### Gold Std. and Classification Results

<table>
<thead>
<tr>
<th>Filter</th>
<th>ham (SPAM1mrx)</th>
<th>spam (SPAM1mrx)</th>
<th>ham (SPAM2mrx)</th>
<th>spam (SPAM2mrx)</th>
<th>ham (SPAM3mrx)</th>
<th>spam (SPAM3mrx)</th>
<th>ham (SPAM4mrx)</th>
<th>spam (SPAM4mrx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ham Misc%</td>
<td>0.01</td>
<td>1.14 (0.93-1.38)</td>
<td>1.63 (1.38-1.91)</td>
<td>6.84 (6.33-7.38)</td>
<td>4.86 (4.42-5.32)</td>
<td>0.28 (0.23-0.34)</td>
<td>0.23 (0.19-0.29)</td>
<td>0.35 (0.29-0.41)</td>
</tr>
<tr>
<td>Spam Misc%</td>
<td>0.01</td>
<td>0.57 (0.50-0.65)</td>
<td>0.62 (0.54-0.71)</td>
<td>1.57 (1.44-1.72)</td>
<td>2.44 (2.29-2.60)</td>
<td>0.103 (0.072 - 0.148)</td>
<td>0.083 (0.054 - 0.130)</td>
<td>0.875 (0.723 - 1.059)</td>
</tr>
<tr>
<td>Spam Misc%</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.05</td>
<td>0.10</td>
<td>0.20</td>
<td>1.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Ham Misc%</td>
<td>0.01</td>
<td>99.79 (74.15 - 100.00)</td>
<td>99.09 (78.96 - 99.97)</td>
<td>100.00 (nan - nan)</td>
<td>99.69 (91.29 - 99.99)</td>
<td>0.01</td>
<td>0.02</td>
<td>0.05</td>
</tr>
<tr>
<td>Spam Misc%</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.05</td>
<td>0.10</td>
<td>0.20</td>
<td>1.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>

### Learning Curves

- **Ham Misc%:**
  - lbSPAM1mrx
  - lbSPAM2mrx
  - lbSPAM3mrx
  - lbSPAM4mrx

- **Spam Misc%:**
  - lbSPAM1mrx
  - lbSPAM2mrx
  - lbSPAM3mrx
  - lbSPAM4mrx

### Cumulative ROC Areas

- **Ham Misc%:**
  - lbSPAM1mrx
  - lbSPAM2mrx
  - lbSPAM3mrx
  - lbSPAM4mrx

- **Spam Misc%:**
  - lbSPAM1mrx
  - lbSPAM2mrx
  - lbSPAM3mrx
  - lbSPAM4mrx

### ROC Curves

- **Ham Misc%:**
  - lbSPAM1mrx
  - lbSPAM2mrx
  - lbSPAM3mrx
  - lbSPAM4mrx

- **Spam Misc%:**
  - lbSPAM1mrx
  - lbSPAM2mrx
  - lbSPAM3mrx
  - lbSPAM4mrx

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### Commentary

The table above presents the results of the classification process using the Gold Std. dataset. The table includes columns for the Filter type, and the percentage of correctly classified ham and spam messages, as well as the (1-ROCA)% values. The diagrams illustrate the learning curves and cumulative ROC areas for different message counts, highlighting the performance of the classification model at various stages.