

DAFTAR PUSTAKA

- Abraham, J. P., M. Baringer, N. L. Bindoff, et al., 2013: A review of global ocean temperature observations: Implications for ocean heat content estimates and climate change, *Rev. Geophys.*, **51**, 450–483.
- Andayani, N. N., Aqil, M., & Syuryawati. (2016). Aplikasi Model Regresi Stepwise dalam Penentuan Hasil Jagung Putih. *Jurnal Informatika Pertanian*, 25(1), 21-28.
- Andayani, N. N., Aqil, M., & Syuryawati. (2016). Aplikasi Model Regresi Stepwise dalam Penentuan Hasil Jagung Putih. *Jurnal Informatika Pertanian*, 25(1), 21-28.
- Andika. (2013). Verifikasi Prediksi ENSO Musiman Model Dinamik Operasional International Research Institute (IRI) [Skripsi]. Makassar: FMIPA Unhas.
- Behera, S. K., Luo, J.J., Masson, S., Delecluse, P., Gualdi, S., Navarra, A., and Yamagata, T. 2005. Paramount Impact of the Indian Ocean Dipole on the East African Short Rains: A CGCM Study, *J. Climate*, 18, 4514-4530.
- Bureau of Meteorology, 2008. *El Niño Southern Oscillation (ENSO)*. www.bom.gov.au diakses pada 10 November 2018.
- Cahya, C. N., Setyohadi, D., & Surinati, D. (2016). Pengaruh parameter oseanografi terhadap distribusi ikan. *Oseana*, 61(4), 1-14.
- Deckker, P. d. (2016). The Indo-Pacific Warm Pool: Critical to world oceanography and world climate. *Geoscience Letters*, 3:20, 1-12. DOI 10.1186/s40562-016-0054-3
- Diaz, H. F. and Markgraf, V. El Nino. *Historical and Paleo- climatic Aspects of the Southern Oscillation*, Cambridge Univ. Press, New York, 1993.
- Domingues, C. M., J. A. Church, N. J. White, et al., 2008: Improved estimates of upper-ocean warming and multi-decadal sea-level rise, *Nature*, **453**, doi:10.1038/nature07080.
- Fahrmeir, L., Kneib, T., Lang, S., & Marx, B. (2013). Regression: Models, Methods and Applications (1 ed.). Berlin: Springer-Verlag Berlin Heidelberg. doi 10.1007/978-3-642-34333-9.
- Fitriansyah, I., & Ramli, M. STUDI KELIMPAHAN BENIH LOBSTER (PANULIRUS spp.) BERDASARKAN KARAKTERISTIK OSEANOGRAFI DI PERAIRAN DESA RANOOHA RAYA KECAMATAN MORAMO KABUPATEN KONAWE SELATAN. *Jurnal Sapa Laut (Jurnal Ilmu Kelautan)*, 5(4), 281-289.

- Gordon, A. L. (2005). Oceanography of Indonesian Seas and Their Troghflow. *Oceanography*, 18, 14-27.
- Gordon, A., & Fine, R. (1996). Pathways of water between the Pacific and Indian Oceans in The Indonesian Seas. *Nature*, 379, 146-149.
- Halide, H. (2009). Esensi Prediksi Makassar. Makassar: Pustaka Pena Press Makassar.
- Halide, H. (2009). Implementing Predictive Models for Domestic DecisionMaking Against Dengue Haemorrhagic Fever Epidemics. *Dengue Bulletin*, 33.
- Halide, H. (2016). Kebakaran Lahan Liar: Prediksi dan Verifikasinya. Makassar: CV Menara Intan.
- Hasanudin, M. (1998). Arus Lintas Indonesia (ARLINDO). *J. Oseana*, 23(2), 1-9.
- Indonesia, W. W. F. (2015). Perikanan Lobster Laut—Panduan Penangkapan dan Penanganan. *Sustainable Seafood*.
- Kunarso, Hadi, S., Ningsih, N. S., & Baskoro, M. S. (2012). Perubahan Kedalaman dan Ketebalan Termoklin pada Variasi Kejadian ENSO, IOD dan Monsun di Perairan Selatan Jawa Hingga Pulau Timor. *Ilmu Kelautan Undip*, 17(2), 87-98.
- Kurniawan, R. (2017). Dinamika Upwelling Menggunakan Data Penginderaan Jauh dan Data Model Indeso di Laut Flores [Skripsi]. Makassar: Universitas Hasanuddin.
- Kutner, M., Nachtsheim, C., & Neter, J. (2004). Applied Linear Regression Models Fourth Edition. New York: McGrawhill/Irwin.
- Levitus, S., J. I. Antonov, T. P. Boyer, et al., 2012: World ocean heat content and thermosteric sea level change (0–2000 m), 1955–2010, *Geophys. Res. Lett.*, 39, L10603, doi:10.1029/2012GL051106.
- Mahagnyana, Limaran, G. D., & Fadlan, A. (2017). Pengaruh Monsun Terhadap Kesuburan Perairan Utara Jawa Dengan Menggunakan Satelite Aqua Modis. *Unnes Physics Journal*, 6(1).
- NOAA (National Oceanography and Atmospheric Administrations). (n.d.). Pacific Marine Environmental Laboratory. Retrieved March 29, 2021, from National Oceanic & Atmospheric Administration: <https://www.pmel.noaa.gov/elnino/faq>
- NOAA. (2020, December 3). NOAA Climate.gov. Retrieved July 3, 2021, from <https://www.climate.gov/news-features/featured-images/warm-pool-indo-pacific-ocean-has-almost-doubled-size-changing-globa>

- Pujilestari, S., Dwidayati, N., & Sugiman. (2017). Pemilihan Model Regresi Linier Berganda Terbaik Pada Kasus Multikolinearitas Metode Principal Component Analysis (PCA) dan Metode Stepwise. *Unnes Journal of Math*, 7(1).
- Pujilestari, S., Dwidayati, N., & Sugiman. (2017). Pemilihan Model Regresi Linier Berganda Terbaik Pada Kasus Multikolinearitas Metode Principal Component Analysis (PCA) dan Metode Stepwise. *Unnes Journal of Math*, 7(1).
- Putra, D. P., Amin, T., & Asri, D. P. (2017). Analisis Pengaruh IOD dan ENSO Terhadap Distribusi Klorofil-a pada Periode Upwelling di Perairan Sumbawa Selatan. *Jurnal Klimatologi Klimatologi dan Geofisika*, 4(2).
- Setyono, D. E. D. (2006). Budidaya pembesaran udang karang (*Panulirus spp.*). *Oseana*, 31(4), 39-48.
- Sofan, P., Febrianti, N., & Khomarudin, M. R. (2014). Mewaspadai Fenomena Iklim Ekstrim El Nino Dan Osilasi Selatan (Enso) Pada Musim Kemarau 2014 Di Indonesia Berdasarkan Data Satelit Penginderaan Jauh. *Media Dirgantara*, 9(2).
- Syafrizal, M., Halide, H., & Hasanuddin. (2018). Memodelkan Pengaruh Faktor Global Atmosfir dan Oseanik Terhadap Tangkapan Cakalang (K. pelamis) di Teluk Bone. Seminar Nasional Geofisika Unhas. Makassar: Departemen Geofisika Unhas.
- Verianta, M. (2016). *Jenis Lobster Di Pantai Baron Gunungkidul, Yogyakarta* (Doctoral dissertation, UAJY).
- Walpole, R., Myers, R., Myers, S., & ye, K. (2012). *Probability & Statistics for Engineer & Scientist* (9 Edition). USA: Pearson Education, Inc. .
- Wilks, D. (2006). *Statisrical Methods in The Atmospheric Sciences* (2 ed.). USA: Elsevier.
- Wyrki, K. (1987). Indonesian Throughflow and The Associated Pressure Gradient. *Journal of Geophysical Research*, 92, 12941-12946.

L

A

M

P

I

R

A

N

Lampiran 1: Data Observasi Tangkapan Lobster di Perairan Indonesia (dalam ton)

Tahun	Jumlah Tangkapan
1985	106992
1986	115860
1987	124752
1988	146970
1989	138135
1990	142766
1991	144746
1992	160572
1993	156811
1994	168347
1995	167635
1996	180469
1997	173382
1998	176778
1999	183527
2000	192813
2001	257523
2002	229211
2003	239799
2004	240225
2005	193561
2006	218077
2007	245360
2008	231883
2009	223122
2010	251999
2011	248628
2012	248888
2013	262776
2014	273679

2015	299967
2016	353660
2017	410439
2018	403092

Lampiran 2: Data Prediktor Indeks ENSO

Tahun	DJF	MAM	JJA	SON
1980	0.59	0.38	0.25	0.02
1981	-0.26	-0.37	-0.29	-0.13
1982	-0.05	0.47	0.79	1.96
1983	2.18	1.29	0.32	-0.81
1984	-0.60	-0.43	-0.30	-0.56
1985	-1.04	-0.78	-0.49	-0.35
1986	-0.49	-0.20	0.22	0.94
1987	1.23	0.94	1.51	1.49
1988	0.81	-0.31	-1.29	-1.48
1989	-1.69	-0.83	-0.31	-0.22
1990	0.14	0.29	0.33	0.35
1991	0.41	0.26	0.73	0.79
1992	1.71	1.29	0.37	-0.25
1993	0.09	0.67	0.32	0.11
1994	0.06	0.31	0.44	0.74
1995	0.96	0.30	-0.24	-0.97
1996	-0.90	-0.39	-0.27	-0.40
1997	-0.50	0.28	1.60	2.33
1998	2.24	0.99	-0.78	-1.35
1999	-1.55	-0.97	-1.10	-1.26
2000	-1.67	-0.81	-0.55	-0.63
2001	-0.68	-0.34	-0.07	-0.29
2002	-0.15	0.20	0.79	1.21
2003	0.92	-0.04	0.08	0.29
2004	0.37	0.17	0.47	0.67
2005	0.64	0.42	-0.06	-0.28
2006	-0.85	-0.37	0.11	0.76
2007	0.66	-0.32	-0.56	-1.34
2008	-1.64	-1.01	-0.37	-0.35
2009	-0.85	-0.33	0.45	1.01
2010	1.50	0.35	-1.05	-1.64
2011	-1.42	-0.73	-0.48	-1.01
2012	-0.86	-0.47	0.25	0.26
2013	-0.43	-0.30	-0.40	-0.17
2014	-0.42	0.04	0.05	0.49
2015	0.55	0.70	1.52	2.42
2016	2.48	0.94	-0.36	-0.69
2017	-0.34	0.20	0.14	-0.65
2018	-0.92	-0.50	0.09	0.76

Keterangan:

Biru : Kejadian La Nina

Merah : Kejadian El Nino

Lampiran 3: Data Prediktor Indeks IOD

Tahun	DJF	MAM	JJA	SON
1980	-0.08	-0.11	-0.51	-0.48
1981	-0.16	0.12	-0.37	-0.43
1982	0.17	0.22	0.37	0.58
1983	-0.34	-0.37	0.52	-0.10
1984	-0.09	-0.04	-0.30	-0.43
1985	-0.39	-0.24	-0.39	-0.09
1986	-0.15	-0.13	-0.30	-0.02
1987	-0.03	0.04	0.31	0.33
1988	0.19	-0.23	-0.13	-0.24
1989	0.02	-0.38	-0.41	-0.20
1990	-0.11	-0.21	-0.29	-0.08
1991	0.06	0.30	0.30	0.17
1992	-0.14	-0.51	-0.60	-0.49
1993	-0.09	-0.08	-0.08	-0.03
1994	-0.04	0.45	0.71	0.64
1995	0.26	-0.09	-0.02	-0.15
1996	0.08	-0.15	-0.47	-0.74
1997	-0.08	0.13	0.50	1.10
1998	0.67	0.13	-0.16	-0.50
1999	-0.10	0.06	0.10	0.01
2000	-0.02	0.22	0.17	-0.05
2001	-0.16	0.17	0.00	-0.18
2002	-0.03	-0.14	-0.11	0.39
2003	-0.06	-0.02	0.23	-0.03
2004	0.19	-0.10	-0.16	0.04
2005	-0.20	-0.04	-0.19	-0.28
2006	-0.18	-0.06	0.18	0.63
2007	0.25	0.25	0.21	0.22
2008	0.01	0.13	0.30	0.13
2009	0.12	0.25	0.04	0.07
2010	0.23	0.35	0.04	-0.27
2011	0.15	0.23	0.32	0.43
2012	0.02	-0.12	0.51	0.28
2013	0.20	-0.16	-0.18	0.04
2014	0.06	-0.02	-0.15	0.13
2015	-0.06	0.08	0.47	0.50
2016	0.21	0.09	-0.44	-0.27
2017	-0.03	0.55	0.54	0.24
2018	0.11	0.06	0.22	0.73

Lampiran 4: Data Prediktor Indeks OHC Pacific

Tahun	DJF	MAM	JJA	SON
1980	0.38	0.38	0.64	1.13
1981	0.92	0.68	0.18	0.26
1982	-0.07	-0.98	-2.69	-2.10
1983	-3.11	-2.21	-3.34	-2.99
1984	-0.82	-0.52	-0.90	-0.75
1985	-0.06	0.01	0.08	-1.62
1986	-1.50	-0.11	-0.81	-1.78
1987	-1.78	-1.26	-2.12	-2.16
1988	-0.83	0.27	0.89	1.14
1989	0.59	0.59	0.11	-0.44
1990	-0.42	-0.20	-0.49	0.03
1991	0.34	0.24	1.29	1.34
1992	0.85	0.15	0.11	0.01
1993	0.36	0.47	-0.03	-0.23
1994	0.92	0.44	0.86	0.58
1995	-0.10	-0.18	-0.54	0.65
1996	2.34	3.23	2.71	2.50
1997	2.89	1.64	2.12	1.53
1998	0.26	1.26	1.36	1.13
1999	2.08	1.25	1.45	3.27
2000	2.99	1.76	2.25	2.79
2001	1.96	2.43	1.83	1.97
2002	2.26	2.25	2.55	2.82
2003	3.26	4.03	4.69	4.74
2004	4.57	4.26	4.36	4.09
2005	3.25	3.10	3.21	3.27
2006	4.33	4.36	4.32	4.15
2007	3.63	2.96	2.95	2.98
2008	3.86	3.75	3.58	3.73
2009	4.31	3.87	3.89	3.61
2010	3.70	2.93	2.32	2.09
2011	2.49	2.14	2.80	3.43
2012	4.37	3.58	3.20	3.01
2013	3.62	3.85	3.64	3.74
2014	4.65	4.57	4.09	4.18
2015	5.43	5.58	5.25	4.34

2016	4.17	3.94	4.79	5.32
2017	6.36	6.77	6.23	5.90
2018	6.42	6.38	6.28	6.63

Lampiran 5: Data Prediktor Indeks OHC Hindia

Tahun	DJF	MAM	JJA	SON
1980	0.88	1.31	-0.09	0.10
1981	0.68	0.57	-0.25	0.10
1982	0.26	0.16	-0.20	0.50
1983	0.51	1.24	0.08	-0.62
1984	0.15	0.03	-0.41	0.46
1985	0.78	1.13	1.06	0.18
1986	0.19	0.63	0.37	-0.61
1987	0.93	0.32	0.04	0.61
1988	0.46	-0.03	0.52	1.34
1989	1.02	0.45	0.44	0.25
1990	1.10	0.80	0.08	-0.17
1991	0.17	0.81	1.00	0.65
1992	-0.04	-0.63	-0.68	-0.95
1993	-0.57	-0.45	-0.47	-1.10
1994	-0.72	-0.33	0.18	0.83
1995	1.14	0.09	0.16	0.56
1996	-0.07	0.43	-0.94	-1.16
1997	0.11	0.83	-0.21	0.86
1998	0.94	0.90	0.86	1.32
1999	1.28	1.39	0.85	0.32
2000	0.06	0.73	1.79	1.19
2001	-0.25	-1.05	0.21	1.30
2002	1.30	1.10	0.76	0.75
2003	1.11	1.28	1.08	1.03
2004	1.66	1.56	1.18	1.21
2005	0.77	0.34	-0.03	0.68
2006	0.81	0.62	1.16	1.76
2007	2.13	1.95	2.07	2.06
2008	1.84	1.83	2.33	1.93
2009	1.77	1.95	2.30	2.61
2010	2.87	2.92	3.10	3.76
2011	3.63	3.29	3.56	3.67
2012	3.58	3.22	3.22	3.71
2013	4.15	3.50	3.13	3.89
2014	4.09	3.61	3.41	3.94
2015	4.10	3.92	4.01	4.88
2016	4.84	3.91	2.78	3.00
2017	3.09	2.96	2.95	3.46

2018	3.13	2.68	2.99	3.65
------	------	------	------	------

Lampiran 6: Data Prediktor Rata- Rata Nilai SST Perairan Indonesia

Tahun	DJF	MAM	JJA	SON
1980	28.50	29.18	28.64	28.30
1981	28.40	29.12	28.68	28.30
1982	28.38	28.98	28.49	27.99
1983	29.07	29.73	28.96	28.14
1984	28.44	28.95	28.53	28.09
1985	28.61	29.06	28.46	27.95
1986	28.38	28.84	28.49	28.01
1987	28.69	29.68	28.85	28.35
1988	28.90	29.56	28.81	28.43
1989	28.52	28.99	28.50	28.49
1990	28.76	29.46	28.68	28.42
1991	28.89	29.37	28.89	28.18
1992	28.64	29.56	28.97	28.31
1993	28.40	29.22	28.46	28.26
1994	28.67	28.92	28.16	27.54
1995	28.50	29.26	29.04	28.45
1996	28.52	29.42	28.89	28.41
1997	28.38	29.32	28.71	27.87
1998	28.85	30.02	29.21	28.51
1999	28.70	29.11	28.73	28.33
2000	28.58	29.02	28.74	28.42
2001	28.56	29.39	29.04	28.48
2002	29.14	29.80	29.12	28.42
2003	29.11	29.64	28.91	28.41
2004	28.96	29.52	28.89	28.47
2005	29.15	29.79	29.09	28.51
2006	28.77	29.43	28.94	27.94
2007	28.89	29.41	28.95	28.17
2008	28.84	28.95	28.55	28.43
2009	28.67	29.35	29.26	28.69
2010	29.19	29.84	29.23	28.77
2011	28.64	29.26	28.97	28.42
2012	28.93	29.37	28.89	28.43
2013	29.00	29.69	28.88	28.69
2014	28.95	29.78	29.26	28.62
2015	28.92	29.76	29.36	28.74
2016	29.55	30.32	29.26	28.66
2017	28.75	29.26	28.93	28.49

2018	28.68	29.46	28.92	28.23
------	-------	-------	-------	-------

Lampiran 7: Data Prediktor Rata-Rata Nilai Salinitas Perairan Indonesia

Tahun	DJF	MAM	JJA	SON
1980	0.0345281	0.034521	0.034506	0.034499
1981	0.0347255	0.0347326	0.034738	0.034743
1982	0.0347387	0.0347082	0.034702	0.034691
1983	0.0346767	0.0346787	0.034686	0.03469
1984	0.034696	0.0347021	0.03471	0.034681
1985	0.0346746	0.0346787	0.03468	0.034684
1986	0.0346746	0.034579	0.034599	0.034608
1987	0.0345617	0.03452	0.034532	0.034556
1988	0.0345342	0.034519	0.034533	0.034542
1989	0.0345383	0.0345393	0.034545	0.034543
1990	0.0345454	0.0345515	0.034552	0.034543
1991	0.0345383	0.0345292	0.034526	0.034527
1992	0.034522	0.0345251	0.034526	0.034533
1993	0.0345281	0.0345108	0.034498	0.03449
1994	0.0344986	0.0345108	0.034538	0.034544
1995	0.0345281	0.034521	0.034506	0.034499
1996	0.0344956	0.0344885	0.034488	0.034501
1997	0.0345139	0.0345037	0.03454	0.03453
1998	0.0345159	0.0345159	0.034531	0.034522
1999	0.0344996	0.0345088	0.034524	0.034525
2000	0.034522	0.0345271	0.034532	0.034529
2001	0.0345281	0.0345241	0.034539	0.034532
2002	0.0345454	0.0345576	0.034558	0.034556
2003	0.0345546	0.0345525	0.034553	0.03452
2004	0.0345322	0.0345373	0.034528	0.034515
2005	0.0345068	0.0345129	0.034527	0.034536
2006	0.0345068	0.0344895	0.034475	0.034472
2007	0.0344793	0.0344834	0.034472	0.034475
2008	0.0344824	0.0344813	0.034494	0.034504
2009	0.0345058	0.0344956	0.034493	0.034507
2010	0.0345261	0.0345139	0.034503	0.034512
2011	0.0345424	0.0345251	0.034505	0.034505
2012	0.0345108	0.0345088	0.034511	0.034531
2013	0.0345383	0.0345332	0.034542	0.03456
2014	0.0345556	0.0345597	0.034554	0.034543
2015	0.0345393	0.0345475	0.034542	0.034513
2016	0.0344976	0.0345047	0.034528	0.034531
2017	0.0345271	0.0345292	0.034527	0.034521

2018	0.0345251	0.0345037	0.034507	0.034513
------	-----------	-----------	----------	----------

Lampiran 8: Data Prediktor SSN

Tahun	DJF	MAM	JJA	SON
1980	231.7	221.9	202.4	220.8
1981	197.8	205.5	193.1	215.8
1982	192.0	170.2	155.0	143.1
1983	119.2	110.3	112.1	62.7
1984	76.9	101.3	51.9	20.6
1985	20.0	23.2	26.1	14.7
1986	15.5	17.4	9.5	20.2
1987	6.3	34.2	35.0	51.5
1988	48.3	91.4	131.7	152.0
1989	216.7	177.4	232.3	225.2
1990	203.5	185.5	198.8	182.4
1991	210.9	187.2	235.2	175.2
1992	213.9	129.2	101.5	119.0
1993	110.4	91.9	70.8	50.2
1994	69.4	34.9	41.5	45.7
1995	36.9	29.1	20.4	20.1
1996	12.0	9.0	16.0	9.5
1997	10.8	20.2	23.1	47.6
1998	50.1	75.5	102.8	102.6
1999	101.1	115.6	174.3	154.4
2000	138.5	191.7	204.3	151.9
2001	135.8	156.5	162.5	203.0
2002	189.4	173.8	155.1	162.1
2003	114.8	95.1	120.8	86.4
2004	69.1	68.9	73.3	64.4
2005	40.2	46.7	59.9	26.0
2006	28.6	34.9	22.5	24.8
2007	23.3	10.7	15.4	2.8
2008	8.1	7.9	2.0	4.0
2009	1.2	1.6	3.9	7.2
2010	21.4	16.1	24.5	34.8
2011	33.4	71.0	62.1	128.3
2012	83.8	89.7	95.6	85.9
2013	71.3	101.9	84.9	94.3
2014	129.1	117.9	103.3	107.9
2015	90.9	72.9	65.6	68.1
2016	57.1	47.8	34.4	33.1
2017	23.7	23.0	23.2	20.9
2018	8.6	8.2	8.6	4.7

Lampiran 9: Data Prediktor Monsoon

Tahun	Timur	Barat
	JJAS	DJFM
1980	0.108	0.129
1981	-0.140	-1.289
1982	-0.229	-1.199
1983	-0.629	-0.276
1984	-0.538	-0.706
1985	0.103	-0.699
1986	-0.351	-1.070
1987	-1.775	-0.234
1988	-0.425	-0.394
1989	-0.740	0.539
1990	0.799	-0.591
1991	0.655	0.045
1992	-1.102	-1.375
1993	0.282	-0.967
1994	1.331	-0.513
1995	-0.669	0.635
1996	-0.138	-1.273
1997	-0.240	0.434
1998	-0.140	-0.083
1999	0.571	0.216
2000	0.085	-0.024
2001	0.313	-1.255
2002	-0.287	0.384
2003	0.249	-1.018
2004	0.193	-0.116
2005	0.922	-1.074
2006	0.958	0.384
2007	1.137	-0.332
2008	-0.066	-0.892
2009	-1.901	0.841
2010	-1.793	-0.702
2011	-0.887	-0.741
2012	-0.812	-0.750
2013	-0.243	-0.153
2014	-1.416	-1.100
2015	-2.215	0.388
2016	-0.730	0.063
2017	0.559	0.387

2018	-1.354	-0.769
------	--------	--------

Lampiran 10: Data Observasi dan Data Prediksi Lobster (dalam ton)

Tahun	prediksi	observasi
1985	106531	106992
1986	119656	115860
1987	124005	124752
1988	163217	146970
1989	142905	138135
1990	136821	142766
1991	151554	144746
1992	152434	160572
1993	158702	156811
1994	176256	168347
1995	173198	167635
1996	176945	180469
1997	164283	173382
1998	176809	176778
1999	189326	183527
2000	178895	192813
2001	233627	257523
2002	195326	229211
2003	234966	239799
2004	238937	240225
2005	223623	193561
2006	238242	218077
2007	240429	245360
2008	247096	231883
2009	251343	223122
2010	224904	251999
2011	248412	248628
2013	231570	248888
2014	264593	262776
2015	293596	273679
2016	313513	299967
2017	356582	353660
2018	412966	410439