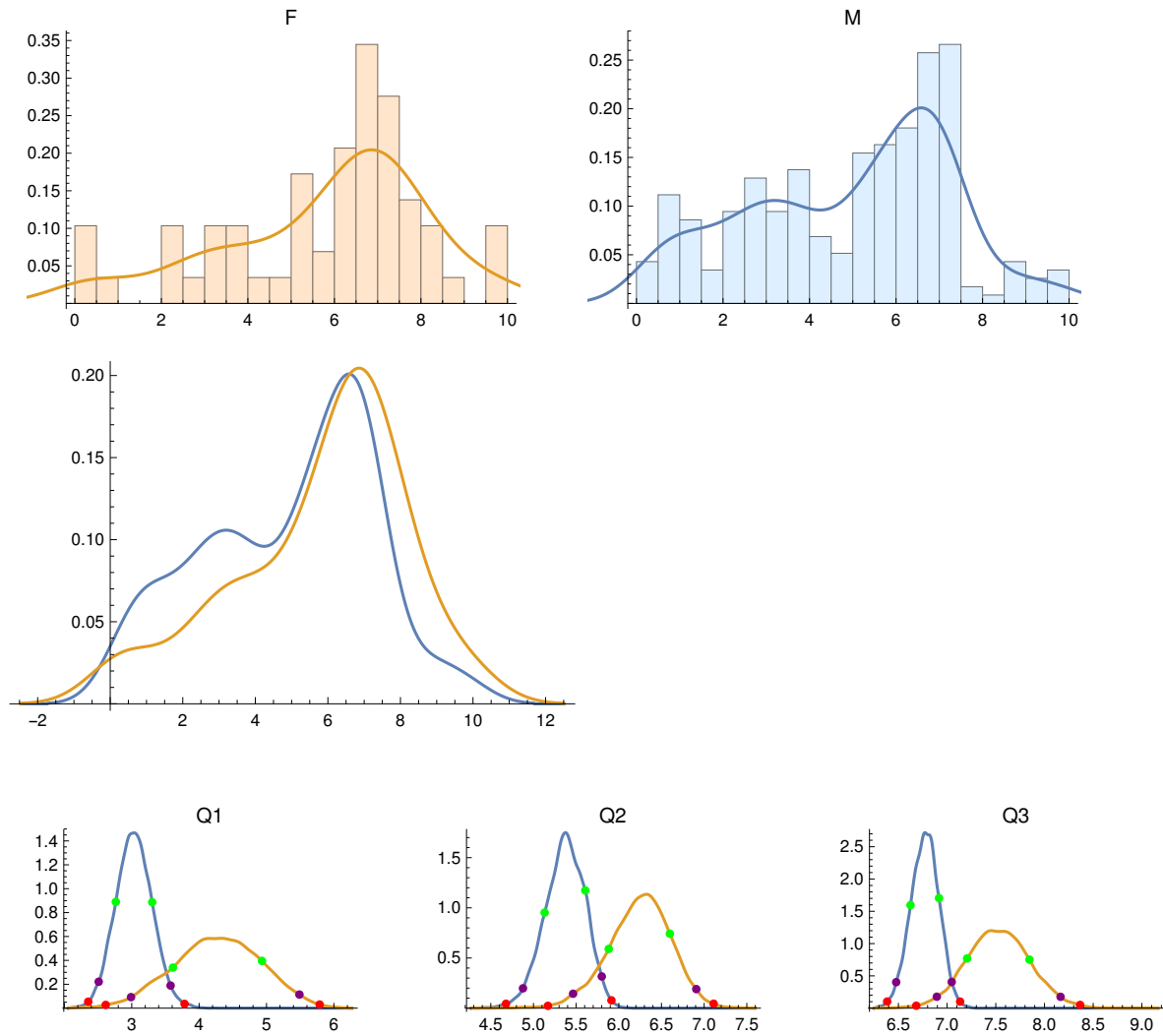
No. Female PIs = 58

No. Male PIs = 233

F PI Quartiles: {4.03821, 6.55468, 7.20157}

M PI Quartiles: {3.00481, 5.49407, 6.83849}

Anderson-Darling two-sample test p-value: 0.00683053



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.005          | 2.764<br>3.304 | 2.51<br>3.576  | 2.354<br>3.784 |
| Quartile 2 | 5.494          | 5.131<br>5.607 | 4.877<br>5.8   | 4.678<br>5.913 |
| Quartile 3 | 6.838          | 6.624<br>6.917 | 6.477<br>7.047 | 6.385<br>7.134 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 4.038          | 3.611<br>4.933 | 2.99<br>5.489  | 2.614<br>5.789 |
| Quartile 2 | 6.555          | 5.882<br>6.599 | 5.464<br>6.908 | 5.169<br>7.111 |
| Quartile 3 | 7.202          | 7.205<br>7.846 | 6.895<br>8.165 | 6.683<br>8.366 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 1.0334 | 0.7123<br>-0.7128      |
| Quartile 2 | 1.0606 | 0.4298<br>-0.4341      |
| Quartile 3 | 0.3631 | 0.3534<br>-0.3529      |

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ALMA Cycle 2 Data, East Asia

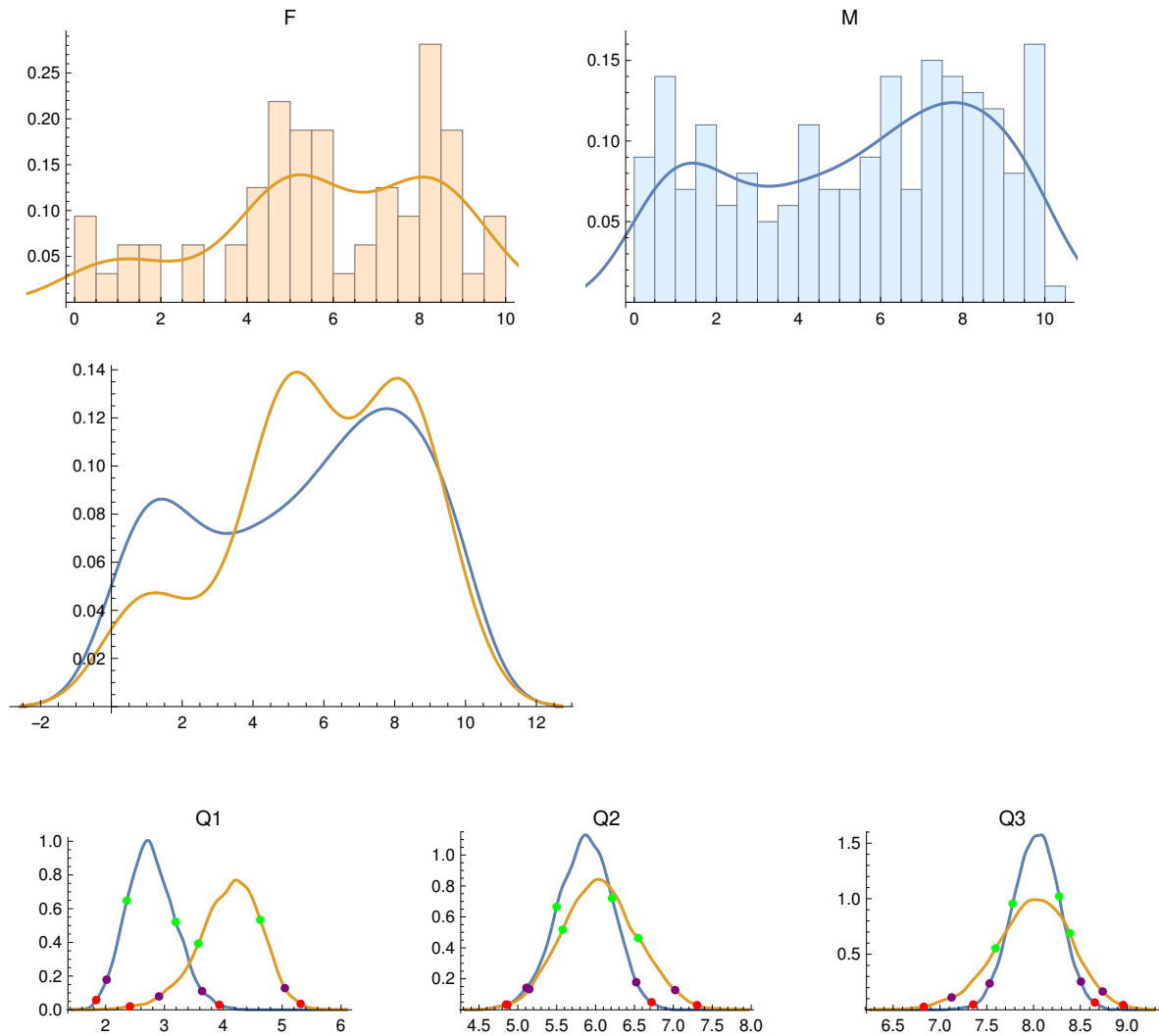
No. Female PIs = 64

No. Male PIs = 200

F PI Quartiles: {4.53997, 5.76169, 8.15611}

M PI Quartiles: {2.75264, 5.96531, 8.01282}

Anderson-Darling two-sample test p-value: 0.270945



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.753          | 2.36<br>3.191  | 2.017<br>3.639 | 1.84<br>3.932  |
| Quartile 2 | 5.965          | 5.499<br>6.212 | 5.111<br>6.523 | 4.851<br>6.72  |
| Quartile 3 | 8.013          | 7.777<br>8.275 | 7.531<br>8.507 | 7.356<br>8.655 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 4.54           | 3.577<br>4.628 | 2.908<br>5.046 | 2.413<br>5.314 |
| Quartile 2 | 5.762          | 5.577<br>6.549 | 5.148<br>7.023 | 4.866<br>7.305 |
| Quartile 3 | 8.156          | 7.595<br>8.388 | 7.124<br>8.739 | 6.828<br>8.958 |

## Quartile differences, F minus M:

|            | diff.   | upper/lower error bars |
|------------|---------|------------------------|
| Quartile 1 | 1.7873  | 0.6675<br>-0.6713      |
| Quartile 2 | -0.2036 | 0.5957<br>-0.5983      |
| Quartile 3 | 0.1433  | 0.4749<br>-0.4724      |

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ALMA Cycle 3 Data, East Asia

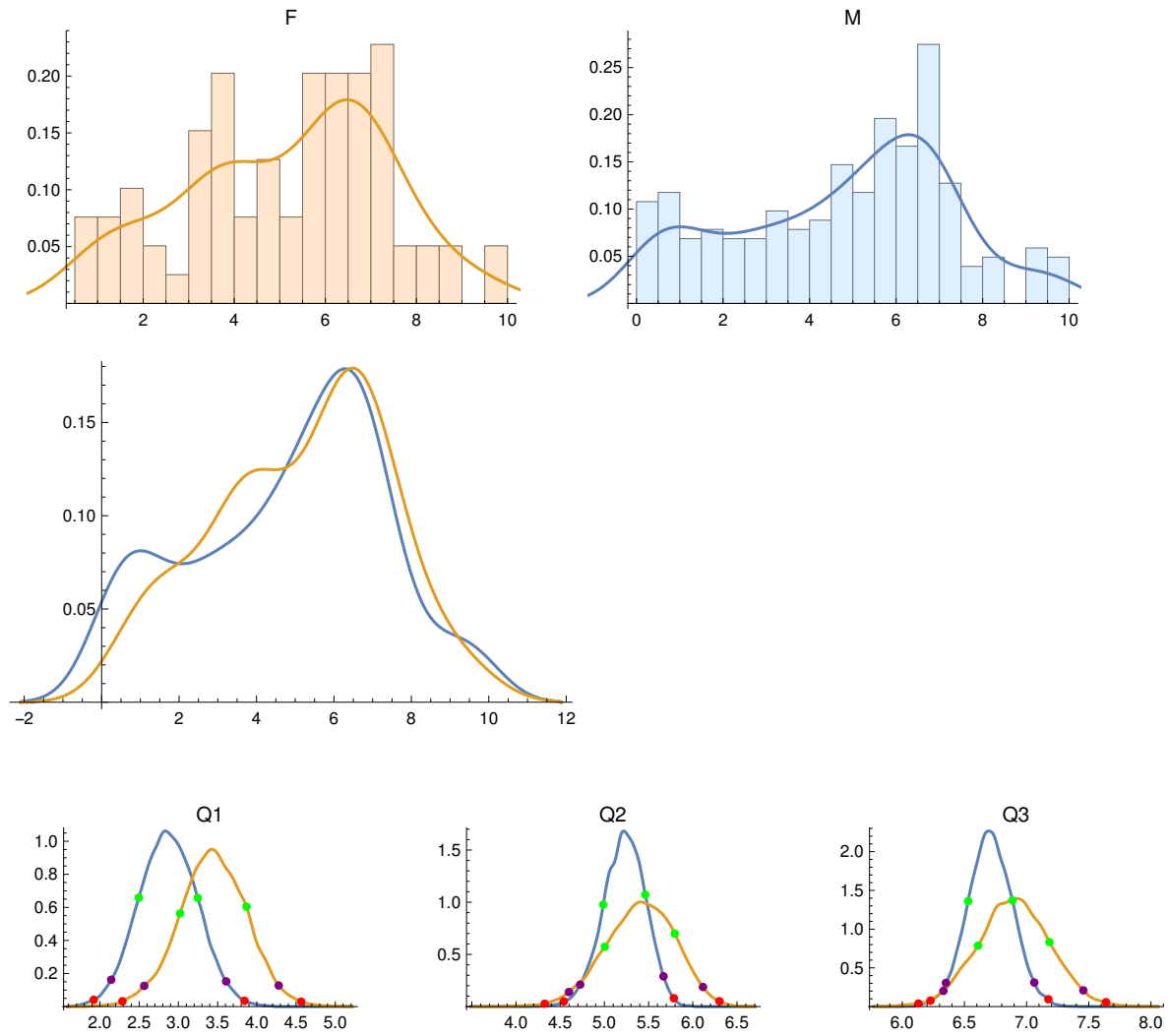
No. Female PIs = 79

No. Male PIs = 204

F PI Quartiles: {3.52414, 5.70776, 6.75147}

M PI Quartiles: {2.90607, 5.30333, 6.69928}

Anderson-Darling two-sample test p-value: 0.322497



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.906          | 2.495<br>3.246 | 2.143<br>3.609 | 1.921<br>3.843 |
| Quartile 2 | 5.303          | 4.987<br>5.463 | 4.726<br>5.669 | 4.541<br>5.786 |
| Quartile 3 | 6.699          | 6.53<br>6.887  | 6.351<br>7.062 | 6.227<br>7.175 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.524          | 3.021<br>3.868 | 2.564<br>4.279 | 2.287<br>4.566 |
| Quartile 2 | 5.708          | 5.005<br>5.797 | 4.598<br>6.115 | 4.325<br>6.302 |
| Quartile 3 | 6.751          | 6.61<br>7.184  | 6.331<br>7.456 | 6.131<br>7.638 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.6181 | 0.5721<br>-0.5634      |
| Quartile 2 | 0.4044 | 0.4623<br>-0.4626      |
| Quartile 3 | 0.0522 | 0.3365<br>-0.3359      |

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ALMA Cycle 4 Data, East Asia

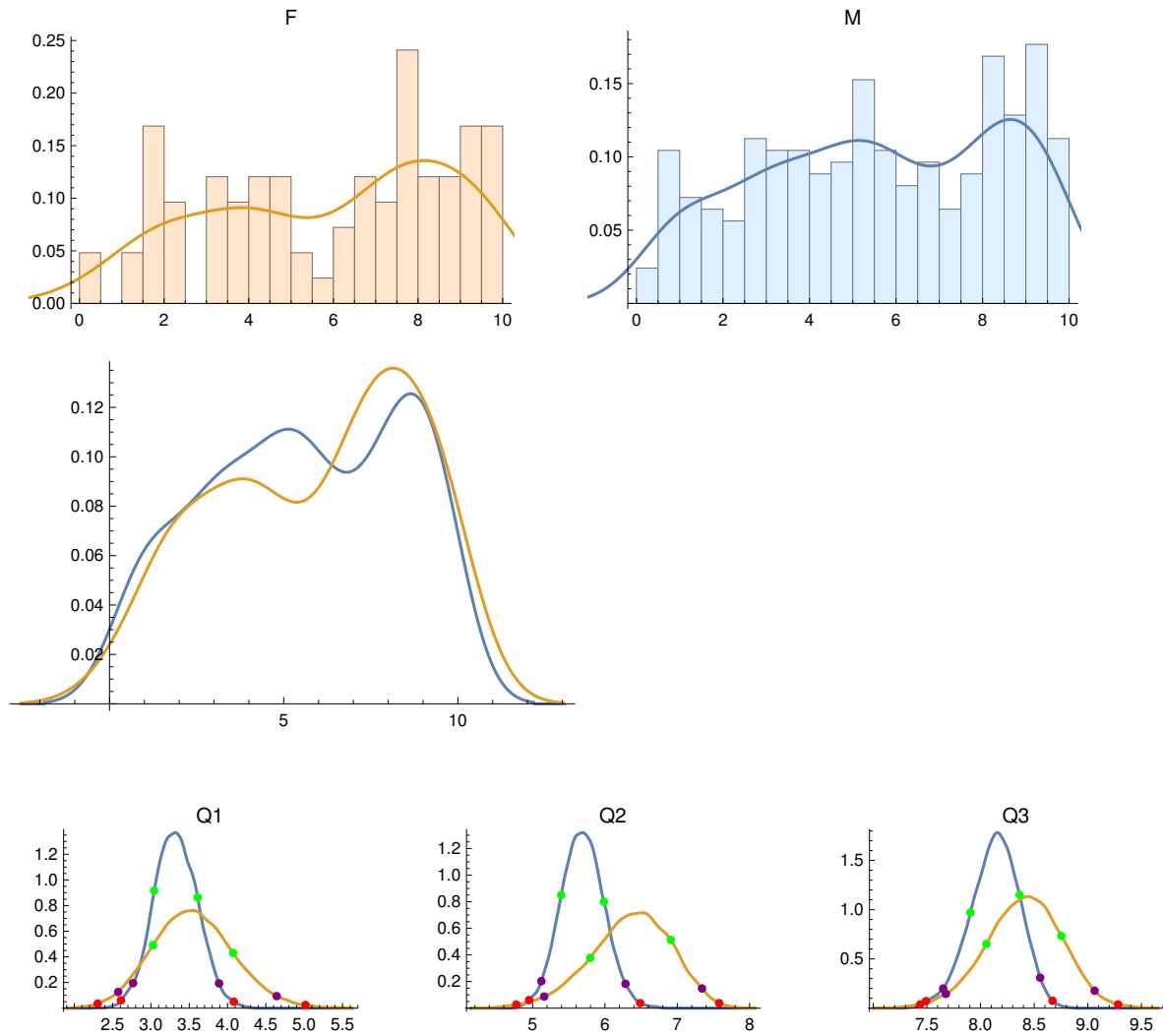
No. Female PIs = 83

No. Male PIs = 249

F PI Quartiles: {3.51614, 6.67325, 8.28228}

M PI Quartiles: {3.2971, 5.55336, 8.22464}

Anderson-Darling two-sample test p-value: 0.477263



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.297          | 3.043<br>3.611 | 2.767<br>3.889 | 2.609<br>4.081 |
| Quartile 2 | 5.553          | 5.395<br>5.985 | 5.121<br>6.284 | 4.95<br>6.487  |
| Quartile 3 | 8.225          | 7.906<br>8.364 | 7.652<br>8.556 | 7.491<br>8.671 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.516          | 3.027<br>4.073 | 2.572<br>4.641 | 2.305<br>5.018 |
| Quartile 2 | 6.673          | 5.795<br>6.911 | 5.16<br>7.342  | 4.773<br>7.579 |
| Quartile 3 | 8.282          | 8.055<br>8.754 | 7.677<br>9.064 | 7.438<br>9.282 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.219  | 0.598<br>-0.6002       |
| Quartile 2 | 1.1199 | 0.6315<br>-0.6362      |
| Quartile 3 | 0.0576 | 0.4115<br>-0.4161      |

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ALMA Cycles 2, 3, and 4 Combined, East Asia

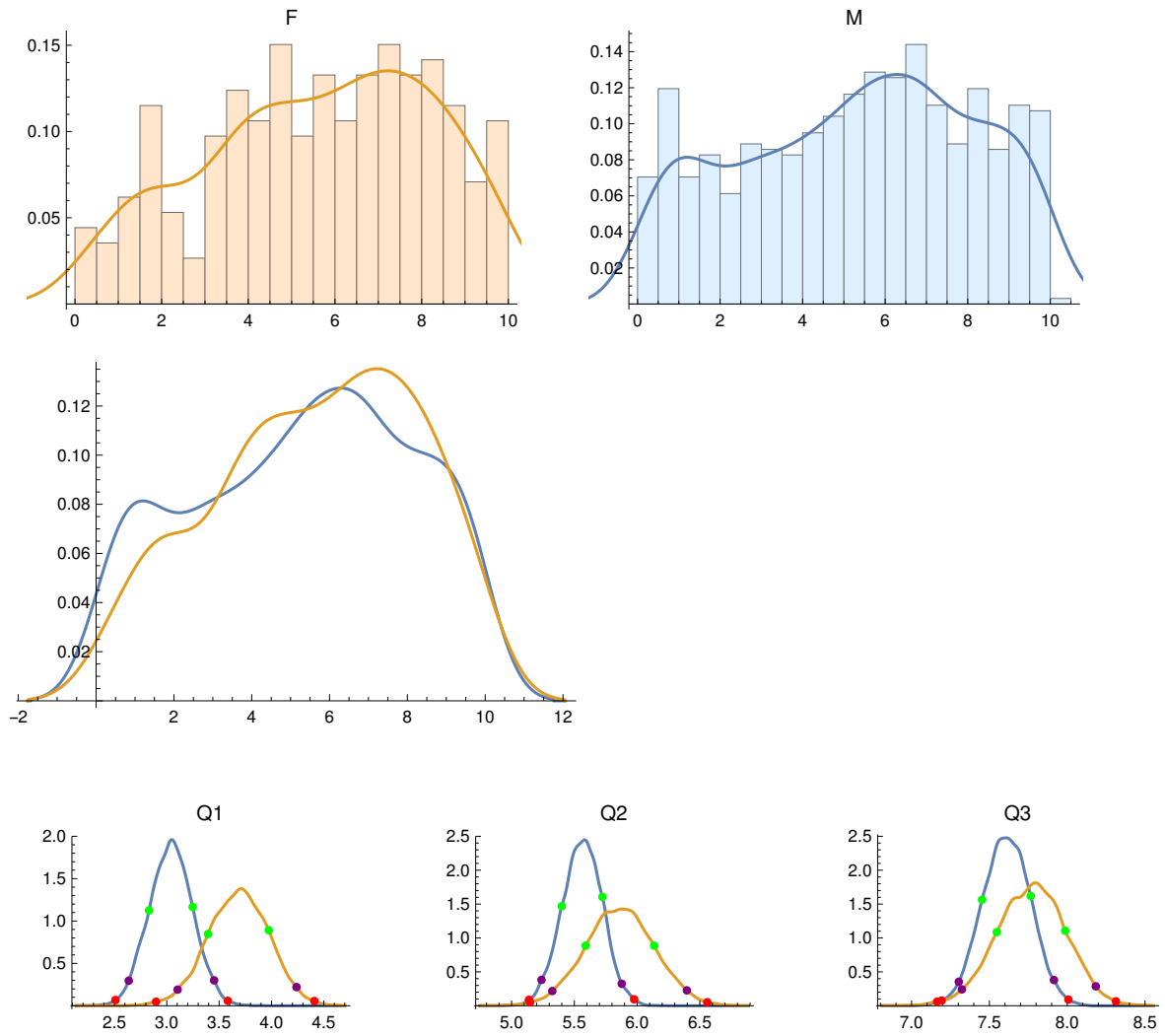
No. Female PIs = 226

No. Male PIs = 653

F PI Quartiles: {3.78343, 5.9002, 7.74045}

M PI Quartiles: {3.02778, 5.56425, 7.54912}

Anderson-Darling two-sample test p-value: 0.126156



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.028          | 2.831<br>3.247 | 2.637<br>3.452 | 2.51<br>3.583  |
| Quartile 2 | 5.564          | 5.4<br>5.723   | 5.238<br>5.878 | 5.139<br>5.976 |
| Quartile 3 | 7.549          | 7.453<br>7.766 | 7.303<br>7.915 | 7.193<br>8.008 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.783          | 3.394<br>3.974 | 3.103<br>4.239 | 2.897<br>4.41  |
| Quartile 2 | 5.9            | 5.591<br>6.136 | 5.324<br>6.397 | 5.147<br>6.56  |
| Quartile 3 | 7.74           | 7.547<br>7.987 | 7.324<br>8.184 | 7.164<br>8.313 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.7556 | 0.3627<br>-0.3619      |
| Quartile 2 | 0.3359 | 0.3147<br>-0.3132      |
| Quartile 3 | 0.1913 | 0.2667<br>-0.2689      |

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ALMA Cycle 2 Data, Europe

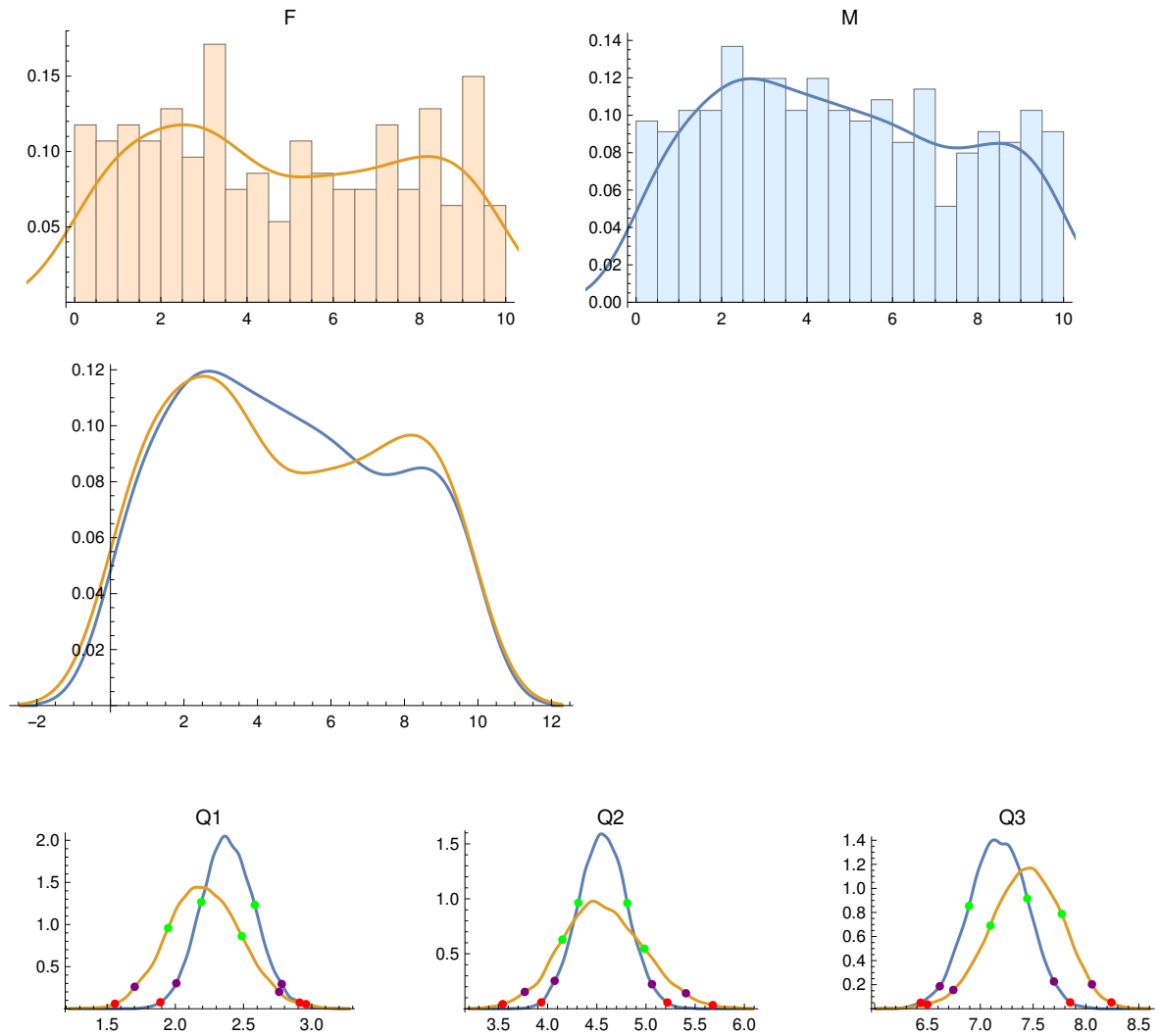
No. Female PIs = 187

No. Male PIs = 351

F PI Quartiles: {2.26621, 4.40422, 7.44155}

M PI Quartiles: {2.38688, 4.53997, 7.1003}

Anderson-Darling two-sample test p-value: 0.866075



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.387          | 2.19<br>2.582  | 2.007<br>2.78  | 1.891<br>2.911 |
| Quartile 2 | 4.54           | 4.312<br>4.809 | 4.071<br>5.061 | 3.936<br>5.218 |
| Quartile 3 | 7.1            | 6.893<br>7.444 | 6.616<br>7.697 | 6.435<br>7.85  |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.266          | 1.947<br>2.487 | 1.702<br>2.761 | 1.558<br>2.957 |
| Quartile 2 | 4.404          | 4.15<br>4.983  | 3.768<br>5.406 | 3.542<br>5.679 |
| Quartile 3 | 7.442          | 7.095<br>7.771 | 6.745<br>8.056 | 6.498<br>8.24  |

## Quartile differences, F minus M:

|            | diff.   | upper/lower error bars |
|------------|---------|------------------------|
| Quartile 1 | -0.1207 | 0.3349<br>-0.3358      |
| Quartile 2 | -0.1357 | 0.487<br>-0.4833       |
| Quartile 3 | 0.3413  | 0.4348<br>-0.4356      |

{}

ALMA Cycle 3 Data, Europe

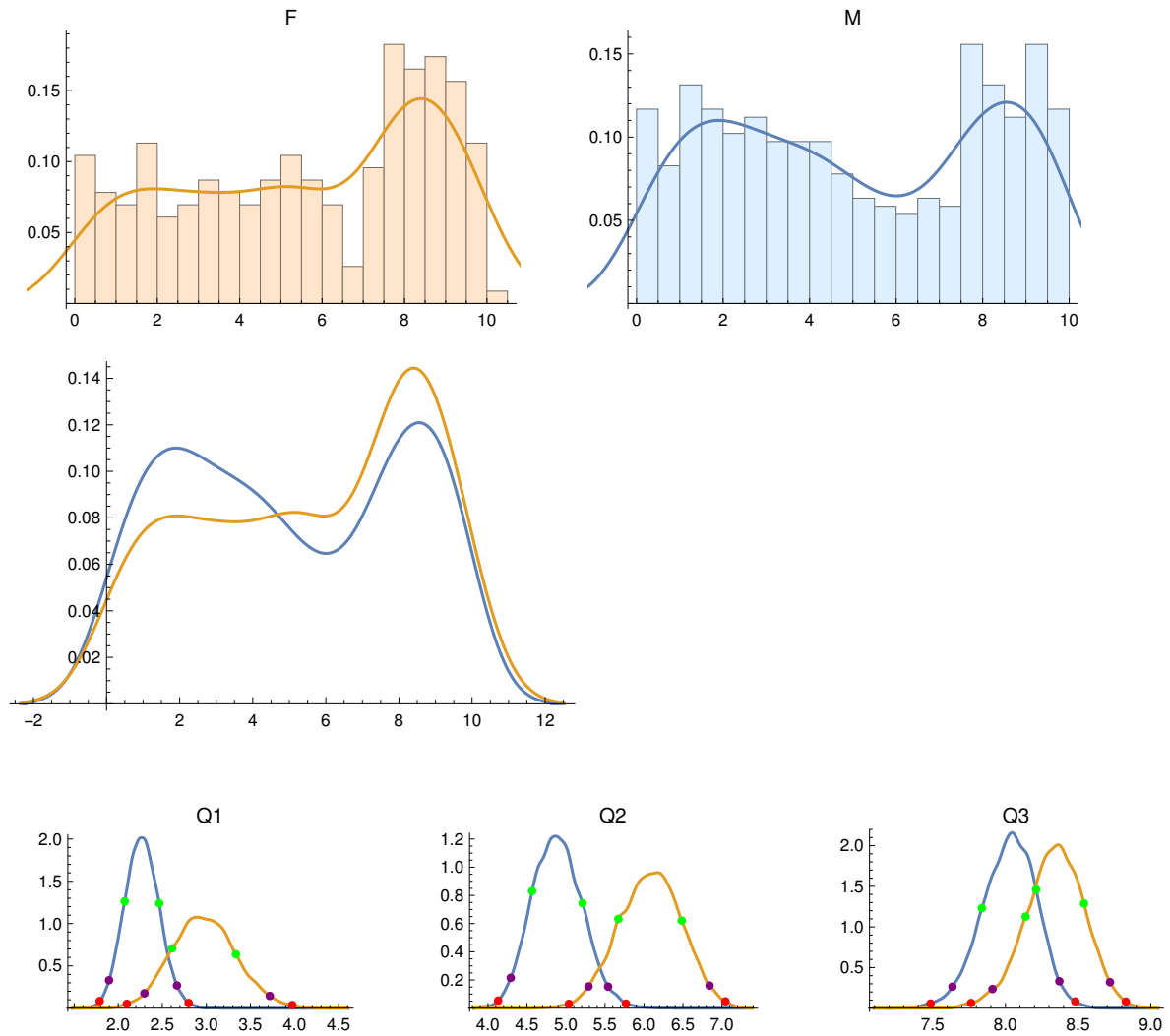
No. Female PIs = 230

No. Male PIs = 411

F PI Quartiles: {3.00065, 5.95238, 8.33659}

M PI Quartiles: {2.18689, 4.7619, 8.06588}

Anderson-Darling two-sample test p-value: 0.0364277



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.187          | 2.073<br>2.465 | 1.897<br>2.666 | 1.79<br>2.799  |
| Quartile 2 | 4.762          | 4.566<br>5.212 | 4.291<br>5.54  | 4.13<br>5.769  |
| Quartile 3 | 8.066          | 7.838<br>8.211 | 7.635<br>8.371 | 7.485<br>8.481 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.001          | 2.612<br>3.335 | 2.298<br>3.718 | 2.098<br>3.974 |
| Quartile 2 | 5.952          | 5.671<br>6.484 | 5.289<br>6.841 | 5.038<br>7.044 |
| Quartile 3 | 8.337          | 8.139<br>8.541 | 7.911<br>8.719 | 7.764<br>8.828 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.8138 | 0.4125<br>-0.412       |
| Quartile 2 | 1.1905 | 0.5104<br>-0.5143      |
| Quartile 3 | 0.2707 | 0.277<br>-0.2768       |

{}

ALMA Cycle 4 Data, Europe

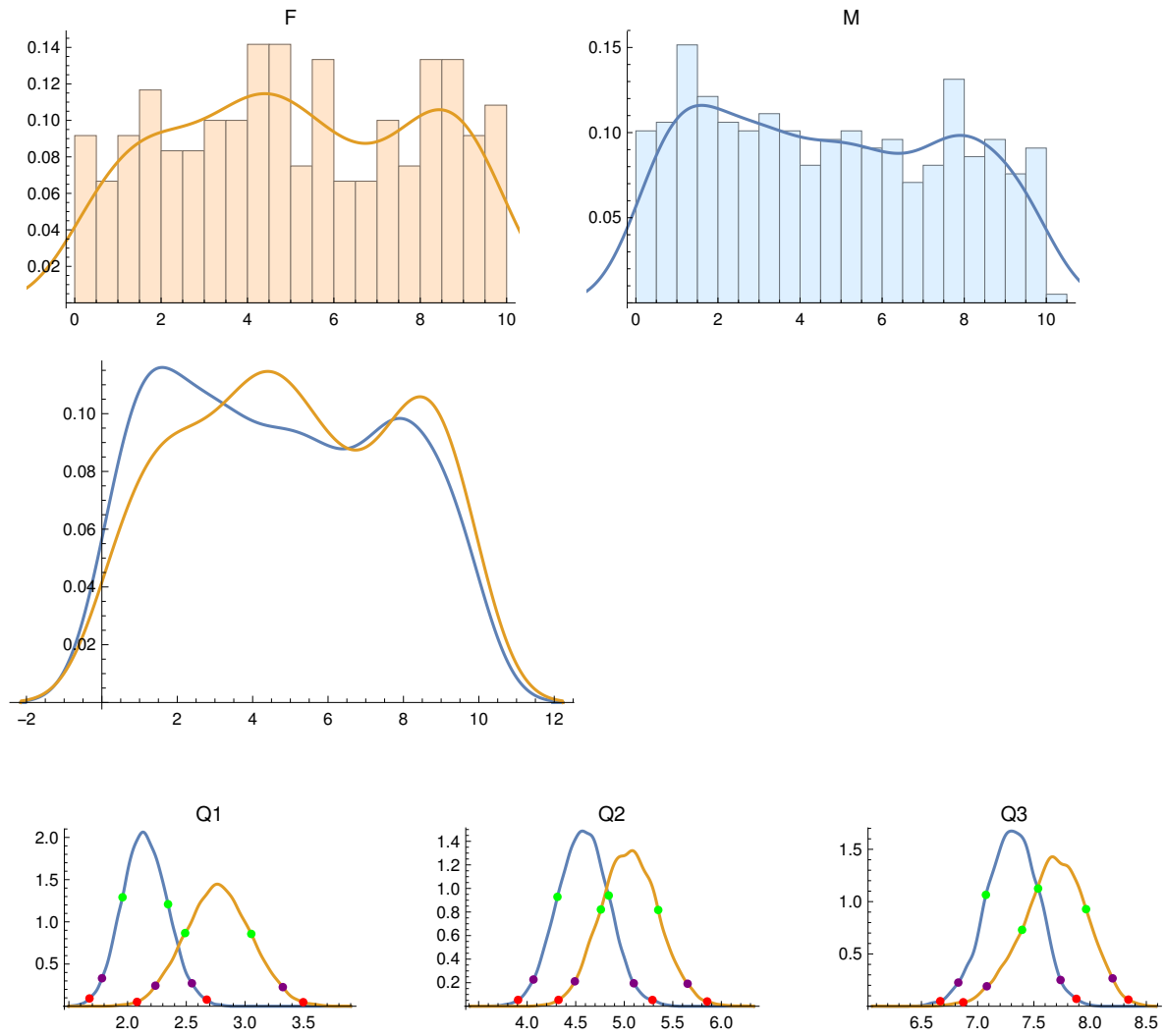
No. Female PIs = 240

No. Male PIs = 396

F PI Quartiles: {2.84256, 4.96706, 7.82938}

M PI Quartiles: {2.08827, 4.60474, 7.45389}

Anderson-Darling two-sample test p-value: 0.0902576



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.088          | 1.957<br>2.345 | 1.782<br>2.548 | 1.676<br>2.674 |
| Quartile 2 | 4.605          | 4.312<br>4.84  | 4.065<br>5.098 | 3.907<br>5.29  |
| Quartile 3 | 7.454          | 7.073<br>7.538 | 6.828<br>7.737 | 6.667<br>7.878 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.843          | 2.49<br>3.053  | 2.237<br>3.322 | 2.08<br>3.496  |
| Quartile 2 | 4.967          | 4.759<br>5.35  | 4.491<br>5.652 | 4.323<br>5.854 |
| Quartile 3 | 7.829          | 7.395<br>7.964 | 7.081<br>8.2   | 6.872<br>8.341 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.7543 | 0.3431<br>-0.3363      |
| Quartile 2 | 0.3623 | 0.4037<br>-0.3974      |
| Quartile 3 | 0.3755 | 0.3705<br>-0.3702      |

{}

ALMA Cycles 2, 3, and 4 Combined, Europe

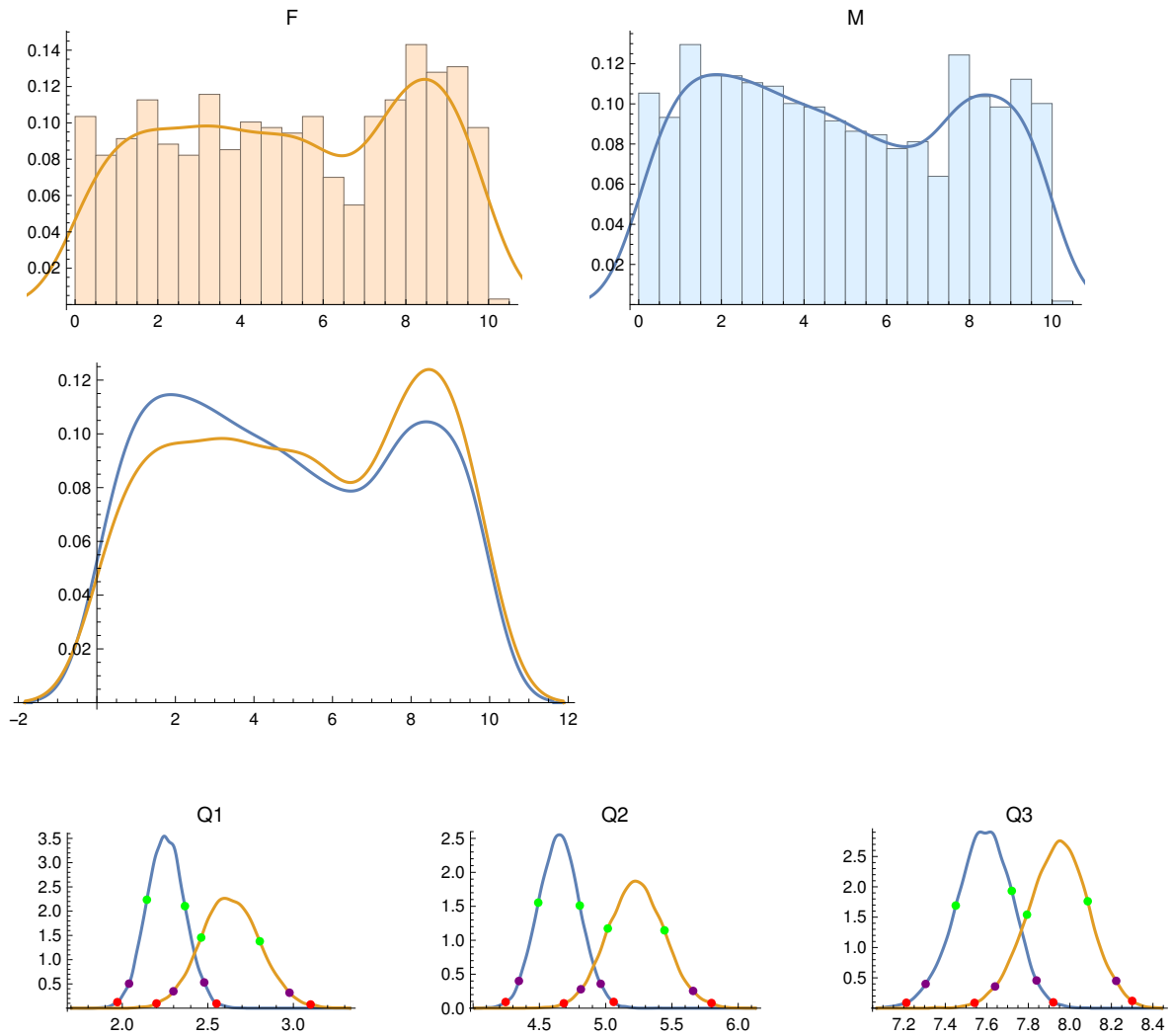
No. Female PIs = 657

No. Male PIs = 1158

F PI Quartiles: {2.67491, 5.24887, 8.01026}

M PI Quartiles: {2.23092, 4.61665, 7.64822}

Anderson-Darling two-sample test p-value: 0.0225993



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.231          | 2.144<br>2.366 | 2.04<br>2.479  | 1.971<br>2.551 |
| Quartile 2 | 4.617          | 4.491<br>4.805 | 4.345<br>4.963 | 4.245<br>5.06  |
| Quartile 3 | 7.648          | 7.45<br>7.72   | 7.305<br>7.839 | 7.212<br>7.92  |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.675          | 2.461<br>2.804 | 2.299<br>2.977 | 2.2<br>3.101   |
| Quartile 2 | 5.249          | 5.016<br>5.444 | 4.813<br>5.66  | 4.684<br>5.798 |
| Quartile 3 | 8.01           | 7.793<br>8.086 | 7.64<br>8.223  | 7.541<br>8.3   |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.444  | 0.2043<br>-0.2023      |
| Quartile 2 | 0.6322 | 0.2612<br>-0.2634      |
| Quartile 3 | 0.362  | 0.1993<br>-0.1989      |

{}



ALMA Cycle 2 Data, North America

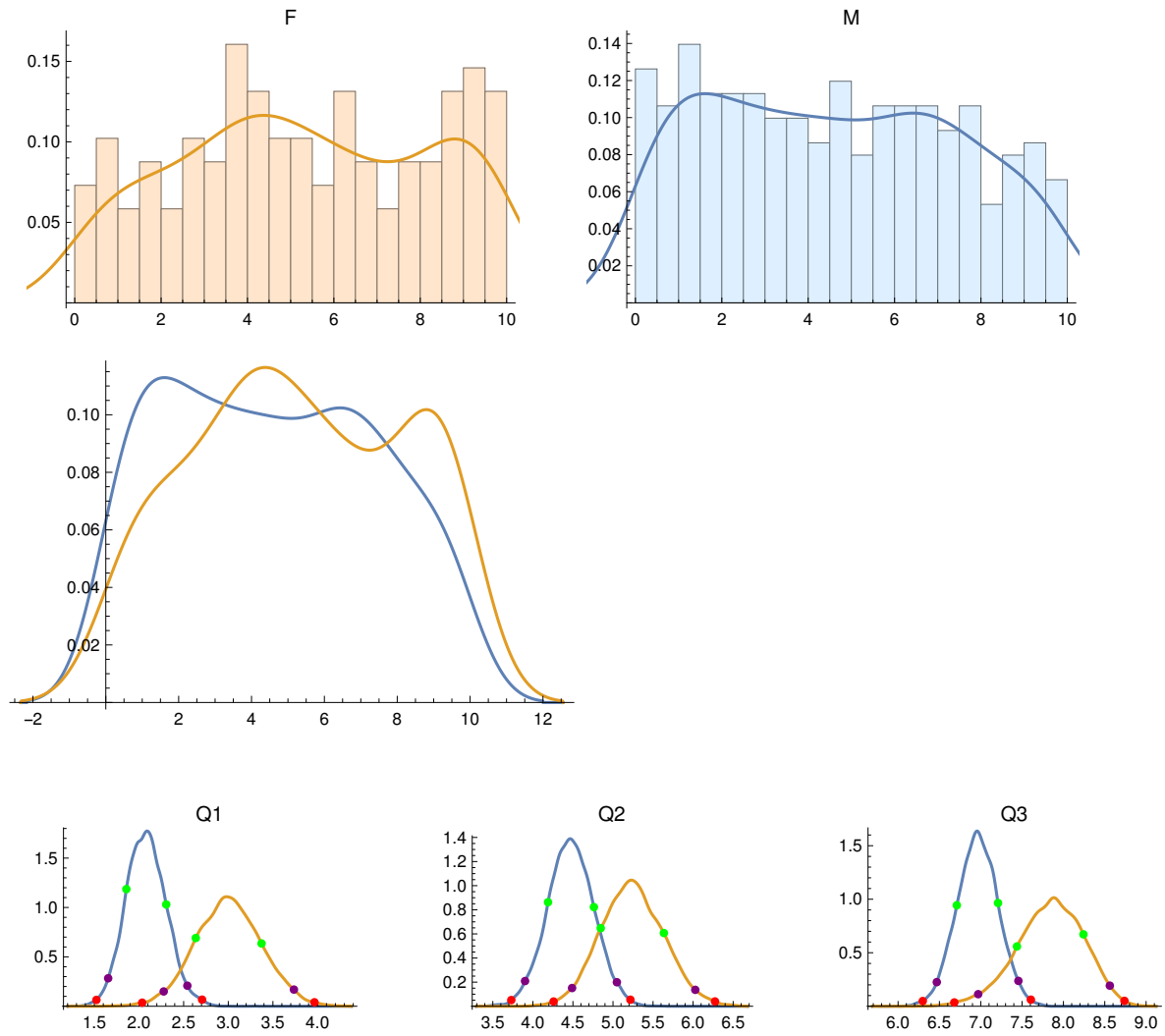
No. Female PIs = 137

No. Male PIs = 301

F PI Quartiles: {3.17685, 5.20362, 7.8356}

M PI Quartiles: {2.09087, 4.50226, 6.87406}

Anderson-Darling two-sample test p-value: 0.0155834



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.091          | 1.859<br>2.305 | 1.655<br>2.542 | 1.523<br>2.707 |
| Quartile 2 | 4.502          | 4.189<br>4.762 | 3.902<br>5.048 | 3.731<br>5.218 |
| Quartile 3 | 6.874          | 6.711<br>7.209 | 6.468<br>7.455 | 6.299<br>7.606 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 3.177          | 2.636<br>3.373 | 2.277<br>3.735 | 2.036<br>3.965 |
| Quartile 2 | 5.204          | 4.847<br>5.635 | 4.489<br>6.027 | 4.259<br>6.274 |
| Quartile 3 | 7.836          | 7.438<br>8.242 | 6.969<br>8.561 | 6.68<br>8.738  |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 1.086  | 0.4323<br>-0.4343      |
| Quartile 2 | 0.7014 | 0.4891<br>-0.4832      |
| Quartile 3 | 0.9615 | 0.4756<br>-0.4692      |

{}

ALMA Cycle 3 Data, North America

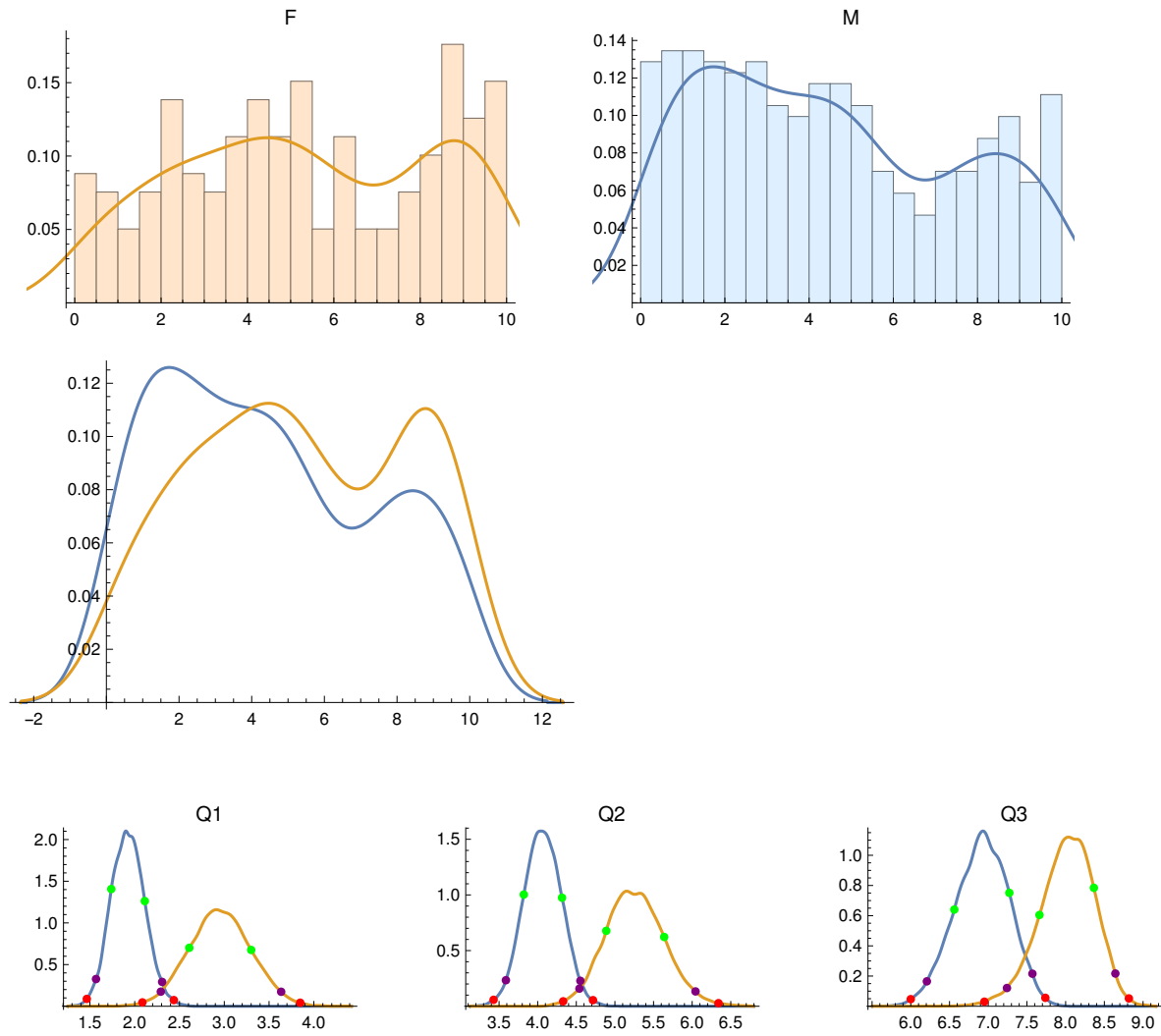
No. Female PIs = 159

No. Male PIs = 342

F PI Quartiles: {2.86856, 5.1272, 8.17025}

M PI Quartiles: {1.87867, 4.11611, 7.0711}

Anderson-Darling two-sample test p-value: 0.00142476



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 1.879          | 1.738<br>2.112 | 1.568<br>2.306 | 1.465<br>2.437 |
| Quartile 2 | 4.116          | 3.82<br>4.315  | 3.588<br>4.553 | 3.429<br>4.716 |
| Quartile 3 | 7.071          | 6.562<br>7.273 | 6.208<br>7.571 | 5.999<br>7.738 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.869          | 2.609<br>3.3   | 2.291<br>3.635 | 2.086<br>3.848 |
| Quartile 2 | 5.127          | 4.888<br>5.638 | 4.541<br>6.043 | 4.33<br>6.341  |
| Quartile 3 | 8.17           | 7.662<br>8.365 | 7.242<br>8.642 | 6.951<br>8.817 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.9899 | 0.3916<br>-0.3946      |
| Quartile 2 | 1.0111 | 0.4532<br>-0.4542      |
| Quartile 3 | 1.0992 | 0.4987<br>-0.4965      |

{}

ALMA Cycle 4 Data, North America

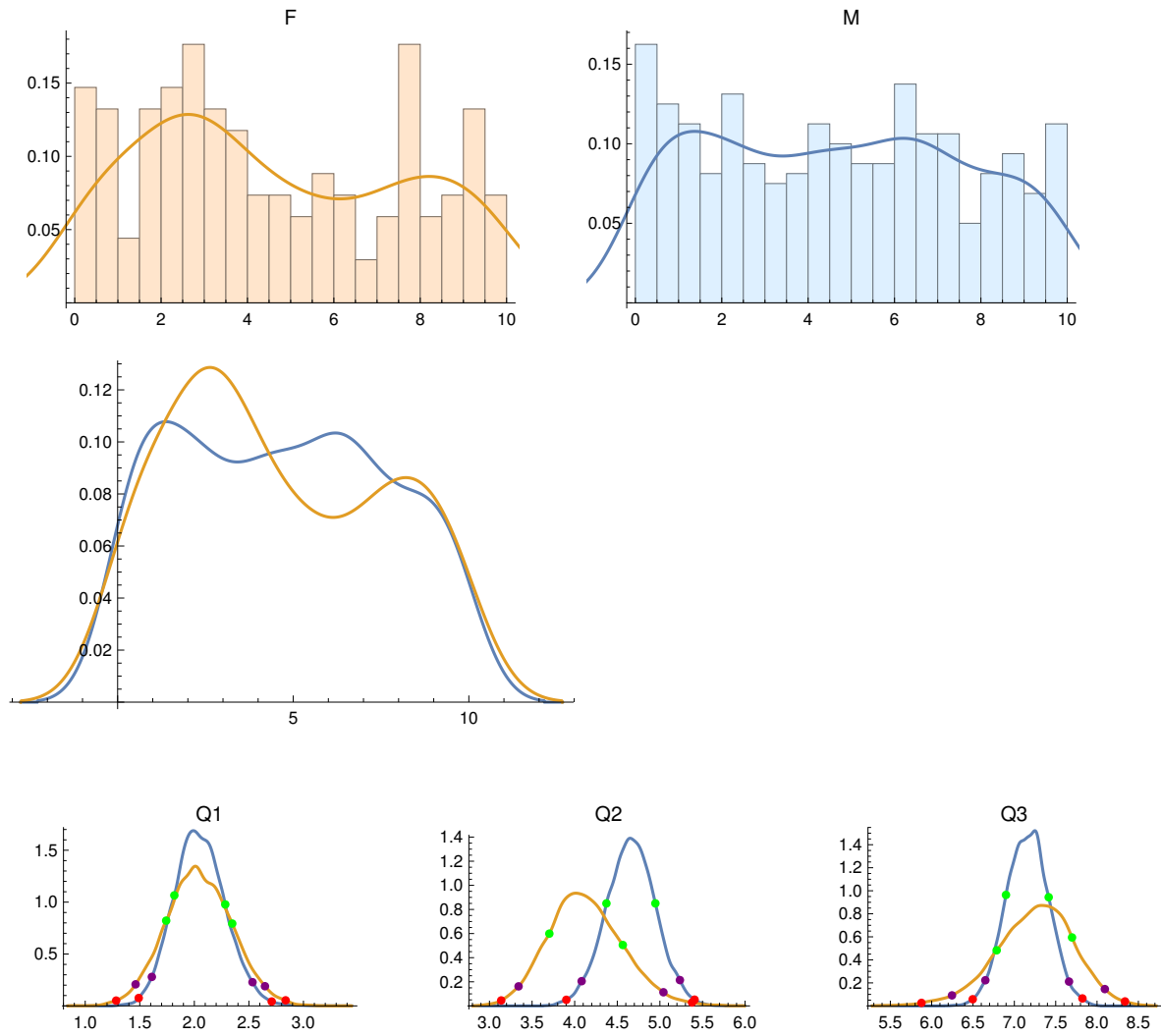
No. Female PIs = 136

No. Male PIs = 320

F PI Quartiles: {2.17391, 3.90975, 7.54611}

M PI Quartiles: {2.05204, 4.67062, 7.17062}

Anderson-Darling two-sample test p-value: 0.624438



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.052          | 1.817<br>2.284 | 1.611<br>2.533 | 1.49<br>2.709  |
| Quartile 2 | 4.671          | 4.373<br>4.947 | 4.082<br>5.235 | 3.902<br>5.407 |
| Quartile 3 | 7.171          | 6.899<br>7.415 | 6.649<br>7.661 | 6.497<br>7.824 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.174          | 1.742<br>2.347 | 1.462<br>2.647 | 1.283<br>2.837 |
| Quartile 2 | 3.91           | 3.703<br>4.565 | 3.341<br>5.042 | 3.138<br>5.377 |
| Quartile 3 | 7.546          | 6.786<br>7.698 | 6.246<br>8.095 | 5.877<br>8.338 |

## Quartile differences, F minus M:

|            | diff.   | upper/lower error bars |
|------------|---------|------------------------|
| Quartile 1 | 0.1219  | 0.3819<br>-0.3793      |
| Quartile 2 | -0.7609 | 0.5155<br>-0.5199      |
| Quartile 3 | 0.3755  | 0.5282<br>-0.5307      |

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ALMA Cycles 2, 3, and 4 Combined, North America

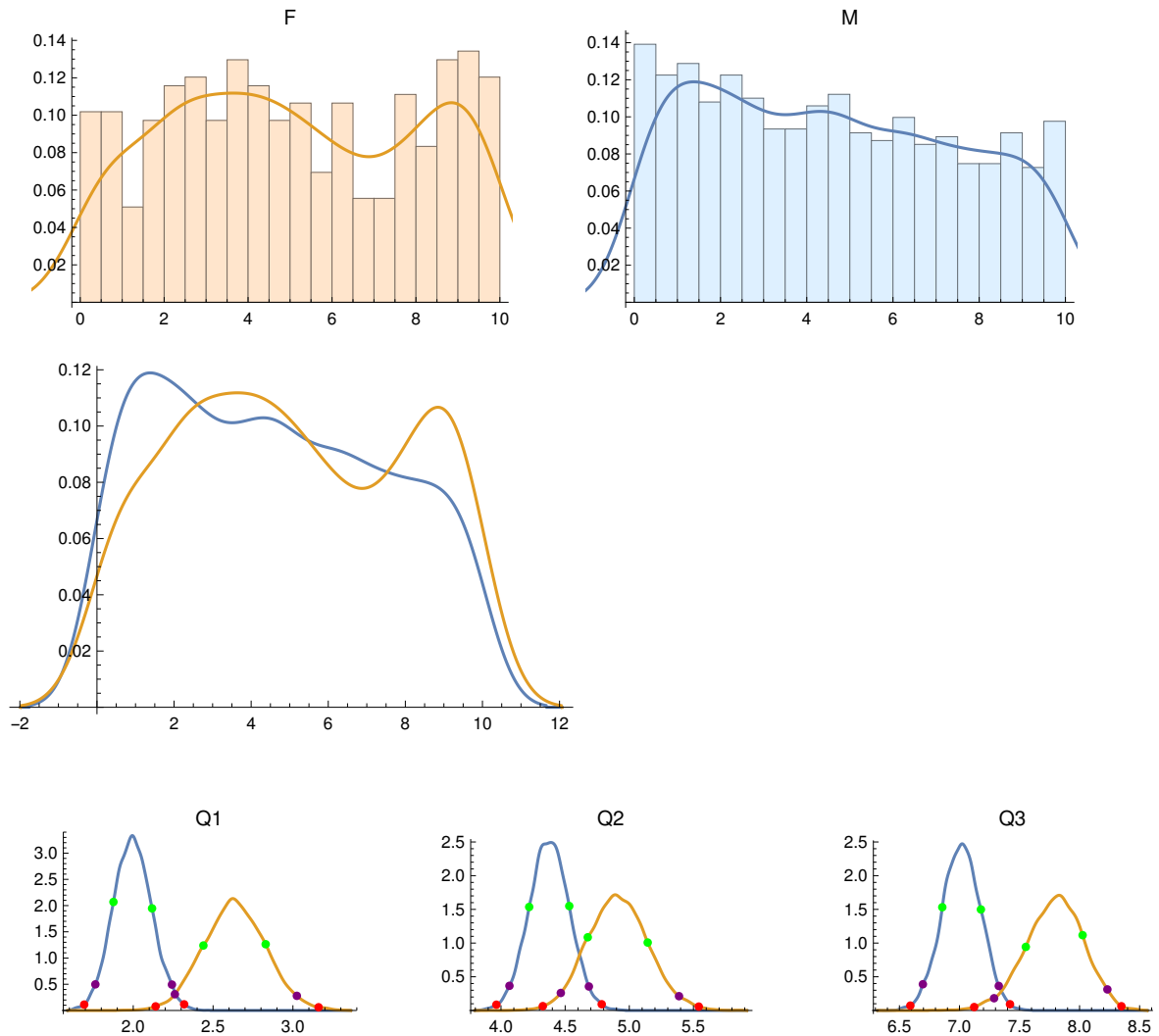
No. Female PIs = 432

No. Male PIs = 963

F PI Quartiles: {2.63795, 4.82908, 7.8466}

M PI Quartiles: {2.00428, 4.37704, 6.98906}

Anderson-Darling two-sample test p-value: 0.0014915



## Male PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.004          | 1.876<br>2.118 | 1.763<br>2.242 | 1.693<br>2.319 |
| Quartile 2 | 4.377          | 4.22<br>4.532  | 4.066<br>4.685 | 3.964<br>4.785 |
| Quartile 3 | 6.989          | 6.857<br>7.178 | 6.695<br>7.327 | 6.591<br>7.421 |

## Female PIs:

|            | Quartile Score | 68% CI         | 95% CI         | 99% CI         |
|------------|----------------|----------------|----------------|----------------|
| Quartile 1 | 2.638          | 2.439<br>2.829 | 2.261<br>3.025 | 2.14<br>3.161  |
| Quartile 2 | 4.829          | 4.676<br>5.143 | 4.466<br>5.388 | 4.326<br>5.542 |
| Quartile 3 | 7.847          | 7.552<br>8.025 | 7.288<br>8.232 | 7.123<br>8.348 |

## Quartile differences, F minus M:

|            | diff.  | upper/lower error bars |
|------------|--------|------------------------|
| Quartile 1 | 0.6337 | 0.2289<br>-0.2273      |
| Quartile 2 | 0.452  | 0.2842<br>-0.2813      |
| Quartile 3 | 0.8575 | 0.2885<br>-0.2918      |

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Out[1]= ALMAGenderBiasTable.Cycles234.xls