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**Lampiran 1.** Data Observasi Kejadian *Hotspot* dari situs ASMC (*Asean Specialised Meteorological Center*)

| Tahun | Bulan     | Wilayah Kemunculan Titik Panas ( <i>Hotspot</i> ) |          |       |         |         |           |
|-------|-----------|---|----------|-------|---------|---------|-----------|
|       |           | Myanmar   | Thailand | Laos  | Vietnam | Kamboja | Filiphina |
| 2013  | Januari   | 1511  | 2613     | 978   | 964     | 10077   | 314       |
| 2013  | Februari  | 6464  | 4622     | 2786  | 1935    | 10150   | 467       |
| 2013  | Maret     | 31553   | 12883    | 19017 | 5523    | 5147    | 886       |
| 2013  | April     | 20694   | 4166     | 15258 | 2399    | 1710    | 761       |
| 2013  | Mei       | 361   | 432      | 753   | 1236    | 510     | 197       |
| 2013  | Juni      | 0   | 0        | 0     | 827     | 177     | 0         |
| 2013  | Juli      | 0   | 0        | 0     | 231     | 0       | 0         |
| 2013  | Agustus   | 0   | 0        | 0     | 246     | 0       | 0         |
| 2013  | September | 0   | 0        | 0     | 127     | 0       | 0         |
| 2013  | Oktober   | 0   | 133      | 0     | 253     | 0       | 0         |
| 2013  | November  | 87  | 192      | 0     | 165     | 161     | 0         |
| 2013  | Desember  | 224   | 1000     | 146   | 508     | 1173    | 110       |
| 2014  | Januari   | 1126  | 2269     | 602   | 1558    | 6560    | 264       |
| 2014  | Februari  | 4690  | 4091     | 2145  | 3423    | 10642   | 538       |
| 2014  | Maret     | 29140   | 11682    | 19373 | 7801    | 7533    | 1162      |
| 2014  | April     | 23524   | 4287     | 19364 | 3518    | 1201    | 1500      |
| 2014  | Mei       | 704   | 346      | 655   | 1477    | 338     | 259       |
| 2014  | Juni      | 0   | 0        | 0     | 393     | 73      | 0         |
| 2014  | Juli      | 0   | 0        | 0     | 177     | 0       | 0         |
| 2014  | Agustus   | 0   | 0        | 0     | 272     | 0       | 103       |
| 2014  | September | 0   | 116      | 0     | 178     | 0       | 0         |
| 2014  | Oktober   | 0   | 90       | 0     | 139     | 0       | 0         |
| 2014  | November  | 76  | 261      | 0     | 247     | 133     | 105       |
| 2014  | Desember  | 467   | 1693     | 249   | 300     | 1388    | 153       |
| 2015  | Januari   | 1578  | 3733     | 981   | 1350    | 11562   | 281       |
| 2015  | Februari  | 5913  | 4335     | 2002  | 2201    | 9587    | 606       |
| 2015  | Maret     | 29646   | 7576     | 16254 | 5169    | 6508    | 2566      |
| 2015  | April     | 12028   | 4635     | 22917 | 4102    | 2428    | 1601      |
| 2015  | Mei       | 1739  | 381      | 1859  | 1894    | 523     | 393       |
| 2015  | Juni      | 0   | 0        | 0     | 787     | 195     | 73        |
| 2015  | Juli      | 0   | 0        | 0     | 370     | 130     | 0         |
| 2015  | Agustus   | 0   | 0        | 0     | 530     | 0       | 0         |
| 2015  | September | 0   | 0        | 0     | 467     | 0       | 0         |
| 2015  | Oktober   | 0   | 0        | 0     | 289     | 0       | 0         |
| 2015  | November  | 213   | 269      | 0     | 174     | 96      | 106       |
| 2015  | Desember  | 485   | 1099     | 173   | 414     | 2676    | 135       |
| 2016  | Januari   | 978   | 1936     | 423   | 1020    | 8001    | 475       |



|      |           |       |      |       |      |       |      |
|------|-----------|-------|------|-------|------|-------|------|
| 2016 | Februari  | 4438  | 4768 | 1706  | 1899 | 10774 | 852  |
| 2016 | Maret     | 21976 | 7718 | 11376 | 4784 | 6614  | 2426 |
| 2016 | April     | 18250 | 6826 | 23905 | 4573 | 5579  | 2470 |
| 2016 | Mei       | 1966  | 877  | 3223  | 1364 | 549   | 344  |
| 2016 | Juni      | 0     | 73   | 158   | 1164 | 182   | 0    |
| 2016 | Juli      | 0     | 0    | 0     | 369  | 0     | 0    |
| 2016 | Agustus   | 0     | 0    | 0     | 266  | 0     | 54   |
| 2016 | September | 0     | 0    | 0     | 165  | 0     | 0    |
| 2016 | Oktober   | 0     | 58   | 0     | 130  | 0     | 0    |
| 2016 | November  | 101   | 309  | 0     | 133  | 0     | 0    |
| 2016 | Desember  | 416   | 1137 | 108   | 211  | 177   | 0    |
| 2017 | Januari   | 1227  | 1403 | 311   | 220  | 2837  | 128  |
| 2017 | Februari  | 5642  | 3635 | 1710  | 1107 | 9231  | 148  |
| 2017 | Maret     | 19013 | 5215 | 7457  | 1875 | 3606  | 505  |
| 2017 | April     | 15777 | 1877 | 15228 | 2189 | 867   | 977  |
| 2017 | Mei       | 1369  | 242  | 3769  | 1124 | 88    | 220  |
| 2017 | Juni      | 0     | 0    | 0     | 570  | 0     | 0    |
| 2017 | Juli      | 0     | 0    | 0     | 82   | 0     | 0    |
| 2017 | Agustus   | 0     | 0    | 0     | 217  | 0     | 0    |
| 2017 | September | 0     | 86   | 0     | 177  | 0     | 0    |
| 2017 | Oktober   | 0     | 0    | 0     | 72   | 0     | 0    |
| 2017 | November  | 142   | 128  | 52    | 68   | 0     | 0    |
| 2017 | Desember  | 463   | 997  | 226   | 203  | 1047  | 64   |
| 2018 | Januari   | 1010  | 1723 | 836   | 492  | 5599  | 155  |
| 2018 | Februari  | 3958  | 2935 | 2299  | 1314 | 9500  | 358  |
| 2018 | Maret     | 20483 | 3719 | 9264  | 2633 | 4043  | 641  |
| 2018 | April     | 13010 | 2732 | 16393 | 2359 | 847   | 870  |
| 2018 | Mei       | 410   | 202  | 1092  | 909  | 99    | 227  |
| 2018 | Juni      | 0     | 0    | 0     | 277  | 0     | 0    |
| 2018 | Juli      | 0     | 0    | 0     | 165  | 83    | 0    |
| 2018 | Agustus   | 0     | 0    | 0     | 140  | 0     | 59   |
| 2018 | September | 0     | 0    | 0     | 271  | 0     | 0    |
| 2018 | Oktober   | 0     | 54   | 0     | 213  | 0     | 131  |
| 2018 | November  | 250   | 344  | 63    | 219  | 172   | 108  |
| 2018 | Desember  | 666   | 1603 | 289   | 284  | 3776  | 116  |

**Lampiran 2 . Data Niño 3.4 El-Nino Southern Oscillation (ENSO)**

| Tahun & Bulan | Data Niño 3.4 (ENSO) |         |         |        |        |        |        |        |        |        |        |        |        |
|---------------|----------------------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|               | ENSO 12              | ENSO 11 | ENSO 10 | ENSO 9 | ENSO 8 | ENSO 7 | ENSO 6 | ENSO 5 | ENSO 4 | ENSO 3 | ENSO 2 | ENSO 1 | ENSO 0 |
| 2013 1        | -0.555               | -0.306  | -0.209  | -0.025 | 0.101  | 0.504  | 0.729  | 0.936  | 0.823  | 0.776  | 0.619  | 0.105  | -0.217 |
| 2013 2        | -0.306               | -0.209  | -0.025  | 0.101  | 0.504  | 0.729  | 0.936  | 0.823  | 0.776  | 0.619  | 0.105  | -0.217 | -0.154 |
| 2013 3        | -0.209               | -0.025  | 0.101   | 0.504  | 0.729  | 0.936  | 0.823  | 0.776  | 0.619  | 0.105  | -0.217 | -0.154 | 0.146  |
| 2013 4        | -0.025               | 0.101   | 0.504   | 0.729  | 0.936  | 0.823  | 0.776  | 0.619  | 0.105  | -0.217 | -0.154 | 0.146  | 0.222  |
| 2013 5        | 0.101                | 0.504   | 0.729   | 0.936  | 0.823  | 0.776  | 0.619  | 0.105  | -0.217 | -0.154 | 0.146  | 0.222  | 0.019  |
| 2013 6        | 0.504                | 0.729   | 0.936   | 0.823  | 0.776  | 0.619  | 0.105  | -0.217 | -0.154 | 0.146  | 0.222  | 0.019  | 0.050  |
| 2013 7        | 0.729                | 0.936   | 0.823   | 0.776  | 0.619  | 0.105  | -0.217 | -0.154 | 0.146  | 0.222  | 0.019  | 0.050  | 0.086  |
| 2013 8        | 0.936                | 0.823   | 0.776   | 0.619  | 0.105  | -0.217 | -0.154 | 0.146  | 0.222  | 0.019  | 0.050  | 0.086  | 0.083  |
| 2013 9        | 0.823                | 0.776   | 0.619   | 0.105  | -0.217 | -0.154 | 0.146  | 0.222  | 0.019  | 0.050  | 0.086  | 0.083  | 0.254  |
| 2013 10       | 0.303                | 0.308   | 0.173   | -0.217 | -0.154 | 0.146  | 0.222  | 0.019  | 0.050  | 0.086  | 0.083  | 0.254  | 0.303  |
| 2013 11       | 0.619                | 0.105   | -0.217  | -0.154 | 0.146  | 0.222  | 0.019  | 0.050  | 0.086  | 0.083  | 0.254  | 0.303  | 0.308  |
| 2013 12       | 0.105                | -0.217  | -0.154  | 0.146  | 0.222  | 0.019  | 0.050  | 0.086  | 0.083  | 0.254  | 0.303  | 0.308  | 0.173  |
| 2014 1        | -0.217               | -0.154  | 0.146   | 0.222  | 0.019  | 0.050  | 0.086  | 0.083  | 0.254  | 0.303  | 0.308  | 0.173  | -0.195 |
| 2014 2        | -0.154               | 0.146   | 0.222   | 0.019  | 0.050  | 0.086  | 0.083  | 0.254  | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 |
| 2014 3        | 0.146                | 0.222   | 0.019   | 0.050  | 0.086  | 0.083  | 0.254  | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  |
| 2014 4        | 0.222                | 0.019   | 0.050   | 0.086  | 0.083  | 0.254  | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  |
| 2014 5        | 0.019                | 0.050   | 0.086   | 0.083  | 0.254  | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726  |
| 2014 6        | 0.050                | 0.086   | 0.083   | 0.254  | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726  | 0.692  |
| 2014 7        | 0.086                | 0.083   | 0.254   | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726  | 0.692  | 0.398  |
| 2014 8        | 0.083                | 0.254   | 0.303   | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726  | 0.692  | 0.398  | 0.420  |
| 2014 9        | 0.254                | 0.303   | 0.308   | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726  | 0.692  | 0.398  | 0.420  | 0.711  |

|         |        |        |        |        |        |       |       |       |       |       |        |        |        |
|---------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|--------|--------|--------|
| 2014 10 | 0.303  | 0.308  | 0.173  | -0.195 | -0.266 | 0.109 | 0.547 | 0.726 | 0.692 | 0.398 | 0.420  | 0.711  | 0.933  |
| 2014 11 | 0.308  | 0.173  | -0.195 | -0.266 | 0.109  | 0.547 | 0.726 | 0.692 | 0.398 | 0.420 | 0.711  | 0.933  | 1.197  |
| 2014 12 | 0.173  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726 | 0.692 | 0.398 | 0.420 | 0.711 | 0.933  | 1.197  | 1.059  |
| 2015 1  | -0.195 | -0.266 | 0.109  | 0.547  | 0.726  | 0.692 | 0.398 | 0.420 | 0.711 | 0.933 | 1.197  | 1.059  | 0.816  |
| 2015 2  | -0.266 | 0.109  | 0.547  | 0.726  | 0.692  | 0.398 | 0.420 | 0.711 | 0.933 | 1.197 | 1.059  | 0.816  | 0.785  |
| 2015 3  | 0.109  | 0.547  | 0.726  | 0.692  | 0.398  | 0.420 | 0.711 | 0.933 | 1.197 | 1.059 | 0.816  | 0.785  | 0.880  |
| 2015 4  | 0.547  | 0.726  | 0.692  | 0.398  | 0.420  | 0.711 | 0.933 | 1.197 | 1.059 | 0.816 | 0.785  | 0.880  | 1.170  |
| 2015 5  | 0.726  | 0.692  | 0.398  | 0.420  | 0.711  | 0.933 | 1.197 | 1.059 | 0.816 | 0.785 | 0.880  | 1.170  | 1.340  |
| 2015 6  | 0.692  | 0.398  | 0.420  | 0.711  | 0.933  | 1.197 | 1.059 | 0.816 | 0.785 | 0.880 | 1.170  | 1.340  | 1.655  |
| 2015 7  | 0.398  | 0.420  | 0.711  | 0.933  | 1.197  | 1.059 | 0.816 | 0.785 | 0.880 | 1.170 | 1.340  | 1.655  | 1.933  |
| 2015 8  | 0.420  | 0.711  | 0.933  | 1.197  | 1.059  | 0.816 | 0.785 | 0.880 | 1.170 | 1.340 | 1.655  | 1.933  | 2.394  |
| 2015 9  | 0.711  | 0.933  | 1.197  | 1.059  | 0.816  | 0.785 | 0.880 | 1.170 | 1.340 | 1.655 | 1.933  | 2.394  | 2.645  |
| 2015 10 | 0.933  | 1.197  | 1.059  | 0.816  | 0.785  | 0.880 | 1.170 | 1.340 | 1.655 | 1.933 | 2.394  | 2.645  | 2.871  |
| 2015 11 | 1.197  | 1.059  | 0.816  | 0.785  | 0.880  | 1.170 | 1.340 | 1.655 | 1.933 | 2.394 | 2.645  | 2.871  | 3.180  |
| 2015 12 | 1.059  | 0.816  | 0.785  | 0.880  | 1.170  | 1.340 | 1.655 | 1.933 | 2.394 | 2.645 | 2.871  | 3.180  | 3.029  |
| 2016 1  | 0.816  | 0.785  | 0.880  | 1.170  | 1.340  | 1.655 | 1.933 | 2.394 | 2.645 | 2.871 | 3.180  | 3.029  | 2.880  |
| 2016 2  | 0.785  | 0.880  | 1.170  | 1.340  | 1.655  | 1.933 | 2.394 | 2.645 | 2.871 | 3.180 | 3.029  | 2.880  | 2.630  |
| 2016 3  | 0.880  | 1.170  | 1.340  | 1.655  | 1.933  | 2.394 | 2.645 | 2.871 | 3.180 | 3.029 | 2.880  | 2.630  | 2.035  |
| 2016 4  | 1.170  | 1.340  | 1.655  | 1.933  | 2.394  | 2.645 | 2.871 | 3.180 | 3.029 | 2.880 | 2.630  | 2.035  | 1.389  |
| 2016 5  | 1.340  | 1.655  | 1.933  | 2.394  | 2.645  | 2.871 | 3.180 | 3.029 | 2.880 | 2.630 | 2.035  | 1.389  | 0.737  |
| 2016 6  | 1.655  | 1.933  | 2.394  | 2.645  | 2.871  | 3.180 | 3.029 | 2.880 | 2.630 | 2.035 | 1.389  | 0.737  | 0.459  |
| 2016 7  | 1.933  | 2.394  | 2.645  | 2.871  | 3.180  | 3.029 | 2.880 | 2.630 | 2.035 | 1.389 | 0.737  | 0.459  | 0.011  |
| 2016 8  | 2.394  | 2.645  | 2.871  | 3.180  | 3.029  | 2.880 | 2.630 | 2.035 | 1.389 | 0.737 | 0.459  | 0.011  | -0.099 |
| 2016 9  | 2.645  | 2.871  | 3.180  | 3.029  | 2.880  | 2.630 | 2.035 | 1.389 | 0.737 | 0.459 | 0.011  | -0.099 | -0.126 |
| 2016 10 | 2.871  | 3.180  | 3.029  | 2.880  | 2.630  | 2.035 | 1.389 | 0.737 | 0.459 | 0.011 | -0.099 | -0.126 | -0.219 |

|         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2016 11 | 3.180  | 3.029  | 2.880  | 2.630  | 2.035  | 1.389  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 |
| 2016 12 | 3.029  | 2.880  | 2.630  | 2.035  | 1.389  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 |
| 2017 1  | 2.880  | 2.630  | 2.035  | 1.389  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 |
| 2017 2  | 2.630  | 2.035  | 1.389  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  |
| 2017 3  | 2.035  | 1.389  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  |
| 2017 4  | 1.389  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  |
| 2017 5  | 0.737  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  |
| 2017 6  | 0.459  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  |
| 2017 7  | 0.011  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  |
| 2017 8  | -0.099 | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  |
| 2017 9  | -0.126 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  |
| 2017 10 | -0.219 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 |
| 2017 11 | -0.286 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 |
| 2017 12 | -0.136 | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 |
| 2018 1  | -0.115 | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 |
| 2018 2  | 0.282  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 |
| 2018 3  | 0.439  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 |
| 2018 4  | 0.682  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 |
| 2018 5  | 0.780  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  |
| 2018 6  | 0.817  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  | 0.524  |
| 2018 7  | 0.741  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  | 0.524  | 0.607  |
| 2018 8  | 0.314  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  | 0.524  | 0.607  | 0.562  |
| 2018 9  | 0.007  | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  | 0.524  | 0.607  | 0.562  | 0.907  |
| 2018 10 | -0.056 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  | 0.524  | 0.607  | 0.562  | 0.907  | 1.409  |
| 2018 11 | -0.506 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212  | 0.524  | 0.607  | 0.562  | 0.907  | 1.409  | 1.366  |

|         |        |        |        |        |        |       |       |       |       |       |       |       |       |
|---------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2018 12 | -0.633 | -0.681 | -0.426 | -0.410 | -0.049 | 0.212 | 0.524 | 0.607 | 0.562 | 0.907 | 1.409 | 1.366 | 1.243 |
|---------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|

**Lampiran 3. Data Madden Julian Oscillation (MJO)**

| Tahun & Bulan | Data Madden Julian Oscillation (MJO) |        |        |        |        |        |        |        |        |        |        |        |        |
|---------------|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|               | MJO 12                               | MJO 11 | MJO 10 | MJO 9  | MJO 8  | MJO 7  | MJO 6  | MJO 5  | MJO 4  | MJO 3  | MJO 2  | MJO 1  | MJO 0  |
| 2013 1        | 0.076                                | -0.092 | -0.034 | 0.249  | 0.408  | 0.421  | -0.069 | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  |
| 2013 2        | -0.092                               | -0.034 | 0.249  | 0.408  | 0.421  | -0.069 | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 |
| 2013 3        | -0.034                               | 0.249  | 0.408  | 0.421  | -0.069 | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  |
| 2013 4        | 0.249                                | 0.408  | 0.421  | -0.069 | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 |
| 2013 5        | 0.408                                | 0.421  | -0.069 | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 |
| 2013 6        | 0.421                                | -0.069 | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  |
| 2013 7        | -0.069                               | 0.253  | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 |
| 2013 8        | 0.253                                | -0.105 | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  |
| 2013 9        | -0.105                               | -0.043 | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 |
| 2013 10       | -0.043                               | -0.341 | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  |
| 2013 11       | -0.341                               | -0.497 | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 |
| 2013 12       | -0.497                               | 0.392  | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 |
| 2014 1        | 0.392                                | -0.289 | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  |
| 2014 2        | -0.289                               | 0.534  | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  |
| 2014 3        | 0.534                                | -0.092 | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  |
| 2014 4        | -0.092                               | -0.396 | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  |
| 2014 5        | -0.396                               | 0.091  | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  |
| 2014 6        | 0.091                                | -0.549 | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  |
| 2014 7        | -0.549                               | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  |

|         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2014 8  | 0.206  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  |
| 2014 9  | -0.163 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  |
| 2014 10 | 0.639  | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  |
| 2014 11 | -0.297 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 |
| 2014 12 | -0.459 | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 |
| 2015 1  | 0.384  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  |
| 2015 2  | 0.572  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  |
| 2015 3  | 0.358  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  |
| 2015 4  | 0.872  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  |
| 2015 5  | 0.044  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  |
| 2015 6  | 0.704  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  |
| 2015 7  | 1.275  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  |
| 2015 8  | 0.037  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  |
| 2015 9  | 0.217  | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  |
| 2015 10 | 0.199  | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  |
| 2015 11 | -0.410 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 |
| 2015 12 | -0.067 | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  |
| 2016 1  | 0.933  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  |
| 2016 2  | 0.549  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  |
| 2016 3  | 0.980  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  |
| 2016 4  | 0.365  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  |
| 2016 5  | 1.225  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 |
| 2016 6  | 0.475  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 |
| 2016 7  | 1.814  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 |
| 2016 8  | 1.086  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  |

|         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2016 9  | 1.210  | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 |
| 2016 10 | 1.308  | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  |
| 2016 11 | -0.212 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 |
| 2016 12 | 0.916  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  |
| 2017 1  | 0.657  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 |
| 2017 2  | 1.209  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  |
| 2017 3  | 0.472  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  |
| 2017 4  | 0.628  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  |
| 2017 5  | -0.467 | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 |
| 2017 6  | -0.075 | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  |
| 2017 7  | -0.075 | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 |
| 2017 8  | 0.501  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 |
| 2017 9  | -0.138 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 |
| 2017 10 | 0.174  | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  |
| 2017 11 | -0.124 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 |
| 2017 12 | 0.421  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  |
| 2018 1  | -0.073 | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 |
| 2018 2  | 0.236  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  |
| 2018 3  | 0.098  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 |
| 2018 4  | 0.753  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 |
| 2018 5  | -0.247 | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 |
| 2018 6  | 0.005  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020  |
| 2018 7  | -0.274 | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020  | 0.547  |
| 2018 8  | -0.159 | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020  | 0.547  | 0.876  |
| 2018 9  | -0.172 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020  | 0.547  | 0.876  | 0.545  |

|         |        |        |        |        |        |        |        |        |       |       |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|
| 2018 10 | 0.290  | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020 | 0.547 | 0.876  | 0.545  | -0.317 |
| 2018 11 | -0.421 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020  | 0.547 | 0.876 | 0.545  | -0.317 | 0.102  |
| 2018 12 | 0.638  | -0.196 | 0.391  | -0.660 | -0.360 | -0.996 | 0.020  | 0.547  | 0.876 | 0.545 | -0.317 | 0.102  | -0.185 |

**Lampiran 4 . Data Indian Ocean Dipole (IOD)**

| Tahun & Bulan | Data Indian Ocean Dipole (IOD) |        |        |        |        |        |        |        |        |        |        |        |        |
|---------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|               | IOD 12                         | IOD 11 | IOD 10 | IOD 9  | IOD 8  | IOD 7  | IOD 6  | IOD 5  | IOD 4  | IOD 3  | IOD 2  | IOD 1  | IOD 0  |
| 2013 1        | 0.227                          | 0.101  | 0.191  | -0.077 | -0.158 | 0.204  | 0.852  | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  |
| 2013 2        | 0.101                          | 0.191  | -0.077 | -0.158 | 0.204  | 0.852  | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  |
| 2013 3        | 0.191                          | -0.077 | -0.158 | 0.204  | 0.852  | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  |
| 2013 4        | -0.077                         | -0.158 | 0.204  | 0.852  | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 |
| 2013 5        | -0.158                         | 0.204  | 0.852  | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 |
| 2013 6        | 0.204                          | 0.852  | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 |
| 2013 7        | 0.852                          | 0.946  | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  |
| 2013 8        | 0.946                          | 0.828  | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  |
| 2013 9        | 0.828                          | 0.477  | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  |
| 2013 10       | 0.477                          | 0.159  | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  |
| 2013 11       | 0.159                          | 0.490  | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  |
| 2013 12       | 0.490                          | 0.116  | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  |
| 2014 1        | 0.116                          | 0.368  | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  |
| 2014 2        | 0.368                          | 0.248  | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  |
| 2014 3        | 0.248                          | -0.103 | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  |
| 2014 4        | -0.103                         | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  |



|         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2014 5  | -0.294 | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  |
| 2014 6  | -0.293 | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  |
| 2014 7  | 0.126  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 |
| 2014 8  | 0.100  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 |
| 2014 9  | 0.065  | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  |
| 2014 10 | 0.199  | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  |
| 2014 11 | 0.457  | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  |
| 2014 12 | 0.363  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  |
| 2015 1  | 0.080  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  |
| 2015 2  | 0.090  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 |
| 2015 3  | 0.014  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 |
| 2015 4  | 0.136  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  |
| 2015 5  | 0.119  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  |
| 2015 6  | 0.175  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  |
| 2015 7  | -0.057 | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  |
| 2015 8  | -0.078 | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  |
| 2015 9  | 0.230  | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  |
| 2015 10 | 0.508  | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  |
| 2015 11 | 0.268  | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  |
| 2015 12 | 0.268  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  |
| 2016 1  | 0.081  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  |
| 2016 2  | -0.166 | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  |
| 2016 3  | -0.076 | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  |
| 2016 4  | 0.186  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  |
| 2016 5  | 0.451  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  |

|         |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2016 6  | 0.499  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 |
| 2016 7  | 0.531  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 |
| 2016 8  | 0.862  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 |
| 2016 9  | 0.669  | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 |
| 2016 10 | 0.850  | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 |
| 2016 11 | 0.605  | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 |
| 2016 12 | 0.494  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 |
| 2017 1  | 0.446  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  |
| 2017 2  | 0.070  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  |
| 2017 3  | 0.156  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  |
| 2017 4  | 0.341  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  |
| 2017 5  | 0.098  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  |
| 2017 6  | -0.240 | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  |
| 2017 7  | -0.451 | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  |
| 2017 8  | -0.149 | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  |
| 2017 9  | -0.061 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  |
| 2017 10 | -0.004 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  |
| 2017 11 | -0.124 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  |
| 2017 12 | -0.087 | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  |
| 2018 1  | 0.096  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 |
| 2018 2  | 0.281  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  |
| 2018 3  | 0.522  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  | 0.044  |
| 2018 4  | 0.693  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  | 0.044  | 0.111  |
| 2018 5  | 0.747  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  | 0.044  | 0.111  | 0.334  |
| 2018 6  | 0.627  | 0.826  | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  | 0.044  | 0.111  | 0.334  | 0.358  |

|         |       |        |        |        |        |        |        |       |       |       |       |       |       |
|---------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| 2018 7  | 0.826 | 0.643  | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395 | 0.044 | 0.111 | 0.334 | 0.358 | 0.359 |
| 2018 8  | 0.643 | 0.410  | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  | 0.044 | 0.111 | 0.334 | 0.358 | 0.359 | 0.415 |
| 2018 9  | 0.410 | 0.383  | 0.547  | 0.332  | -0.019 | 0.395  | 0.044  | 0.111 | 0.334 | 0.358 | 0.359 | 0.415 | 0.980 |
| 2018 10 | 0.383 | 0.547  | 0.332  | -0.019 | 0.395  | 0.044  | 0.111  | 0.334 | 0.358 | 0.359 | 0.415 | 0.980 | 1.052 |
| 2018 11 | 0.547 | 0.332  | -0.019 | 0.395  | 0.044  | 0.111  | 0.334  | 0.358 | 0.359 | 0.415 | 0.980 | 1.052 | 0.758 |
| 2018 12 | 0.332 | -0.019 | 0.395  | 0.044  | 0.111  | 0.334  | 0.358  | 0.359 | 0.415 | 0.980 | 1.052 | 0.758 | 0.532 |

### Lampiran 5 . Data MONSOON

| Tahun & Bulan | Data MONSOON |           |           |           |           |           |           |           |           |           |
|---------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|               | Monsoon 9    | Monsoon 8 | Monsoon 7 | Monsoon 6 | Monsoon 5 | Monsoon 4 | Monsoon 3 | Monsoon 2 | Monsoon 1 | Monsoon 0 |
| 2013 1        | -1.754       | 0.427     | -1.130    | 0.697     | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     |
| 2013 2        | 0.427        | -1.130    | 0.697     | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     |
| 2013 3        | -1.130       | 0.697     | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    |
| 2013 4        | -1.130       | 0.697     | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    |
| 2013 5        | -1.130       | 0.697     | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    |
| 2013 6        | 0.697        | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    | 0.316     |
| 2013 7        | -0.692       | -1.364    | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    | 0.316     | 0.324     |
| 2013 8        | -1.364       | -0.774    | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    | 0.316     | 0.324     | -1.229    |
| 2013 9        | -0.774       | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    | 0.316     | 0.324     | -1.229    | -0.187    |
| 2013 10       | -0.774       | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    | 0.316     | 0.324     | -1.229    | -0.187    |
| 2013 11       | -0.774       | 0.346     | -1.371    | 0.450     | 0.114     | -1.056    | 0.316     | 0.324     | -1.229    | -0.187    |
| 2013 12       | 0.000        | -1.754    | 0.427     | -1.130    | 0.697     | -0.692    | -1.364    | -0.774    | 0.346     | -1.371    |

|         |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2014 1  | -1.371 | 0.450  | 0.114  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  |
| 2014 2  | 0.450  | 0.114  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 |
| 2014 3  | 0.114  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  |
| 2014 4  | 0.114  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  |
| 2014 5  | 0.114  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  |
| 2014 6  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 |
| 2014 7  | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 |
| 2014 8  | 0.324  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 |
| 2014 9  | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  |
| 2014 10 | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  |
| 2014 11 | -1.229 | -0.187 | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  |
| 2014 12 | 0.000  | -1.371 | 0.450  | 0.114  | -1.056 | 0.316  | 0.324  | -1.229 | -0.187 | -0.402 |
| 2015 1  | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  |
| 2015 2  | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 |
| 2015 3  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  |
| 2015 4  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  |
| 2015 5  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  |
| 2015 6  | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 |
| 2015 7  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 |
| 2015 8  | -0.643 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 |
| 2015 9  | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 |
| 2015 10 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 |
| 2015 11 | -1.926 | 0.028  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 |
| 2015 12 | 0.000  | -0.402 | 0.882  | -1.031 | 0.291  | -1.536 | -0.643 | -1.926 | 0.028  | 0.303  |
| 2016 1  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  |

|         |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2016 2  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 |
| 2016 3  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  |
| 2016 4  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  |
| 2016 5  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  |
| 2016 6  | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 |
| 2016 7  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 |
| 2016 8  | -1.649 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 |
| 2016 9  | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 |
| 2016 10 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 |
| 2016 11 | -2.383 | -1.054 | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 |
| 2016 12 | 0.000  | 0.303  | 0.882  | -1.031 | 0.291  | -1.175 | -1.649 | -2.383 | -1.054 | 0.586  |
| 2017 1  | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 |
| 2017 2  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 |
| 2017 3  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  |
| 2017 4  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  |
| 2017 5  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  |
| 2017 6  | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  |
| 2017 7  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  |
| 2017 8  | -1.518 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  |
| 2017 9  | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 |
| 2017 10 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 |
| 2017 11 | -0.903 | -1.054 | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 |
| 2017 12 | 0.000  | 0.586  | 0.882  | -0.953 | 0.088  | -0.668 | -1.518 | -0.903 | -1.054 | -0.179 |
| 2018 1  | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  |
| 2018 2  | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 |

|         |        |        |        |        |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2018 3  | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 |
| 2018 4  | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 |
| 2018 5  | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 |
| 2018 6  | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 | -0.931 |
| 2018 7  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 | -0.931 | -0.662 |
| 2018 8  | 1.166  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 | -0.931 | -0.662 | -0.637 |
| 2018 9  | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 | -0.931 | -0.662 | -0.637 | -1.546 |
| 2018 10 | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 | -0.931 | -0.662 | -0.637 | -1.546 |
| 2018 11 | 0.095  | -0.204 | 0.825  | 0.206  | -0.014 | -0.055 | -0.931 | -0.662 | -0.637 | -1.546 |
| 2018 12 | 0.000  | -0.179 | -0.018 | -0.019 | 0.352  | 0.440  | 1.166  | 0.095  | -0.204 | 0.825  |

**Lampiran 6.** Jumlah Kejadian Titik Panas (*Hotspot*) Tahunan (2013 – 2018) di Wilayah Asean Utara

| Tahun | Jumlah Titik Panas (Hotspot) |          |        |         |         |           |
|-------|------------------------------|----------|--------|---------|---------|-----------|
|       | Myanmar                      | Thailand | Laos   | Vietnam | Kamboja | Filiphina |
| 2013  | 60894                        | 26041    | 38938  | 14414   | 29105   | 2735      |
| 2014  | 59727                        | 24835    | 42388  | 19483   | 27868   | 4084      |
| 2015  | 51602                        | 22028    | 44186  | 17747   | 33705   | 5761      |
| 2016  | 48125                        | 23702    | 40899  | 16078   | 31876   | 6621      |
| 2017  | 43633                        | 13583    | 28753  | 7904    | 17676   | 2042      |
| 2018  | 39787                        | 13312    | 30236/ | 9479    | 24119   | 2665      |

**Lampiran 7.** Jumlah Kejadian Titik Panas (Hotspot) Periode Bulanan Selama 6 Tahun (2013 – 2018) di Wilayah Asean Utara

| Bulan     | Jumlah Titik Panas ( <i>Hotspot</i> ) |          |        |         |         |           |
|-----------|---------------------------------------|----------|--------|---------|---------|-----------|
|           | Myanmar                               | Thailand | Laos   | Vietnam | Kamboja | Filiphina |
| Januari   | 7430                                  | 13677    | 4131   | 5604    | 44636   | 1617      |
| Februari  | 31105                                 | 24386    | 12648  | 11879   | 59884   | 2969      |
| Maret     | 151811                                | 48793    | 82741  | 27785   | 33451   | 8186      |
| April     | 103283                                | 24523    | 113065 | 19140   | 12632   | 8179      |
| Mei       | 6549                                  | 2480     | 11351  | 8004    | 2107    | 1640      |
| Juni      | 0                                     | 73       | 158    | 4018    | 627     | 73        |
| Juli      | 0                                     | 0        | 0      | 1394    | 213     | 0         |
| Agustus   | 0                                     | 0        | 0      | 1671    | 0       | 216       |
| September | 0                                     | 202      | 0      | 1385    | 0       | 0         |
| Oktober   | 0                                     | 335      | 0      | 1096    | 0       | 131       |
| November  | 869                                   | 1503     | 115    | 1006    | 562     | 319       |
| Desember  | 2721                                  | 7529     | 1191   | 1920    | 10237   | 578       |

**Lampiran 8.** Model Data Kejadian (EVE), Observasi (OBS) dan Prediksi (PRED) di Wilayah Myanmar

| OBS   | PRED  | EVE |
|-------|-------|-----|
| 1511  | 6355  | 1   |
| 6464  | 5537  | 2   |
| 31553 | 14465 | 3   |
| 20694 | 16023 | 4   |
| 361   | 9436  | 5   |
| 0     | 1659  | 6   |
| 0     | 3279  | 7   |
| 0     | 2244  | 8   |
| 0     | 2514  | 9   |
| 0     | 3749  | 10  |
| 87    | 3289  | 11  |
| 224   | 4873  | 12  |
| 1126  | 3418  | 13  |
| 4690  | 1570  | 14  |
| 29140 | 15816 | 15  |
| 23524 | 17482 | 16  |
| 704   | 7870  | 17  |
| 0     | 837   | 18  |
| 0     | 5898  | 19  |

|       |       |    |
|-------|-------|----|
| 0     | 1876  | 20 |
| 0     | 5182  | 21 |
| 0     | 2089  | 22 |
| 76    | 1047  | 23 |
| 467   | 3554  | 24 |
| 1578  | 8851  | 25 |
| 5913  | 6072  | 26 |
| 29646 | 22113 | 27 |
| 12028 | 16572 | 28 |
| 1739  | 2440  | 29 |
| 0     | 2004  | 30 |
| 0     | 3020  | 31 |
| 0     | 3333  | 32 |
| 0     | 81    | 33 |
| 0     | 382   | 34 |
| 213   | 1780  | 35 |
| 485   | 2432  | 36 |
| 978   | 1484  | 37 |
| 4438  | 1062  | 38 |
| 21976 | 25584 | 39 |
| 18250 | 6083  | 40 |
| 1966  | 9916  | 41 |
| 0     | 3917  | 42 |
| 0     | 3117  | 43 |
| 0     | 1322  | 44 |
| 0     | 4306  | 45 |
| 0     | 1714  | 46 |
| 101   | 2187  | 47 |
| 416   | 2546  | 48 |
| 1227  | 1936  | 49 |
| 5642  | 6584  | 50 |
| 19013 | 4776  | 51 |
| 15777 | 3172  | 52 |
| 1369  | 6617  | 53 |
| 0     | 5735  | 54 |
| 0     | 2679  | 55 |
| 0     | 1293  | 56 |
| 0     | 7195  | 57 |
| 0     | 7201  | 58 |
| 142   | 9646  | 59 |
| 463   | 583   | 60 |



|       |      |    |
|-------|------|----|
| 1010  | 1341 | 61 |
| 3958  | 2293 | 62 |
| 20483 | 5994 | 63 |
| 13010 | 4934 | 64 |
| 410   | 3692 | 65 |
| 0     | 3974 | 66 |
| 0     | 4638 | 67 |
| 0     | 3253 | 68 |
| 0     | 3368 | 69 |
| 0     | 1059 | 70 |
| 250   | 237  | 71 |
| 666   | 1884 | 72 |

**Lampiran 9.** Model Data Kejadian (EVE), Observasi (OBS) dan Prediksi (PRED) di Wilayah Thailand

| OBS   | PRED | EVE |
|-------|------|-----|
| 2613  | 4226 | 1   |
| 4622  | 3296 | 2   |
| 12883 | 5867 | 3   |
| 4166  | 3199 | 4   |
| 432   | 3201 | 5   |
| 0     | 277  | 6   |
| 0     | 1003 | 7   |
| 0     | 1214 | 8   |
| 0     | 658  | 9   |
| 133   | 1516 | 10  |
| 192   | 681  | 11  |
| 1000  | 290  | 12  |
| 2269  | 694  | 13  |
| 4091  | 1114 | 14  |
| 11682 | 6431 | 15  |
| 4287  | 4450 | 16  |
| 346   | 2813 | 17  |
| 0     | 1255 | 18  |
| 0     | 356  | 19  |
| 0     | 1811 | 20  |
| 116   | 1307 | 21  |
| 90    | 51   | 22  |
| 261   | 242  | 23  |
| 1693  | 1622 | 24  |

|      |      |    |
|------|------|----|
| 3733 | 2837 | 25 |
| 4335 | 2791 | 26 |
| 7576 | 8279 | 27 |
| 4635 | 4802 | 28 |
| 381  | 2576 | 29 |
| 0    | 783  | 30 |
| 0    | 187  | 31 |
| 0    | 60   | 32 |
| 0    | 998  | 33 |
| 0    | 1159 | 34 |
| 269  | 678  | 35 |
| 1099 | 3088 | 36 |
| 1936 | 3    | 37 |
| 4768 | 4032 | 38 |
| 7718 | 7090 | 39 |
| 6826 | 4148 | 40 |
| 877  | 2944 | 41 |
| 73   | 467  | 42 |
| 0    | 448  | 43 |
| 0    | 1034 | 44 |
| 0    | 1981 | 45 |
| 58   | 1774 | 46 |
| 309  | 1407 | 47 |
| 1137 | 480  | 48 |
| 1403 | 459  | 49 |
| 3635 | 2952 | 50 |
| 5215 | 1787 | 51 |
| 1877 | 2048 | 52 |
| 242  | 1931 | 53 |
| 0    | 2073 | 54 |
| 0    | 433  | 55 |
| 0    | 1889 | 56 |
| 86   | 1786 | 57 |
| 0    | 3057 | 58 |
| 128  | 2780 | 59 |
| 997  | 1938 | 60 |
| 1723 | 977  | 61 |
| 2935 | 333  | 62 |
| 3719 | 105  | 63 |
| 2732 | 1759 | 64 |
| 202  | 716  | 65 |

|      |      |    |
|------|------|----|
| 0    | 2849 | 66 |
| 0    | 1098 | 67 |
| 0    | 1773 | 68 |
| 0    | 826  | 69 |
| 54   | 429  | 70 |
| 344  | 535  | 71 |
| 1603 | 72   | 72 |

**Lampiran 10.** Model Data Kejadian (EVE), Observasi (OBS) dan Prediksi (PRED) di Wilayah Laos

| OBS   | PRED | EVE |
|-------|------|-----|
| 978   | 3617 | 1   |
| 2786  | 6274 | 2   |
| 19017 | 5415 | 3   |
| 15258 | 5216 | 4   |
| 753   | 4609 | 5   |
| 0     | 1057 | 6   |
| 0     | 6616 | 7   |
| 0     | 1160 | 8   |
| 0     | 2138 | 9   |
| 0     | 2076 | 10  |
| 0     | 1840 | 11  |
| 146   | 28   | 12  |
| 602   | 825  | 13  |
| 2145  | 1307 | 14  |
| 19373 | 6678 | 15  |
| 19364 | 6580 | 16  |
| 655   | 6108 | 17  |
| 0     | 2165 | 18  |
| 0     | 1865 | 19  |
| 0     | 1103 | 20  |
| 0     | 4628 | 21  |
| 0     | 4663 | 22  |
| 0     | 3765 | 23  |
| 249   | 3217 | 24  |
| 981   | 4338 | 25  |
| 2002  | 3037 | 26  |
| 16254 | 8978 | 27  |
| 22917 | 7780 | 28  |
| 1859  | 7904 | 29  |

|       |       |    |
|-------|-------|----|
| 0     | 14    | 30 |
| 0     | 2346  | 31 |
| 0     | 2451  | 32 |
| 0     | 239   | 33 |
| 0     | 2764  | 34 |
| 0     | 2275  | 35 |
| 173   | 2425  | 36 |
| 423   | 1036  | 37 |
| 1706  | 4723  | 38 |
| 11376 | 14998 | 39 |
| 23905 | 12223 | 40 |
| 3223  | 11954 | 41 |
| 158   | 3108  | 42 |
| 0     | 1133  | 43 |
| 0     | 309   | 44 |
| 0     | 5430  | 45 |
| 0     | 5710  | 46 |
| 0     | 5890  | 47 |
| 108   | 2013  | 48 |
| 311   | 5696  | 49 |
| 1710  | 7521  | 50 |
| 7457  | 5615  | 51 |
| 15228 | 4785  | 52 |
| 3769  | 4151  | 53 |
| 0     | 4203  | 54 |
| 0     | 1180  | 55 |
| 0     | 1102  | 56 |
| 0     | 822   | 57 |
| 0     | 2025  | 58 |
| 52    | 2690  | 59 |
| 226   | 2474  | 60 |
| 836   | 2709  | 61 |
| 2299  | 1386  | 62 |
| 9264  | 4294  | 63 |
| 16393 | 3515  | 64 |
| 1092  | 3477  | 65 |
| 0     | 3357  | 66 |
| 0     | 409   | 67 |
| 0     | 1250  | 68 |
| 0     | 1039  | 69 |
| 0     | 1561  | 70 |

|     |      |    |
|-----|------|----|
| 63  | 286  | 71 |
| 289 | 2540 | 72 |

**Lampiran 11.** Model Data Kejadian (EVE), Observasi (OBS) dan Prediksi (PRED) di Wilayah Vietnam

| <b>OBS</b> | <b>PRED</b> | <b>EVE</b> |
|------------|-------------|------------|
| 964        | 1484        | 1          |
| 1935       | 382         | 2          |
| 5523       | 1626        | 3          |
| 2399       | 1626        | 4          |
| 1236       | 1626        | 5          |
| 827        | 523         | 6          |
| 231        | 705         | 7          |
| 246        | 370         | 8          |
| 127        | 692         | 9          |
| 253        | 692         | 10         |
| 165        | 692         | 11         |
| 508        | 704         | 12         |
| 1558       | 618         | 13         |
| 3423       | 666         | 14         |
| 7801       | 2511        | 15         |
| 3518       | 2511        | 16         |
| 1477       | 2511        | 17         |
| 393        | 793         | 18         |
| 177        | 1182        | 19         |
| 272        | 1185        | 20         |
| 178        | 1050        | 21         |
| 139        | 1050        | 22         |
| 247        | 1050        | 23         |
| 300        | 590         | 24         |
| 1350       | 1948        | 25         |
| 2201       | 1416        | 26         |
| 5169       | 3479        | 27         |
| 4102       | 3479        | 28         |
| 1894       | 3479        | 29         |
| 787        | 804         | 30         |
| 370        | 517         | 31         |
| 530        | 945         | 32         |
| 467        | 268         | 33         |

|      |      |    |
|------|------|----|
| 289  | 268  | 34 |
| 174  | 268  | 35 |
| 414  | 1014 | 36 |
| 1020 | 721  | 37 |
| 1899 | 2726 | 38 |
| 4784 | 4114 | 39 |
| 4573 | 4114 | 40 |
| 1364 | 4114 | 41 |
| 1164 | 810  | 42 |
| 369  | 339  | 43 |
| 266  | 608  | 44 |
| 165  | 403  | 45 |
| 130  | 403  | 46 |
| 133  | 403  | 47 |
| 211  | 1114 | 48 |
| 220  | 756  | 49 |
| 1107 | 1698 | 50 |
| 1875 | 1445 | 51 |
| 2189 | 1445 | 52 |
| 1124 | 1445 | 53 |
| 570  | 1552 | 54 |
| 82   | 980  | 55 |
| 217  | 822  | 56 |
| 177  | 833  | 57 |
| 72   | 833  | 58 |
| 68   | 833  | 59 |
| 203  | 799  | 60 |
| 492  | 552  | 61 |
| 1314 | 767  | 62 |
| 2633 | 719  | 63 |
| 2359 | 719  | 64 |
| 909  | 719  | 65 |
| 277  | 948  | 66 |
| 165  | 239  | 67 |
| 140  | 798  | 68 |
| 271  | 806  | 69 |
| 213  | 806  | 70 |
| 219  | 806  | 71 |
| 284  | 523  | 72 |

**Lampiran 12.** Model Data Kejadian (EVE), Observasi (OBS) dan Prediksi (PRED) di Wilayah Kamboja

| OBS   | PRED  | EVE |
|-------|-------|-----|
| 10077 | 7592  | 1   |
| 10150 | 6589  | 2   |
| 5147  | 3347  | 3   |
| 1710  | 1676  | 4   |
| 510   | 588   | 5   |
| 177   | 1977  | 6   |
| 0     | 599   | 7   |
| 0     | 956   | 8   |
| 0     | 840   | 9   |
| 0     | 1121  | 10  |
| 161   | 377   | 11  |
| 1173  | 640   | 12  |
| 6560  | 4516  | 13  |
| 10642 | 8937  | 14  |
| 7533  | 5421  | 15  |
| 1201  | 3663  | 16  |
| 338   | 2546  | 17  |
| 73    | 1829  | 18  |
| 0     | 1897  | 19  |
| 0     | 239   | 20  |
| 0     | 1716  | 21  |
| 0     | 241   | 22  |
| 133   | 122   | 23  |
| 1388  | 3226  | 24  |
| 11562 | 9683  | 25  |
| 9587  | 10917 | 26  |
| 6508  | 4430  | 27  |
| 2428  | 2390  | 28  |
| 523   | 5385  | 29  |
| 195   | 964   | 30  |
| 130   | 1269  | 31  |
| 0     | 1324  | 32  |
| 0     | 714   | 33  |
| 0     | 548   | 34  |
| 96    | 257   | 35  |
| 2676  | 224   | 36  |

|       |       |    |
|-------|-------|----|
| 8001  | 7070  | 37 |
| 10774 | 11487 | 38 |
| 6614  | 4198  | 39 |
| 5579  | 5346  | 40 |
| 549   | 3867  | 41 |
| 182   | 182   | 42 |
| 0     | 167   | 43 |
| 0     | 155   | 44 |
| 0     | 110   | 45 |
| 0     | 1079  | 46 |
| 0     | 1072  | 47 |
| 177   | 1028  | 48 |
| 2837  | 4657  | 49 |
| 9231  | 5406  | 50 |
| 3606  | 3134  | 51 |
| 867   | 2799  | 52 |
| 88    | 915   | 53 |
| 0     | 1282  | 54 |
| 0     | 847   | 55 |
| 0     | 1233  | 56 |
| 0     | 3269  | 57 |
| 0     | 4056  | 58 |
| 0     | 2022  | 59 |
| 1047  | 1206  | 60 |
| 5599  | 7203  | 61 |
| 9500  | 4149  | 62 |
| 4043  | 4426  | 63 |
| 847   | 1344  | 64 |
| 99    | 129   | 65 |
| 0     | 486   | 66 |
| 83    | 11    | 67 |
| 0     | 1935  | 68 |
| 0     | 378   | 69 |
| 0     | 551   | 70 |
| 172   | 270   | 71 |
| 3776  | 1300  | 72 |



**Lampiran 13.** Model Data Kejadian (EVE), Observasi (OBS) dan Prediksi (PRED) di Wilayah Filipina

| OBS  | PRED | EVE |
|------|------|-----|
| 314  | 463  | 1   |
| 467  | 13   | 2   |
| 886  | 523  | 3   |
| 761  | 523  | 4   |
| 197  | 523  | 5   |
| 0    | 44   | 6   |
| 0    | 148  | 7   |
| 0    | 22   | 8   |
| 0    | 119  | 9   |
| 0    | 119  | 10  |
| 0    | 119  | 11  |
| 110  | 114  | 12  |
| 264  | 84   | 13  |
| 538  | 104  | 14  |
| 1162 | 900  | 15  |
| 1500 | 900  | 16  |
| 259  | 900  | 17  |
| 0    | 166  | 18  |
| 0    | 332  | 19  |
| 103  | 312  | 20  |
| 0    | 287  | 21  |
| 0    | 287  | 22  |
| 105  | 287  | 23  |
| 153  | 95   | 24  |
| 281  | 670  | 25  |
| 606  | 433  | 26  |
| 2566 | 1316 | 27  |
| 1601 | 1316 | 28  |
| 393  | 1316 | 29  |
| 73   | 167  | 30  |
| 0    | 42   | 31  |
| 0    | 211  | 32  |
| 0    | 40   | 33  |
| 0    | 40   | 34  |
| 106  | 40   | 35  |
| 135  | 250  | 36  |
| 475  | 152  | 37  |

|      |      |    |
|------|------|----|
| 852  | 997  | 38 |
| 2426 | 1589 | 39 |
| 2470 | 1589 | 40 |
| 344  | 1589 | 41 |
| 0    | 187  | 42 |
| 0    | 37   | 43 |
| 54   | 71   | 44 |
| 0    | 15   | 45 |
| 0    | 15   | 46 |
| 0    | 15   | 47 |
| 0    | 292  | 48 |
| 128  | 158  | 49 |
| 148  | 565  | 50 |
| 505  | 450  | 51 |
| 977  | 450  | 52 |
| 220  | 450  | 53 |
| 0    | 497  | 54 |
| 0    | 244  | 55 |
| 0    | 175  | 56 |
| 0    | 180  | 57 |
| 0    | 180  | 58 |
| 0    | 180  | 59 |
| 64   | 164  | 60 |
| 155  | 55   | 61 |
| 358  | 508  | 62 |
| 641  | 130  | 63 |
| 870  | 130  | 64 |
| 227  | 130  | 65 |
| 0    | 231  | 66 |
| 0    | 82   | 67 |
| 59   | 161  | 68 |
| 0    | 168  | 69 |
| 131  | 168  | 70 |
| 108  | 168  | 71 |
| 116  | 44   | 72 |