

DAFTAR PUSTAKA

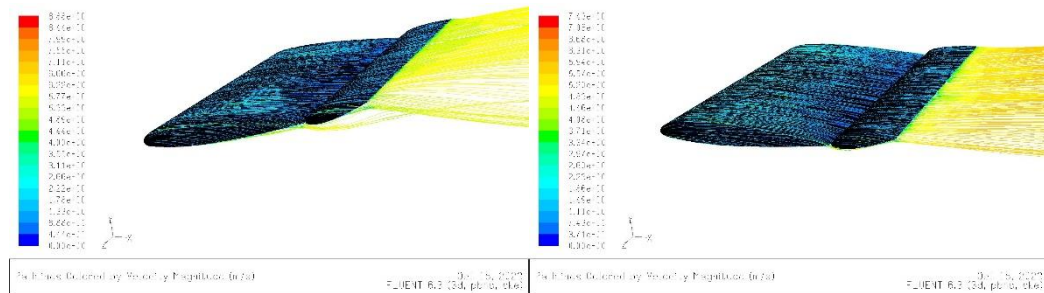
- Anderson, J. D. Jr. (2012). *Aircraft Performance and Design*. New Delhi : Tata Mc-Graw Hill.
- Anderson, J. D. Jr. (2017). *Fundamental of Aerodynamics Sixth Edition*. New York : Mc-Graw Hill Education.
- Cengel, Y. A., & Cimbala, J. (2006). *Fluid Mechanics Fundamentals and Applications*. New York : Mc-Graw Hill.
- Faris, M. R. A., Priangkoso, & T., Darmanto. (2020). Visualisasi Pengaruh Sudut Serang dan Kecepatan Aliran Udara terhadap Stall *Airfoil* NACA 2415 dan NACA 4424. *Momentum*. Vol 16(1) : 56-62
- Ghofar, A. M. (2018). *Pemilihan Sudut Pasang Airfoil NACA 2412 pada Tail UAV Male dengan Menggunakan Software Berbasis Computational Fluid Dynamic untuk Memperoleh Gaya Angkat Optimal*. (Skripsi : Universitas Islam Indonesia Yogyakarta)
- Heriyadi, Anwar, K., & Muchsin. (2018). Pengaruh Variasi Jarak External *Flap* pada *Airfoil* NACA 23012, Joukowski 12%, Gottingen 79 serta NASA Supercritical 0406 dengan Menggunakan Autodesk CFD. *Jurnal Mekanikal* Vol 9(1) :784-792
- Jatisukanto, G., Sari, M., & Putranto, G. D. (2017). Analisis Pengaruh Vane Terhadap Karakteristik Distribusi Tekanan *Airfoil* Double-Slotted *Flap* Pesawat N2XX. *Jurnal Elemen*. Vol 4(2) : 92-95
- Julius, M. S., Adio, S. A., Muritala, A. O., & Alonge, O. A. (2020). The Suction Control Character of Flow Separation on NACA 23012. *East African Journal of Engineering*. Vol 2(1) : 1-13
- Jumadi. (2012). Studi Eksperimental Karakteristik Aliran pada *Airfoil* NACA 0015. *Jurnal Pendidikan Teknik Mesin*. Vol 1(1) : 1-8.
- Leandis., Anwar, K., & Hatib, R. (2022). Distribusi Tekanan pada *Airfoil* NACA 23012 dengan Penambahan *Vortex* Generator. *Jurnal Ilmiah Foristek*. Vol 12(1) : 58-64.
- Kabir, A., Chowdhury, M. S., Islam, M. J., & Islam, M. (2019). Numerical Assessment of the Backward Facing Step for NACA 0015 *Airfoil* using Computational Fluid Dynamics. *1st International Conference on Advances in Science, Engineering and Robotics Technology 2019 (ICASERT 2019)*.
- Katz, J. (2016). *Automotive Aerodynamics*. New Jersey : John Wiley & Sons

- Lubis, M. M. (2012). Analisis Aerodinamika *Airfoil* NACA 2412 pada Sayap Pesawat Model Tipe Glider dengan menggunakan Software Berbasis Computational Fluid Dynamic untuk Memperoleh Gaya Angkat Maksimum. *Jurnal e-Dinamis*. Vol 2(2) : 1-11.
- Mulyadi, M. (2010). *Analisis Aerodinamika Pada Sayap Pesawat Terbang Dengan Menggunakan Software Berbasis Computational Fluid Dynamics (CFD)*. (Skripsi : Universitas Gunadarma).
- Platt, R. C., & Abbott, I. H. (1936). *Aerodynamic Characteristics of N. A. C. A. 23012 and 23021 Airfoils with 20-percent-chord-external-airfoil Flaps of N. A. C. A 23012 Section*. National Advisory Committee for Aeronautics Report No. 573.
- Radhakrishnan, P. M., & Dheepthi, M. (2019). CFD Analysis of NACA 2415 and 23012 *Airfoil*. *International Journal of Research in Aeronautical and Mechanical Engineering*. Vol 7(4) : 11-17.
- Ramadika, W., & Permatasari, R. (2018). Pengaruh Panjang Chord Terhadap Nilai Koefisien Gaya Angkat (Cl) Dan Koefisien Gaya Hambat (Cd) Pada Variasi Sudut Serang Hydrofoil NACA 0018 Menggunakan Computational Fluid Dynamics. *Seminar Nasional Cendekiawan ke 4 Tahun 2018 Buku 1: "Teknik, Kedokteran Hewan, Kesehatan, Lingkungan dan Lanskap"*
- Salam, N., & Tarakka, R. (2021). *Dinamika Fluida : Teori dan Soal Jawab*. Makassar : Unhas Press
- Salam, N., Tarakka, R., Jalaluddin, J., & Sarwan. (2021). Analisis Karakteristik Aliran Fluida Melewati Model Sayap Pesawat Swayasa. *JMPM (Jurnal Material dan Proses Manufaktur)*, Vol 5(2) : 58-67.
- Salam, N., Tarakka, R., Jalaluddin, J., & Iriansyah, D. (2022). The Effects of Flap Angles on the Aerodynamic Performances of a Homebuilt Aircraft Wing Model. *International Journal of Mechanical Engineering and Robotics Research* Vol. 11, No. 12, December 2022.
- Serway, R. A., & Jewett, J. W. (2004). *Physics for Scientist and Engineers Sixth Edition*. California : Thomson Brooks/Col
- Wenzinger, C. J. (1937). *Pressure Distribution over an N. A. C. A 23012 Airfoil with an N. A. C. A 23012 External-Airfoil Flap*. National Advisory Committee for Aeronautics Report No. 614

LAMPIRAN

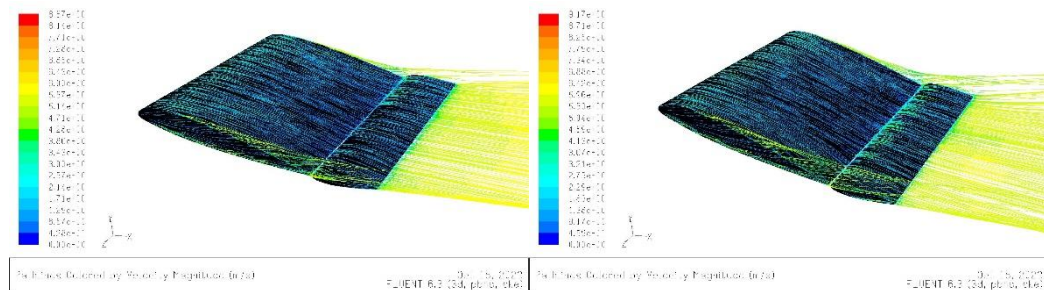
Lampiran 1 *Pathline* Model Benda Uji

1. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = -10^\circ$ dan $\delta_k = -10^\circ$



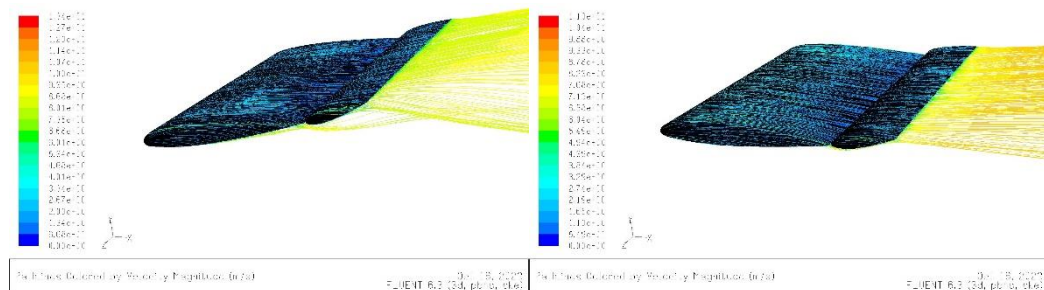
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6 \text{ m/s}$

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6 \text{ m/s}$



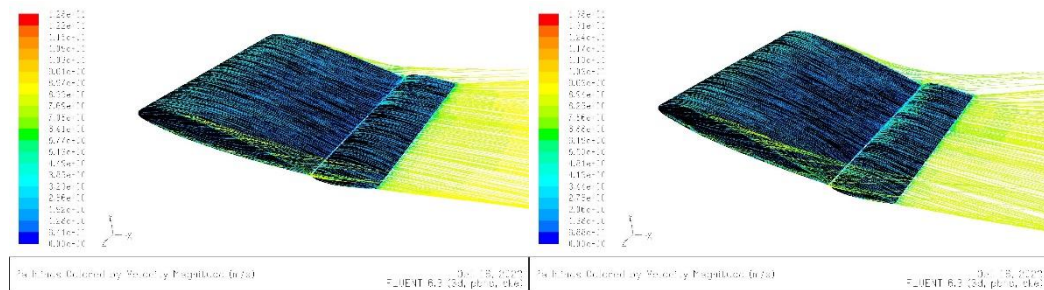
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6 \text{ m/s}$

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6 \text{ m/s}$



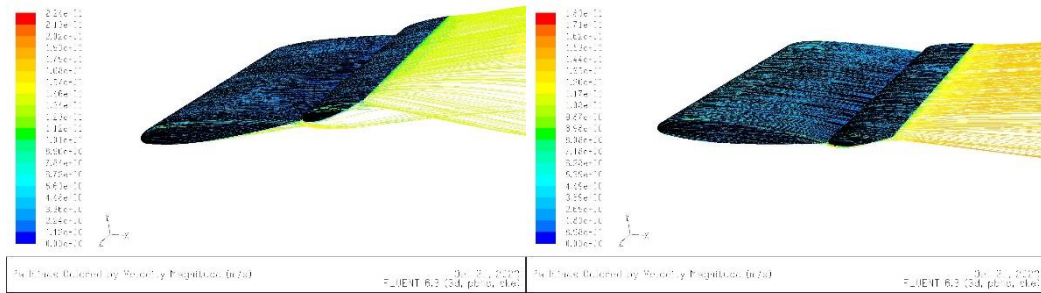
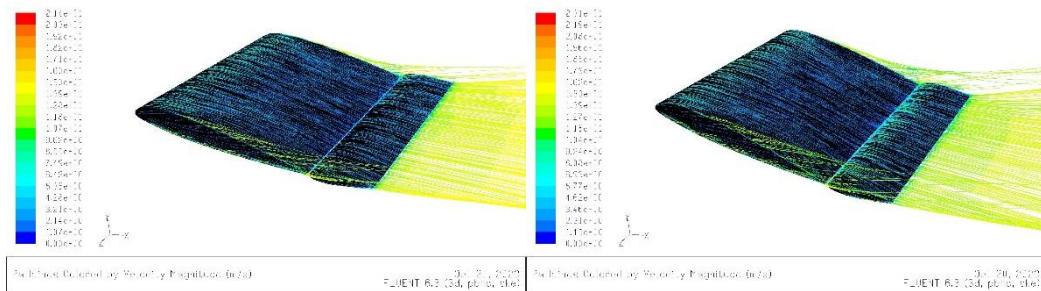
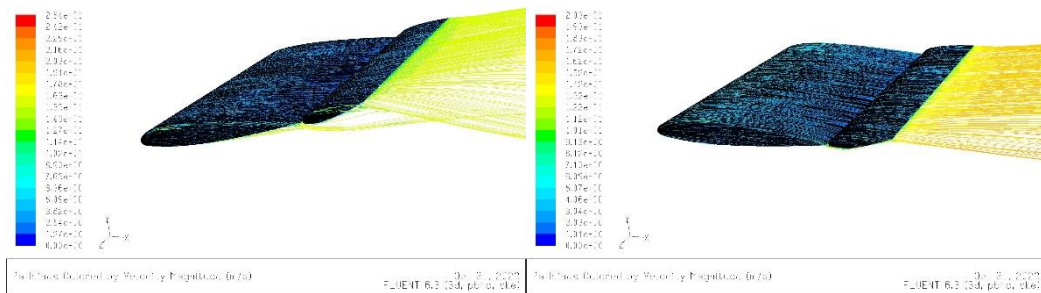
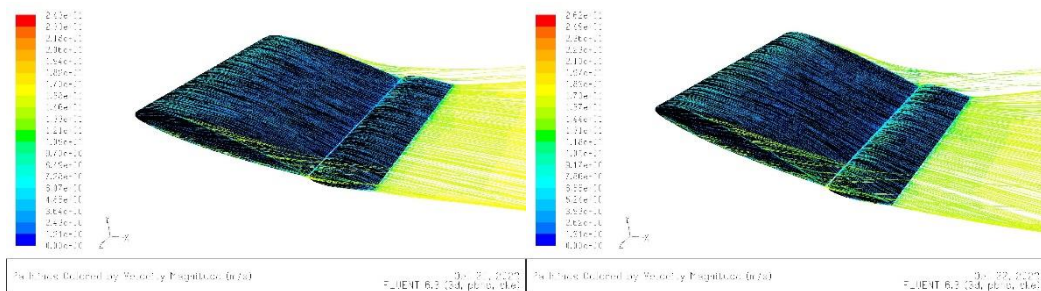
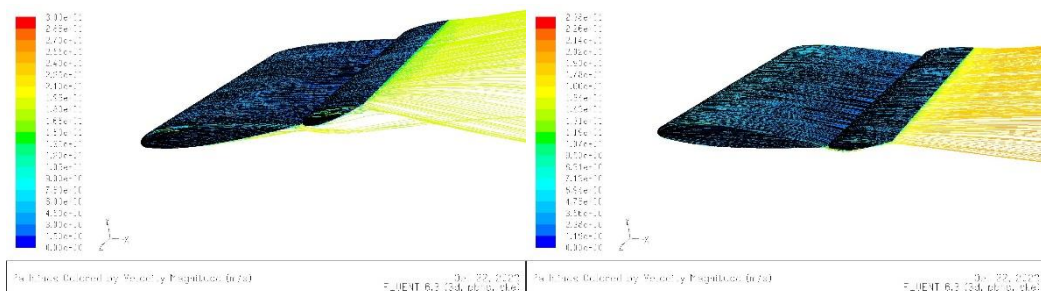
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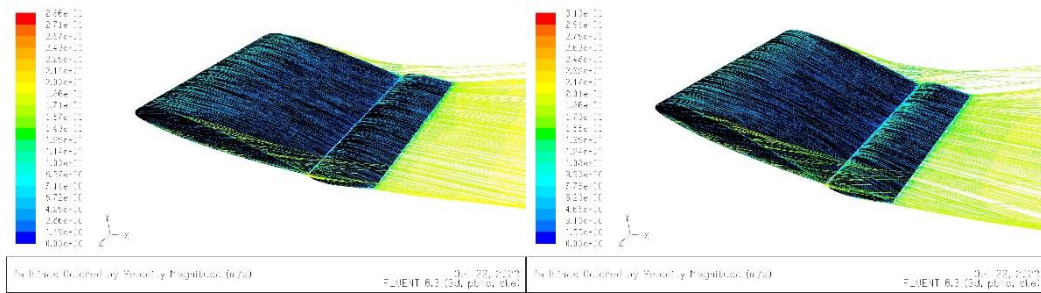
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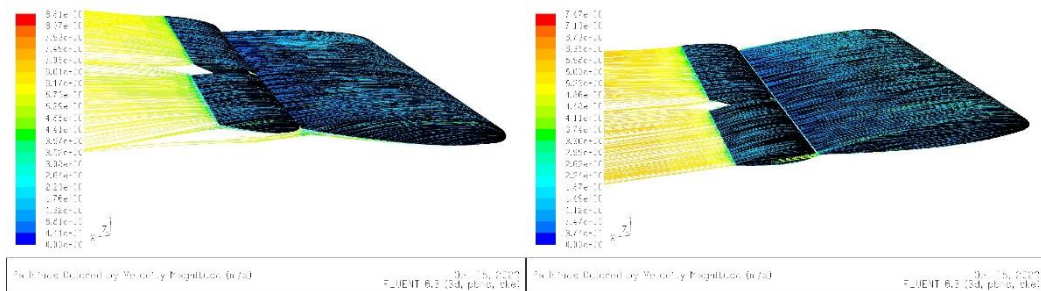
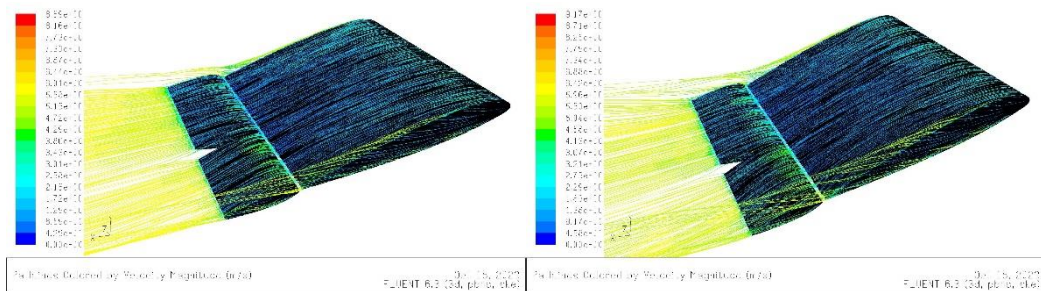
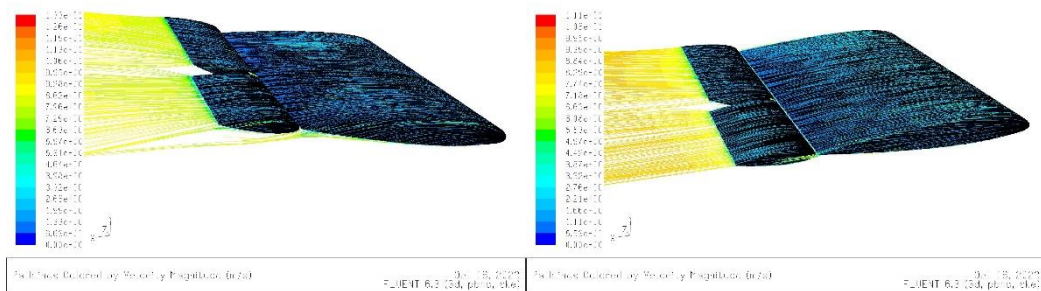
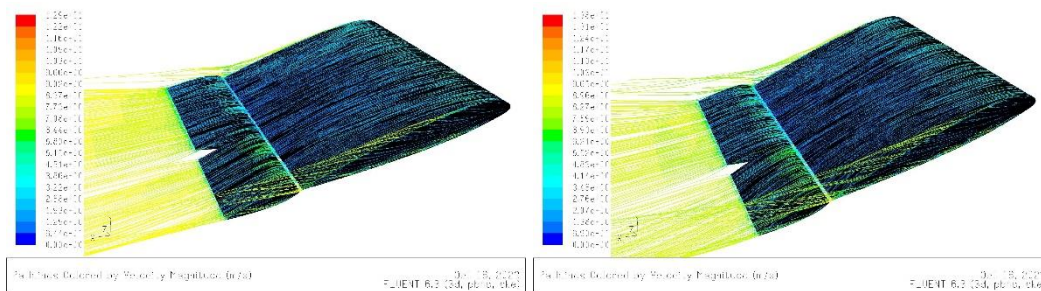
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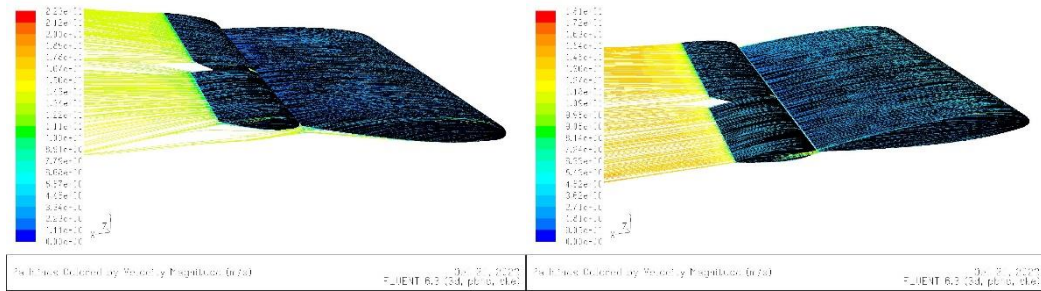
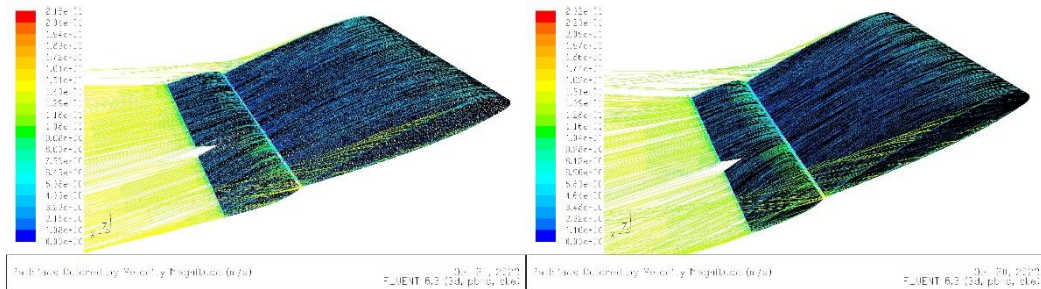
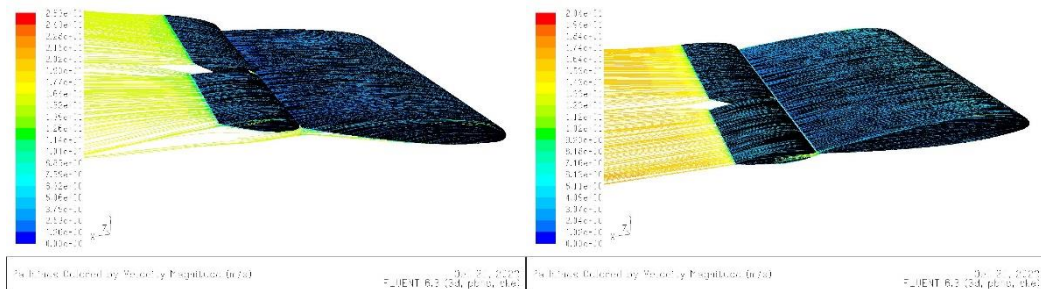
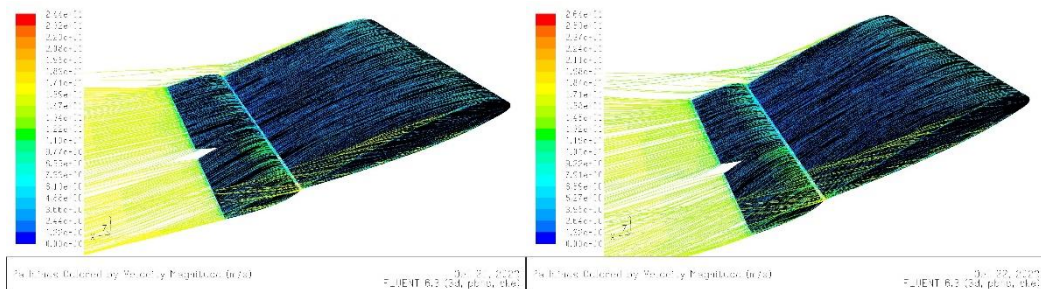
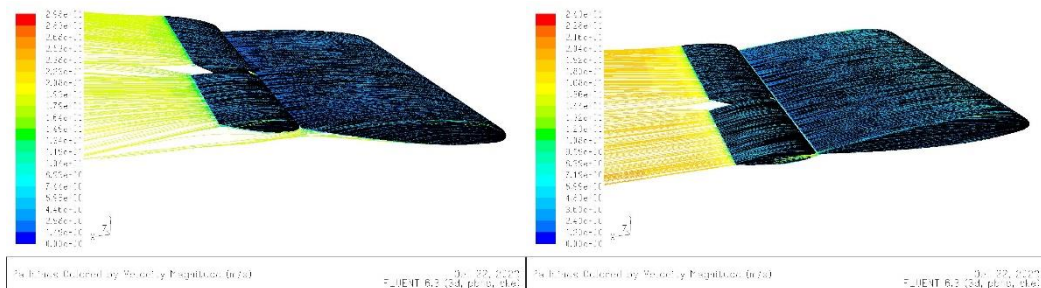
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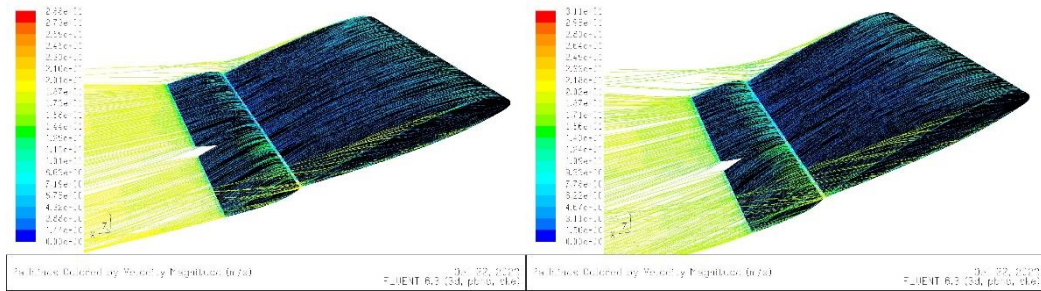
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Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

2. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = -10^\circ$ dan $\delta_k = 0^\circ$

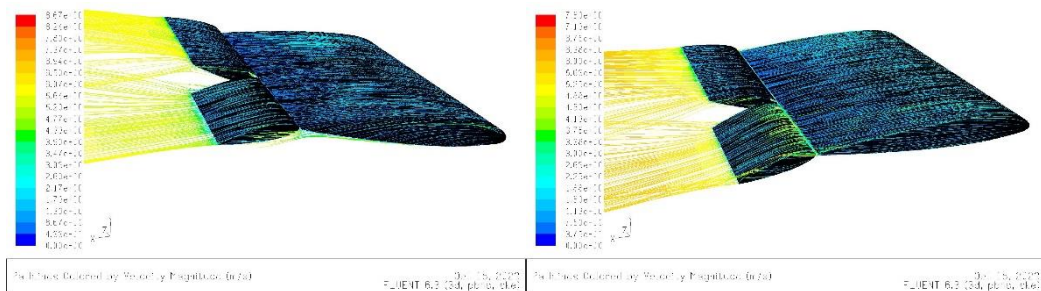
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Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/s

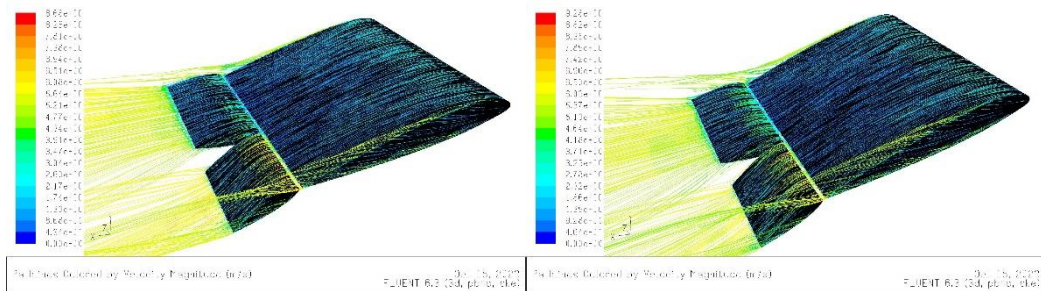


Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/s Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/s

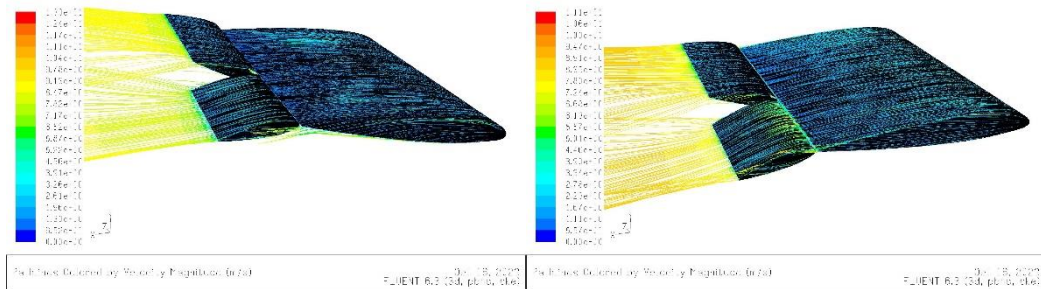
3. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = -10^\circ$ dan $\delta_k = 15^\circ$



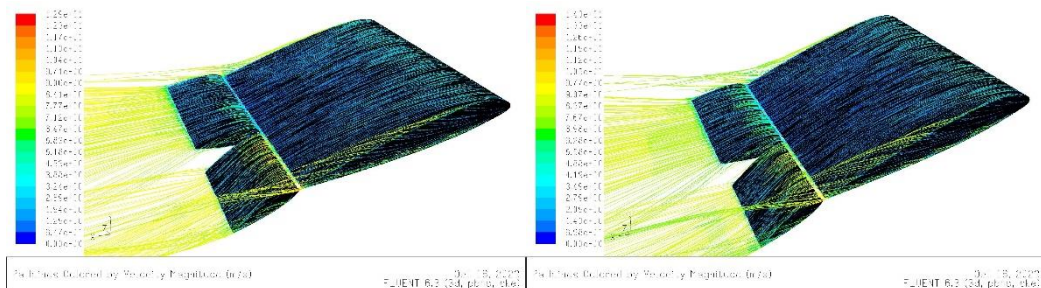
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/s Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s



Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/s Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s



Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/s Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s



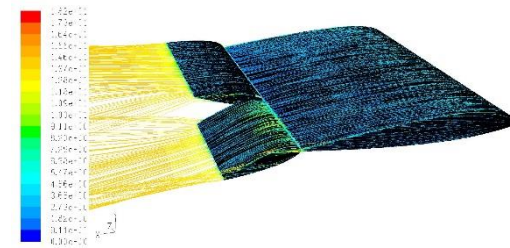
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/s Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 15, 15e)

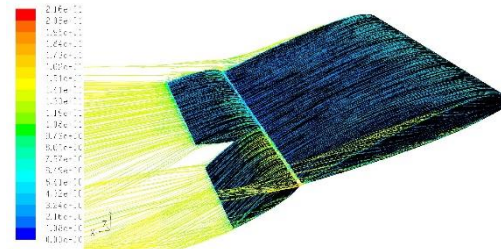
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 15, 15e)

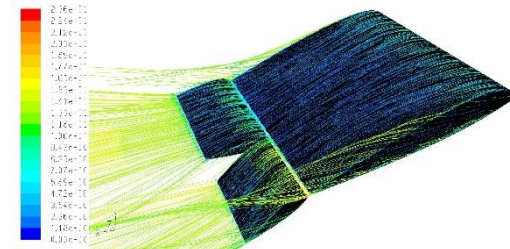
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 15, 15e)

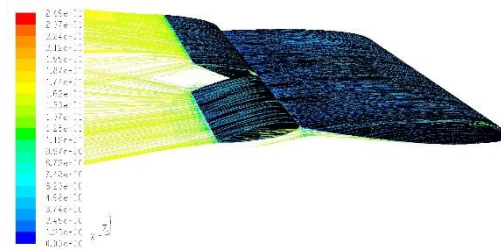
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 15, 15e)

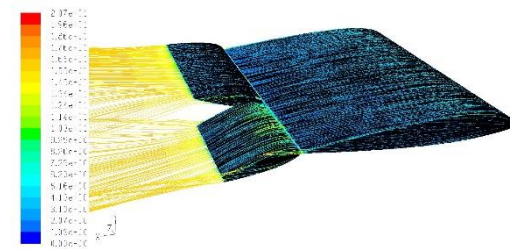
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 17, 17e)

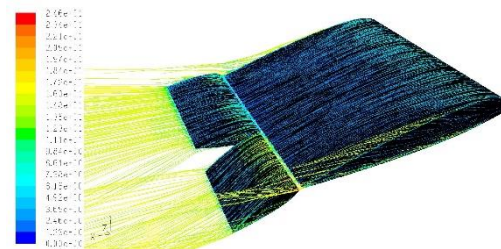
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Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 17, 17e)

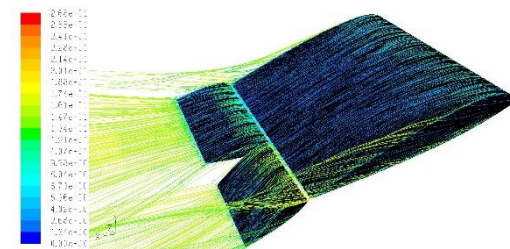
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 17, 17e)

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 17, 17e)

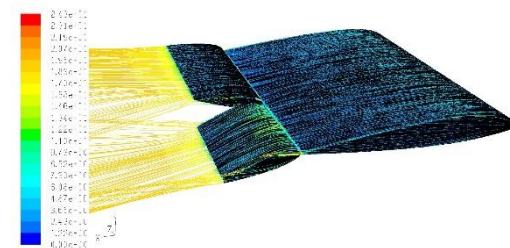
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/s



Pa (Pa) Coefficient of Pressure (Cp)

FLUENT 6.3 (3D, pb, 20, 20e)

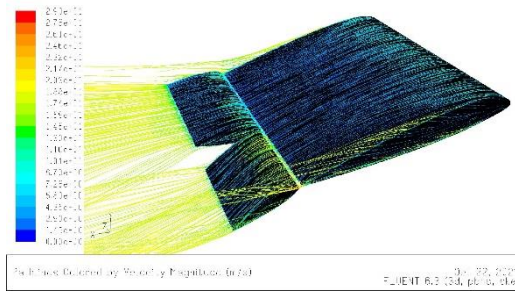
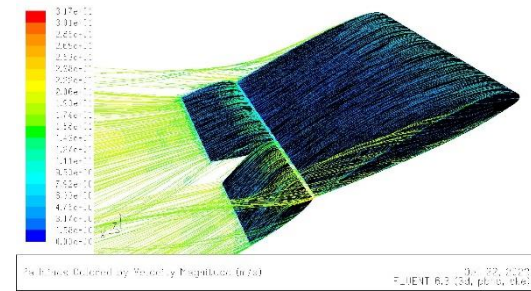
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/s



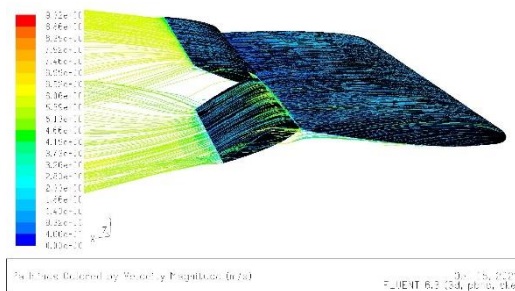
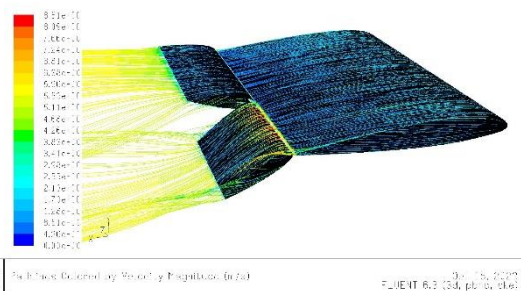
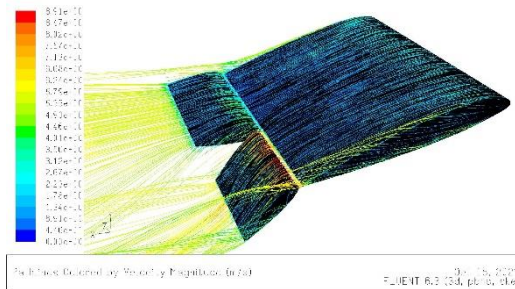
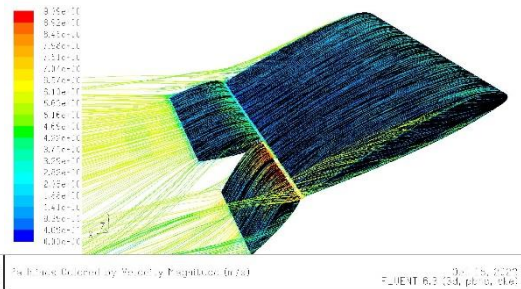
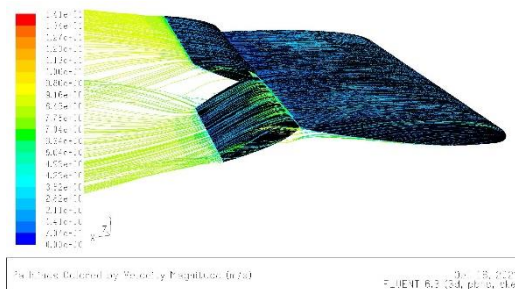
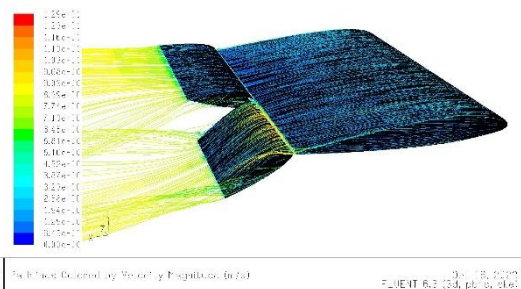
Pa (Pa) Coefficient of Pressure (Cp)

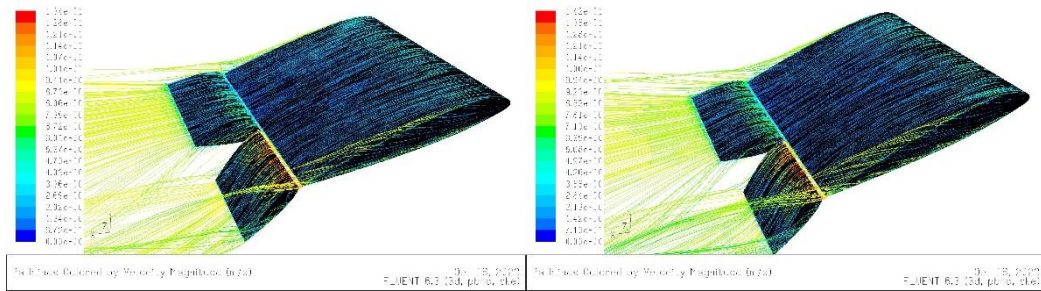
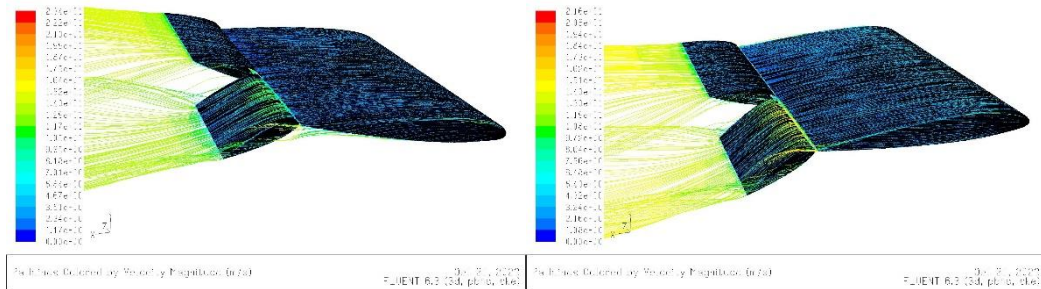
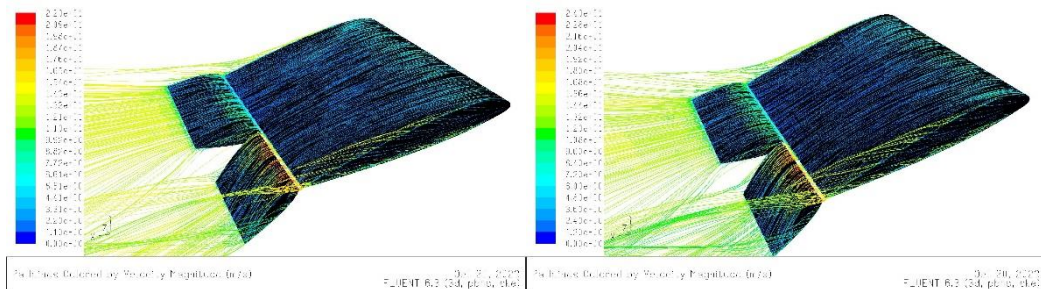
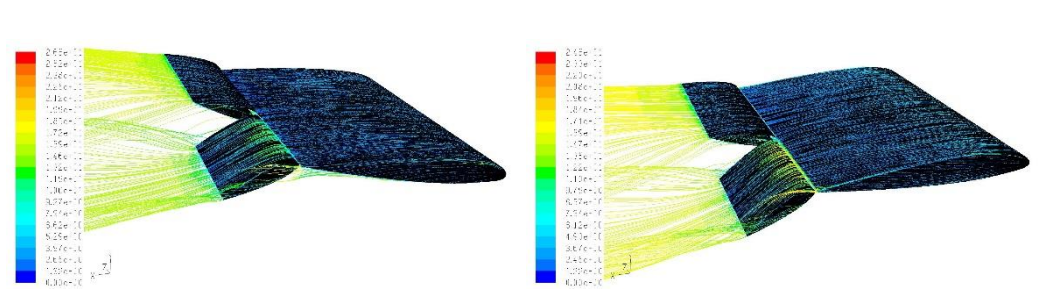
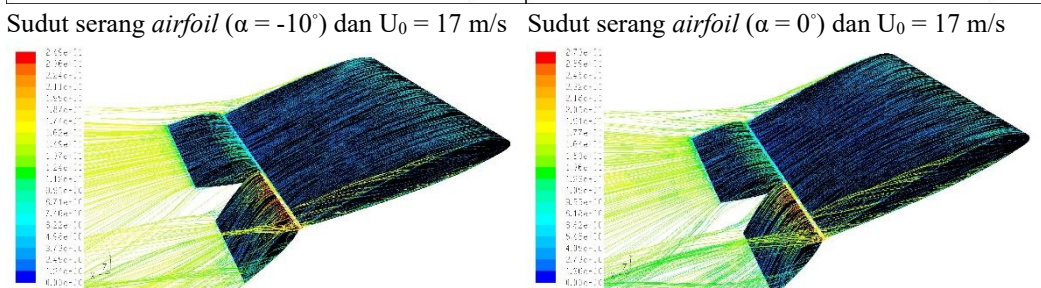
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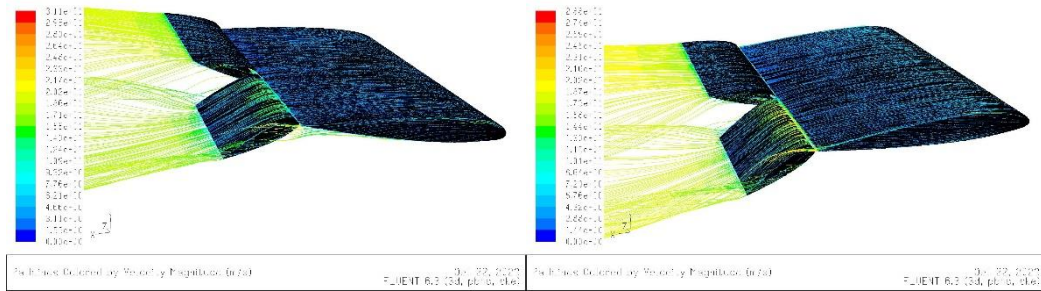
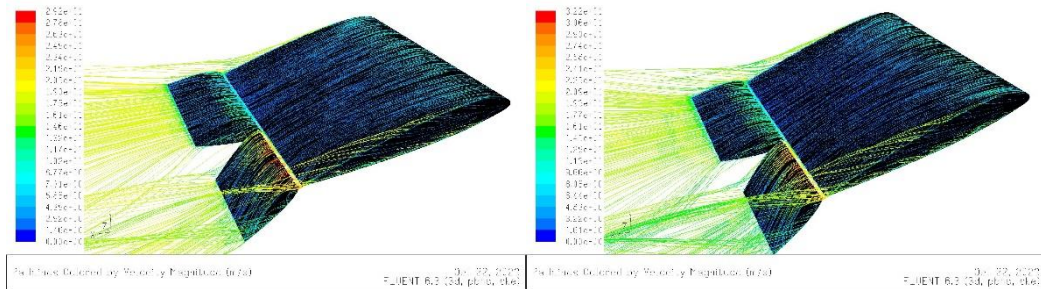
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/s

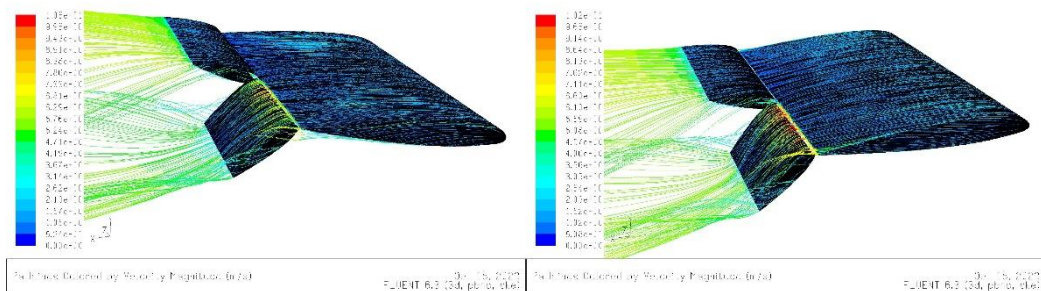
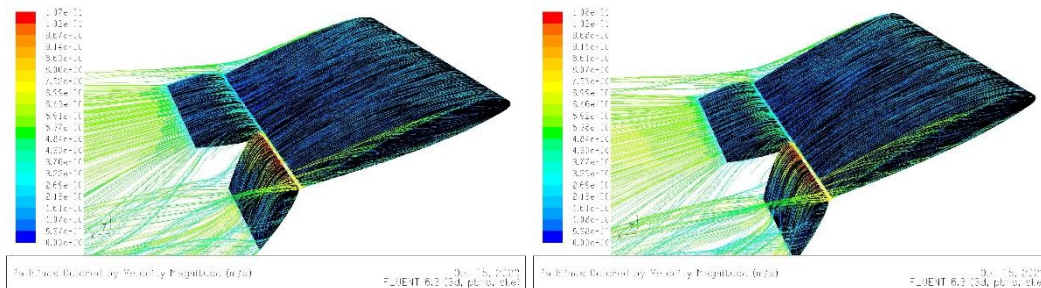
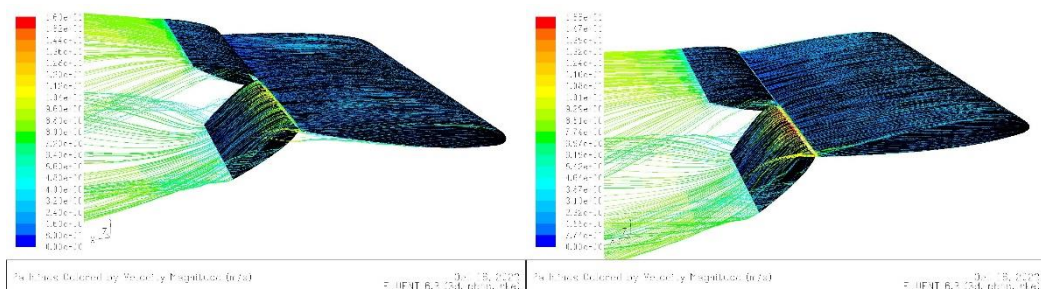
4. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = -10^\circ$ dan $\delta_k = 30^\circ$

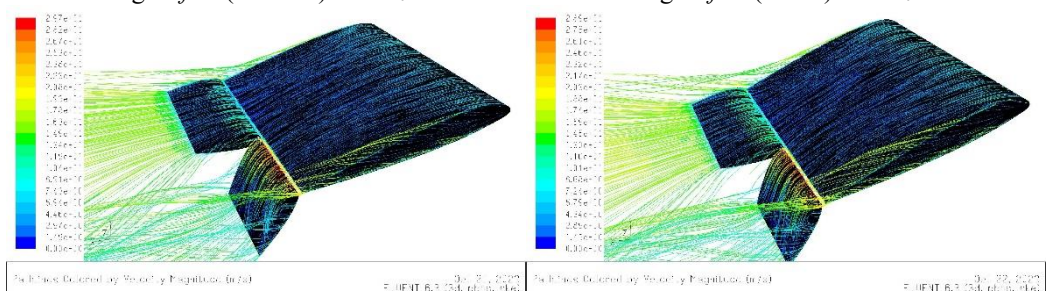
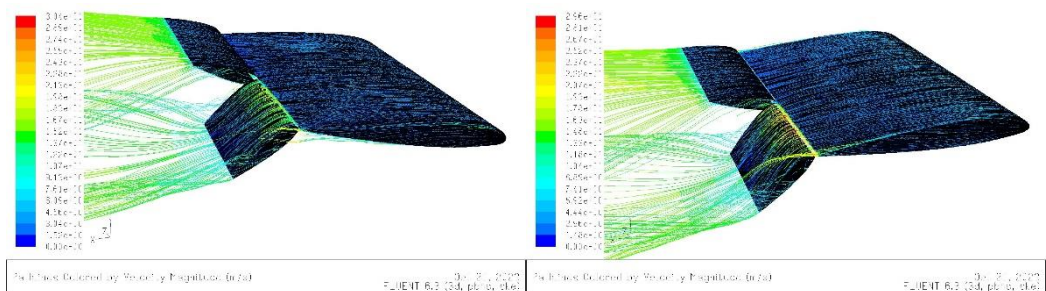
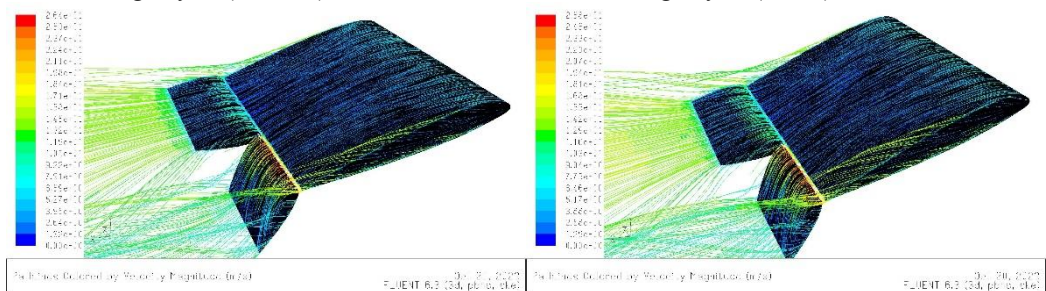
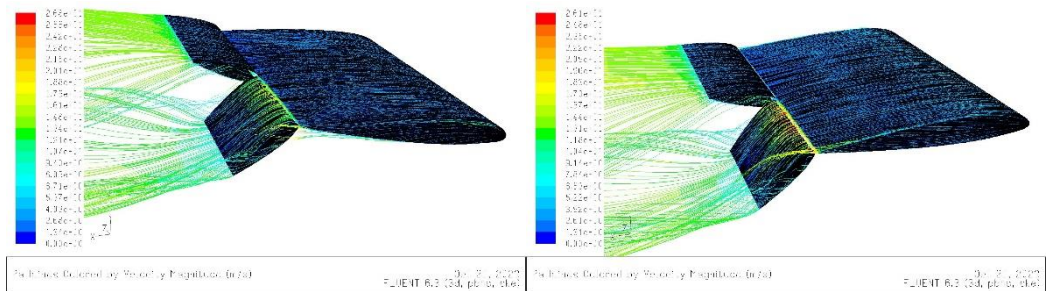
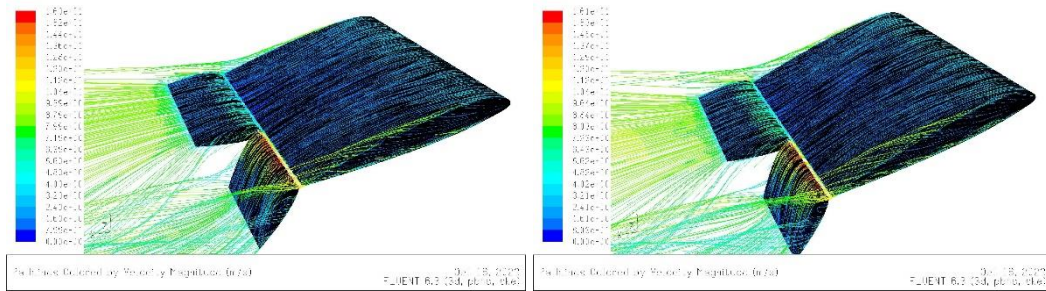
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s

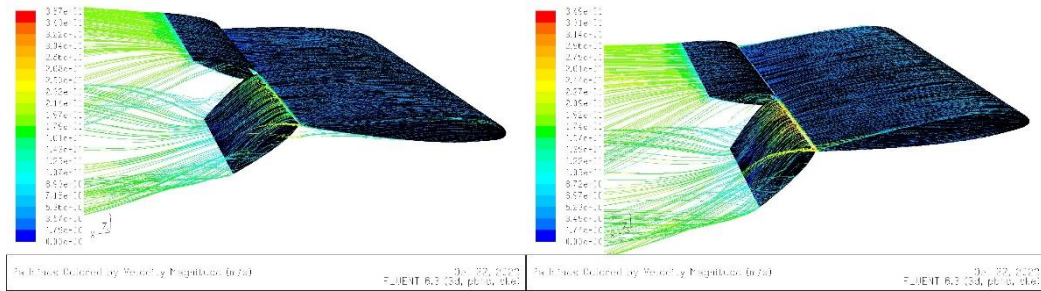
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

5. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = -10^\circ$ dan $\delta_k = 45^\circ$

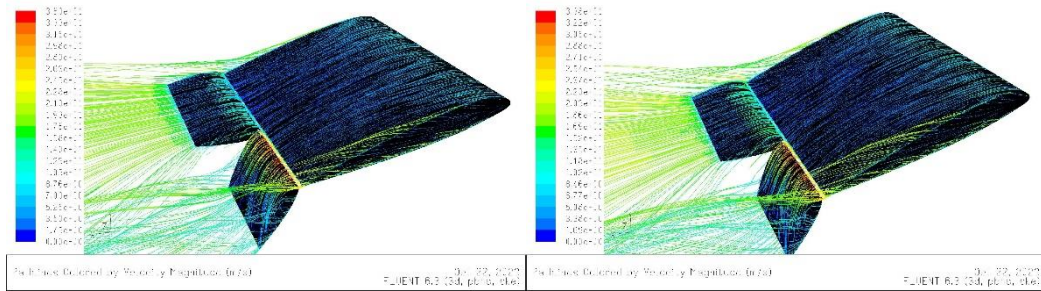
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s





Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/s

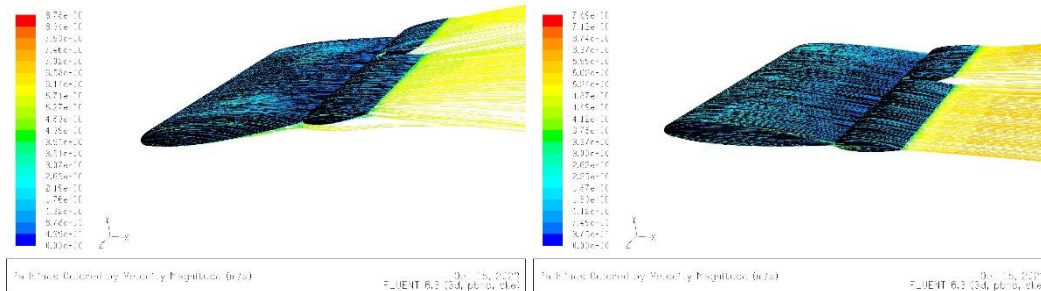
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/s



Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/s

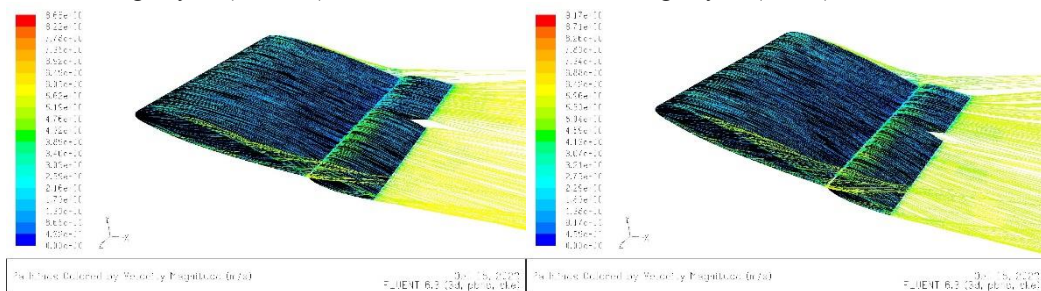
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

6. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 0^\circ$ dan $\delta_k = -10^\circ$



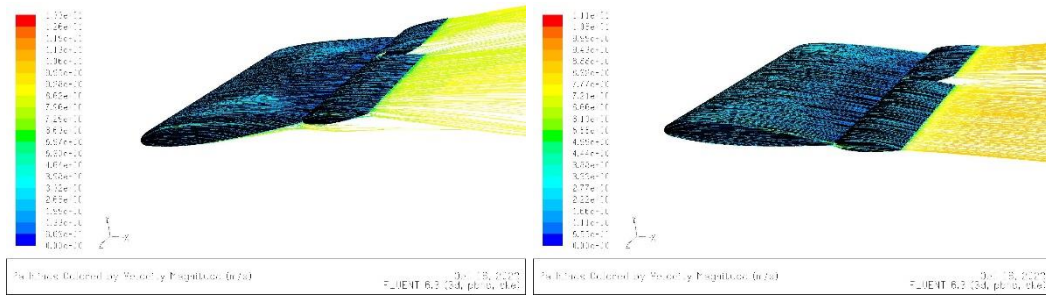
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s



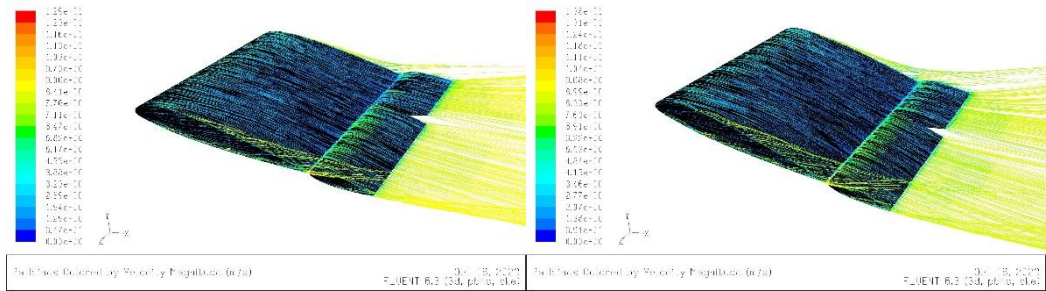
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s



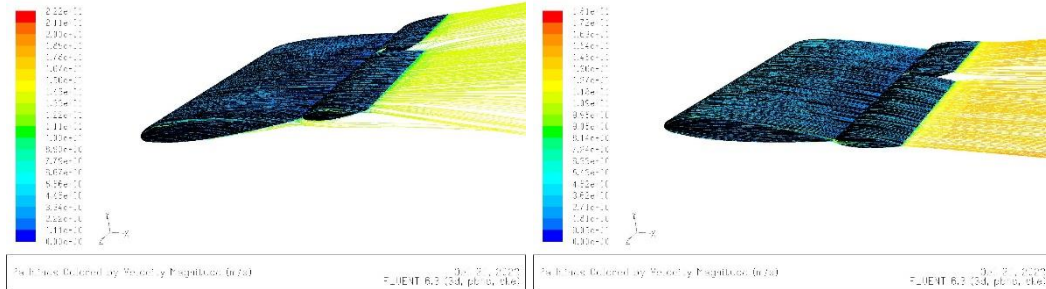
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s



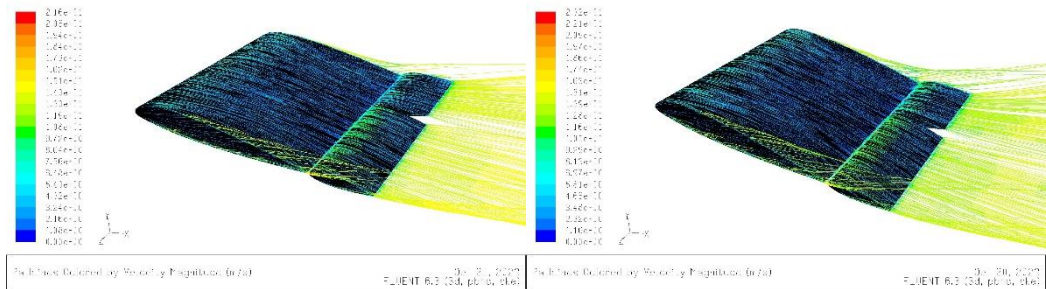
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/s



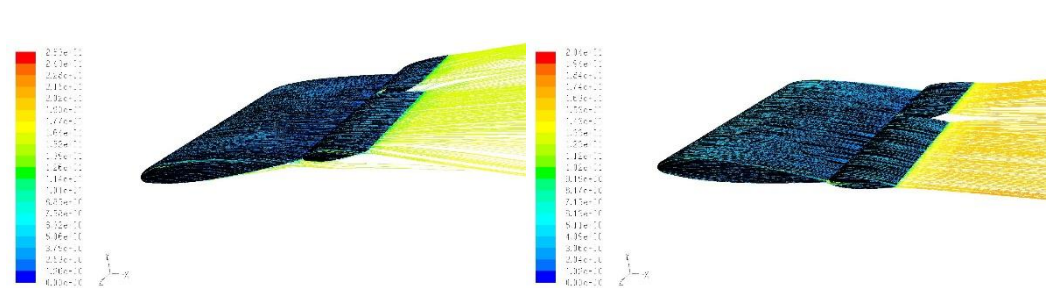
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/s



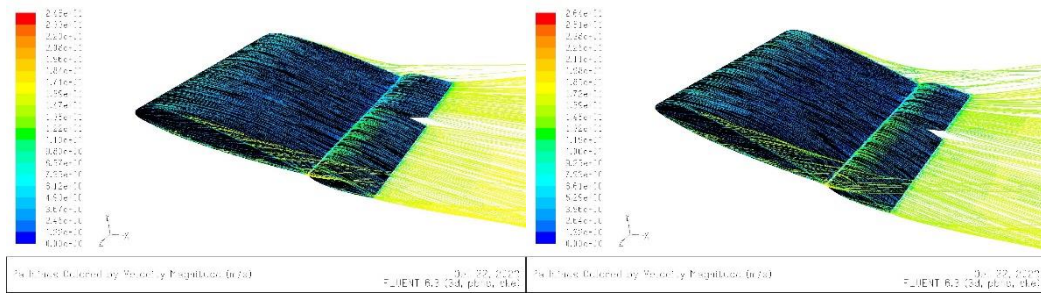
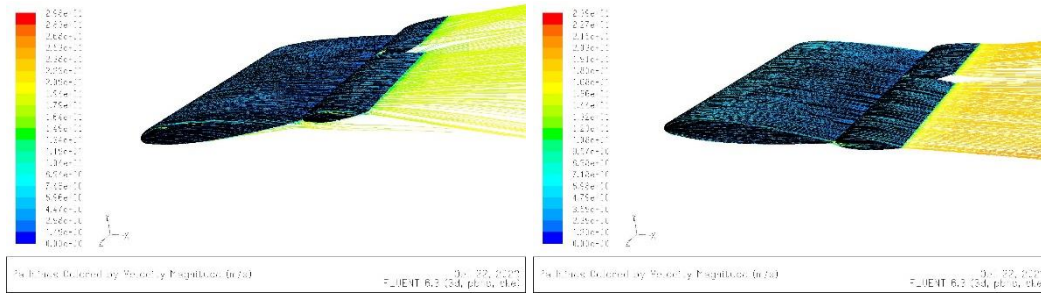
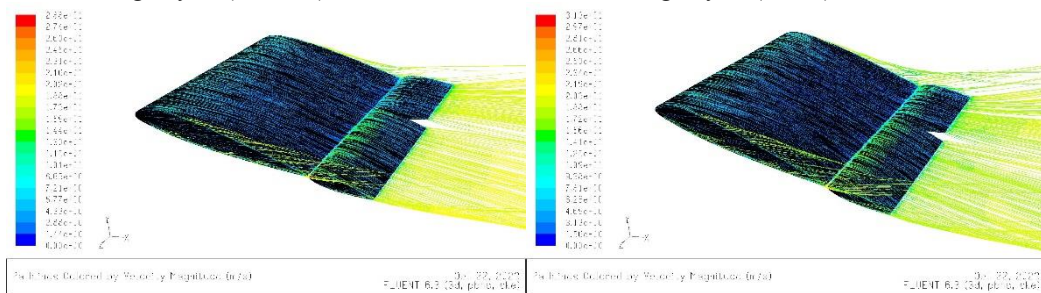
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

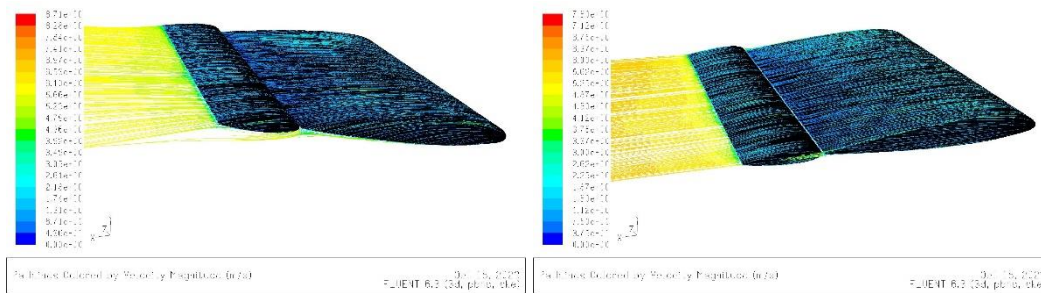
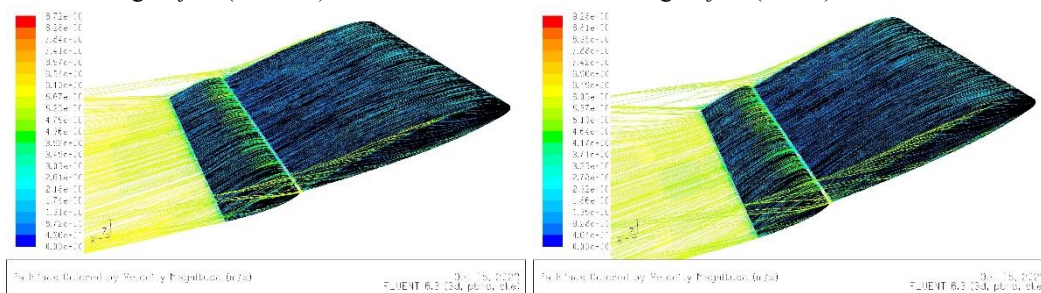


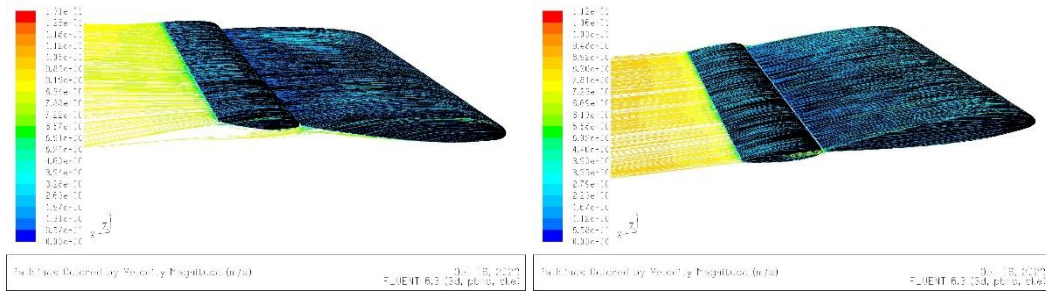
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

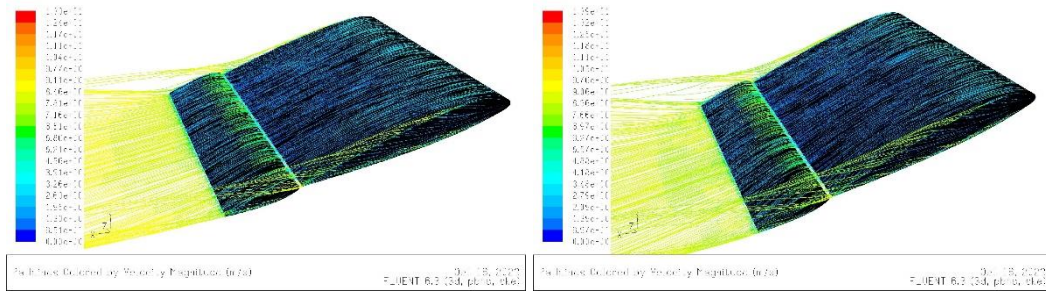
7. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 0^\circ$ dan $\delta_k = 0^\circ$

Sudut serang *airfoil* ($\alpha = 10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s



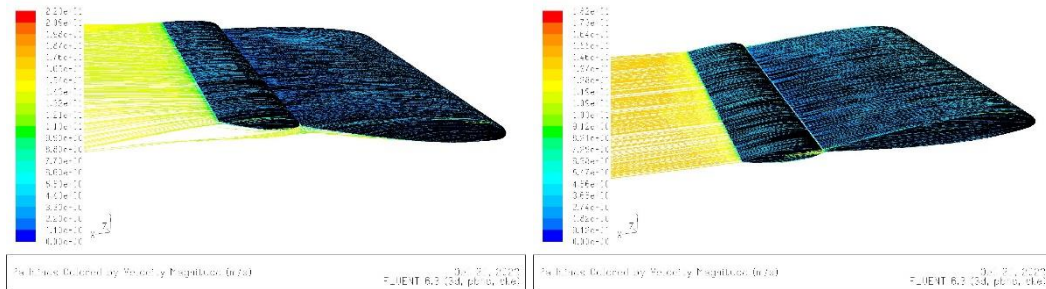
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s



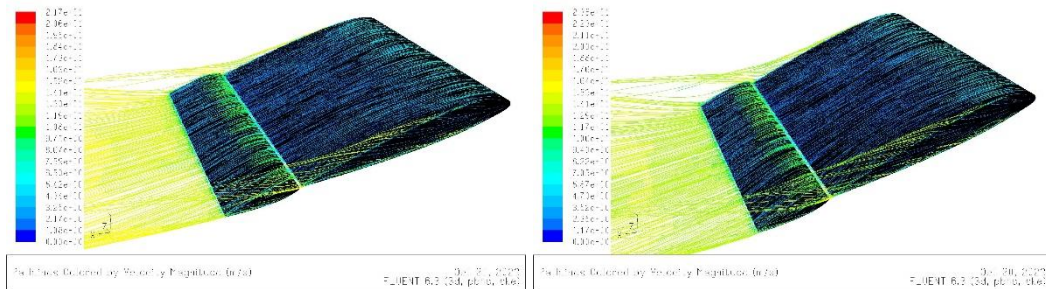
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/s



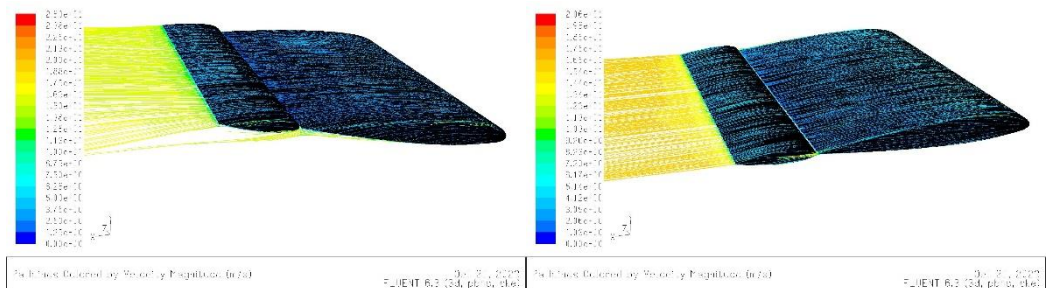
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/s



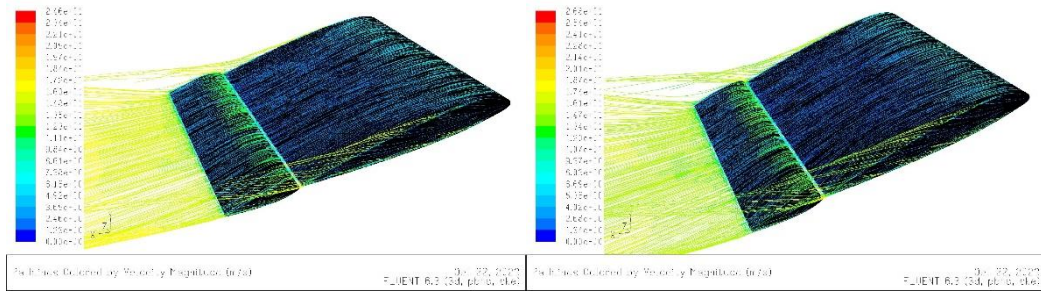
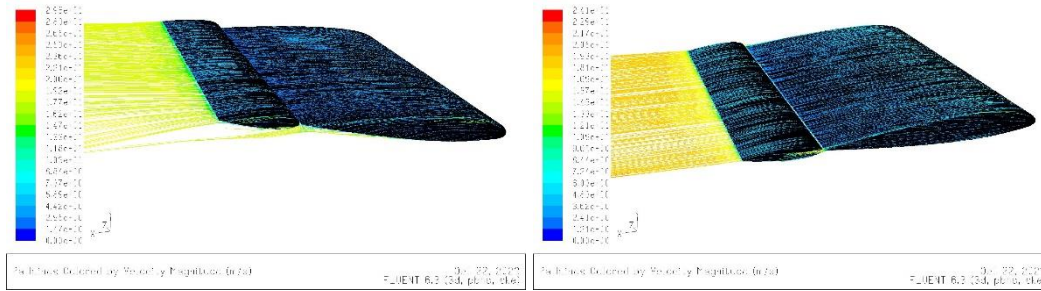
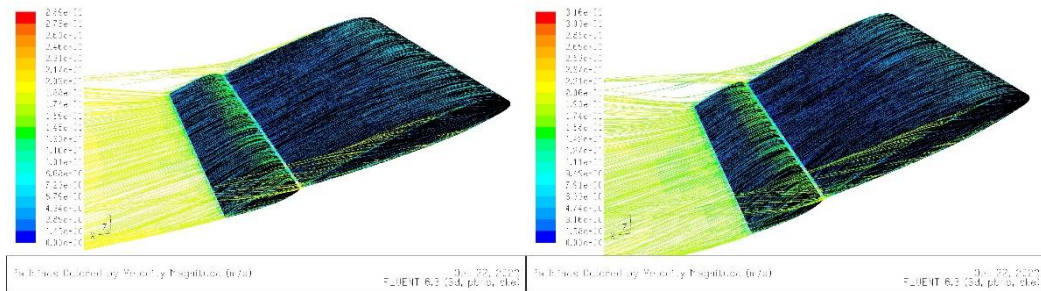
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

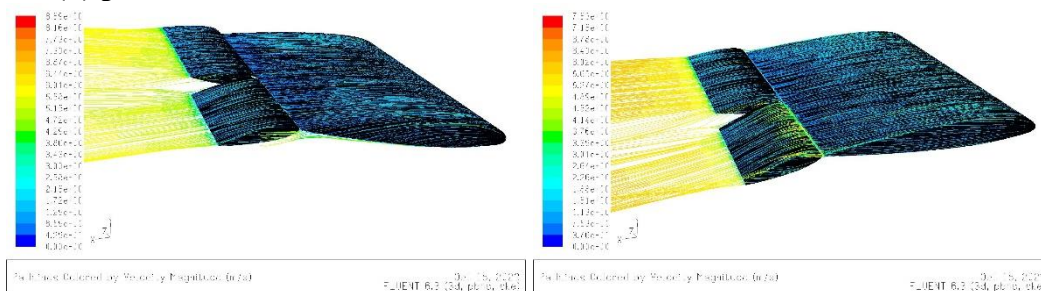
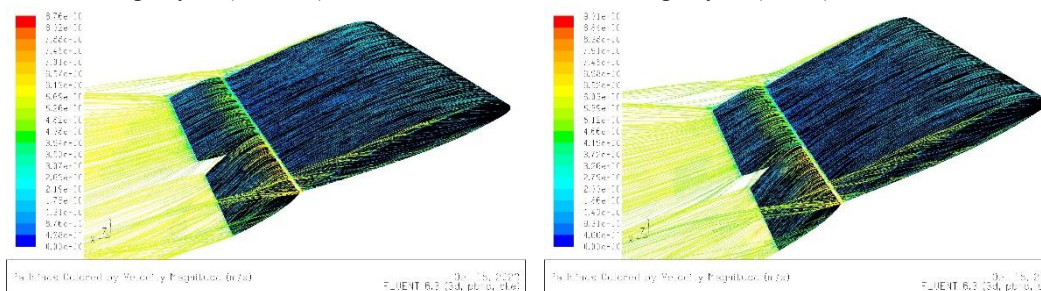


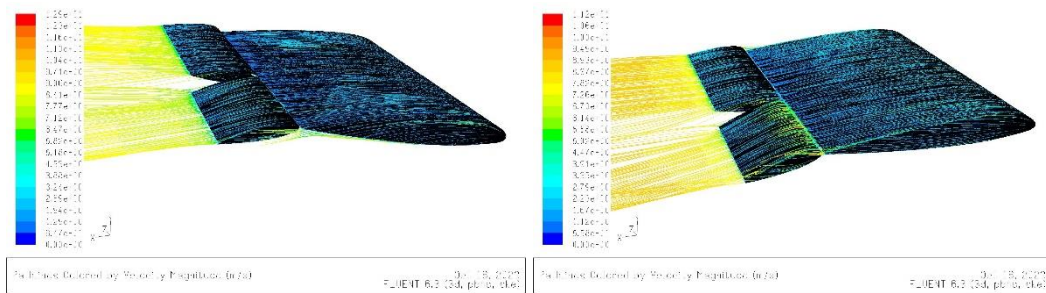
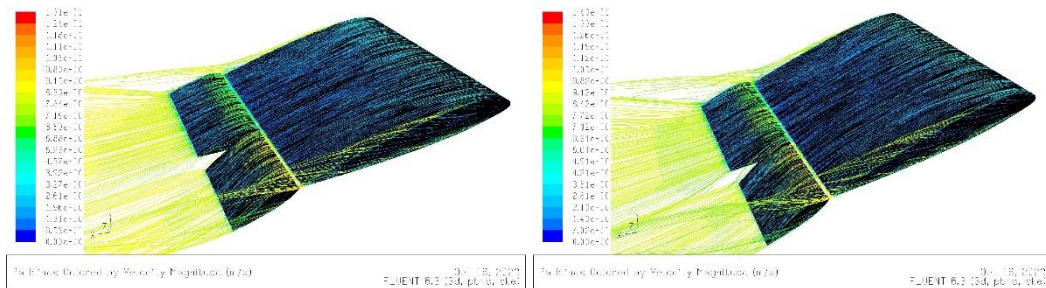
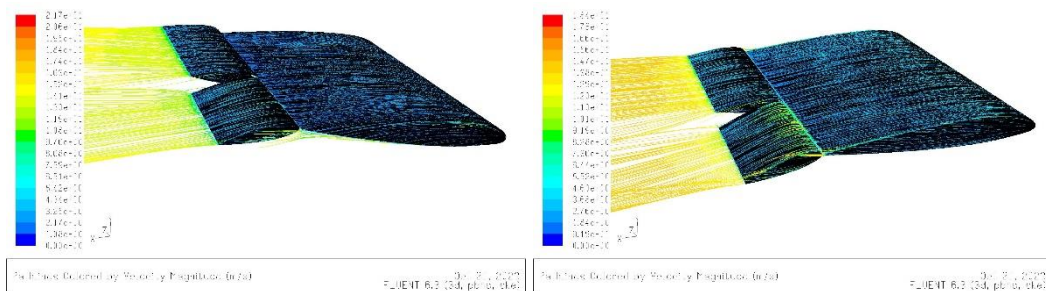
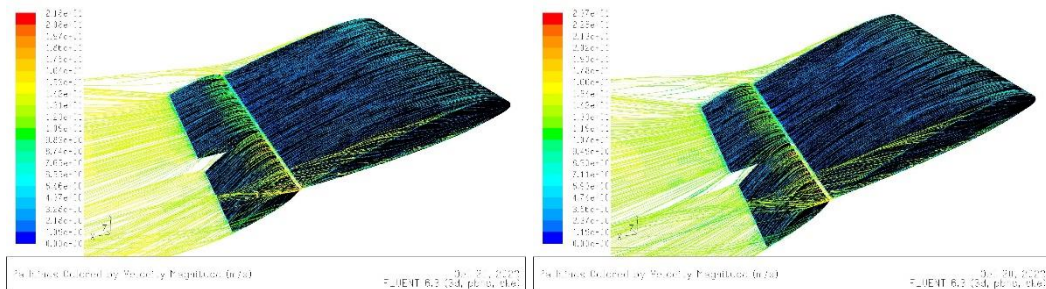
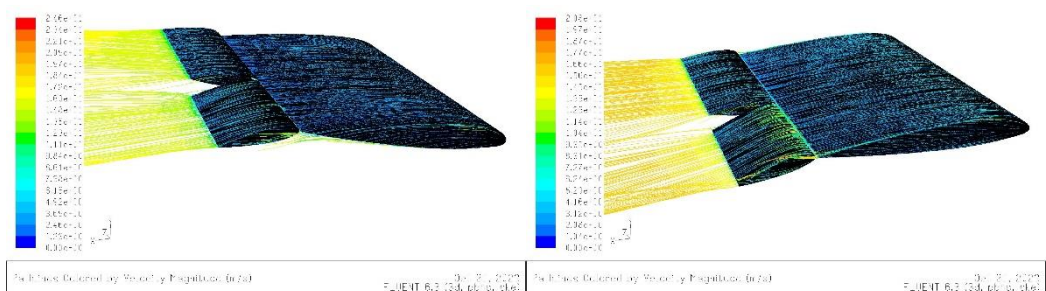
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/s

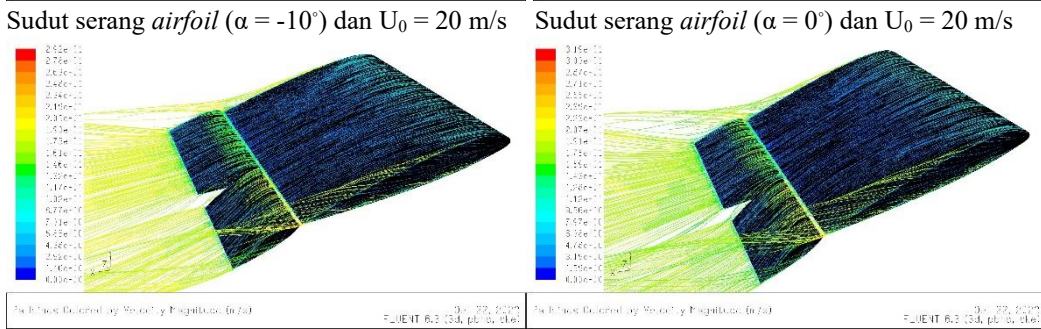
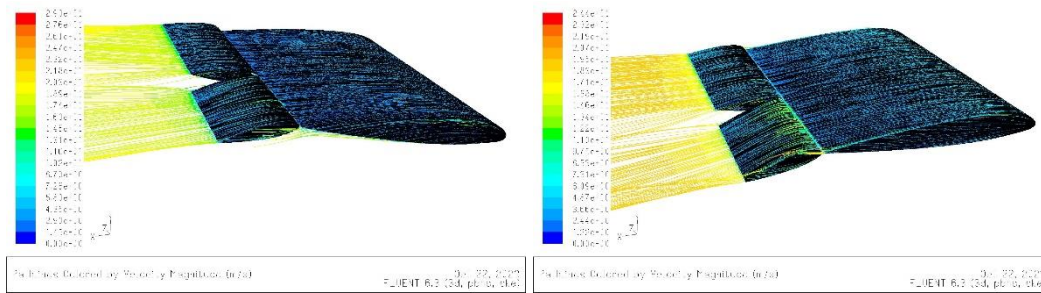
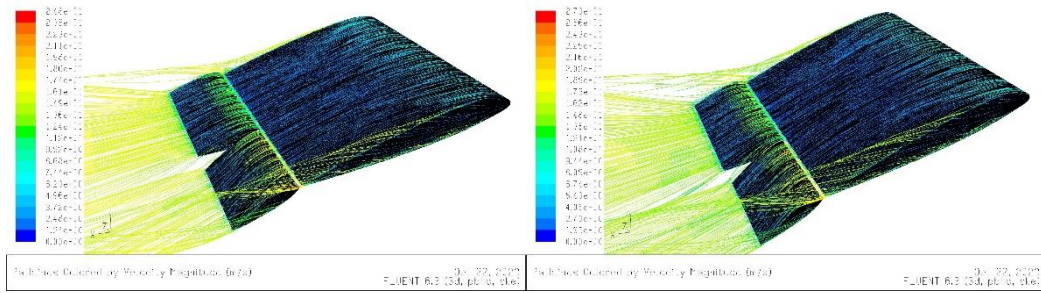
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

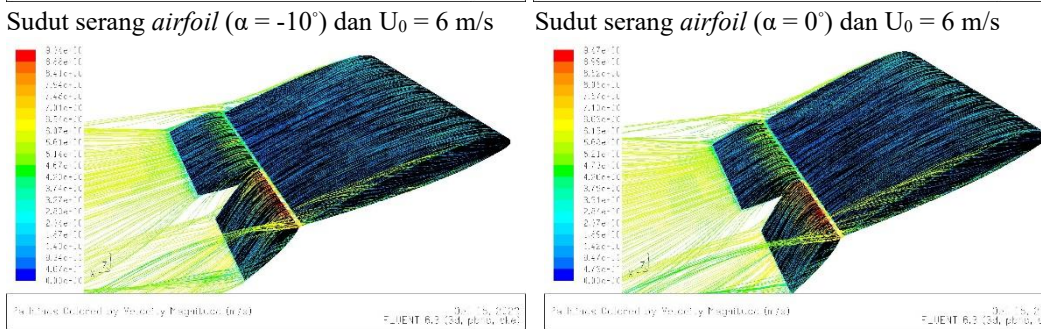
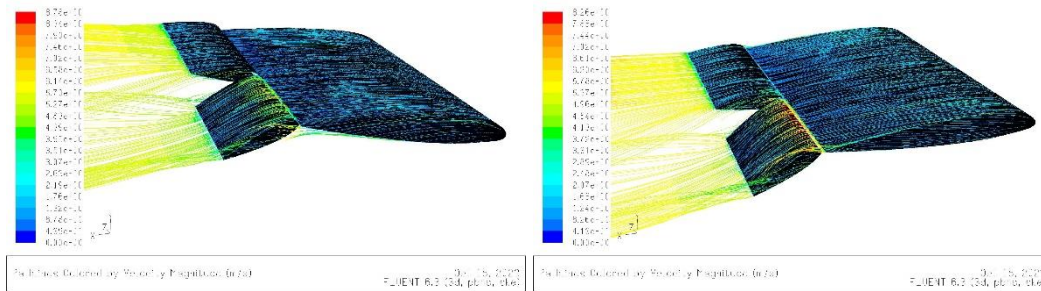
8. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 0^\circ$ dan $\delta_k = 15^\circ$

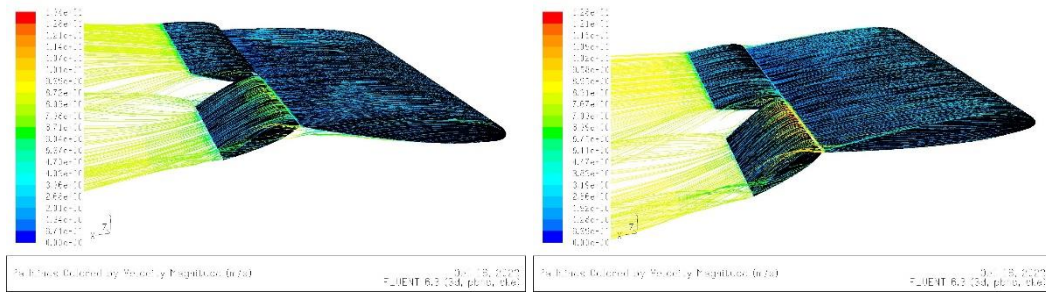
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s



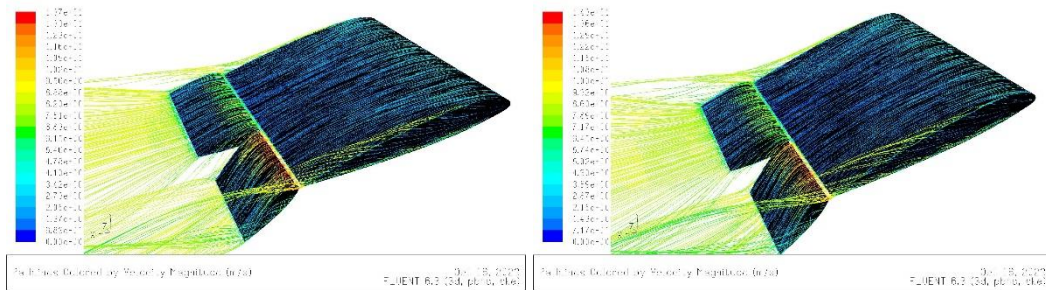
9. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 0^\circ$ dan $\delta_k = 30^\circ$





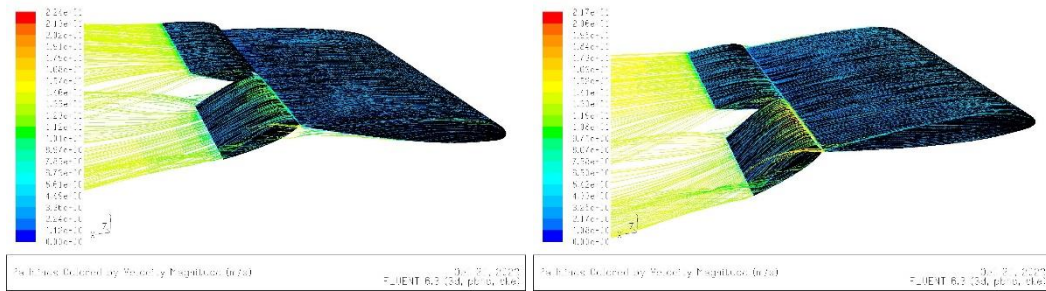
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s



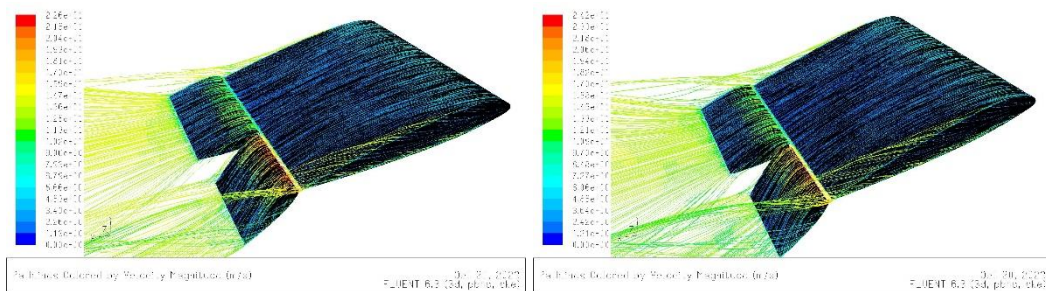
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/s



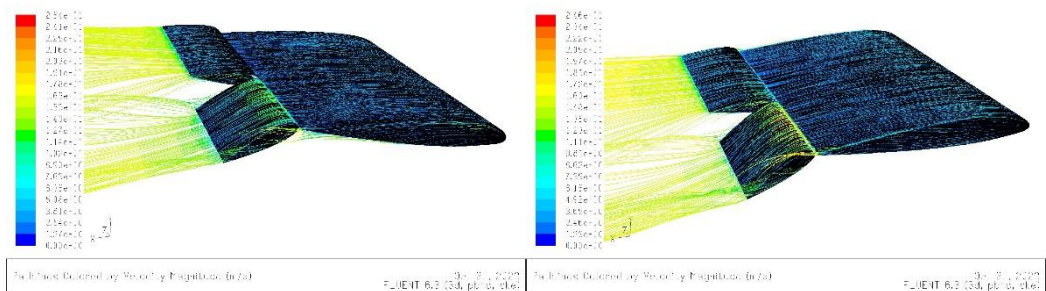
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/s



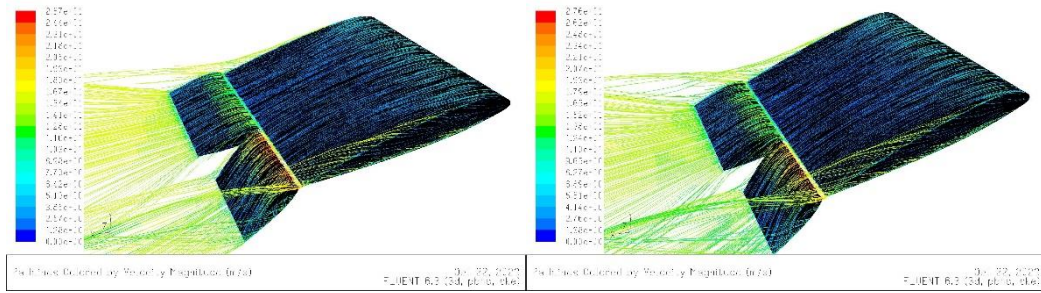
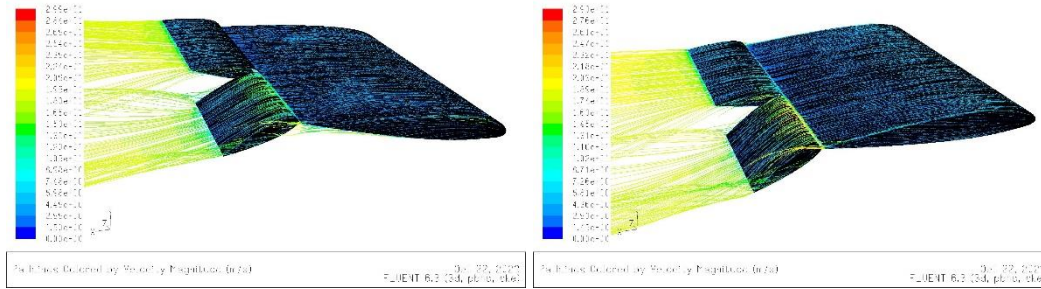
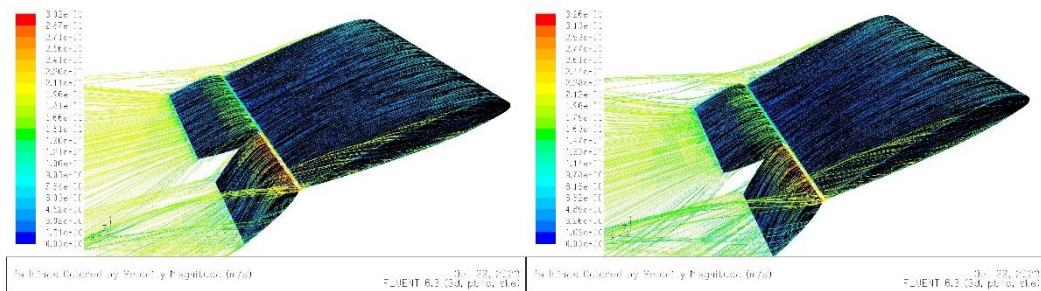
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

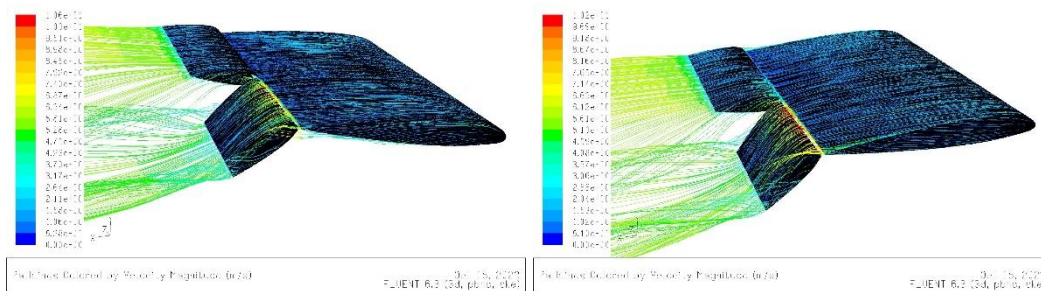
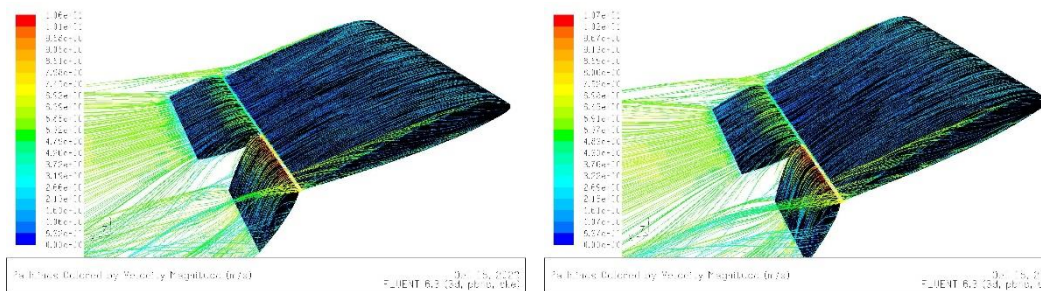


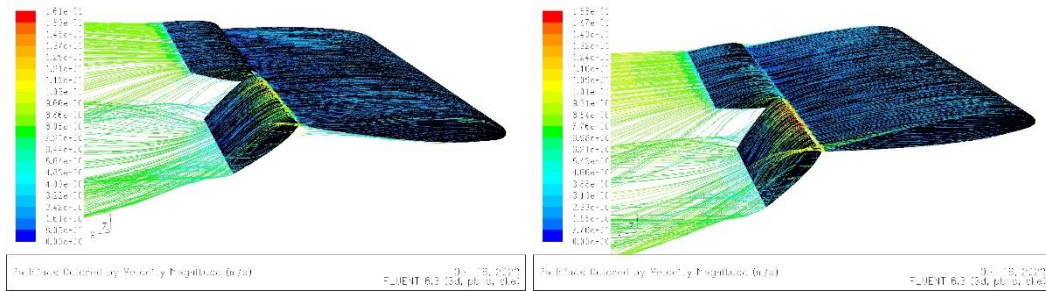
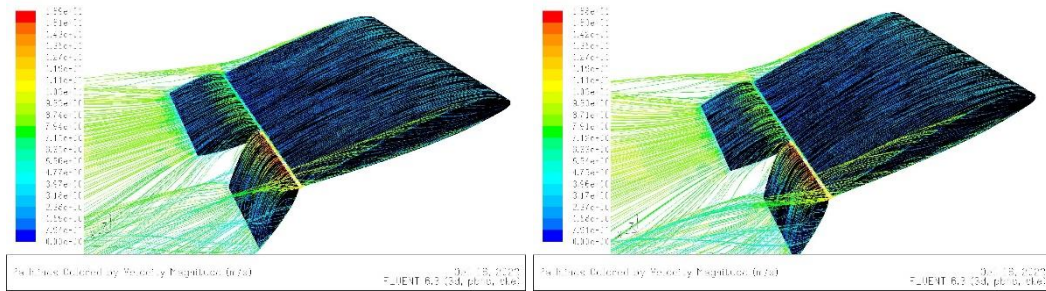
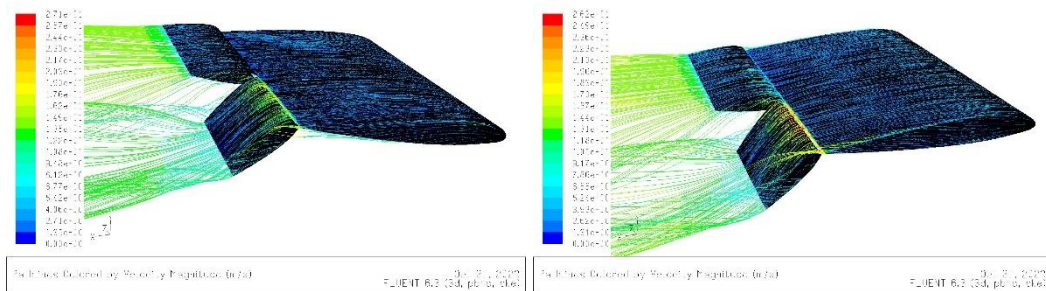
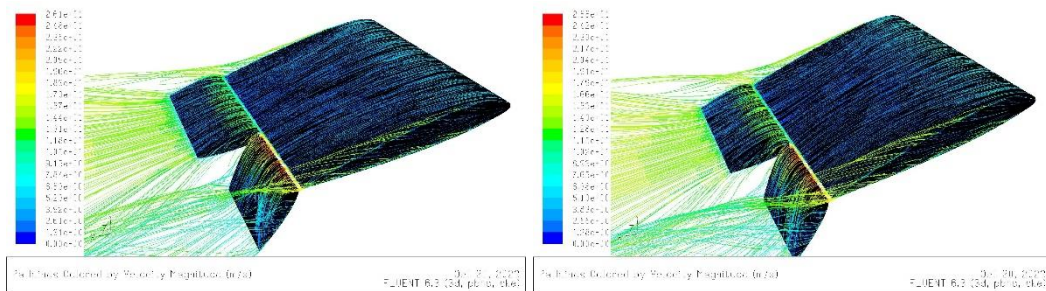
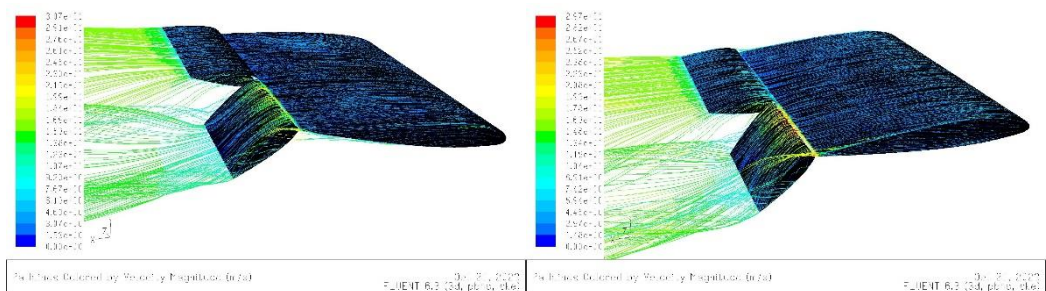
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/s

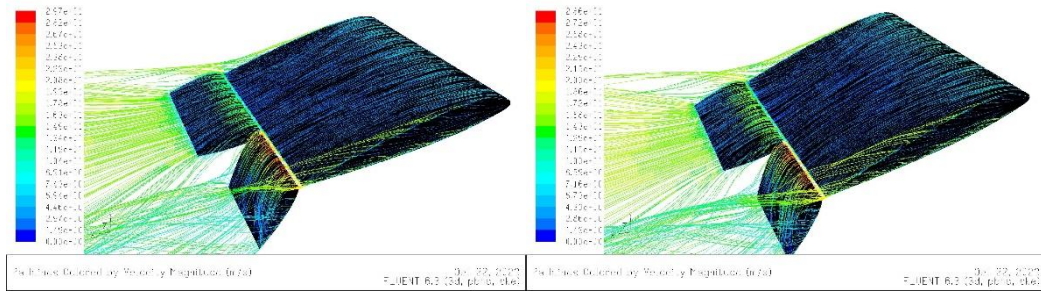
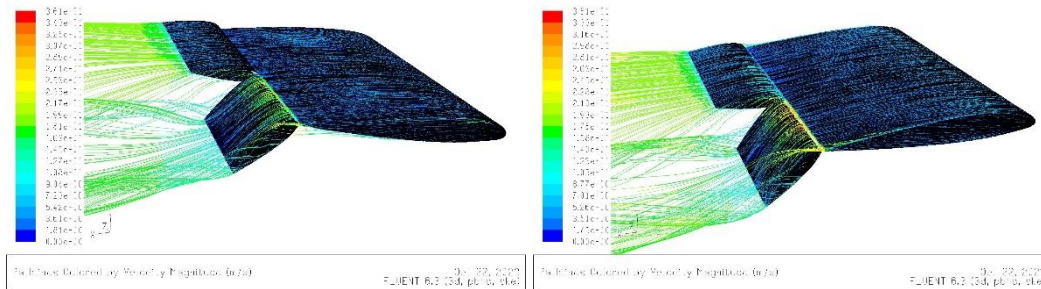
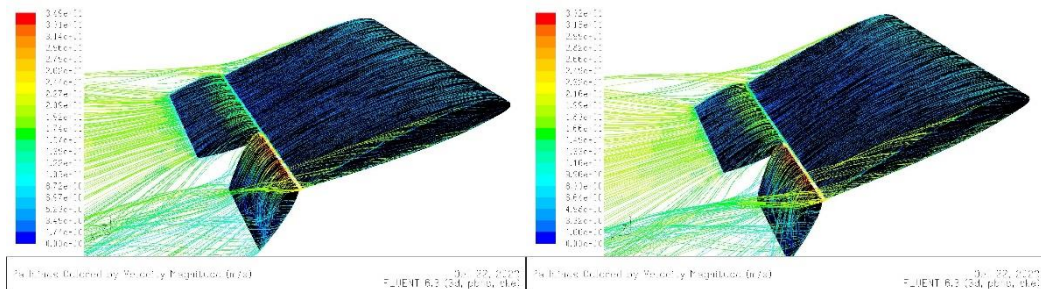
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

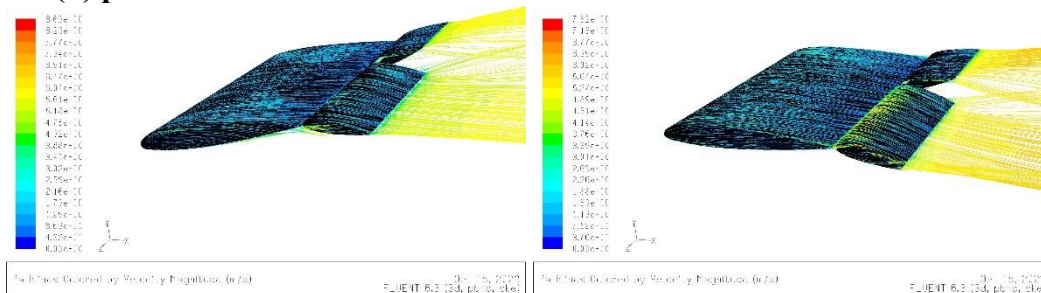
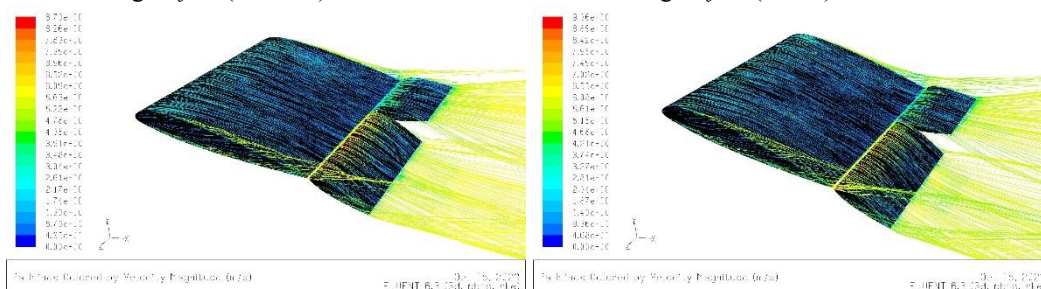
10. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 0^\circ$ dan $\delta_k = 45^\circ$

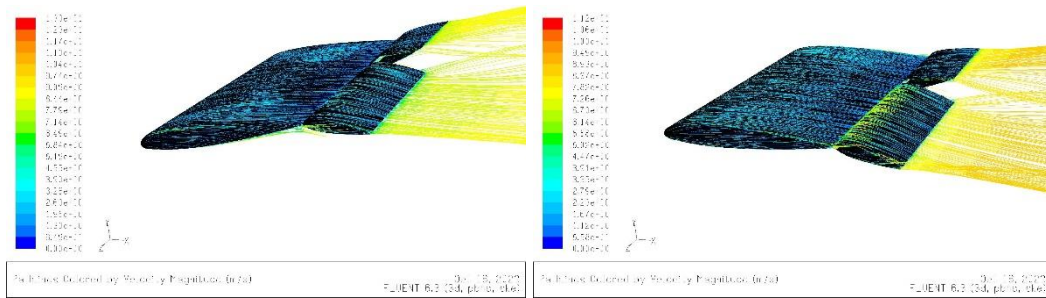
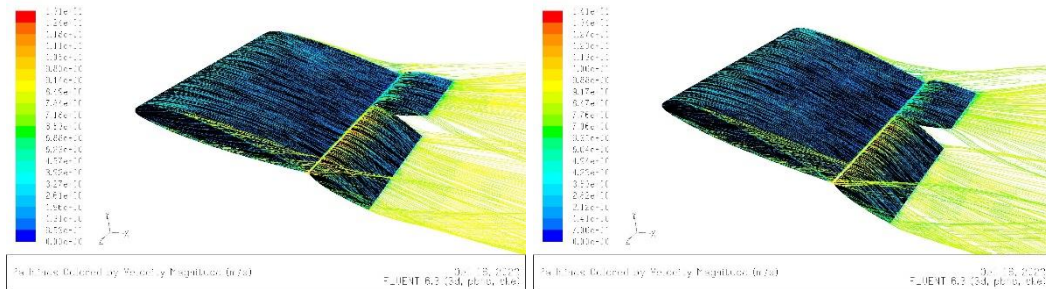
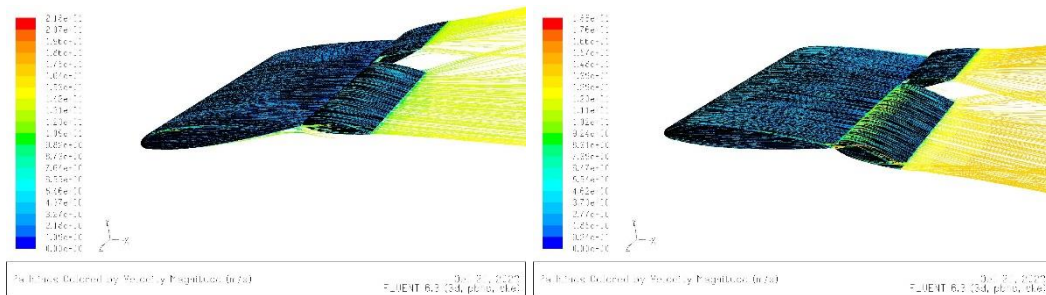
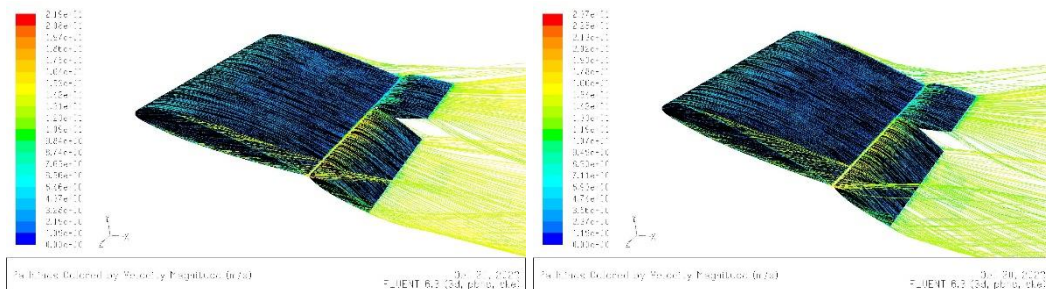
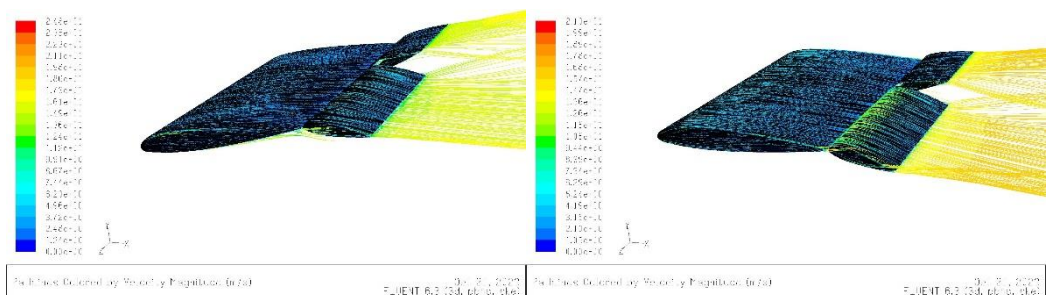
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s

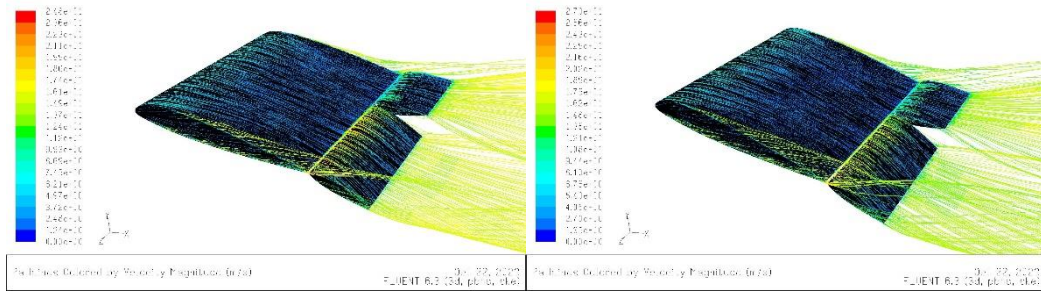
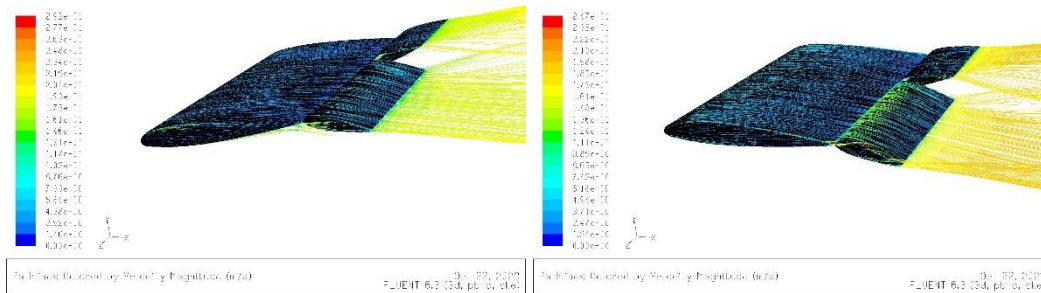
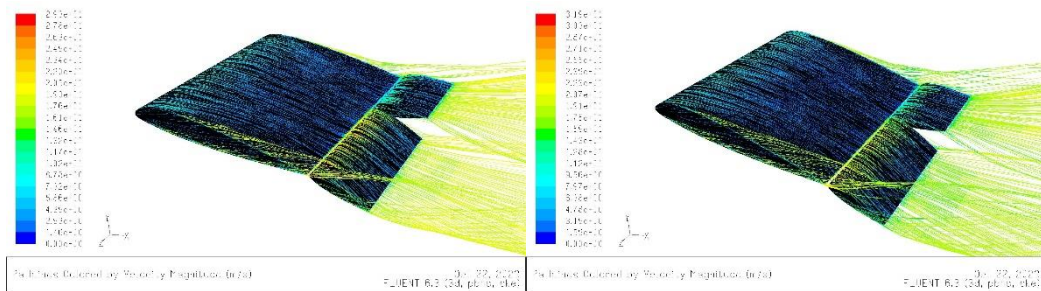
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

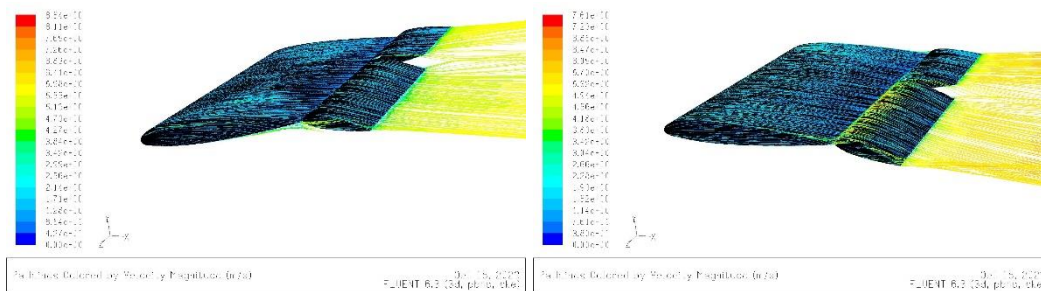
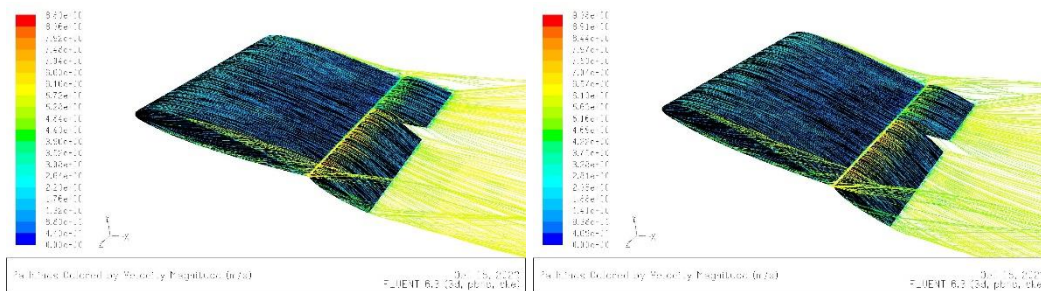
11. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 15^\circ$ dan $\delta_k = -10^\circ$

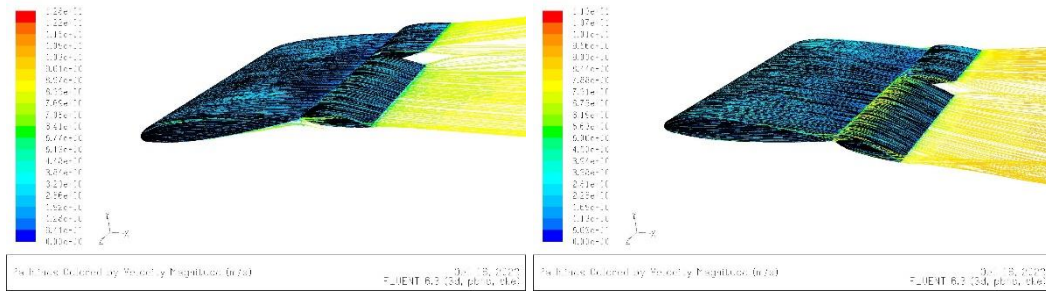
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20 \text{ m/s}$

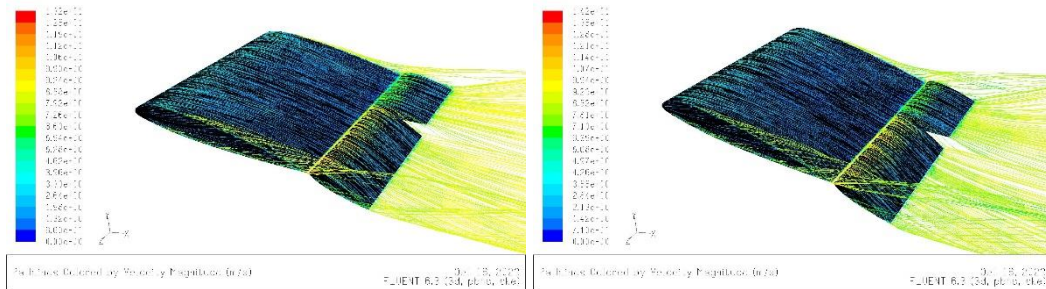
12. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 15^\circ$ dan $\delta_k = 0^\circ$

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6 \text{ m/s}$



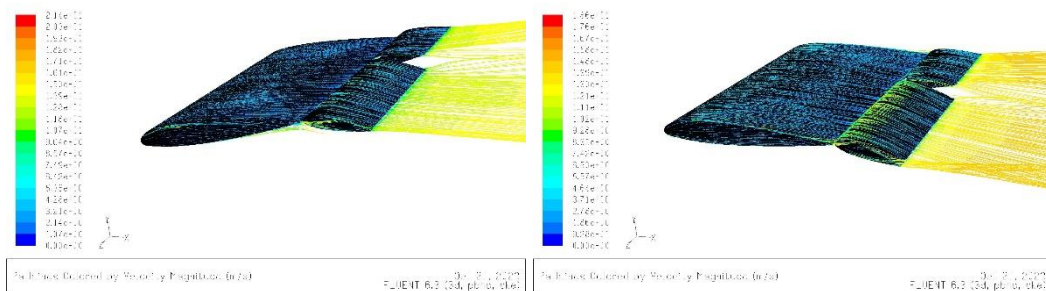
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s



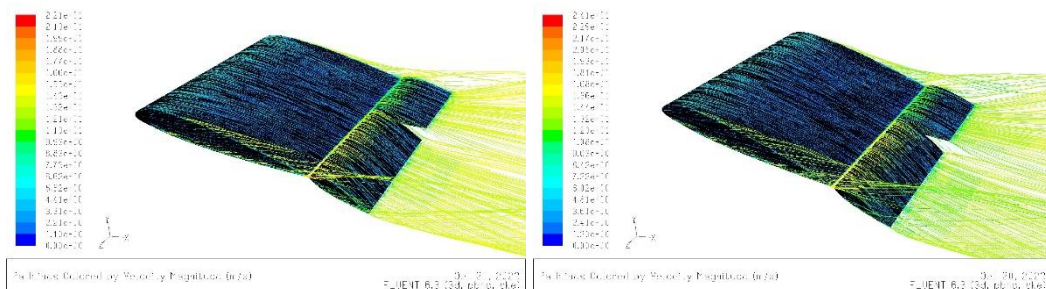
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/s



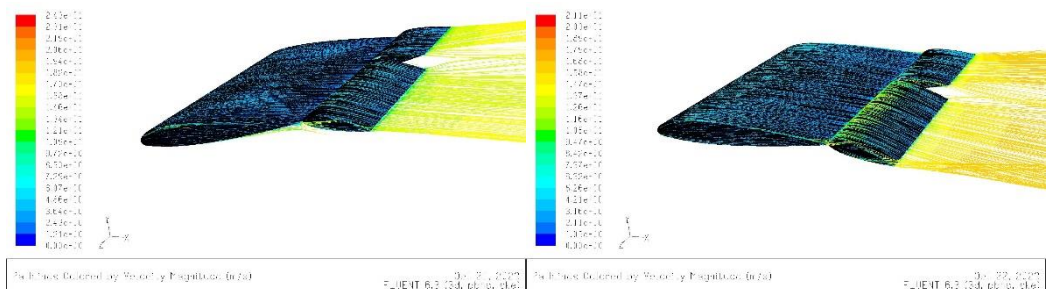
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/s



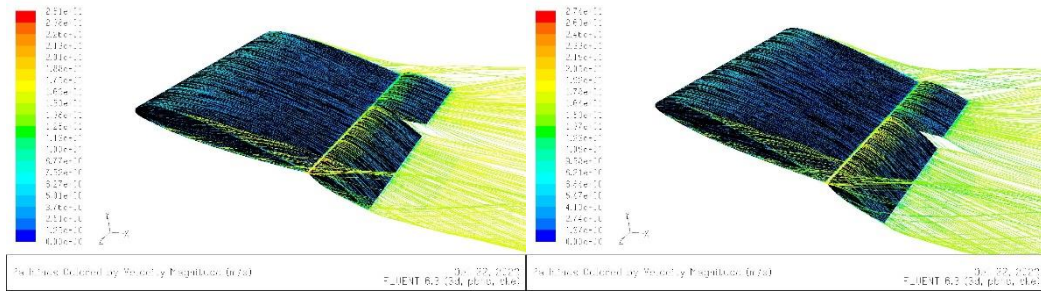
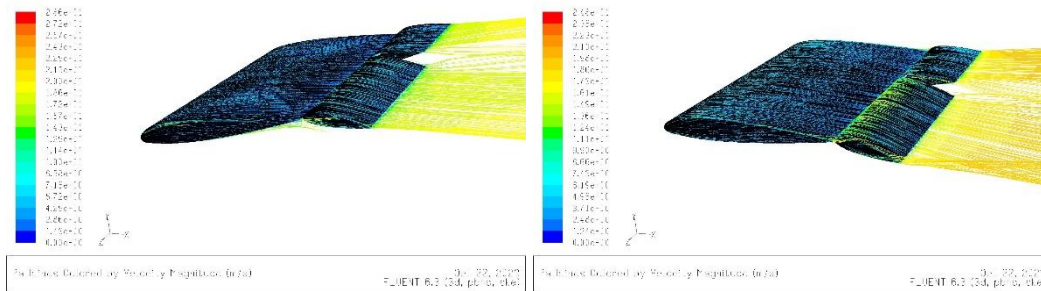
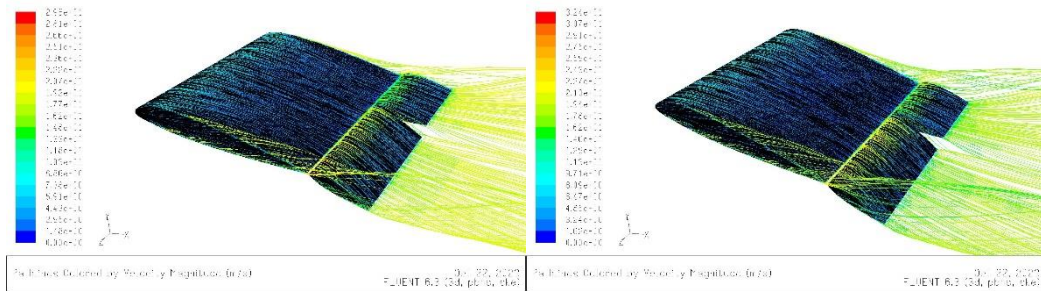
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

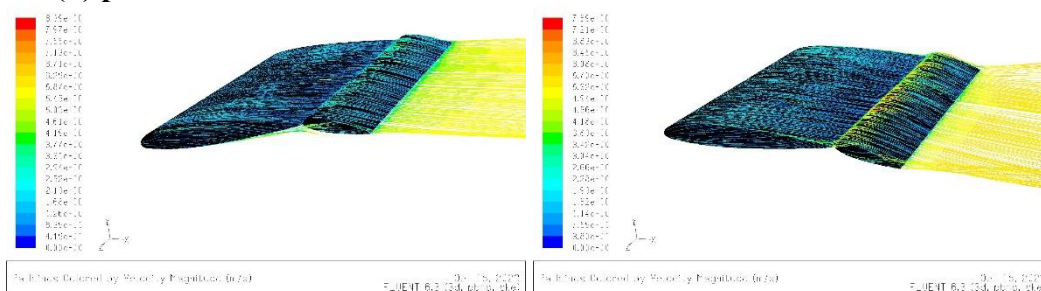
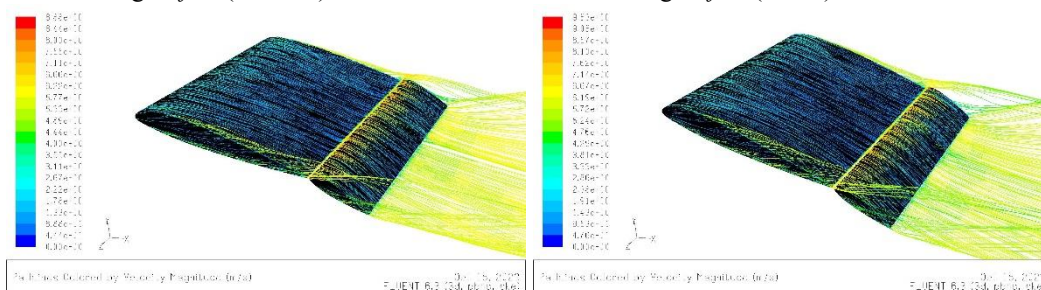


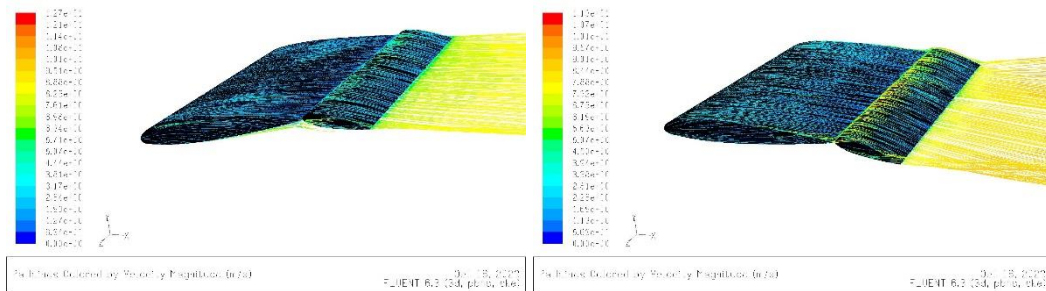
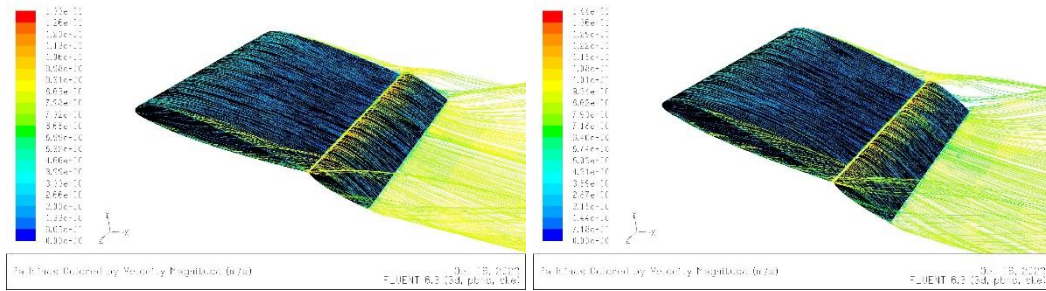
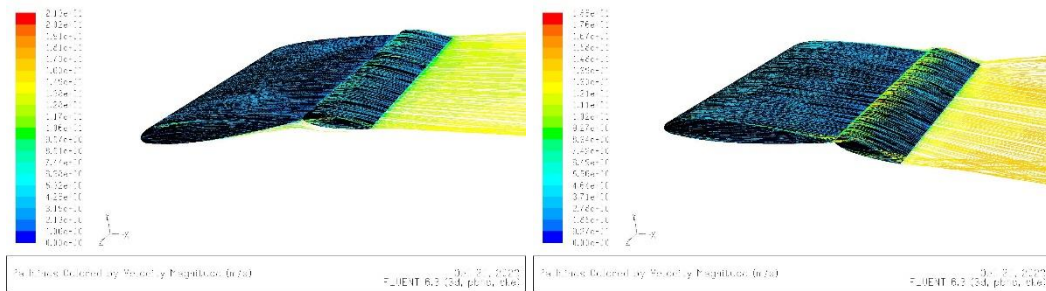
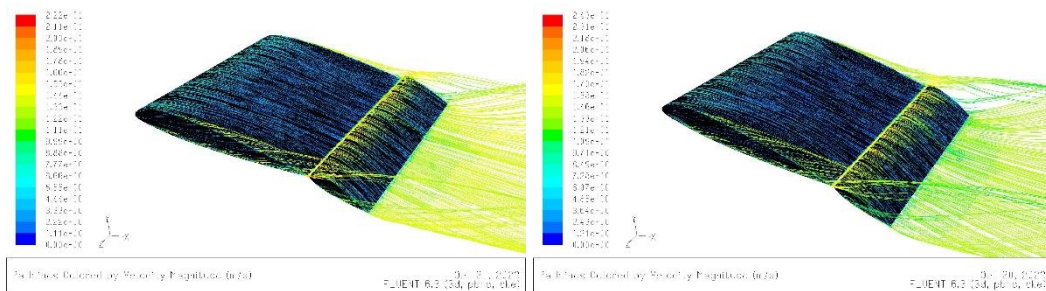
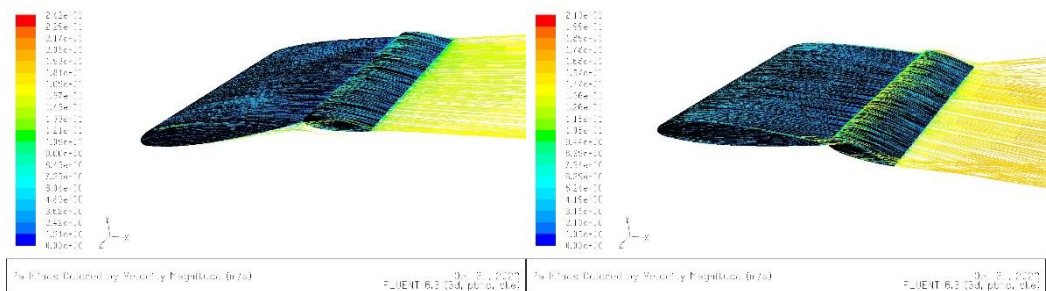
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/s

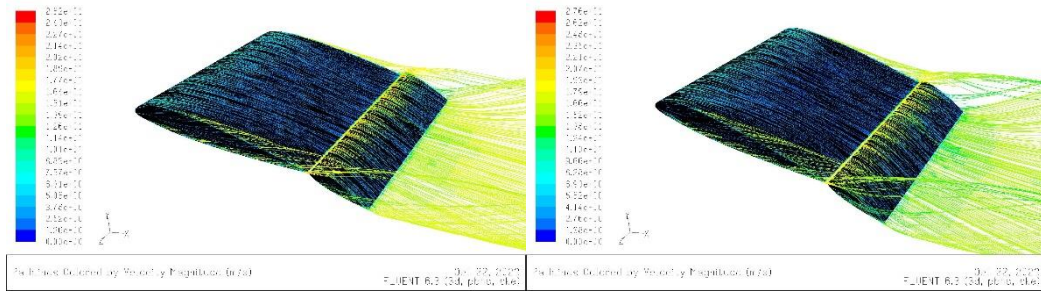
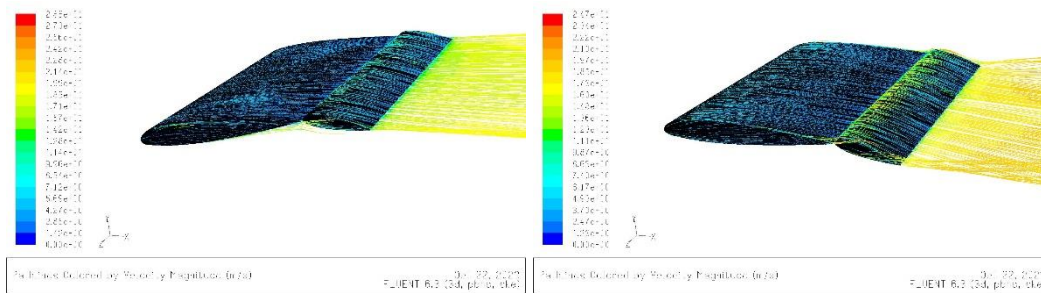
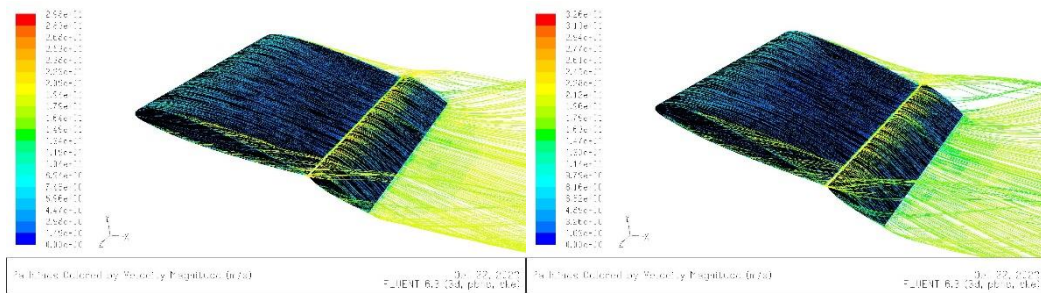
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

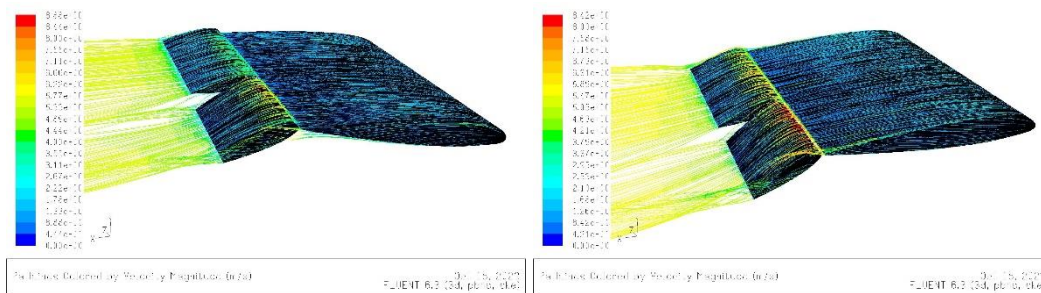
13. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 15^\circ$ dan $\delta_k = 15^\circ$

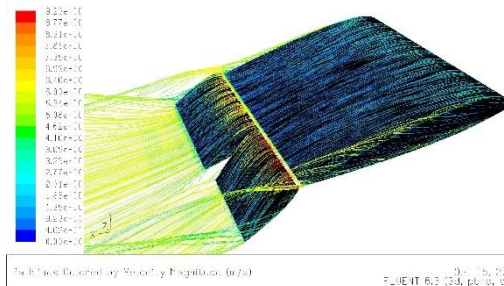
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/s

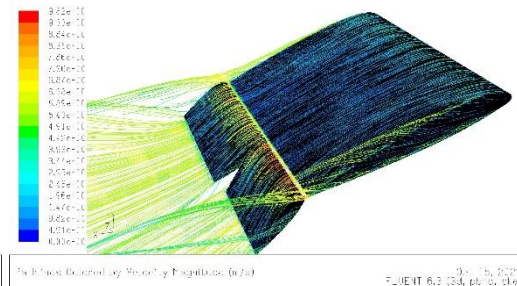
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

14. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 15^\circ$ dan $\delta_k = 30^\circ$

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s



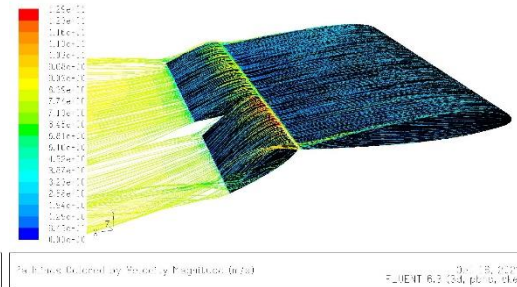
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6 \text{ m/s}$



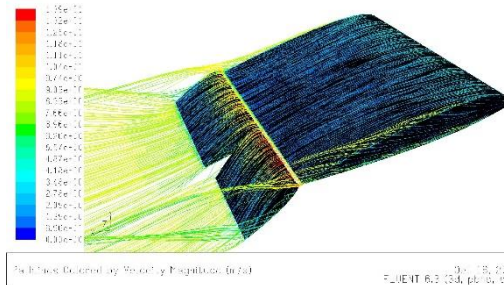
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6 \text{ m/s}$



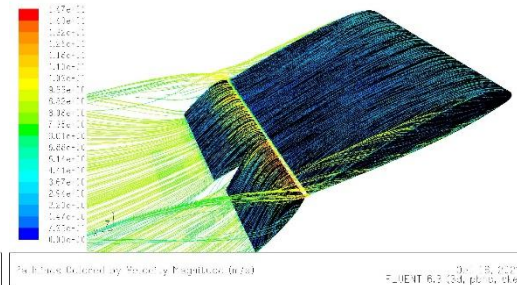
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9 \text{ m/s}$



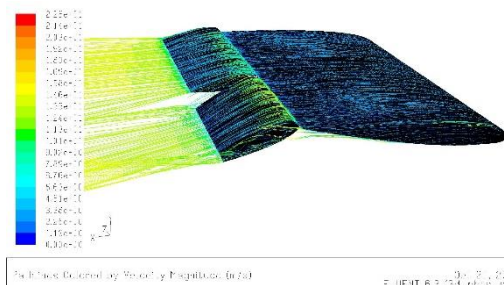
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9 \text{ m/s}$



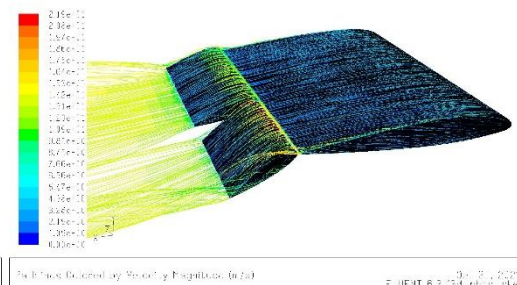
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9 \text{ m/s}$



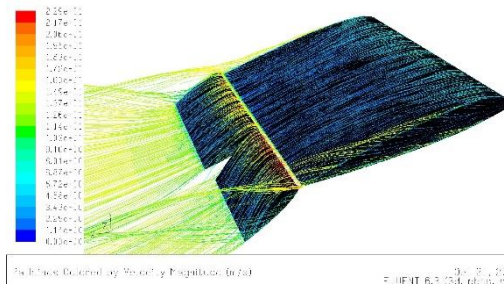
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9 \text{ m/s}$



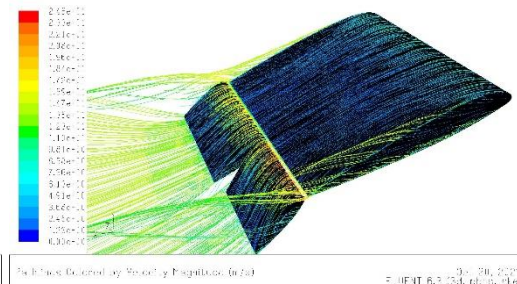
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15 \text{ m/s}$



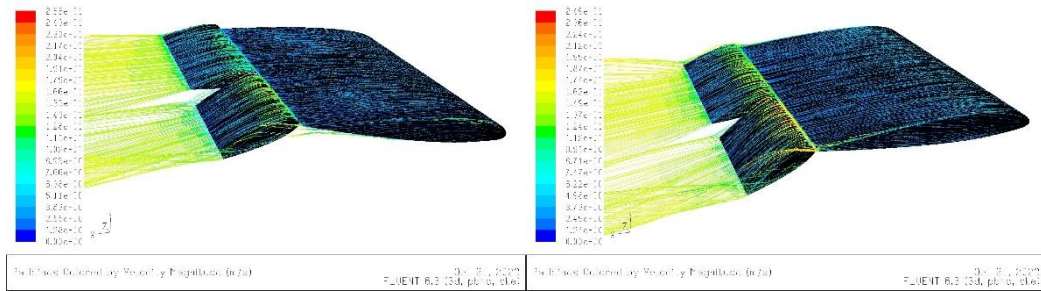
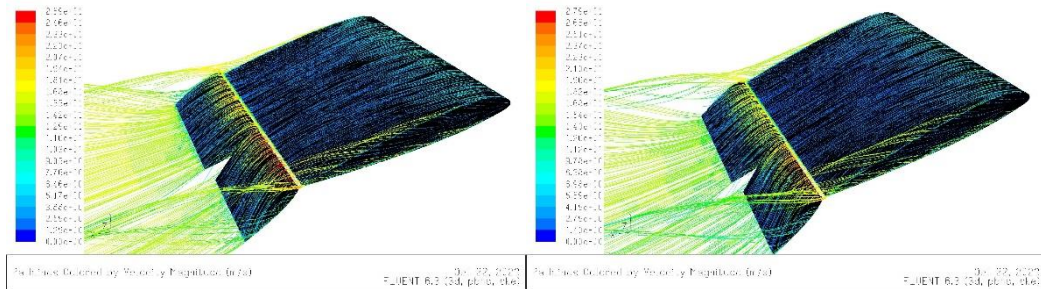
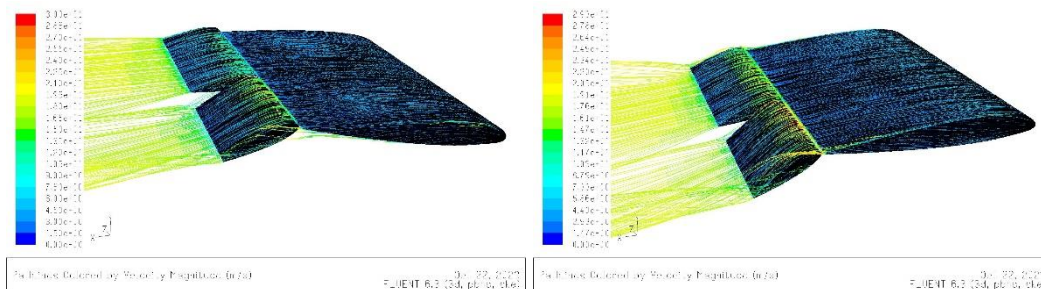
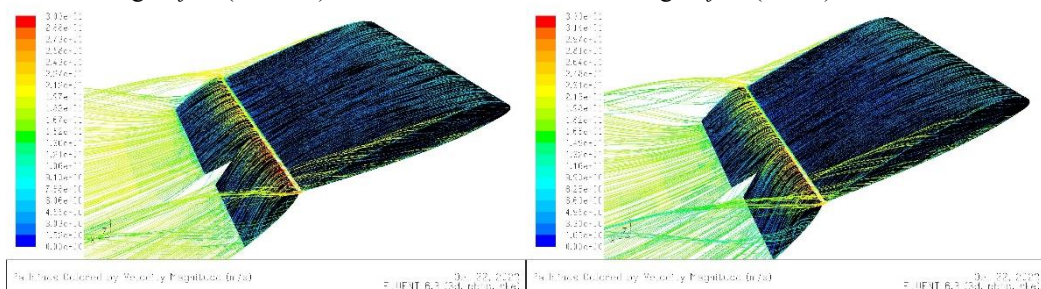
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15 \text{ m/s}$



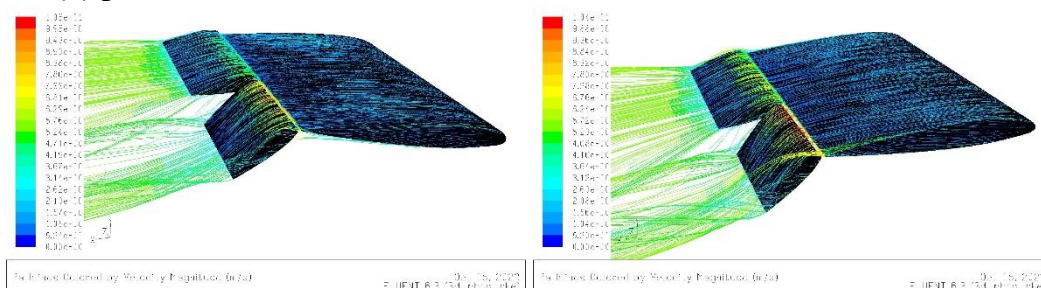
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15 \text{ m/s}$

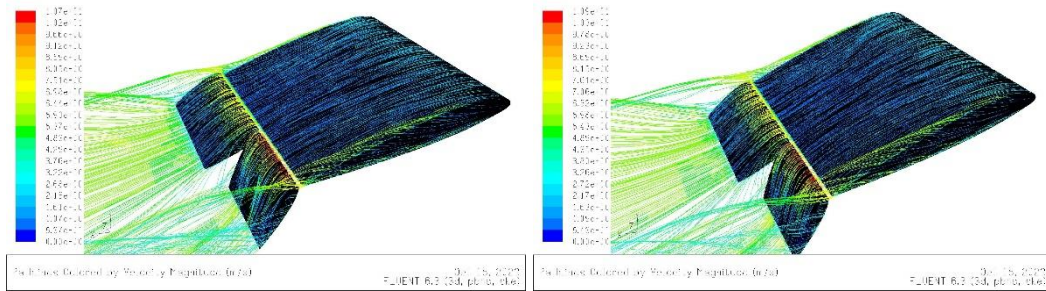
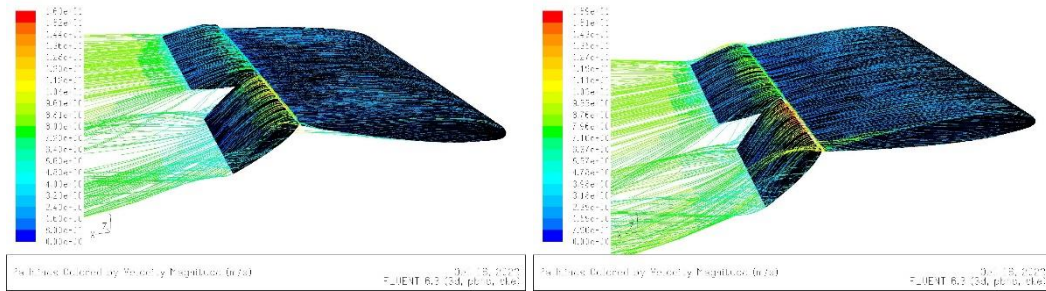
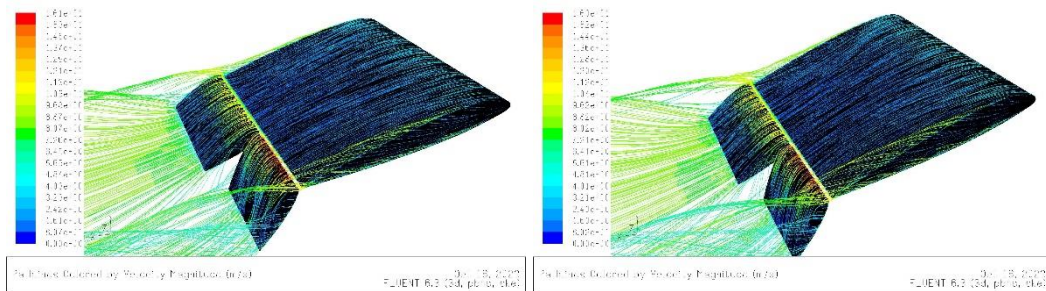
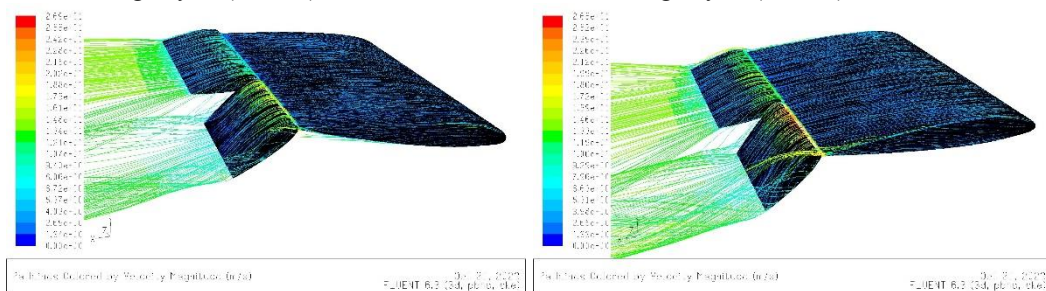
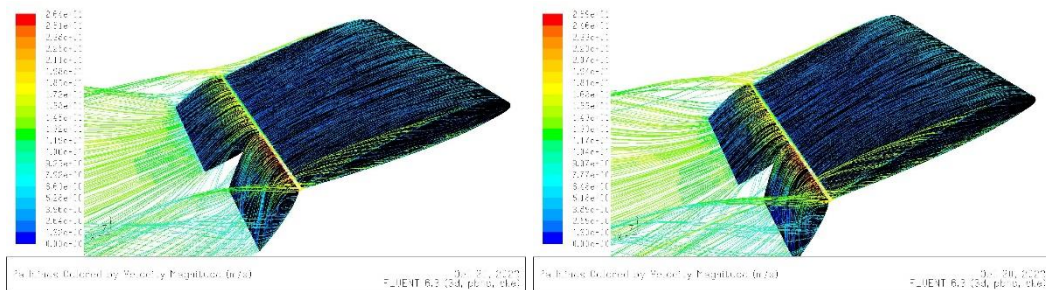


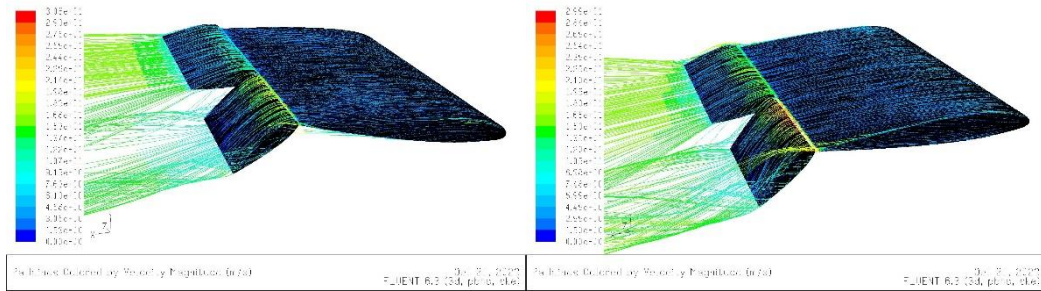
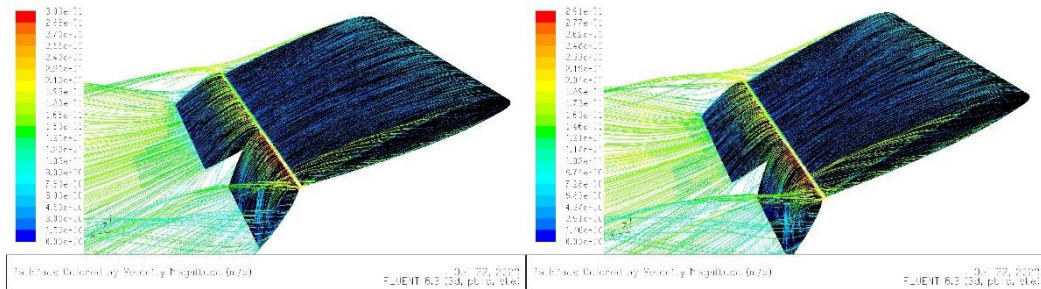
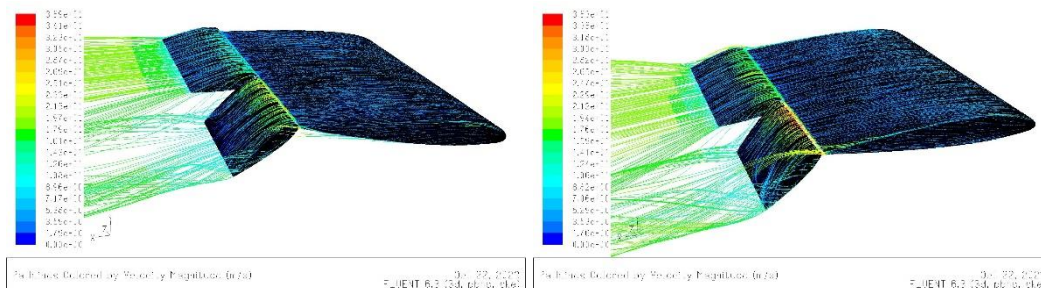
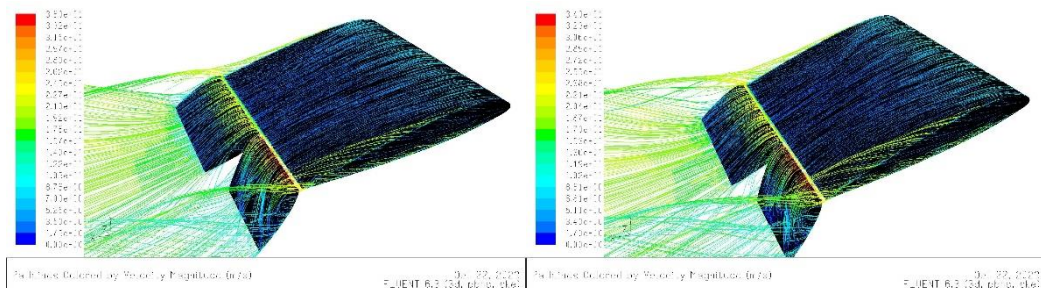
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15 \text{ m/s}$

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

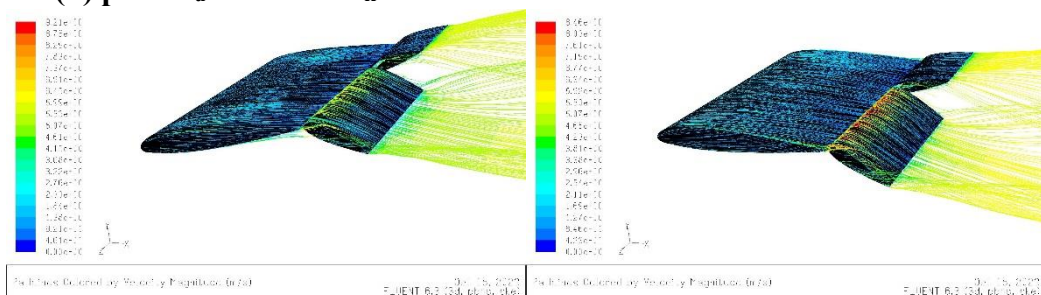
15. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 15^\circ$ dan $\delta_k = 45^\circ$

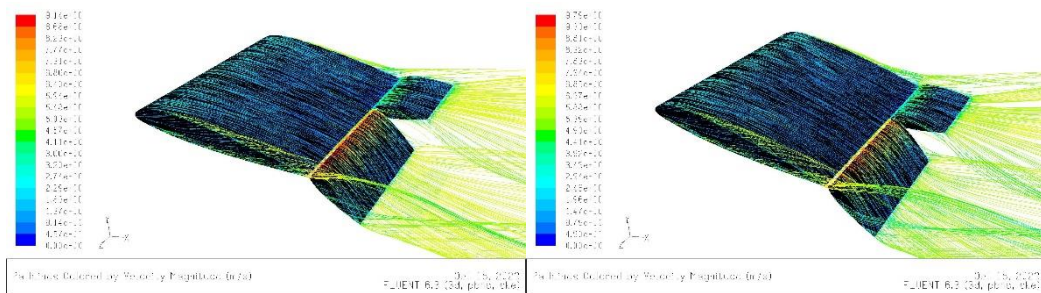
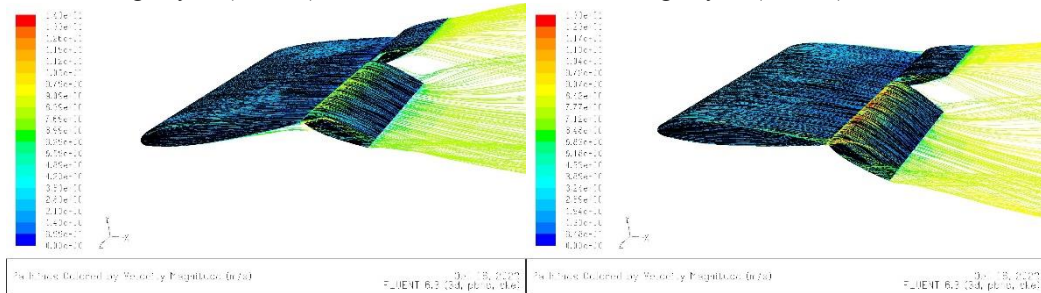
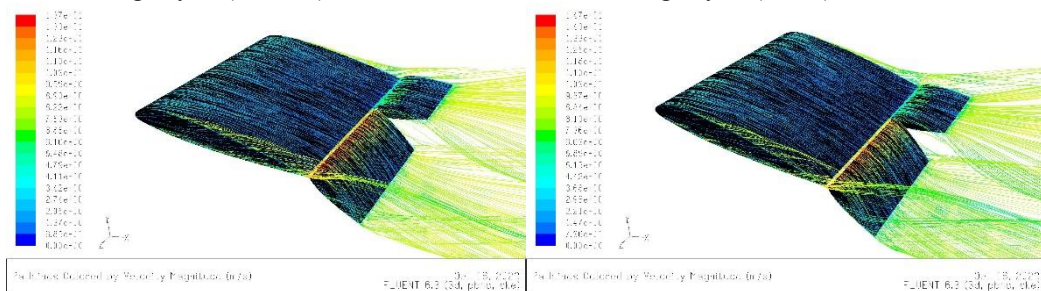
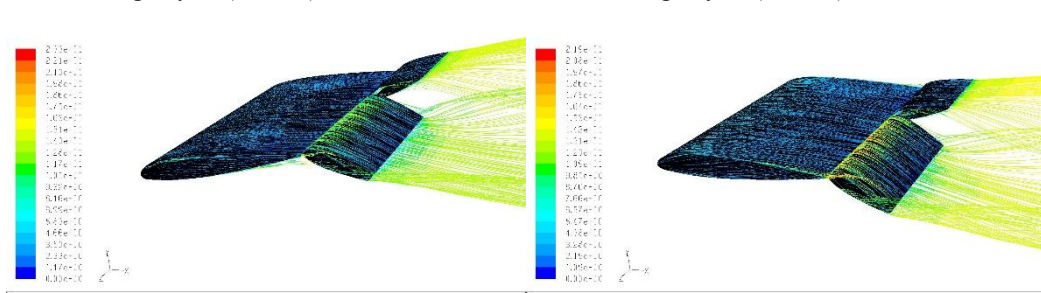
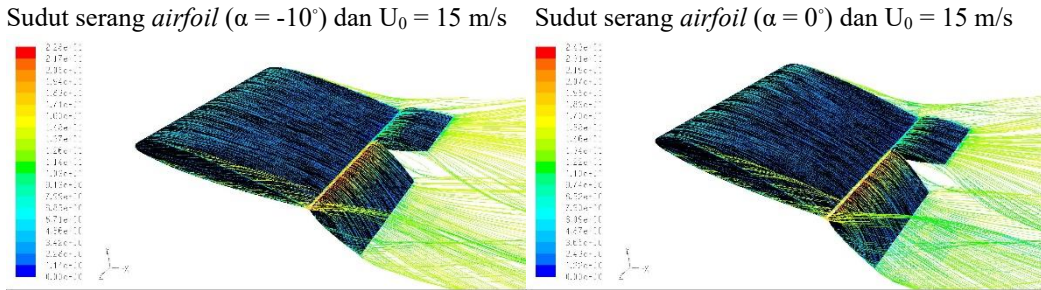
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

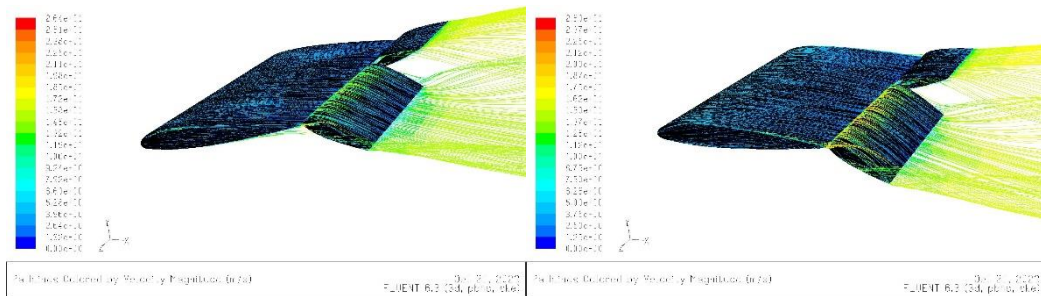
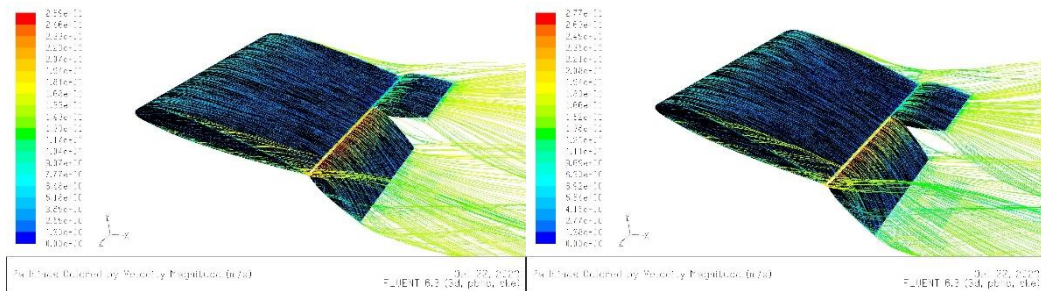
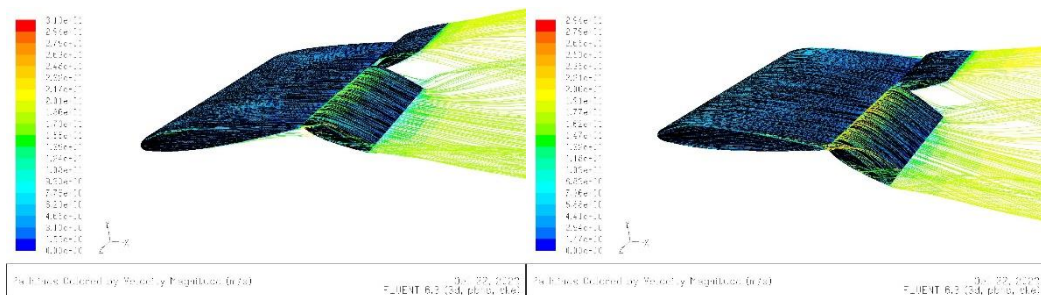
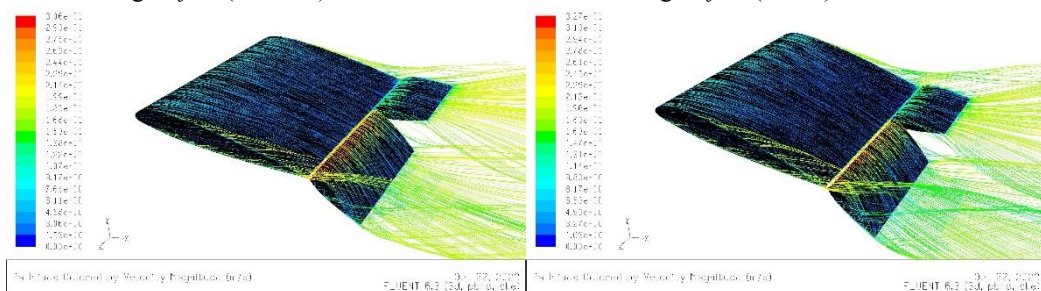
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

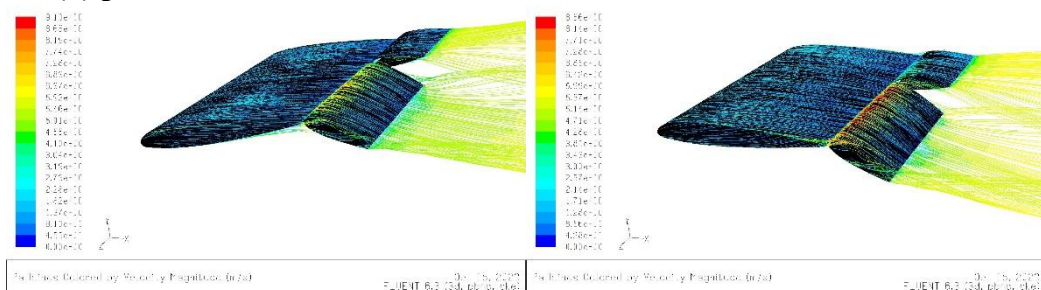
16. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 30^\circ$ dan $\delta_k = -10^\circ$

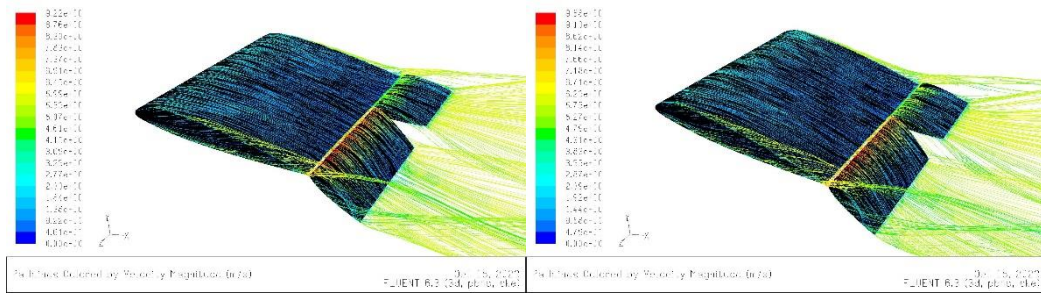
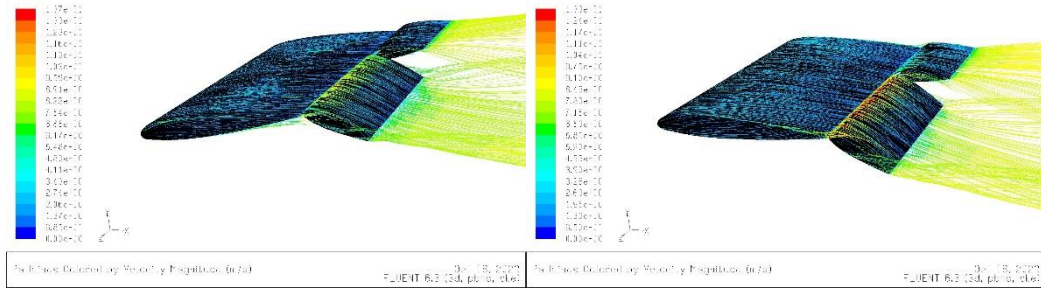
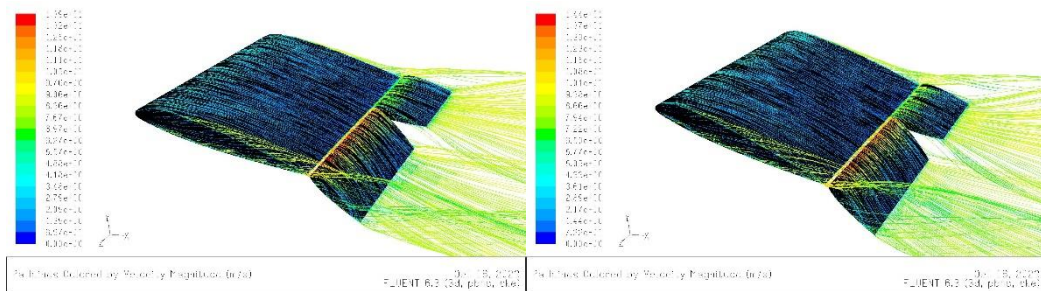
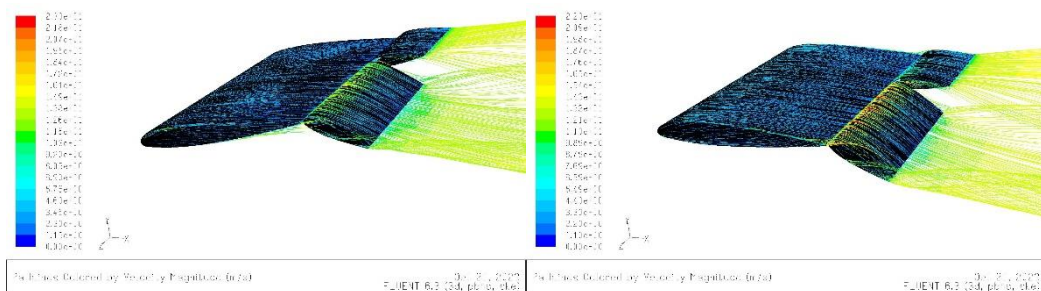
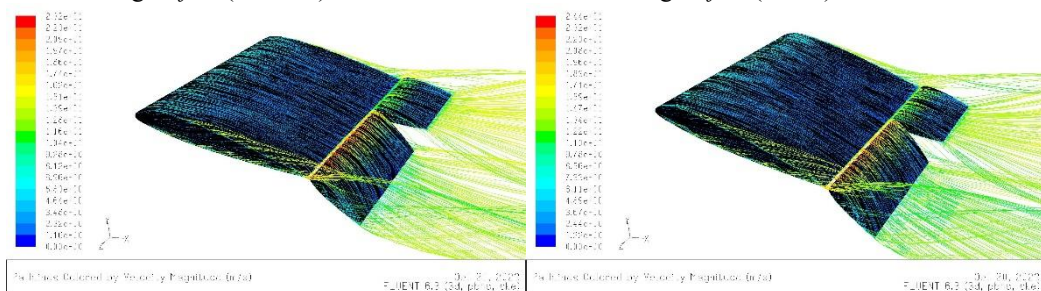
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

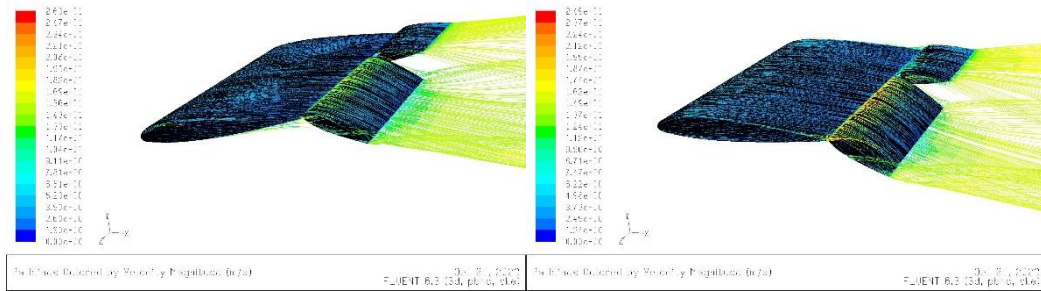
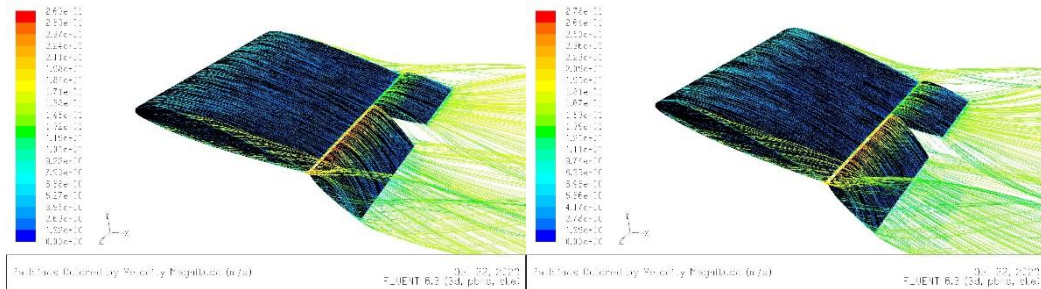
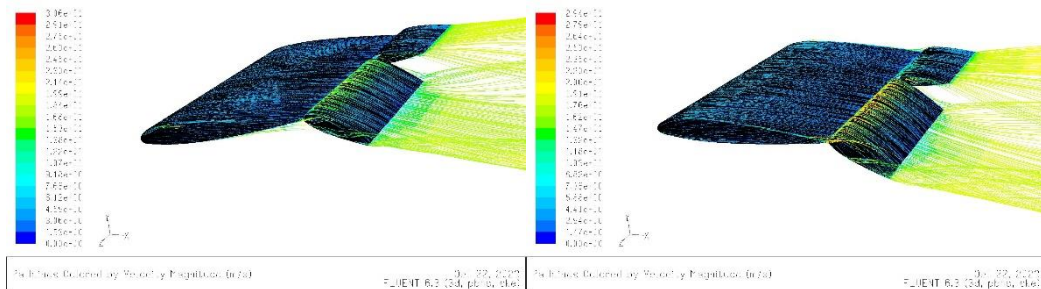
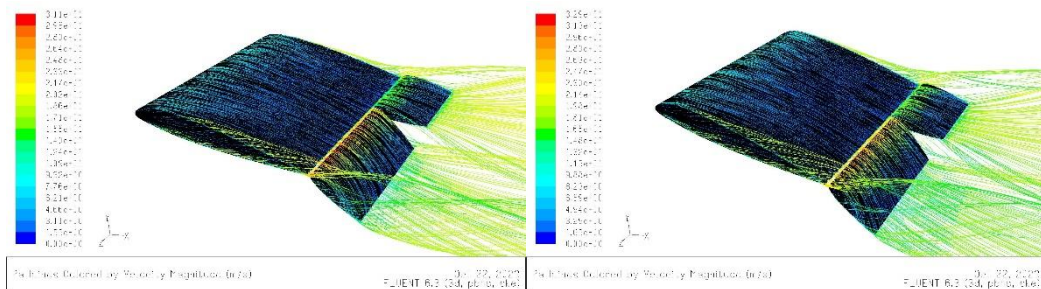
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

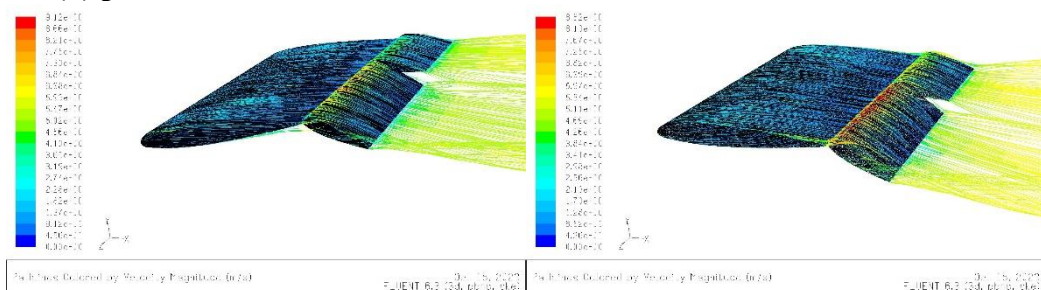
17. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 30^\circ$ dan $\delta_k = 0^\circ$

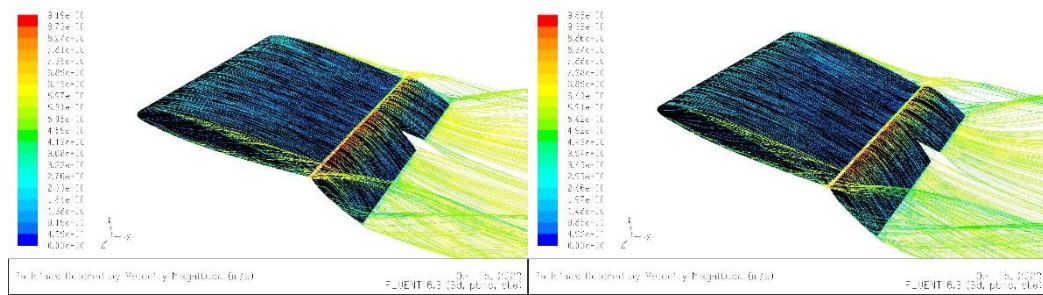
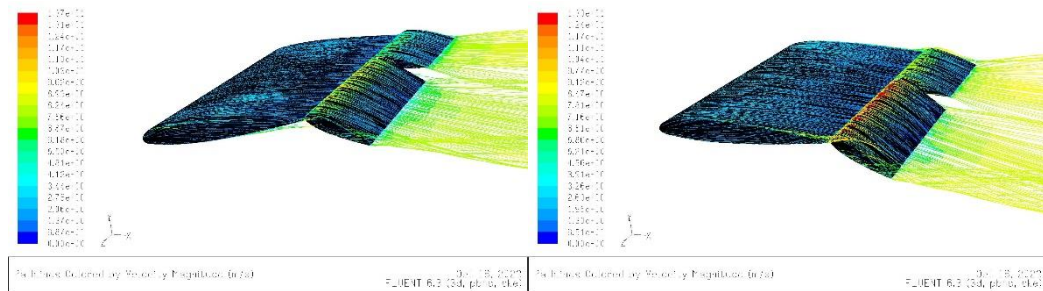
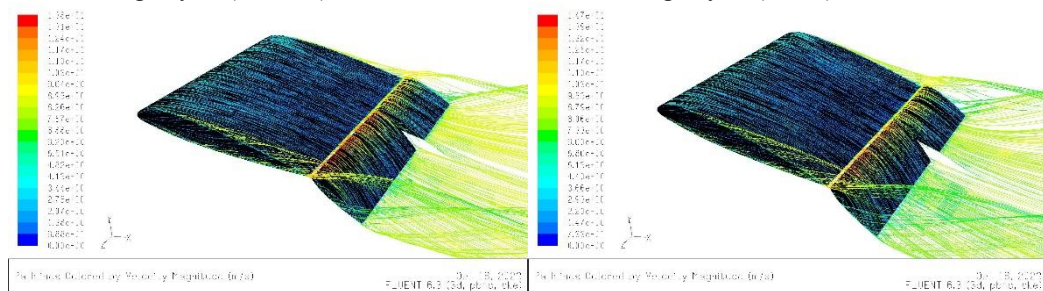
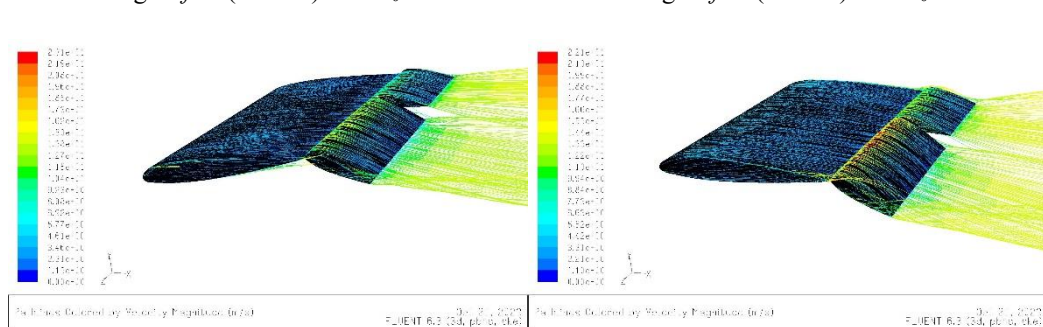
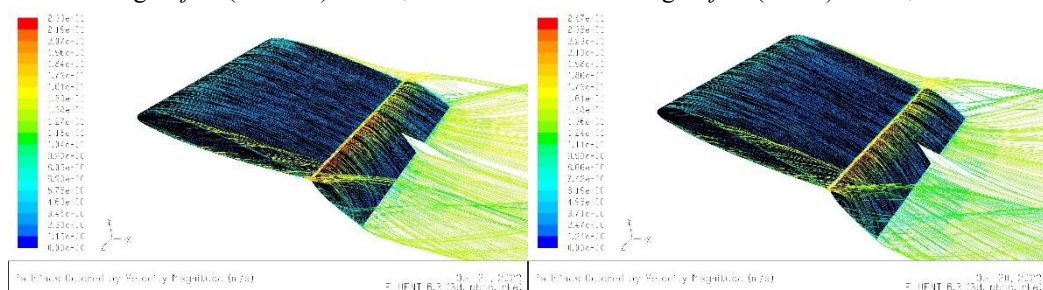
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

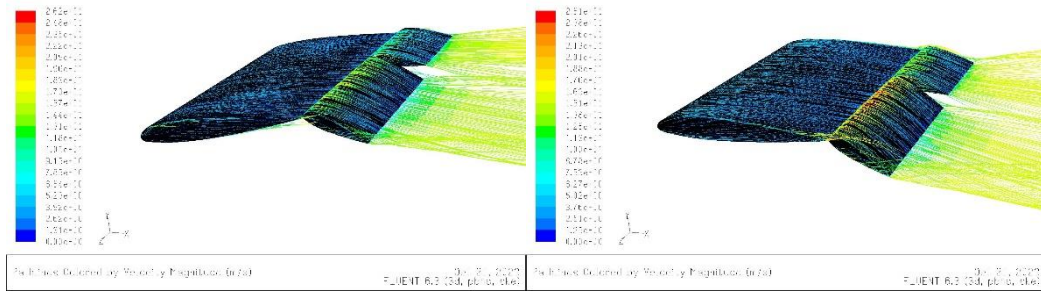
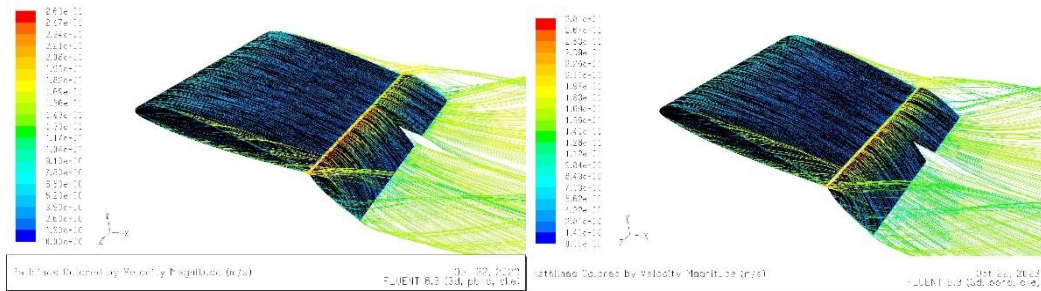
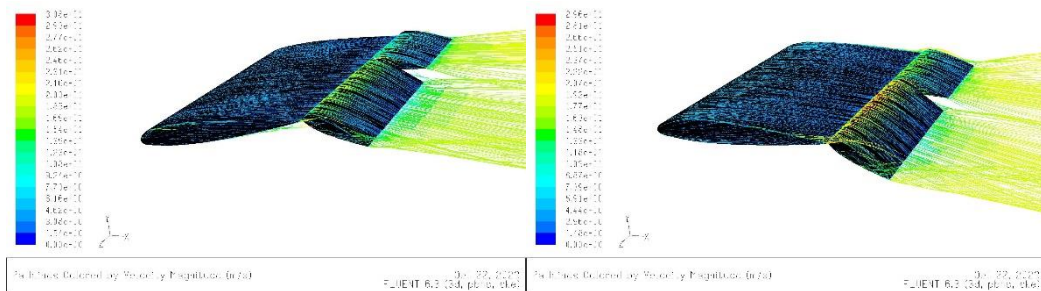
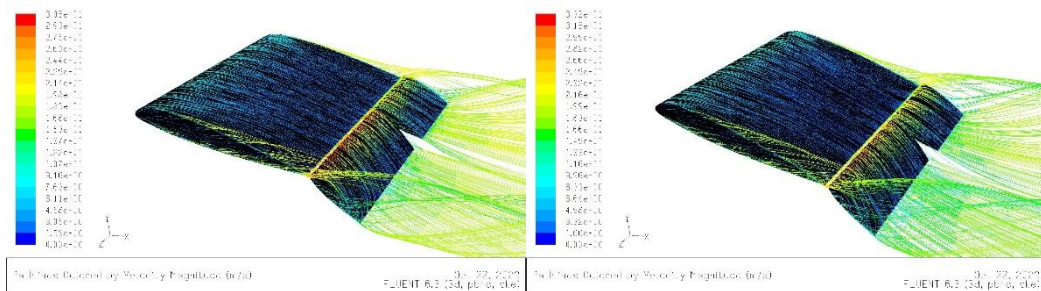
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15 \text{ m/s}$ Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15 \text{ m/s}$

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

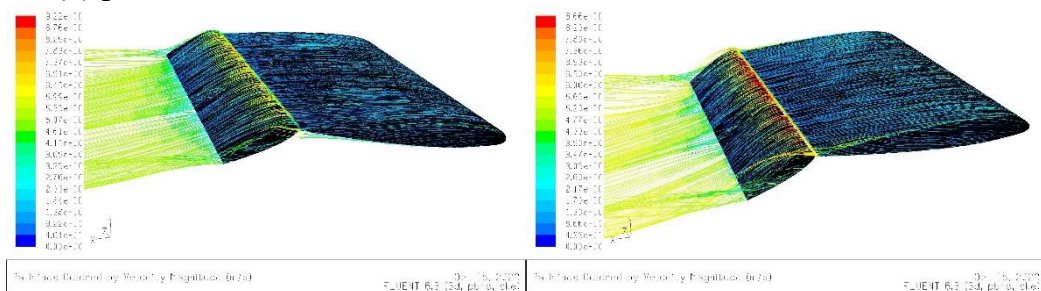
18. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 30^\circ$ dan $\delta_k = 15^\circ$

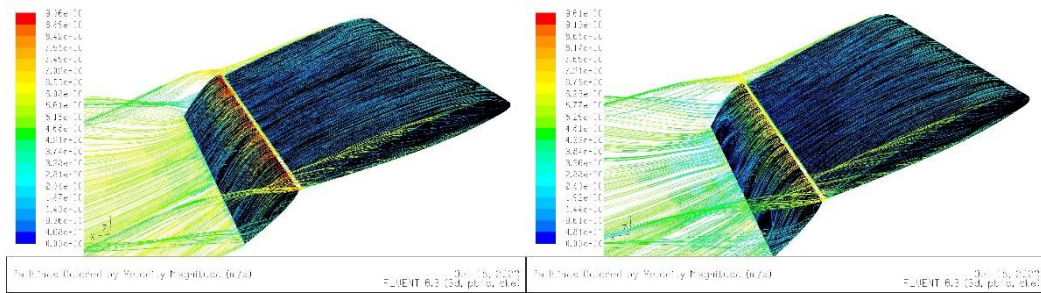
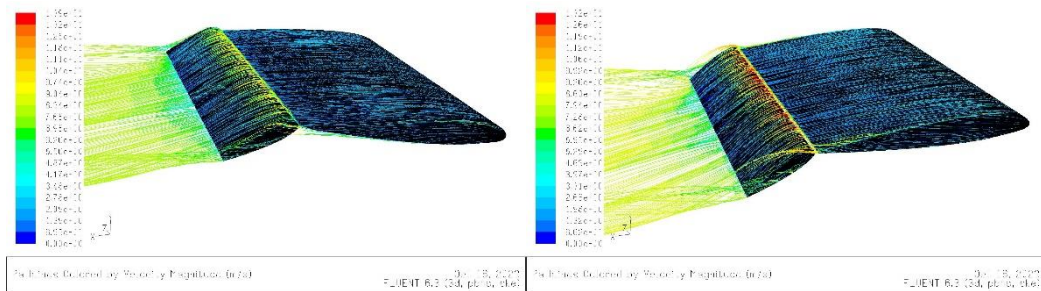
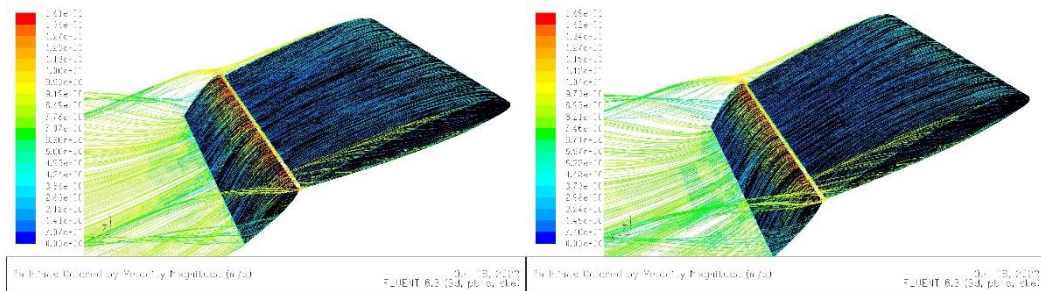
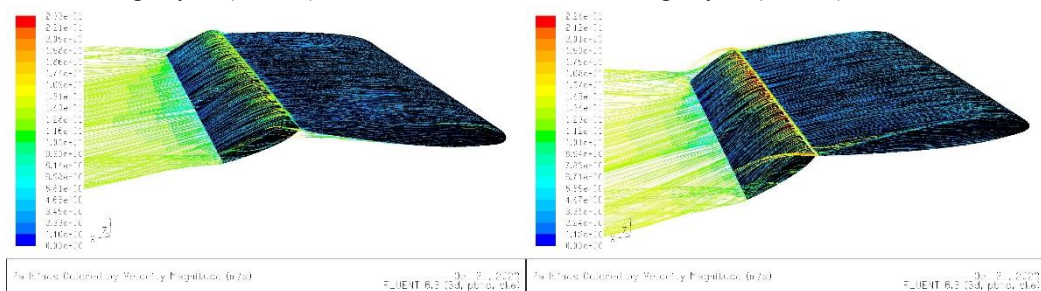
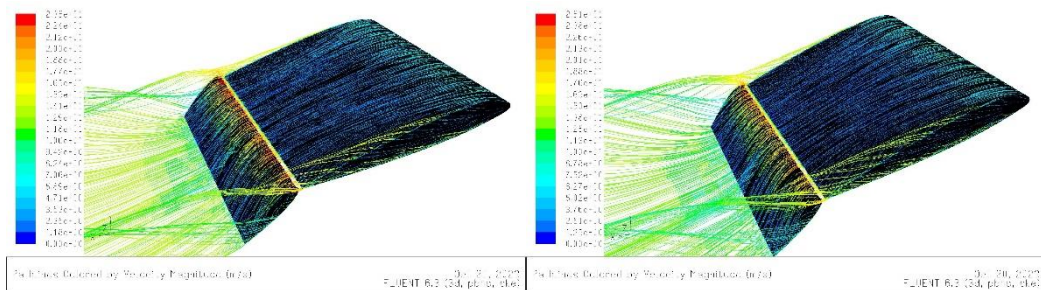
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

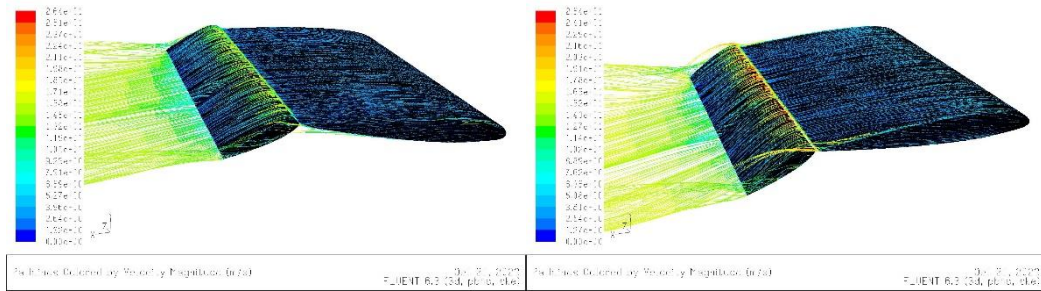
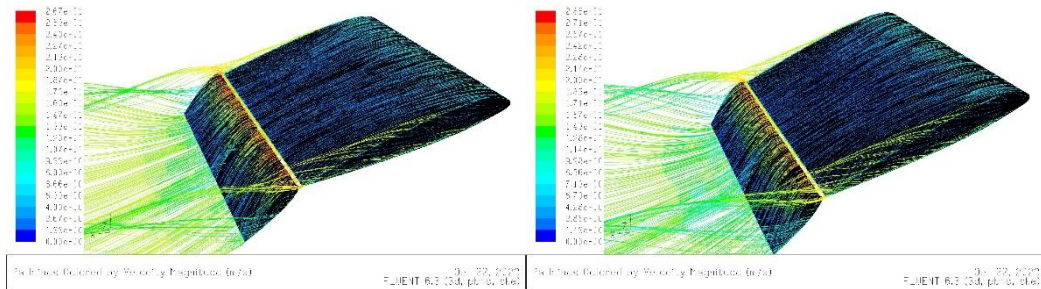
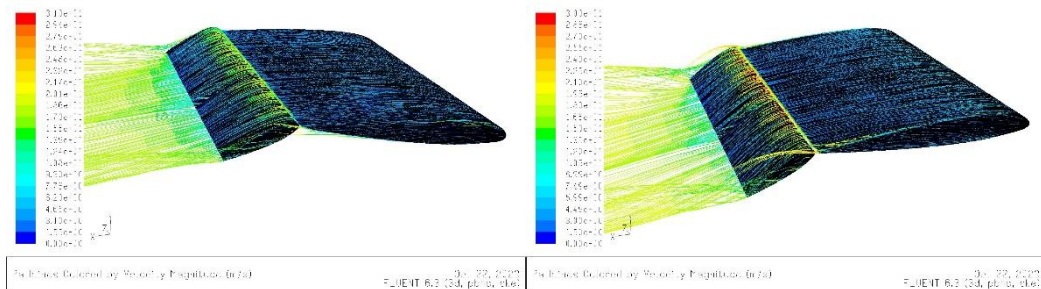
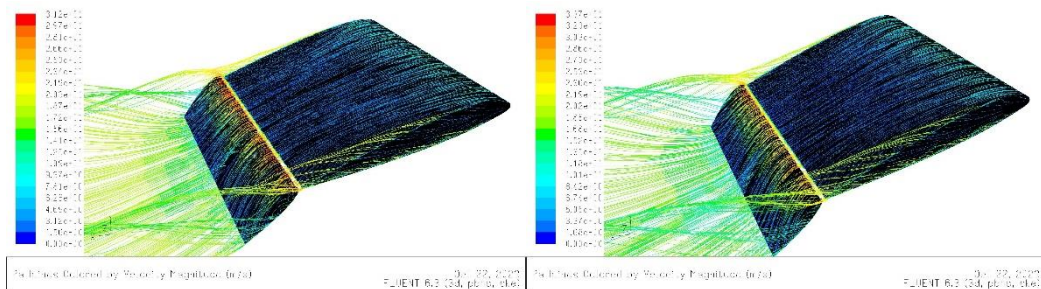
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/s

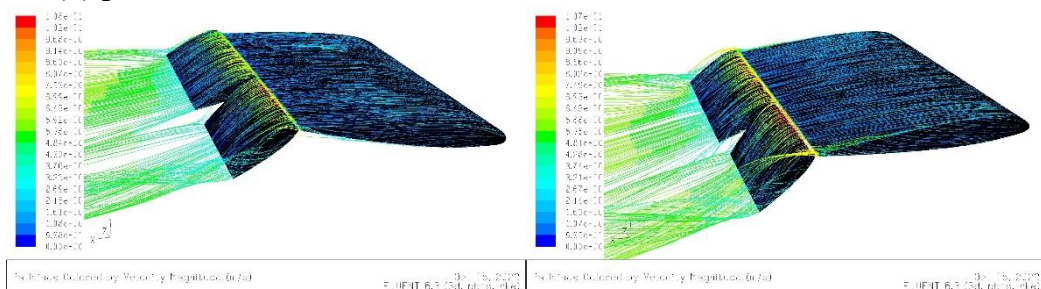
19. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 30^\circ$ dan $\delta_k = 30^\circ$

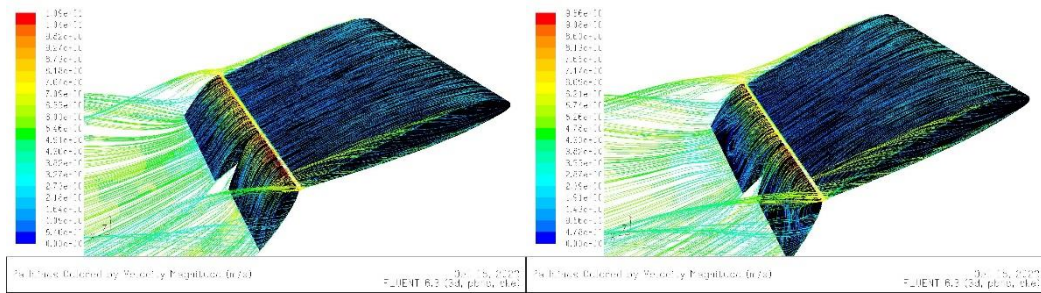
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/s

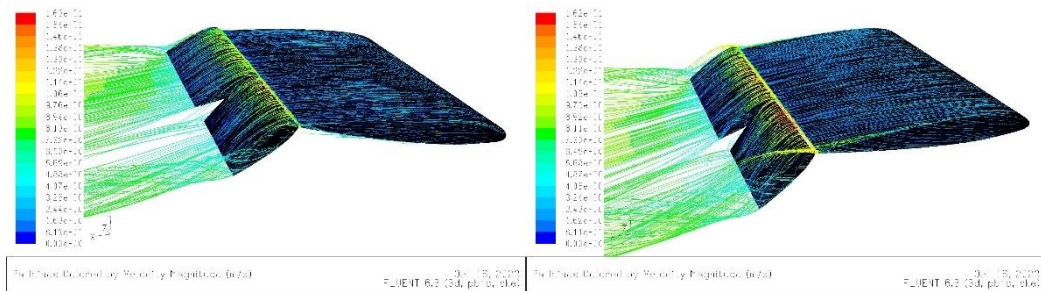
20. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 30^\circ$ dan $\delta_k = 45^\circ$

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s



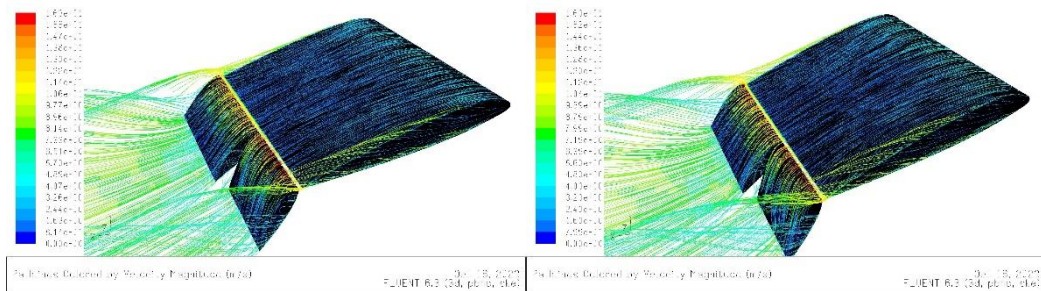
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/s



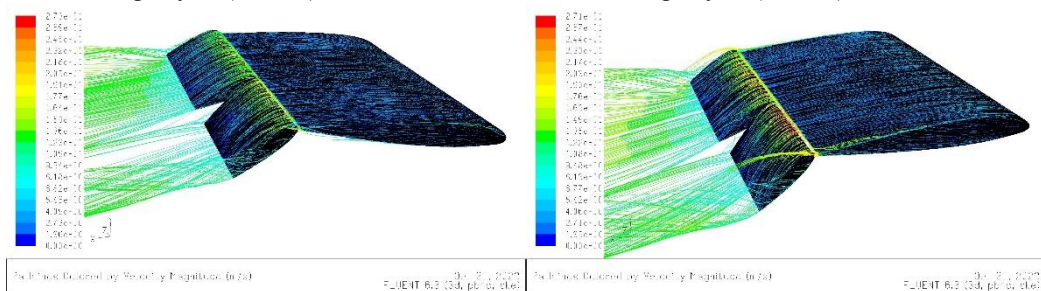
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/s



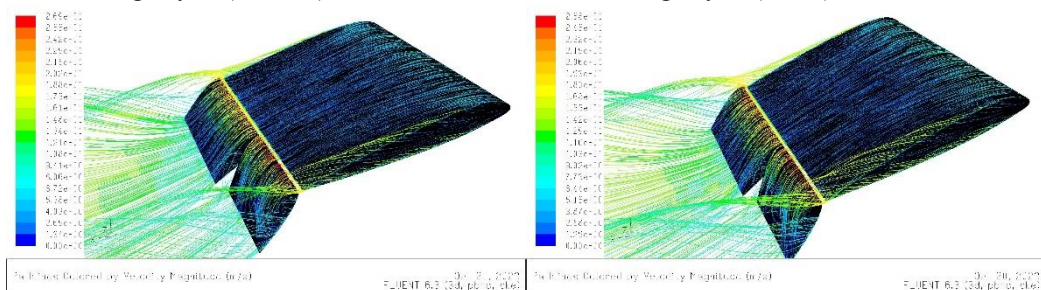
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/s



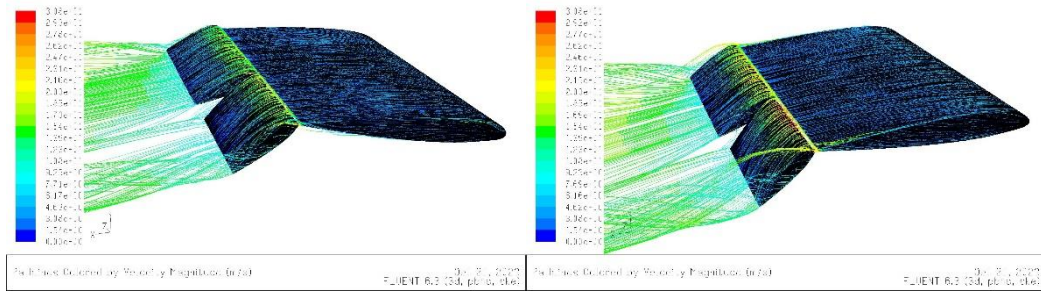
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/s



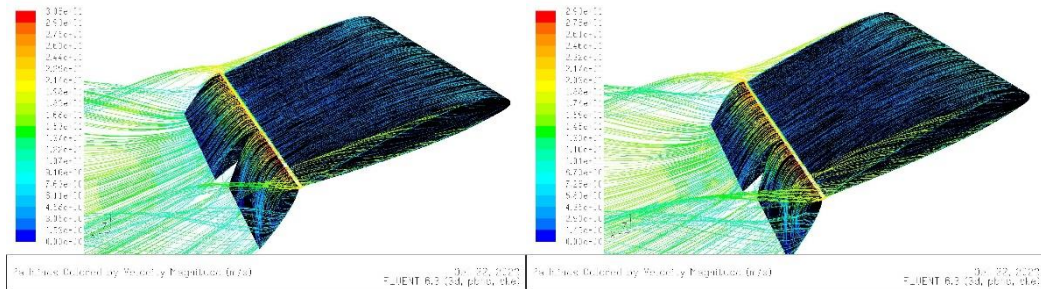
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s



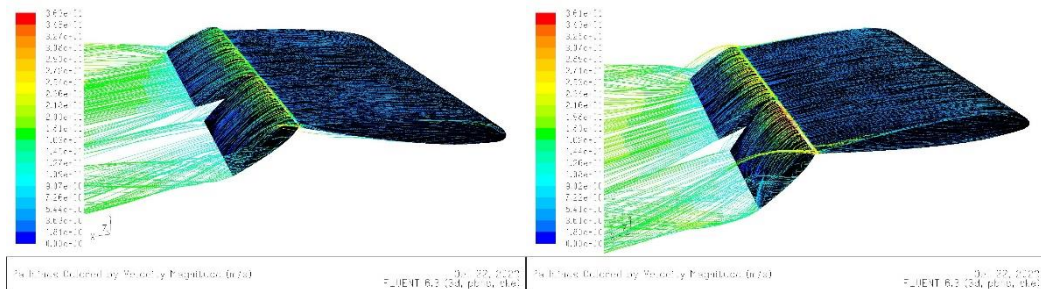
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17 \text{ m/s}$

Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17 \text{ m/s}$



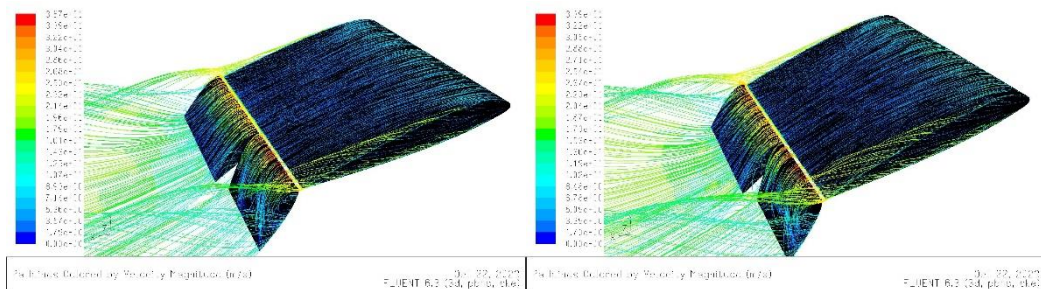
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17 \text{ m/s}$

Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17 \text{ m/s}$



Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20 \text{ m/s}$

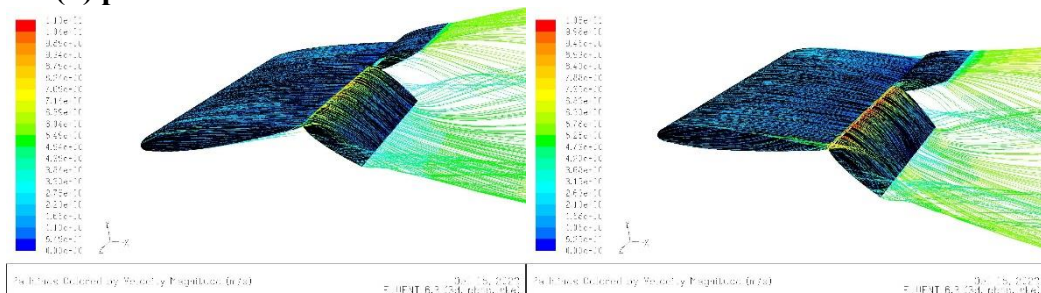
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20 \text{ m/s}$



Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20 \text{ m/s}$

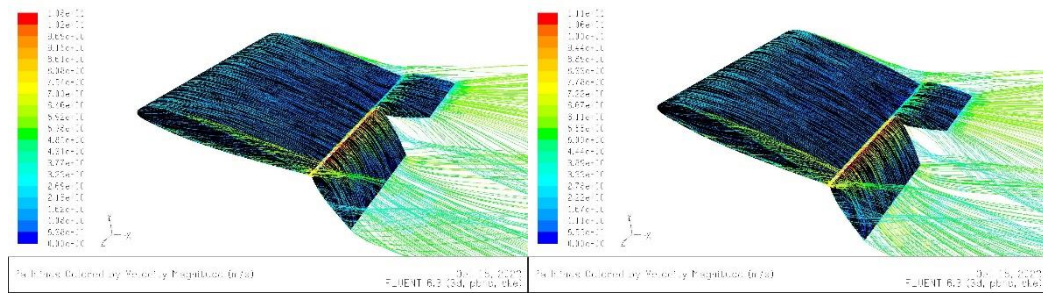
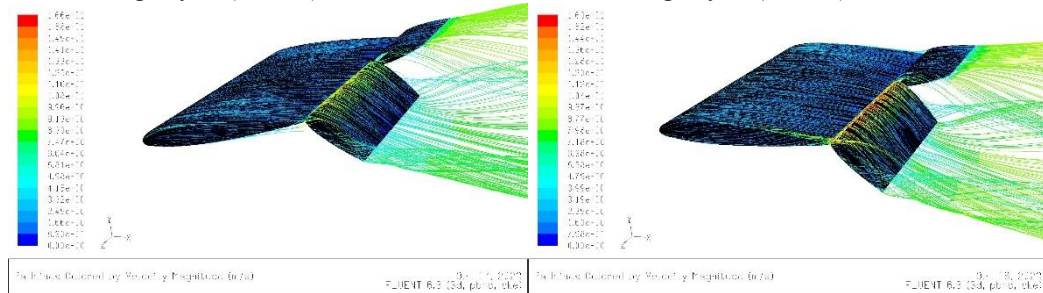
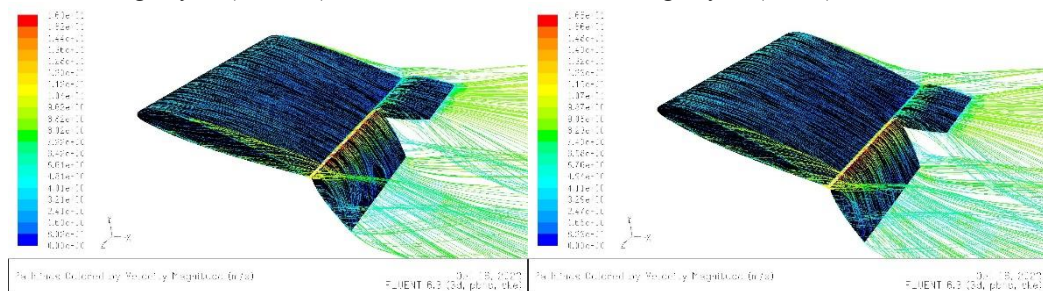
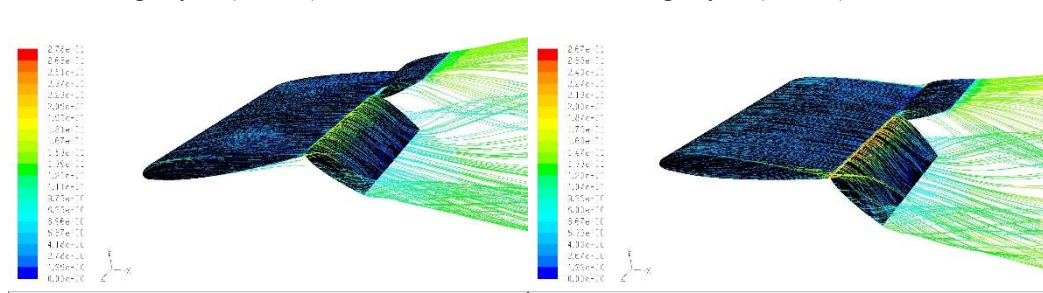
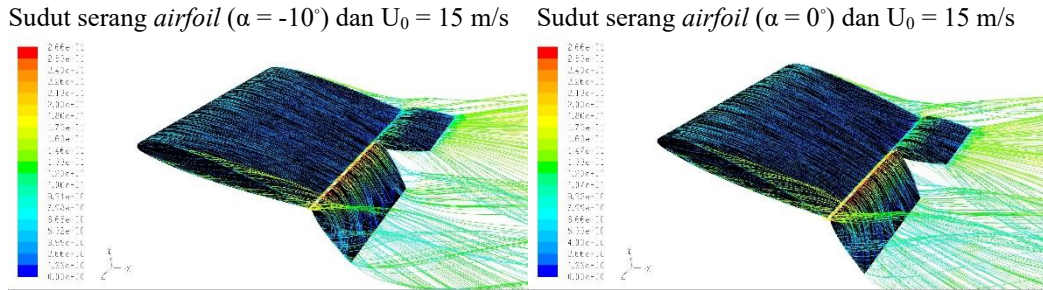
Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20 \text{ m/s}$

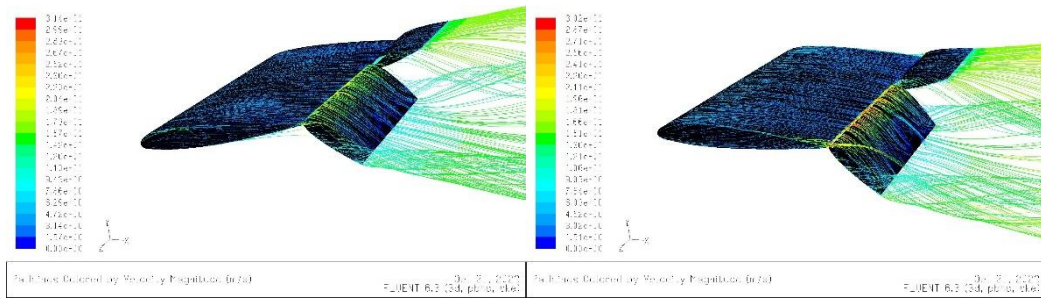
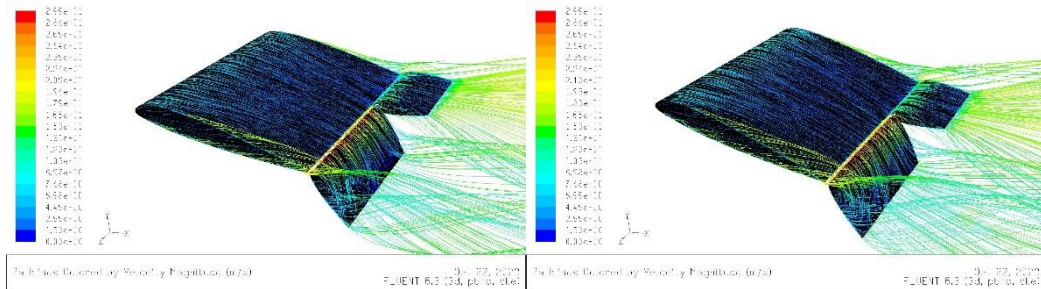
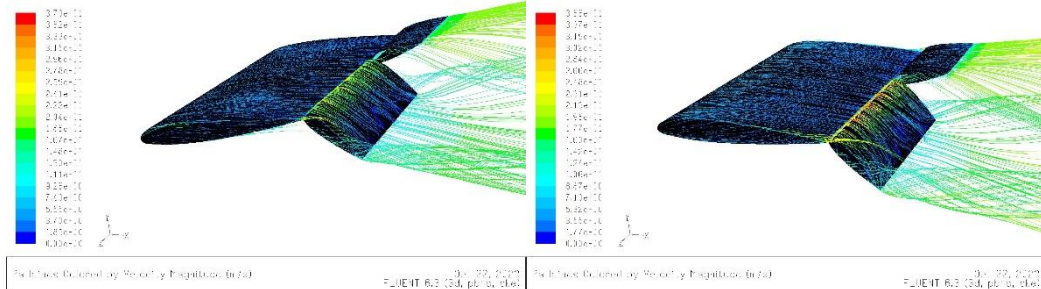
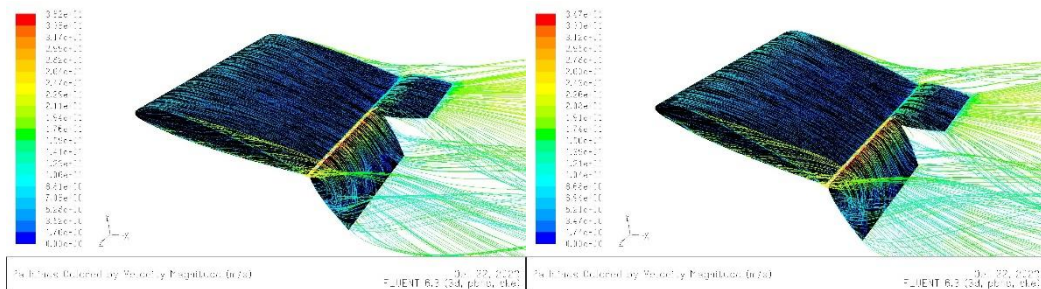
21. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 45^\circ$ dan $\delta_k = -10^\circ$



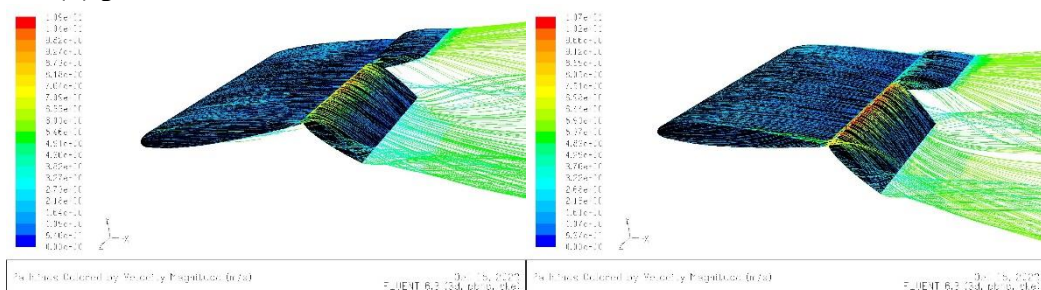
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6 \text{ m/s}$

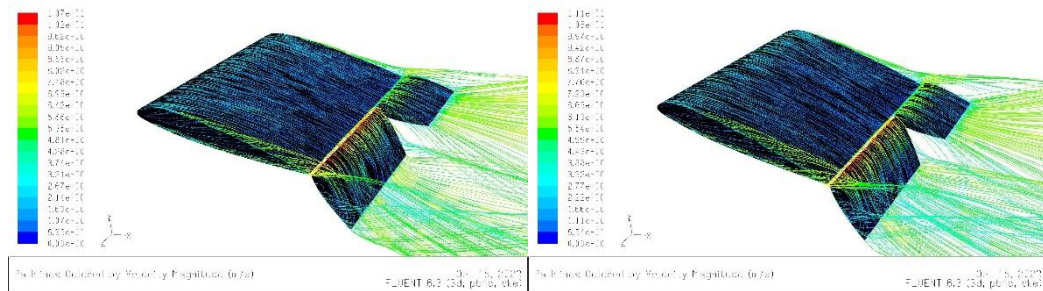
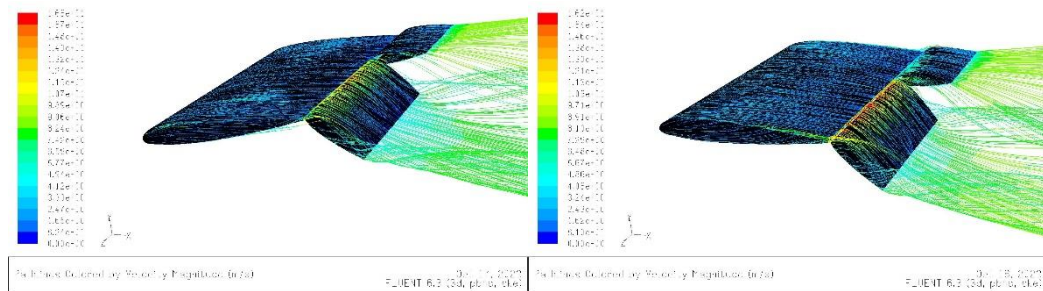
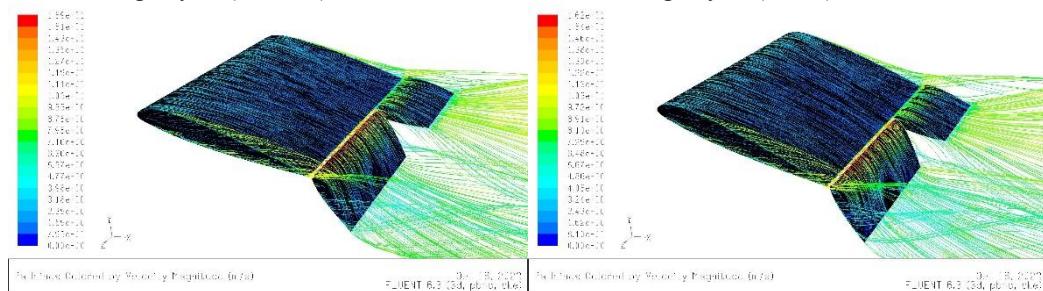
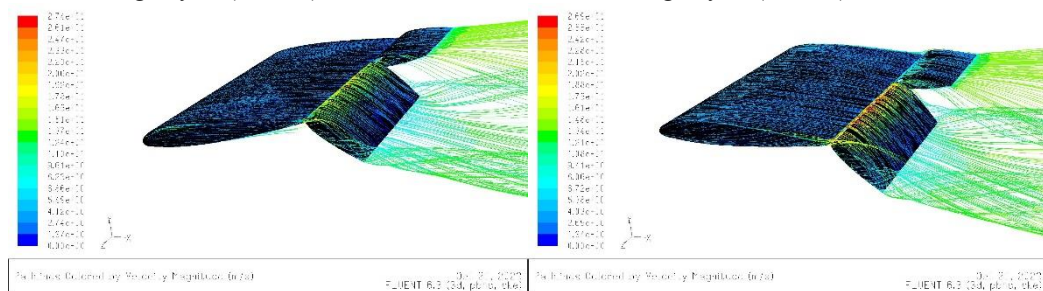
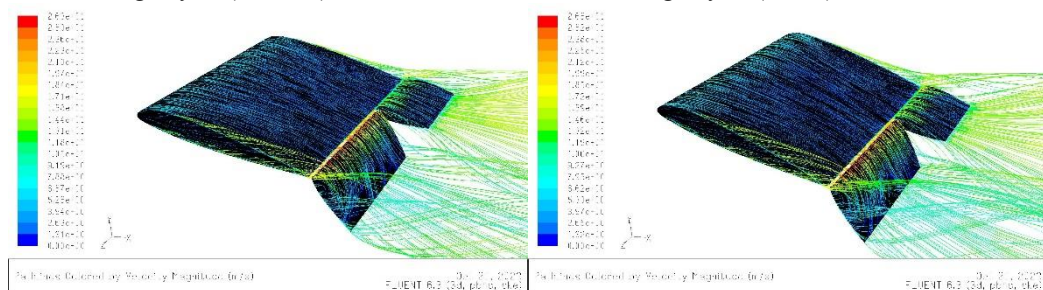
Sudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6 \text{ m/s}$

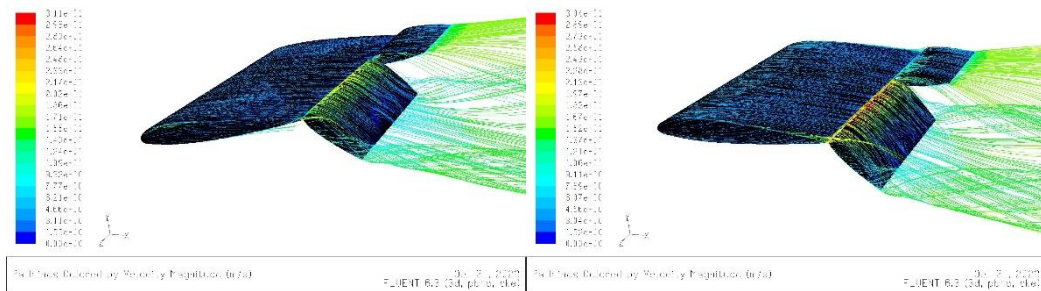
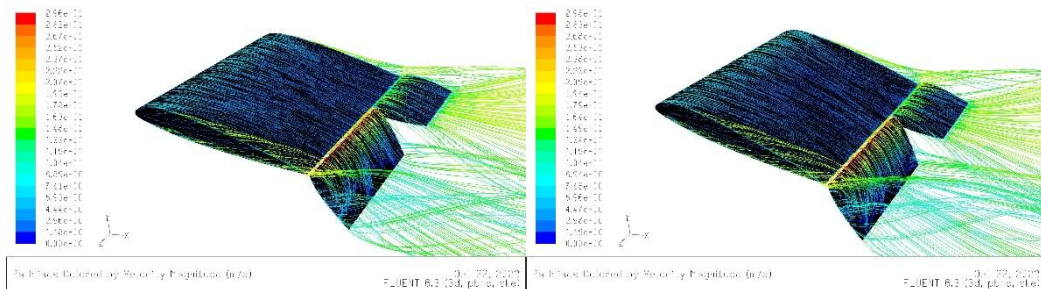
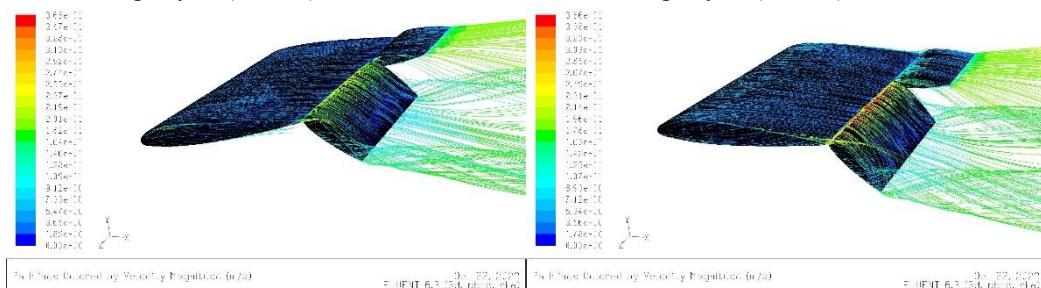
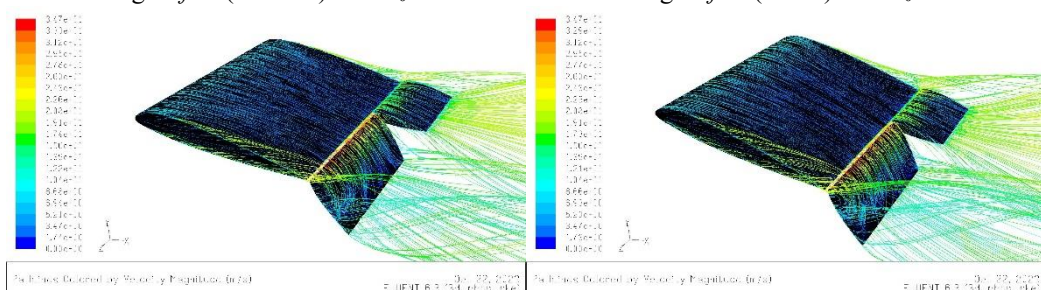
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

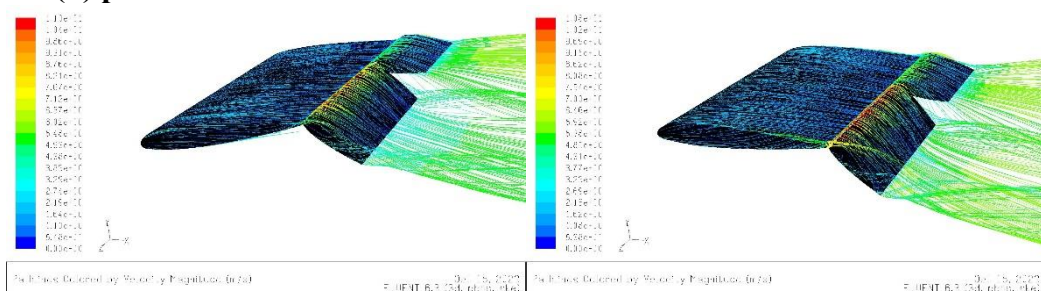
22. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 45^\circ$ dan $\delta_k = 0^\circ$

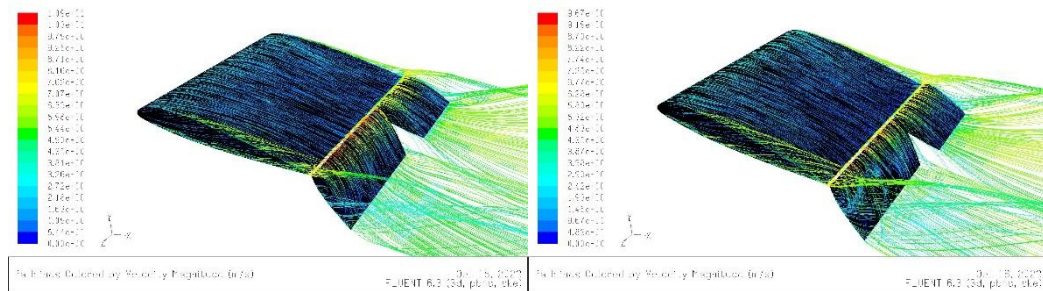
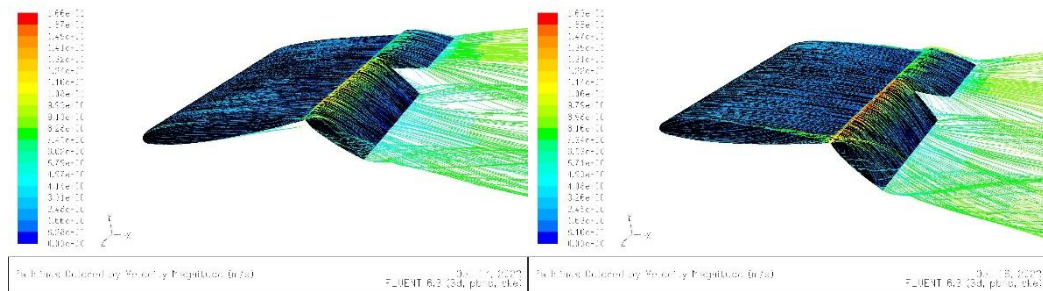
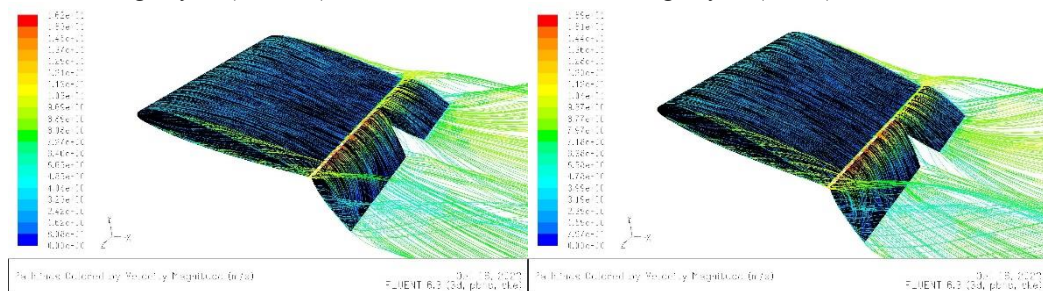
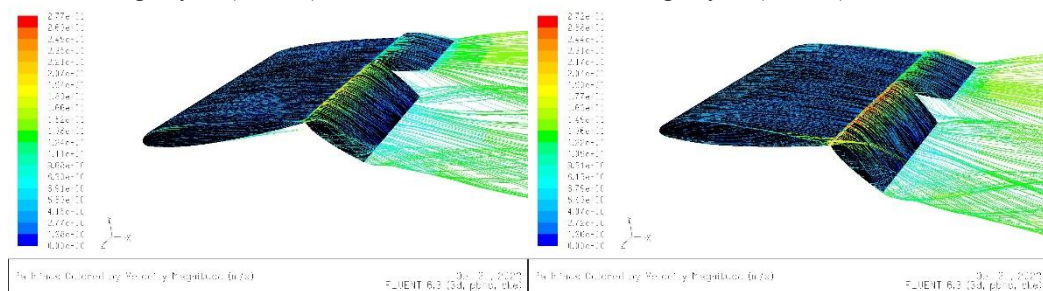
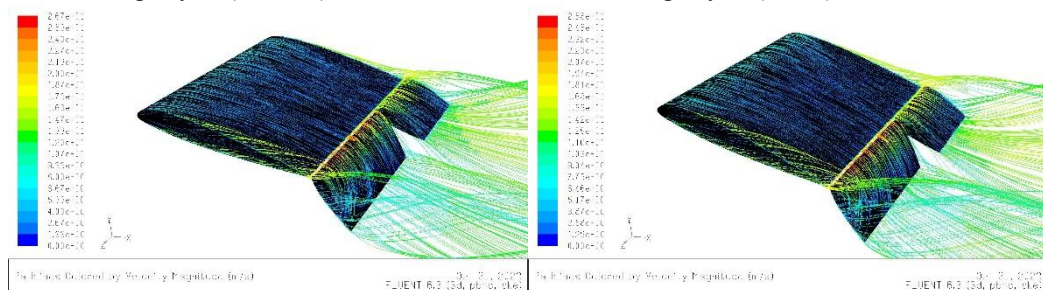
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

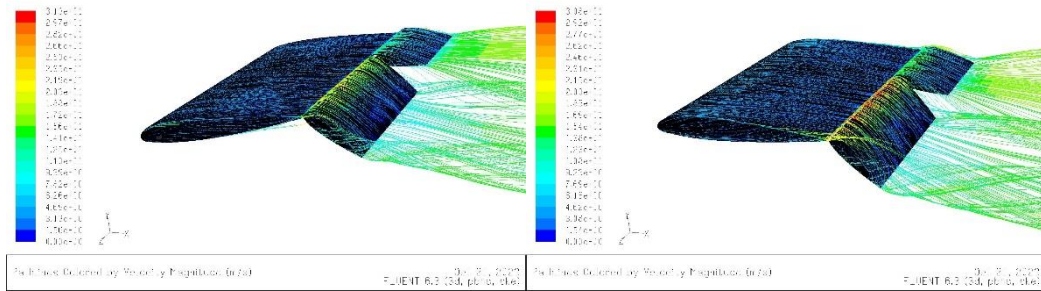
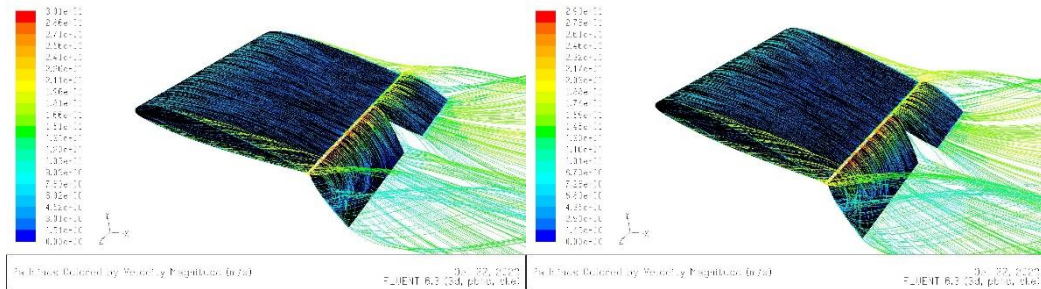
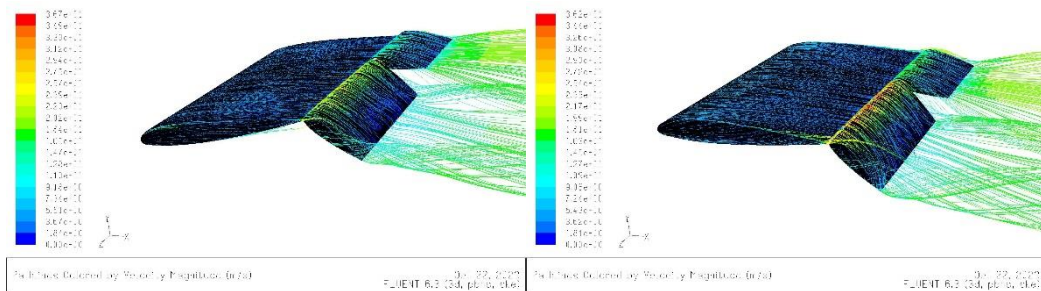
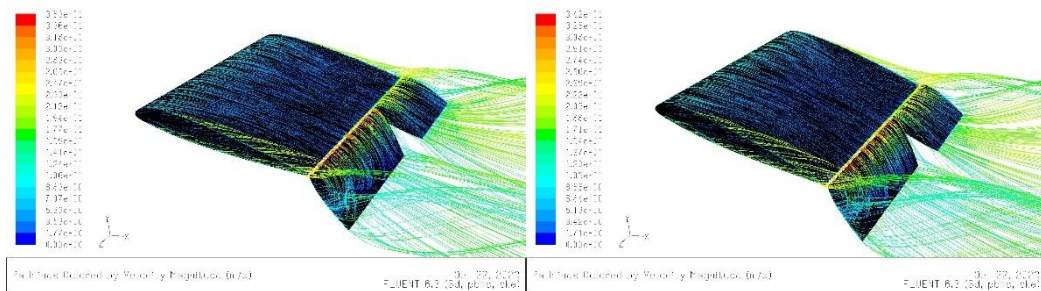
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/s Sudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

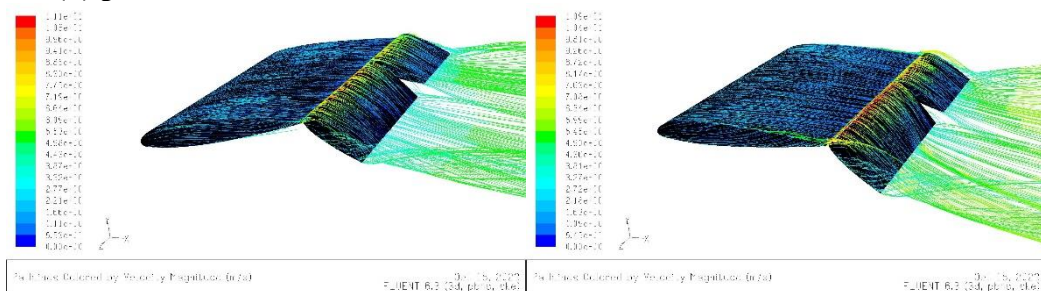
23. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 45^\circ$ dan $\delta_k = 15^\circ$

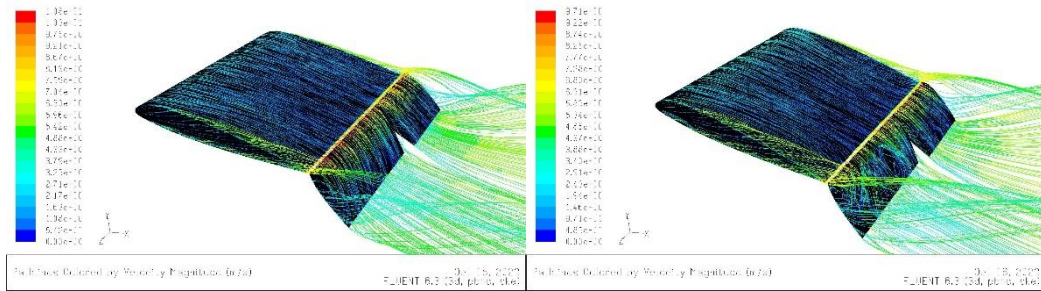
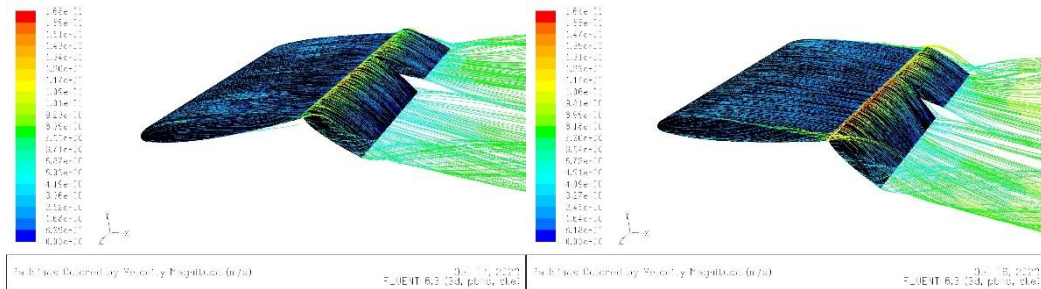
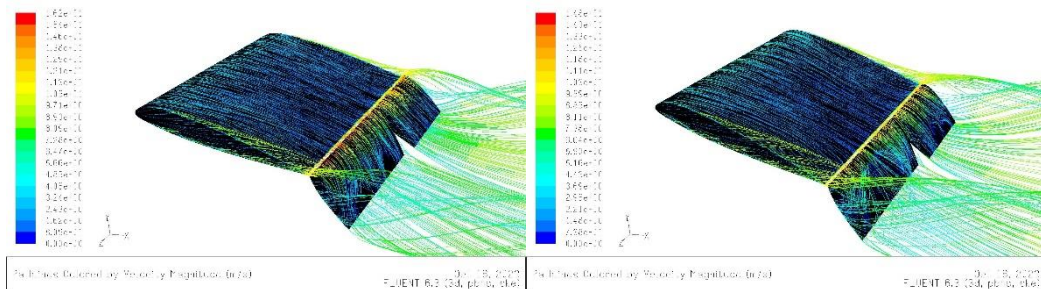
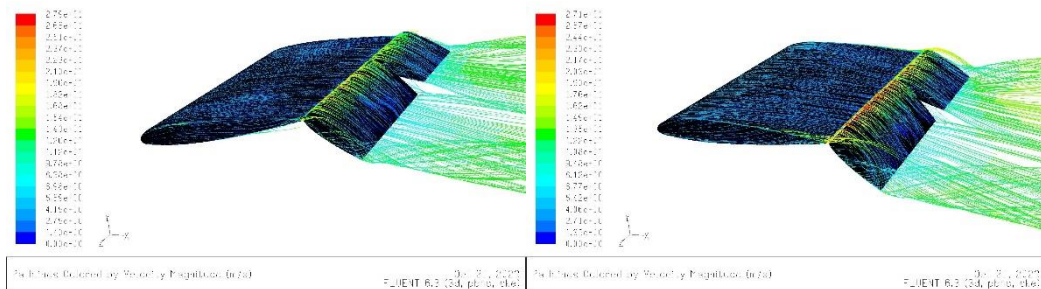
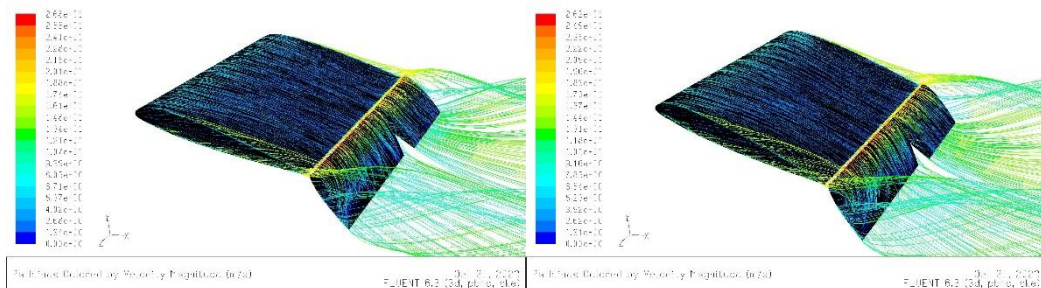
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

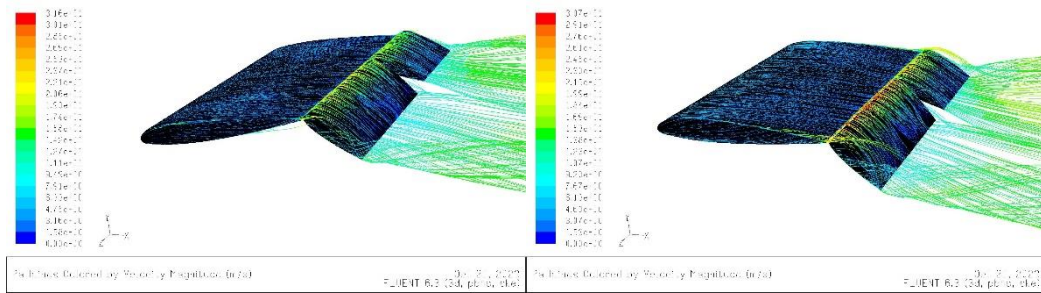
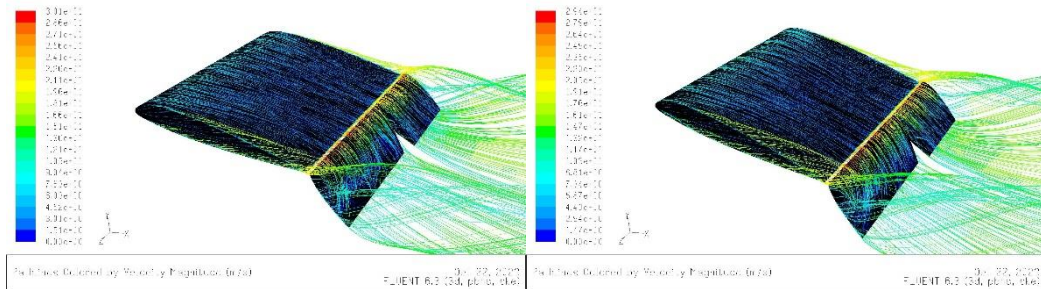
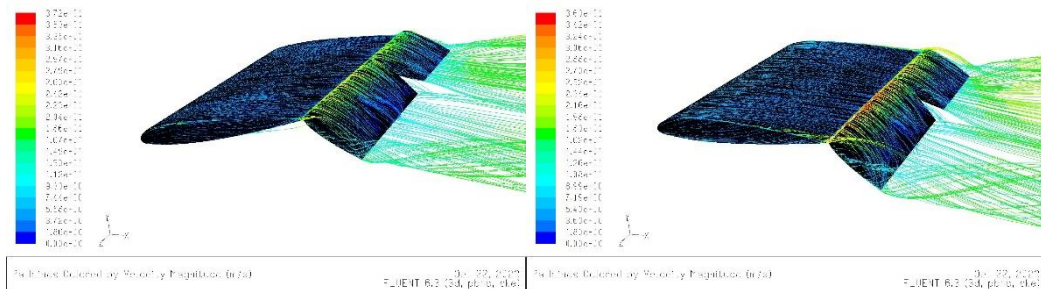
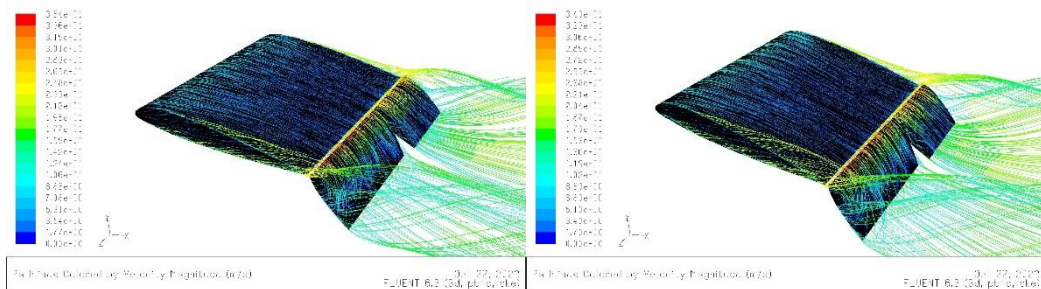
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

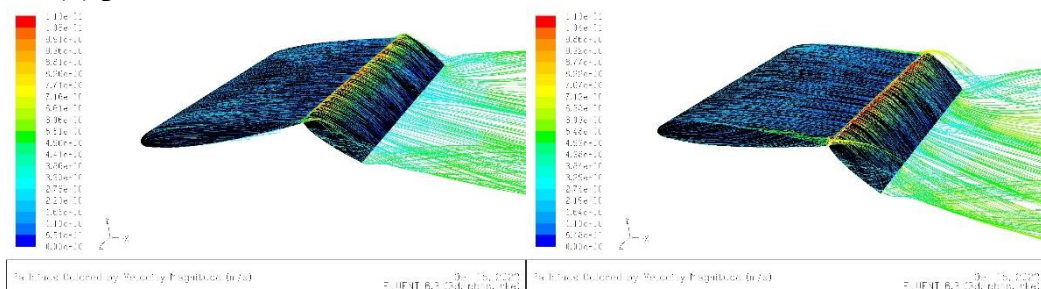
24. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 45^\circ$ dan $\delta_k = 30^\circ$

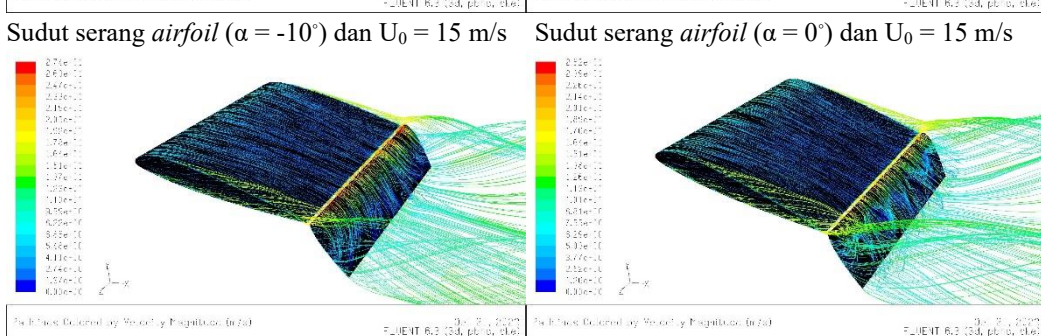
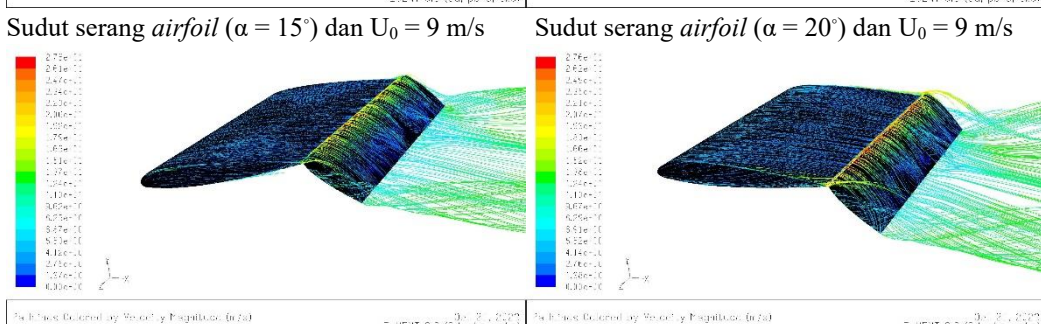
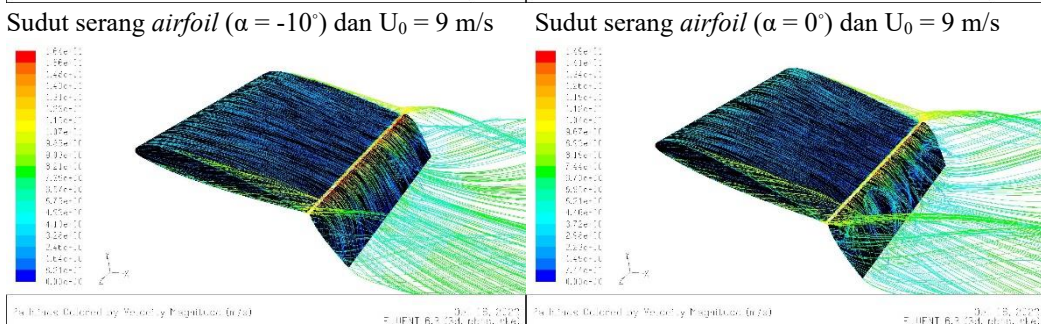
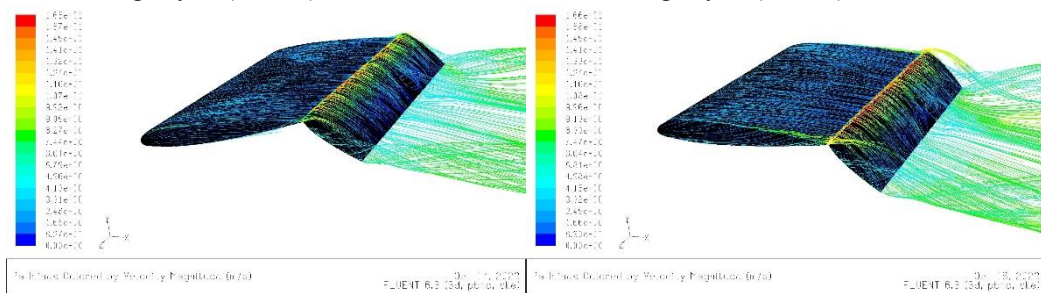
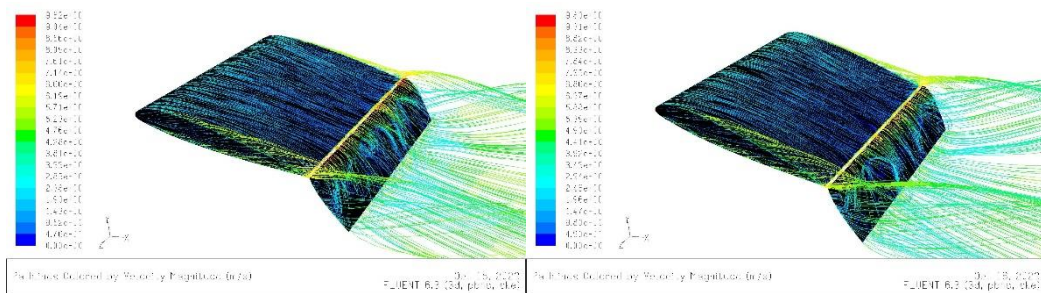
Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

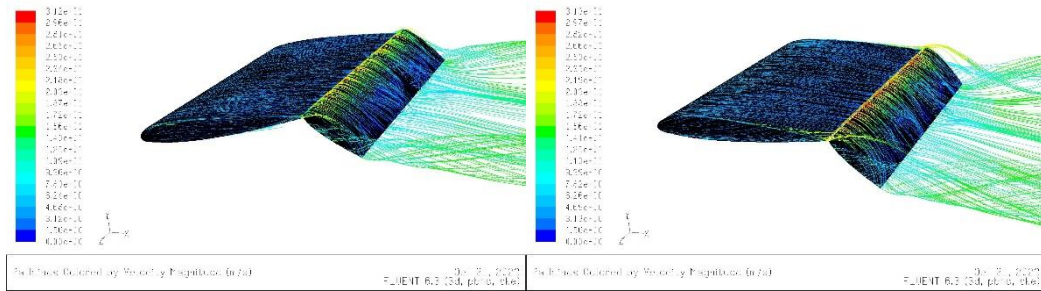
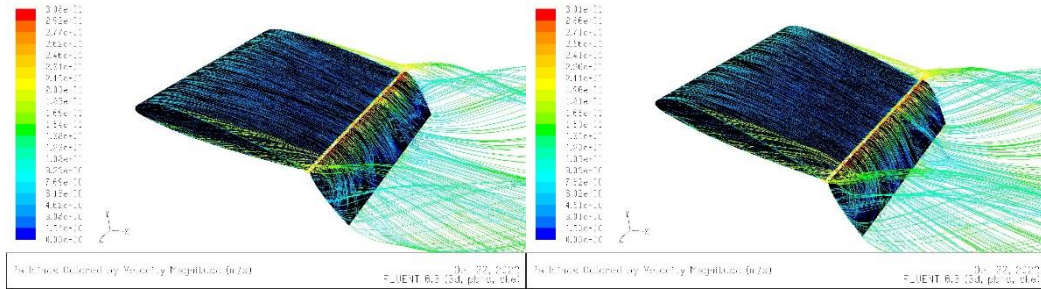
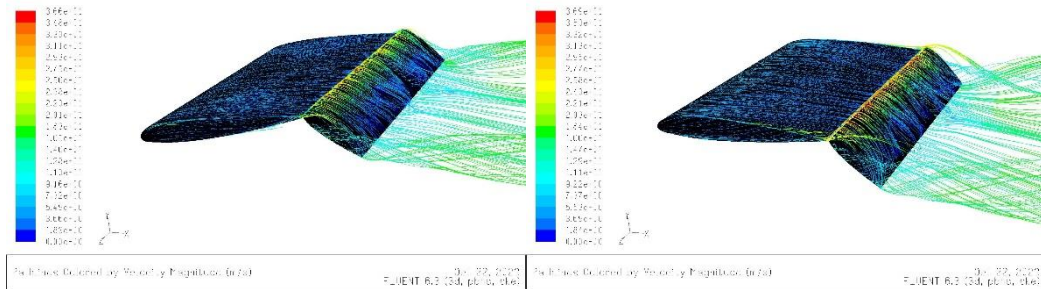
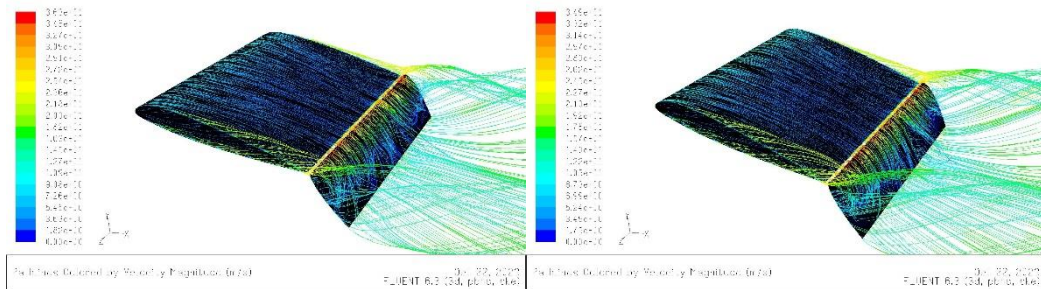
Sudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 9$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 15$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 15$ m/s

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

25. Karakteristik aliran pada model uji dengan variasi sudut serang *airfoil* (α) pada $\delta_u = 45^\circ$ dan $\delta_k = 45^\circ$

Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 6$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 6$ m/s

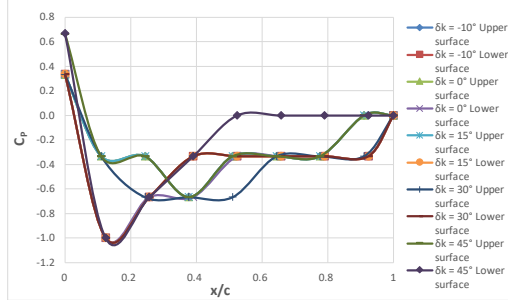


Sudut serang *airfoil* ($\alpha = -10^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 0^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 17$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 15^\circ$) dan $U_0 = 20$ m/sSudut serang *airfoil* ($\alpha = 20^\circ$) dan $U_0 = 20$ m/s

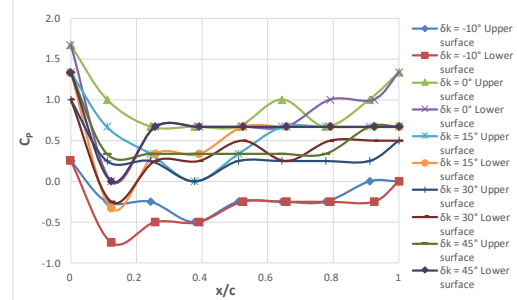
Lampiran 2 Nilai Koefisien Tekanan (C_p) pada *Airfoil*

1. Sudut serang *airfoil* (α) -10° dan Kecepatan *freestream* (U_0) 6 m/s

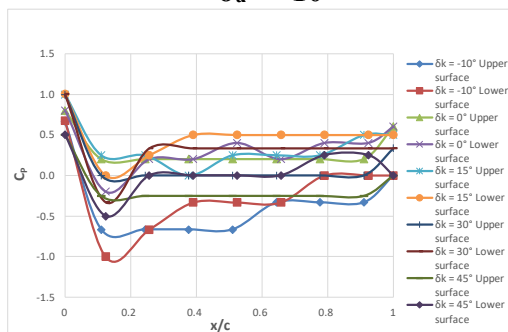
δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	0.3	-0.3	-1.0	-0.3	-0.7	-0.7	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	0.0	0.0	-0.3	-0.7	-0.3	-0.3	0.0	-0.7	-0.7	-0.3
	0	0.3	-0.3	-1.0	-0.3	-0.7	-0.7	-0.7	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	0.0	-0.7	-0.3	-0.7	-0.3	0.0	-0.7	-0.3	0.0	
	15	0.3	-0.3	-1.0	-0.3	-0.7	-0.7	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	0.0	-0.7	-0.3	-0.3	0.0	-0.3	-0.7	-0.3	-0.3	
	30	0.3	-0.3	-1.0	-0.7	-0.7	-0.7	-0.3	-0.7	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	-0.3	-0.7	-0.3	-0.3	-0.7	0.0	-0.7	0.0	
	45	0.7	-0.3	-1.0	-0.3	-0.7	-0.7	-0.3	-0.3	0.0	-0.3	0.0	-0.3	0.0	0.0	0.0	0.0	-0.7	-0.3	-0.7	-0.3	-0.3	-0.7	0.3	-0.7	
0	-10	0.3	-0.3	-0.8	-0.3	-0.5	-0.5	-0.5	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	0.0	0.3	-0.3	-0.3	-0.3	0.0	-0.3	-0.3	0.0	
	0	1.7	1.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	1.0	0.7	0.7	1.0	1.0	1.0	1.3	-1.0	-0.7	-0.7	-0.3	-0.3	-0.7	-0.3	-0.3	
	15	1.3	0.7	-0.3	0.3	0.3	0.0	0.3	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-0.7	-0.3	-0.3	0.0	0.0	-0.7	-0.3	-0.3	
	30	1.0	0.3	-0.3	0.3	0.3	0.0	0.3	0.3	0.5	0.3	0.3	0.3	0.5	0.3	0.5	0.5	-0.5	-0.3	-0.3	0.0	-0.3	-0.5	0.3	-0.3	
	45	1.3	0.3	0.0	0.3	0.7	0.3	0.7	0.3	0.7	0.3	0.7	0.3	0.7	0.7	0.7	0.7	-0.7	-0.7	-0.7	-0.3	-0.7	-1.0	0.0	-0.7	
15	-10	0.7	-0.7	-1.0	-0.7	-0.7	-0.7	-0.3	-0.7	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	0.0	0.7	-0.7	-0.3	-0.3	0.0	-0.3	-0.3	0.0	
	0	0.8	0.2	-0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.4	0.2	0.4	0.6	0.2	0.0	0.0	0.0	0.2	-0.2	-0.2	0.0	0.0	
	15	1.0	0.3	0.0	0.3	0.3	0.0	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.5	0.5	0.3	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	
	30	1.0	0.0	-0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.3	-0.3	-0.7	-0.3	-0.3	-0.7	-0.7	0.0	-0.7	
	45	0.5	-0.3	-0.5	-0.3	0.0	-0.3	0.0	-0.3	0.0	-0.3	0.0	-0.3	0.3	0.3	0.3	0.0	0.0	-0.3	0.0	0.0	-0.3	-0.3	0.5	-0.3	
30	-10	0.8	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	-0.3	0.0	
	0	0.5	-0.3	-0.5	-0.3	-0.3	-0.5	-0.3	-0.3	0.0	-0.3	0.0	-0.3	0.3	-0.3	0.3	0.3	0.5	-0.3	0.3	-0.3	0.3	-0.3	-0.3	0.0	
	15	0.3	-0.7	-1.0	-0.7	-0.3	-0.7	-0.3	-0.7	-0.3	-0.7	-0.3	-0.7	0.0	-0.7	0.0	0.0	-0.3	-0.7	0.0	-0.7	-0.7	-0.7	-0.3	-0.3	
	30	0.5	-0.3	-0.5	-0.3	0.0	-0.3	0.0	-0.3	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.3	-0.3	0.3	-0.3	-0.3	-0.3	0.3	-0.3	
	45	0.5	-0.3	-0.5	-0.3	0.0	-0.3	0.0	-0.3	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.0	0.5	-0.3	0.3	-0.3	-0.3	-0.3	0.5	-0.3	
45	-10	0.8	-0.3	-0.3	-0.3	0.0	-0.3	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.5	0.3	0.3	-0.3	0.5	-0.3	0.3	-0.3	-0.3	0.0	
	0	0.5	-0.3	-0.5	-0.3	-0.3	-0.3	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.8	-0.3	0.5	-0.3	0.0	-0.3	-0.3	0.0	
	15	0.5	-0.3	-0.5	-0.3	0.0	-0.3	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.0	0.5	-0.3	0.5	-0.3	-0.3	-0.3	0.0	0.0	
	30	0.7	0.2	0.0	0.2	0.3	0.0	0.3	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.5	0.8	0.2	0.7	0.2	0.0	0.0	0.5	0.2	
	45	0.8	-0.3	-0.3	-0.3	0.0	-0.5	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.5	-0.3	0.5	0.3	1.0	-0.3	0.5	-0.3	-0.5	-0.3	0.5	-0.3	



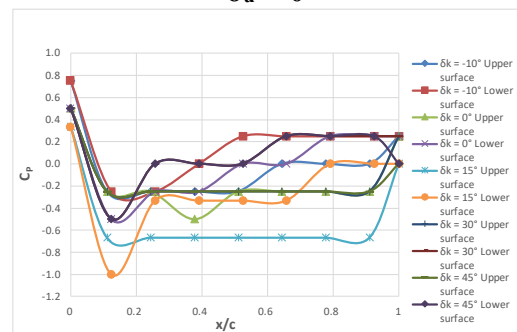
$\delta_u = -10^\circ$



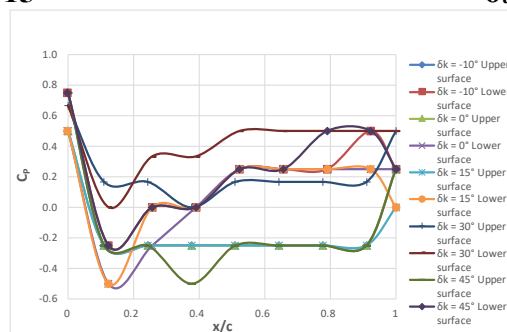
$\delta_u = 0^\circ$



$\delta_u = 15^\circ$



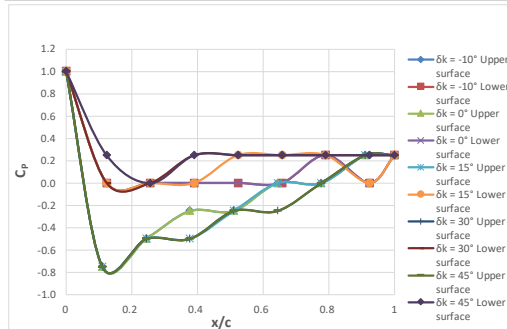
$\delta_u = 30^\circ$



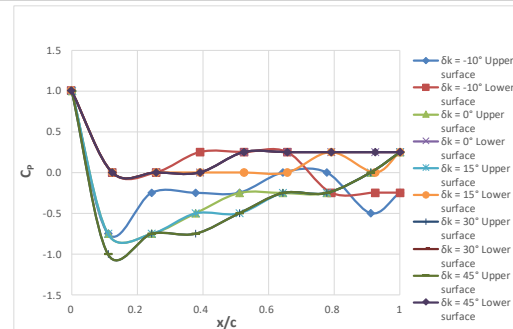
$\delta_u = 45^\circ$

2. Sudut serang *airfoil* (α) 0° dan Kecepatan *freestream* (U_0) 6 m/s

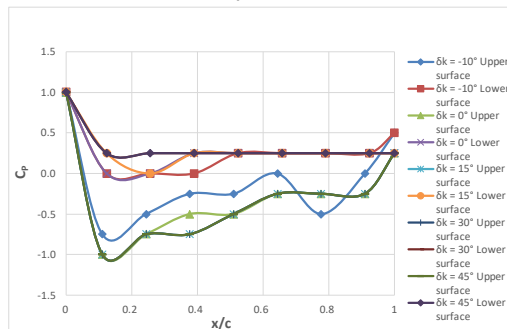
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	1.0	-0.8	0.0	-0.5	0.0	-0.3	0.0	-0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.0	0.0	-0.3	0.0	0.3	-0.3	-0.3	0.0	0.0
	0	1.0	-0.8	0.0	-0.5	0.0	-0.3	0.0	-0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.5	0.0	0.0	0.0	0.3	-0.3	0.0	0.0	
	15	1.0	-0.8	0.0	-0.5	0.0	-0.5	0.0	-0.3	0.3	0.0	0.3	0.0	0.3	0.3	0.0	0.3	0.3	-0.3	0.0	0.0	0.0	-0.3	0.3	0.0	
	30	1.0	-0.8	0.0	-0.5	0.0	-0.5	0.3	-0.3	0.3	-0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	-0.3	0.3	0.0	
	45	1.0	-0.8	0.3	-0.5	0.0	-0.5	0.3	-0.3	0.3	-0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.5	-0.3	-0.3	0.0	0.0	-0.3	0.5	-0.3
0	-10	1.0	-0.8	0.0	-0.3	0.0	-0.3	0.3	-0.3	0.3	0.0	0.3	0.0	-0.3	-0.5	-0.3	-0.3	0.3	-0.3	0.0	0.0	0.3	-0.3	-0.3	0.0	0.0
	0	1.0	-0.8	0.0	-0.8	0.0	-0.5	0.0	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.0	0.3	0.3	0.8	-0.3	0.0	0.0	0.3	-0.3	0.0	0.0	0.0
	15	1.0	-0.8	0.0	-0.8	0.0	-0.5	0.0	-0.5	0.0	-0.3	0.0	-0.3	0.3	0.0	0.0	0.3	-0.5	-0.3	0.0	0.0	0.0	-0.3	0.0	0.0	
	30	1.0	-1.0	0.0	-0.8	0.0	-0.8	0.0	-0.5	0.3	-0.3	0.3	-0.3	0.3	0.0	0.3	0.3	0.5	-0.3	-0.3	0.0	-0.3	-0.3	0.3	-0.3	
	45	1.0	-1.0	0.0	-0.8	0.0	-0.8	0.0	-0.5	0.3	-0.3	0.3	-0.3	0.3	0.0	0.3	0.3	0.5	-0.3	0.0	0.0	-0.3	-0.5	0.5	-0.3	
15	-10	1.0	-0.8	0.0	-0.5	0.0	-0.3	0.0	-0.3	0.3	0.0	0.3	-0.5	0.3	0.0	0.3	0.5	0.5	-0.3	0.3	0.0	0.3	-0.3	-0.3	0.0	0.0
	0	1.0	-1.0	0.0	-0.8	0.0	-0.5	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.8	0.0	0.3	0.0	0.3	-0.3	0.0	0.0	
	15	1.0	-1.0	0.3	-0.8	0.0	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.8	0.0	0.3	0.0	0.0	-0.3	0.3	0.0	
	30	1.0	-1.0	0.3	-0.8	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.3	-0.3	0.3	0.0	-0.5	-0.3	0.3	-0.3	
	45	1.0	-1.0	0.3	-0.8	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.8	-0.3	0.0	0.0	-0.3	-0.5	0.5	-0.5	
30	-10	1.0	-1.0	0.0	-0.5	0.0	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.0	0.3	0.3	0.5	-0.3	0.3	-0.3	0.3	-0.3	-0.3	0.0	0.0
	0	1.0	-1.0	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.8	-0.3	0.3	-0.3	0.3	-0.3	0.0	0.0	
	15	1.0	-1.0	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.8	-0.3	0.0	0.5	-0.3	0.0	-0.5	0.3	0.0
	30	1.0	-1.0	0.3	-0.8	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.8	0.5	-0.3	0.5	0.3	0.8	-0.3	0.3	-0.3	-0.3	0.3	-0.3	-0.3	
	45	1.0	-1.3	0.3	-0.8	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.0	-0.3	0.5	0.3	0.8	-0.3	0.5	-0.3	0.0	-0.5	0.5	-0.5	
45	-10	1.0	-1.0	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.5	0.5	0.5	-0.3	0.5	-0.3	0.3	-0.3	-0.3	0.0	0.0
	0	1.0	-1.0	0.3	-0.8	0.0	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.5	-0.3	0.5	0.3	0.8	-0.3	0.5	-0.5	0.3	-0.5	-0.3	-0.3	
	15	1.0	-1.0	0.3	-0.8	0.3	-0.8	0.3	-0.5	0.3	-0.3	0.3	-0.3	0.5	-0.3	0.5	0.3	0.5	-0.3	0.5	-0.5	-0.3	-0.5	0.0	-0.3	
	30	1.0	-0.8	0.4	-0.4	0.2	-0.4	0.4	-0.2	0.4	-0.2	0.4	0.0	0.6	0.4	0.6	0.4	0.4	0.0	0.6	-0.2	-0.2	-0.2	0.4	0.0	
	45	1.0	-0.6	0.4	-0.4	0.4	-0.4	0.4	-0.2	0.4	0.0	0.4	0.0	0.6	0.0	0.8	0.4	0.2	0.0	0.6	-0.2	0.0	-0.2	0.6	-0.2	



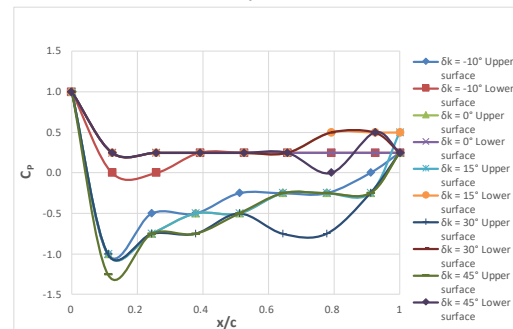
$\delta_u = -10^\circ$



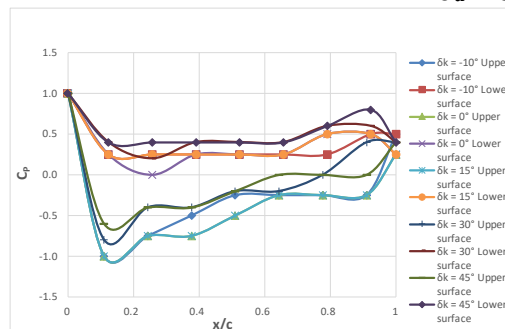
$\delta_u = 0^\circ$



$\delta_u = 15^\circ$



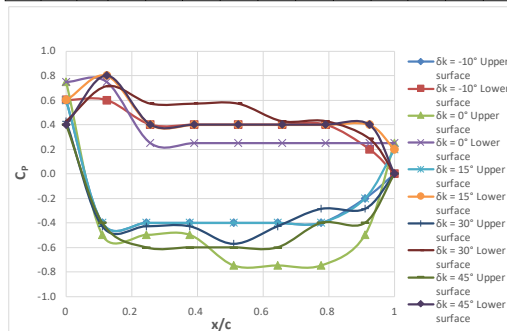
$\delta_u = 30^\circ$



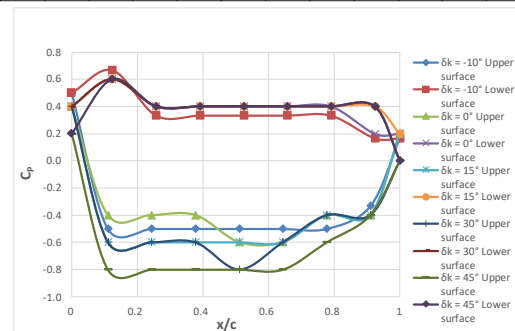
$\delta_u = 45^\circ$

3. Sudut serang *airfoil* (α) 15° dan Kecepatan *freestream* (U_0) 6 m/s

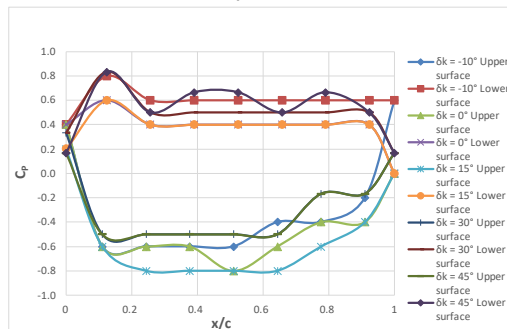
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.6	-0.4	0.6	-0.4	0.4	-0.4	0.4	-0.4	0.4	-0.4	0.4	-0.4	0.4	-0.2	0.2	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
	0	0.8	-0.5	0.8	-0.5	0.3	-0.5	0.3	-0.8	0.3	-0.8	0.3	-0.8	0.3	-0.5	0.3	0.3	1.0	-0.3	-0.3	0.0	-0.3	-0.3	-0.3	-0.3
	15	0.6	-0.4	0.8	-0.4	0.4	-0.4	0.4	-0.4	0.4	-0.4	0.4	-0.4	0.4	-0.2	0.4	0.2	-0.2	0.0	0.0	0.2	0.0	-0.2	0.4	0.0
	30	0.4	-0.4	0.7	-0.4	0.6	-0.4	0.6	-0.6	0.6	-0.4	0.4	-0.3	0.4	-0.3	0.3	0.0	-0.1	0.0	0.0	0.1	0.0	-0.1	0.6	-0.1
0	45	0.4	-0.4	0.8	-0.6	0.4	-0.6	0.4	-0.6	0.4	-0.4	0.4	-0.4	0.4	-0.4	0.4	0.0	-0.2	0.0	0.0	0.0	-0.4	-0.4	0.8	-0.2
	-10	0.5	-0.5	0.7	-0.5	0.3	-0.5	0.3	-0.5	0.3	-0.5	0.3	-0.5	0.3	-0.3	0.2	0.2	-0.2	0.0	0.0	0.0	0.2	-0.2	-0.2	0.0
	0	0.4	-0.4	0.6	-0.4	0.4	-0.4	0.4	-0.6	0.4	-0.6	0.4	-0.4	0.4	-0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.2	-0.2	0.0	0.0
	15	0.4	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.6	0.4	-0.4	0.4	-0.4	0.4	-0.4	0.4	0.2	0.4	0.0	0.2	0.2	0.0	-0.2	0.2	0.0
15	30	0.4	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.8	0.4	-0.6	0.4	-0.4	0.4	-0.4	0.4	0.0	0.4	0.0	0.2	0.2	-0.2	-0.2	0.6	-0.2
	45	0.2	-0.8	0.6	-0.8	0.4	-0.8	0.4	-0.8	0.4	-0.8	0.4	-0.6	0.4	-0.4	0.4	0.0	0.2	0.0	0.0	0.0	-0.2	-0.4	0.8	-0.2
	-10	0.4	-0.6	0.8	-0.6	0.6	-0.6	0.6	-0.6	0.6	-0.4	0.6	-0.4	0.6	-0.2	0.6	0.6	0.0	0.0	0.4	0.0	0.4	-0.2	0.0	0.0
	0	0.4	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.8	0.4	-0.6	0.4	-0.4	0.4	-0.4	0.4	0.0	0.4	0.0	0.2	0.0	-0.2	-0.4	0.0	0.0
30	15	0.2	-0.6	0.6	-0.8	0.4	-0.8	0.4	-0.8	0.4	-0.8	0.4	-0.6	0.4	-0.4	0.4	0.0	0.0	-0.2	0.2	0.0	-0.2	-0.4	0.2	-0.2
	30	0.3	-0.5	0.8	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.2	0.5	-0.2	0.5	0.2	0.2	0.0	0.3	0.2	-0.2	-0.2	0.5	0.0
	45	0.2	-0.5	0.8	-0.5	0.5	-0.5	0.7	-0.5	0.7	-0.5	0.5	-0.2	0.7	-0.2	0.5	0.2	0.5	0.0	0.3	0.2	-0.2	-0.2	0.7	-0.2
	-10	0.2	-0.8	0.8	-0.8	0.4	-0.8	0.6	-0.8	0.6	-0.6	0.6	-0.4	0.6	-0.2	0.6	0.6	0.2	0.0	0.6	0.0	0.4	-0.4	0.0	0.0
45	0	0.3	-0.5	0.8	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.2	0.5	-0.2	0.5	0.2	0.7	0.0	0.5	0.2	0.2	-0.2	0.2	0.2
	15	0.2	-0.5	0.8	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.3	0.7	-0.2	0.5	0.2	0.7	0.0	0.5	0.2	-0.2	-0.3	0.3	0.0
	30	0.2	-0.7	0.8	-0.7	0.5	-0.7	0.7	-0.7	0.7	-0.5	0.7	-0.2	0.7	-0.2	0.7	0.2	0.5	0.0	0.5	0.2	-0.2	-0.2	0.5	-0.2
	45	0.2	-0.7	0.8	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	0.3	0.3	0.0	0.5	0.2	-0.2	-0.3	0.7	-0.2
45	-10	0.2	-0.8	0.8	-0.8	0.6	-0.8	0.6	-0.8	0.6	-0.6	0.6	-0.4	0.6	-0.4	0.6	0.6	0.2	-0.2	0.8	0.0	0.2	-0.4	-0.2	0.0
	0	0.2	-0.5	0.8	-0.7	0.7	-0.5	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	0.2	0.8	0.0	0.8	0.2	-0.2	-0.2	0.2	0.2
	15	0.0	-0.8	0.8	-0.8	0.7	-0.8	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	0.2	0.7	0.0	0.7	0.2	-0.2	-0.3	0.3	0.0
	30	0.0	-0.8	0.8	-0.8	0.7	-0.8	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.8	-0.2	0.7	0.2	0.7	0.0	0.8	0.2	-0.2	-0.2	0.5	-0.2
45	45	0.0	-0.8	0.8	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.3	0.7	-0.2	0.8	-0.2	0.7	0.3	0.3	-0.2	0.7	0.0	-0.2	-0.3	0.7	-0.2



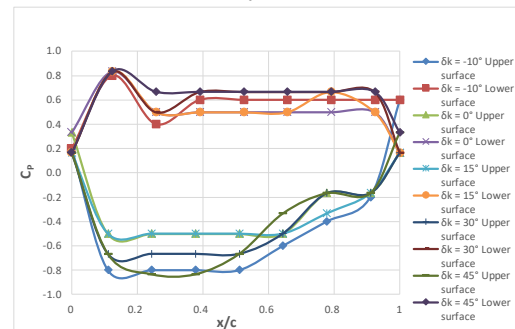
$\delta_u = -10^\circ$



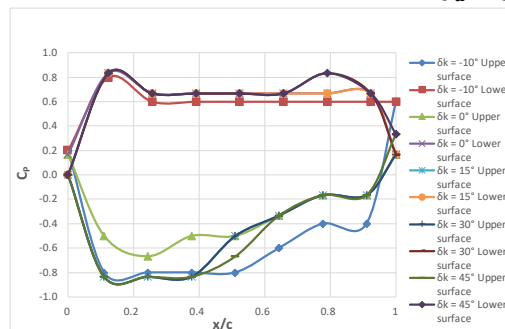
$\delta_u = 0^\circ$



$\delta_u = 15^\circ$



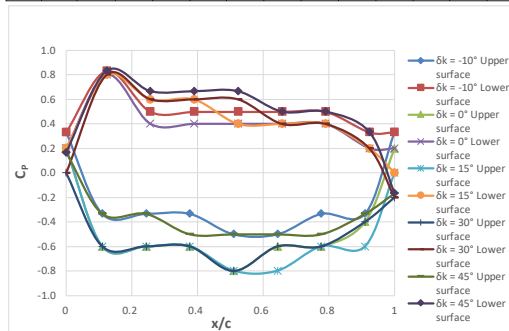
$\delta_u = 30^\circ$



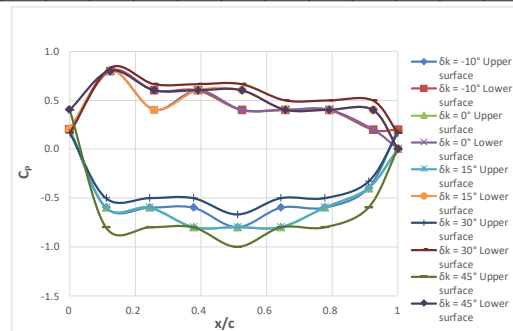
$\delta_u = 45^\circ$

4. Sudut serang *airfoil* (α) 20° dan Kecepatan *freestream* (U_0) 6 m/s

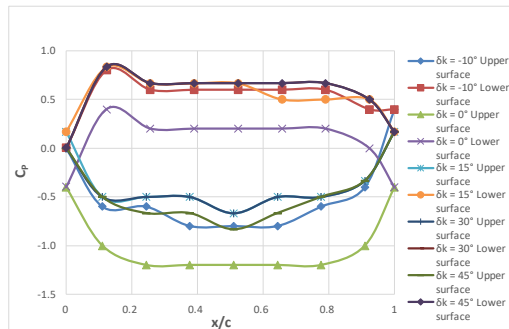
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.3	-0.3	0.8	-0.3	0.5	-0.3	0.5	-0.5	0.5	-0.5	0.5	-0.3	0.5	-0.3	0.3	0.3	-0.2	0.0	0.0	0.0	-0.2	-0.2	0.0	0.0
	0	0.2	-0.6	0.8	-0.6	0.4	-0.6	0.4	-0.8	0.4	-0.6	0.4	-0.6	0.4	-0.4	0.2	0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	-0.2
	15	0.2	-0.6	0.8	-0.6	0.6	-0.6	0.6	-0.8	0.4	-0.8	0.4	-0.6	0.4	-0.6	0.2	0.0	-0.2	-0.2	-0.2	-0.2	-0.4	-0.4	0.2	-0.2
	30	0.0	-0.6	0.8	-0.6	0.6	-0.6	0.6	-0.8	0.6	-0.6	0.4	-0.6	0.4	-0.4	0.2	-0.2	-0.2	-0.2	-0.2	0.0	-0.4	-0.4	0.4	-0.4
	45	0.2	-0.3	0.8	-0.3	0.7	-0.5	0.7	-0.5	0.7	-0.5	0.5	-0.5	0.5	-0.3	0.3	-0.2	0.3	0.0	0.0	0.0	0.0	-0.2	0.7	-0.2
0	-10	0.2	-0.6	0.8	-0.6	0.6	-0.6	0.6	-0.8	0.4	-0.6	0.4	-0.6	0.4	-0.4	0.2	0.2	0.6	-0.2	0.0	-0.2	-0.2	-0.2	-0.2	-0.2
	0	0.2	-0.6	0.8	-0.6	0.4	-0.8	0.6	-0.8	0.4	-0.8	0.4	-0.6	0.4	-0.4	0.2	0.0	0.0	-0.2	0.0	0.0	-0.4	-0.4	0.0	-0.2
	15	0.2	-0.6	0.8	-0.6	0.4	-0.8	0.6	-0.8	0.6	-0.8	0.4	-0.6	0.4	-0.4	0.4	0.0	0.2	-0.2	0.0	0.0	-0.4	-0.4	0.2	-0.2
	30	0.2	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.7	0.7	-0.5	0.5	-0.5	0.5	-0.3	0.5	0.2	0.2	0.0	0.2	0.0	-0.3	-0.2	0.5	-0.2
	45	0.4	-0.8	0.8	-0.8	0.6	-0.8	0.6	-1.0	0.6	-0.8	0.4	-0.8	0.4	-0.6	0.4	0.0	0.4	-0.2	0.0	0.0	-0.4	-0.4	0.6	0.0
15	-10	0.0	-0.6	0.8	-0.6	0.6	-0.8	0.6	-0.8	0.6	-0.8	0.6	-0.6	0.6	-0.4	0.4	0.4	-0.2	-0.2	0.4	0.0	-0.2	-0.4	0.2	-0.2
	0	-0.4	-1.0	0.4	-1.2	0.2	-1.2	0.2	-1.2	0.2	-1.2	0.2	-1.2	0.2	-1.0	0.0	-0.4	0.0	-0.2	0.2	0.0	-0.4	-0.4	0.0	-0.2
	15	0.2	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.7	0.7	-0.5	0.5	-0.5	0.5	-0.3	0.5	0.2	0.3	0.0	0.3	0.0	-0.3	-0.3	0.3	-0.2
	30	0.0	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.7	0.7	-0.5	0.7	-0.5	0.7	-0.3	0.5	0.2	0.2	0.0	0.3	0.2	-0.5	-0.3	0.5	-0.2
	45	0.0	-0.5	0.8	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.3	0.5	0.2	0.0	0.0	0.3	0.2	-0.5	-0.3	0.8	-0.2
30	-10	0.2	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.7	0.7	-0.5	0.7	-0.5	0.7	-0.2	0.7	0.5	0.5	0.0	0.7	0.2	-0.2	-0.3	0.0	-0.2
	0	0.2	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.7	0.7	-0.5	0.7	-0.5	0.7	-0.3	0.7	0.3	0.8	0.0	0.5	0.2	-0.2	-0.3	0.2	0.0
	15	0.0	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.7	0.7	-0.5	0.7	-0.5	0.7	-0.3	0.7	0.3	0.3	0.0	0.5	0.2	-0.5	-0.3	0.3	-0.2
	30	0.0	-0.5	0.8	-0.7	0.7	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.3	0.7	0.3	0.7	-0.2	0.5	0.0	-0.5	-0.3	0.5	-0.2
	45	0.0	-0.5	0.8	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.2	0.7	0.3	0.3	-0.2	0.5	0.0	-0.5	-0.3	0.7	-0.3
45	-10	0.0	-0.5	0.8	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.3	0.7	0.5	0.3	0.0	0.8	0.2	-0.2	-0.3	0.0	-0.2
	0	0.0	-0.5	0.8	-0.5	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.2	0.7	0.5	0.7	-0.2	0.8	0.0	-0.3	-0.3	0.2	-0.2
	15	0.0	-0.5	0.8	-0.7	0.7	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.3	0.7	0.3	0.8	-0.2	0.8	0.0	-0.5	-0.3	0.3	-0.2
	30	0.0	-0.7	0.8	-0.7	0.7	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.2	0.7	0.3	0.8	0.0	0.8	0.0	-0.5	-0.3	0.5	-0.3
	45	-0.2	-0.7	0.8	-0.8	0.7	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.3	0.7	0.3	0.8	-0.2	0.7	0.0	-0.5	-0.3	0.7	-0.3



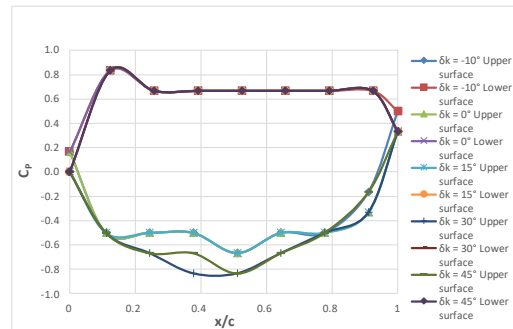
$\delta u = -10^\circ$



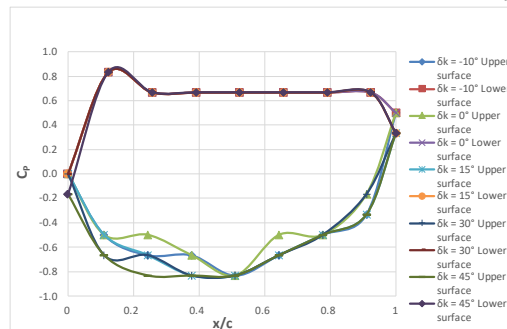
$\delta u = 0^\circ$



$\delta u = 15^\circ$



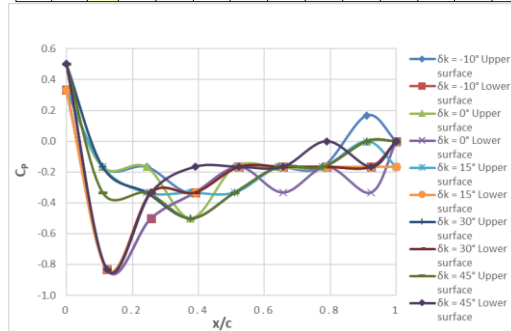
$\delta u = 30^\circ$



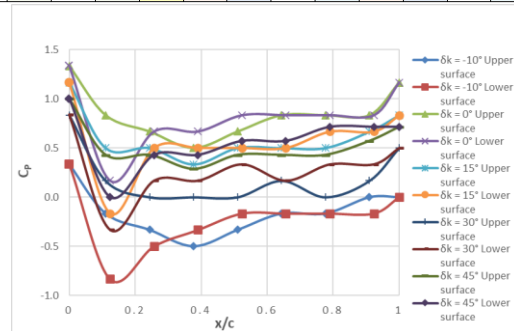
$\delta u = 45^\circ$

5. Sudut serang *airfoil* (α) -10° dan Kecepatan *freestream* (U_0) 9 m/s

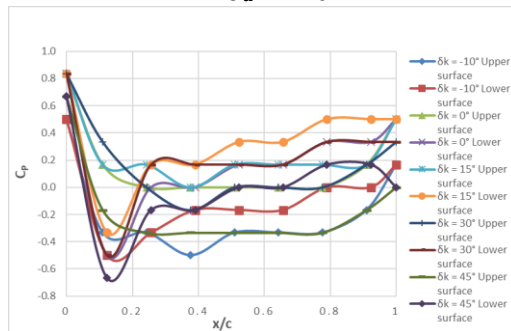
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.3	-0.2	-0.8	-0.2	-0.5	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	-0.2	0.0	0.0	-0.3	-0.3	-0.2	0.2	-0.3	-0.3	-0.2
	0	0.3	-0.2	-0.8	-0.2	-0.5	-0.5	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	0.0	-0.3	0.0	-0.3	-0.2	-0.5	-0.2	0.2	-0.3	-0.3	0.0
	15	0.3	-0.2	-0.8	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	-0.2	-0.2	-0.5	-0.2	-0.3	0.0	-0.2	-0.3	-0.2	-0.2
	30	0.5	-0.2	-0.8	-0.3	-0.3	-0.5	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	-0.2	0.0	-0.2	-0.3	-0.5	-0.2	-0.2	-0.5	0.2	-0.5
	45	0.5	-0.3	-0.8	-0.3	-0.3	-0.5	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	0.0	-0.2	0.0	-0.3	-0.3	-0.2	-0.2	-0.7	0.5	-0.5
0	-10	0.3	-0.2	-0.8	-0.3	-0.5	-0.5	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	-0.2	0.0	0.3	-0.3	-0.3	-0.2	0.2	-0.3	-0.3	0.0
	0	1.3	0.8	0.2	0.7	0.7	0.5	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	1.2	-0.8	-0.2	-0.3	0.0	0.0	-0.5	-0.3	0.0	0.0
	15	1.2	0.5	-0.2	0.5	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.8	-0.5	-0.2	-0.2	0.0	-0.2	-0.3	-0.2	-0.2
	30	0.8	0.2	-0.3	0.0	0.2	0.0	0.2	0.0	0.3	0.2	0.2	0.0	0.3	0.2	0.3	0.5	-0.7	-0.3	-0.3	-0.2	-0.3	-0.5	0.0	-0.5
	45	1.0	0.4	0.0	0.4	0.4	0.3	0.4	0.4	0.6	0.4	0.6	0.4	0.7	0.6	0.7	0.7	-0.1	-0.1	-0.1	0.0	-0.1	-0.4	0.4	-0.4
15	-10	0.5	-0.3	-0.5	-0.3	-0.3	-0.5	-0.2	-0.3	-0.2	-0.3	-0.2	-0.3	0.0	-0.2	0.0	0.2	0.5	-0.3	0.0	0.0	0.2	-0.3	-0.3	0.0
	0	0.8	0.2	-0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.3	0.2	0.3	0.5	0.3	-0.3	-0.2	-0.2	0.0	-0.5	-0.3	0.0
	15	0.8	0.2	-0.3	0.2	0.2	0.0	0.2	0.2	0.3	0.2	0.3	0.2	0.5	0.2	0.5	0.5	0.2	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2
	30	0.8	0.3	-0.5	0.0	0.2	-0.2	0.2	0.0	0.2	0.0	0.2	0.0	0.3	0.2	0.3	0.3	-0.2	-0.5	-0.2	-0.2	-0.5	-0.5	0.0	-0.3
	45	0.7	-0.2	-0.7	-0.3	-0.2	-0.3	-0.2	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.2	0.0	-0.2	-0.3	0.0	0.0	-0.3	-0.3	0.5	-0.3
30	-10	0.7	-0.5	-0.5	-0.5	-0.3	-0.5	-0.2	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.2	0.2	0.0	-0.5	0.2	-0.3	-0.2	-0.5	-0.5	0.0
	0	0.4	-0.1	-0.6	-0.3	-0.1	-0.3	-0.1	-0.3	0.0	-0.1	0.0	-0.1	0.1	-0.1	0.1	0.1	0.6	-0.1	0.1	-0.1	0.1	-0.3	-0.1	0.0
	15	0.5	-0.3	-0.7	-0.3	-0.2	-0.5	-0.2	-0.3	-0.2	-0.3	0.0	-0.3	0.2	-0.3	0.2	0.0	-0.5	-0.3	0.0	-0.3	-0.3	-0.5	-0.2	-0.2
	30	0.7	-0.2	-0.5	-0.3	0.0	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.3	0.3	-0.2	0.3	0.2	0.3	-0.2	0.3	-0.3	-0.3	-0.3	0.3	-0.3
	45	0.5	-0.3	-0.5	-0.5	-0.2	-0.5	-0.2	-0.5	0.0	-0.5	0.0	-0.5	0.2	-0.3	0.2	0.0	0.5	-0.5	0.0	-0.5	-0.5	-0.5	0.5	-0.5
45	-10	0.9	-0.3	-0.3	-0.3	-0.1	-0.3	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.1	0.3	0.3	0.3	0.3	0.4	-0.3	0.1	-0.3	-0.3	-0.1
	0	0.5	-0.3	-0.7	-0.5	-0.2	-0.5	-0.2	-0.5	0.0	-0.3	0.0	-0.3	0.2	-0.3	0.2	0.0	0.8	-0.5	0.3	-0.5	0.0	-0.5	-0.3	-0.2
	15	0.5	-0.3	-0.7	-0.5	-0.2	-0.5	-0.2	-0.5	0.0	-0.5	0.0	-0.5	0.2	-0.3	0.2	0.0	0.7	-0.5	0.3	-0.5	-0.5	-0.5	-0.2	-0.2
	30	0.6	-0.3	-0.4	-0.3	0.0	-0.3	0.0	-0.3	0.1	-0.3	0.3	-0.3	0.3	-0.1	0.3	0.1	0.7	-0.3	0.4	-0.3	-0.4	-0.4	0.3	-0.3
	45	0.6	-0.3	-0.3	-0.3	0.0	-0.4	0.0	-0.3	0.1	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.0	0.9	-0.3	0.4	-0.3	-0.6	-0.4	0.4	-0.4



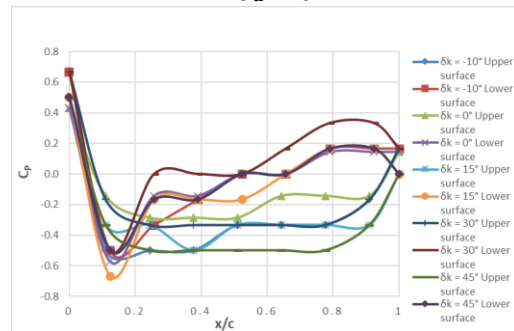
$\delta u = -10^\circ$



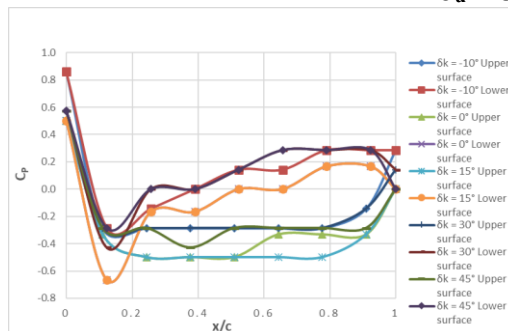
$\delta u = 0^\circ$



$\delta u = 15^\circ$



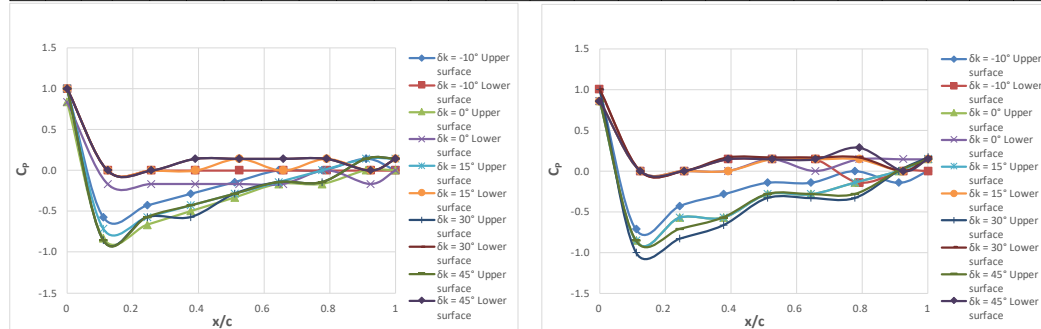
$\delta u = 30^\circ$



$\delta u = 45^\circ$

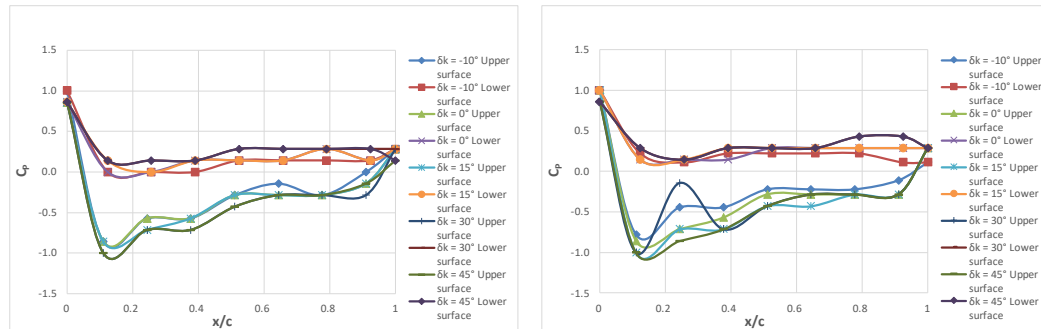
6. Sudut serang *airfoil* (α) 0° dan Kecepatan *freestream* (U_0) 9 m/s

δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	1.0	-0.6	0.0	-0.4	0.0	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.1	-0.1	-0.1	0.0	0.0
	0	0.8	-0.8	-0.2	-0.7	-0.2	-0.5	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	0.0	0.0	-0.2	0.0	0.3	-0.3	-0.3	-0.2	0.2	-0.3	-0.3	0.0	0.0
	15	1.0	-0.7	0.0	-0.6	0.0	-0.4	0.0	-0.3	0.1	-0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	-0.1	-0.1	0.0	0.1	-0.3	0.1	0.0	0.0
	30	1.0	-0.9	0.0	-0.6	0.0	-0.6	0.1	-0.3	0.1	-0.1	0.1	-0.1	0.1	0.1	0.0	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.3	0.3	-0.1	0.0
	45	1.0	-0.9	0.0	-0.6	0.0	-0.4	0.1	-0.3	0.1	-0.1	0.1	-0.1	0.1	0.1	0.0	0.1	0.4	-0.1	-0.3	0.0	0.0	-0.4	0.6	-0.3	0.0
0	-10	1.0	-0.7	0.0	-0.4	0.0	-0.3	0.1	-0.1	0.1	-0.1	0.1	0.0	-0.1	-0.1	0.0	0.0	0.1	-0.3	-0.1	0.0	0.3	-0.1	-0.1	0.0	0.0
	0	0.9	-0.9	0.0	-0.6	0.0	-0.6	0.0	-0.3	0.1	-0.3	0.0	-0.1	0.1	0.0	0.1	0.1	0.3	-0.1	-0.1	0.1	0.3	-0.3	-0.1	0.0	0.0
	15	0.9	-0.9	0.0	-0.6	0.0	-0.6	0.0	-0.3	0.1	-0.3	0.1	-0.1	0.1	0.0	0.0	0.1	-0.4	-0.1	0.0	0.0	0.0	-0.3	0.0	0.0	0.0
	30	1.0	-1.0	0.0	-0.8	0.0	-0.7	0.2	-0.3	0.2	-0.3	0.2	-0.3	0.2	0.0	0.0	0.2	0.7	-0.2	0.0	0.0	-0.3	-0.3	0.3	-0.2	0.0
	45	0.9	-0.9	0.0	-0.7	0.0	-0.6	0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	0.0	0.0	0.1	0.4	-0.1	0.0	0.0	-0.3	-0.4	0.4	-0.3	0.0
15	-10	1.0	-0.9	0.0	-0.6	0.0	-0.6	0.0	-0.3	0.1	-0.1	0.1	-0.3	0.1	0.0	0.1	0.3	0.4	-0.3	0.1	0.0	0.3	-0.1	-0.1	0.0	0.0
	0	0.9	-0.9	0.0	-0.6	0.0	-0.6	0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.1	0.1	0.3	0.7	0.0	0.1	0.0	0.3	-0.3	-0.1	0.0	0.0
	15	0.9	-0.9	0.1	-0.7	0.0	-0.6	0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.1	0.1	0.3	0.6	0.0	0.1	0.0	0.0	-0.3	0.1	0.0	0.0
	30	0.9	-1.0	0.1	-0.7	0.1	-0.7	0.1	-0.4	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.3	-0.1	0.1	0.0	-0.3	-0.3	0.3	-0.3	0.0
	45	0.9	-1.0	0.1	-0.7	0.1	-0.7	0.1	-0.4	0.3	-0.3	0.3	-0.3	0.3	-0.1	0.3	0.1	0.7	-0.1	0.1	0.0	-0.3	-0.6	0.6	-0.4	0.0
30	-10	1.0	-0.8	0.2	-0.4	0.1	-0.4	0.2	-0.2	0.2	-0.2	0.2	-0.2	0.2	-0.1	0.1	0.1	0.6	-0.3	0.3	-0.2	0.3	-0.2	-0.2	0.0	0.0
	0	1.0	-0.9	0.1	-0.7	0.1	-0.6	0.1	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.3	0.3	0.6	-0.1	0.3	-0.1	0.3	-0.3	-0.1	0.0	0.0
	15	1.0	-1.0	0.1	-0.7	0.1	-0.7	0.3	-0.4	0.3	-0.4	0.3	-0.3	0.3	-0.3	0.3	0.3	0.6	-0.1	0.3	-0.3	0.0	-0.6	0.0	0.0	0.0
	30	0.9	-1.0	0.3	-0.1	0.1	-0.7	0.3	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.3	0.4	0.3	0.6	-0.1	0.3	-0.3	-0.3	-0.3	0.3	-0.3	0.0
	45	0.9	-1.0	0.3	-0.9	0.1	-0.7	0.3	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.3	0.4	0.3	0.6	-0.1	0.3	-0.3	-0.3	-0.6	0.4	-0.4	0.0
45	-10	1.0	-0.9	0.1	-0.7	0.1	-0.6	0.1	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.1	0.4	0.3	0.6	-0.4	0.6	-0.1	0.3	-0.3	-0.3	0.0	0.0
	0	0.9	-0.8	0.3	-0.5	0.3	-0.4	0.4	-0.1	0.4	-0.1	0.4	-0.1	0.5	-0.1	0.6	0.4	0.6	-0.1	0.6	-0.3	0.4	-0.3	-0.1	0.0	0.0
	15	0.9	-0.8	0.4	-0.5	0.3	-0.5	0.4	-0.3	0.4	-0.1	0.4	-0.1	0.5	-0.1	0.6	0.4	0.5	-0.1	0.6	-0.3	0.0	-0.4	0.1	0.0	0.0
	30	0.9	-0.8	0.4	-0.6	0.3	-0.5	0.4	-0.3	0.4	-0.3	0.4	-0.1	0.5	-0.1	0.6	0.4	0.4	-0.1	0.6	-0.1	-0.3	-0.4	0.3	-0.1	0.0
	45	0.9	-1.1	0.3	-0.9	0.1	-0.7	0.3	-0.4	0.3	-0.4	0.4	-0.3	0.6	-0.3	0.6	0.3	-0.1	-0.3	0.4	-0.4	-0.4	-0.7	0.4	-0.6	0.0



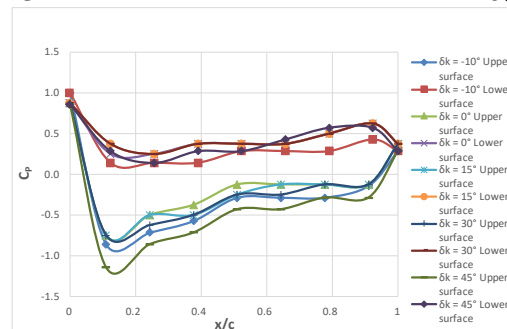
$\delta_u = -10^\circ$

$\delta_u = 0^\circ$



$\delta_u = 15^\circ$

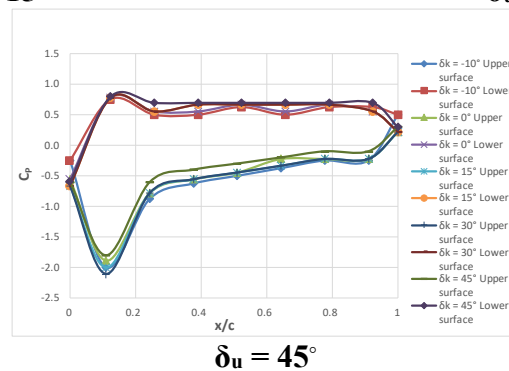
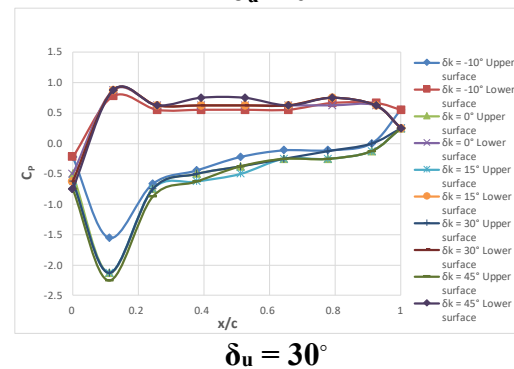
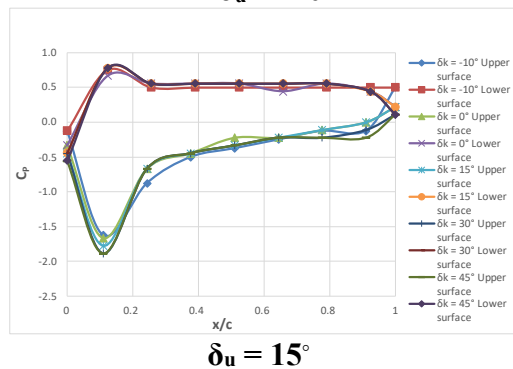
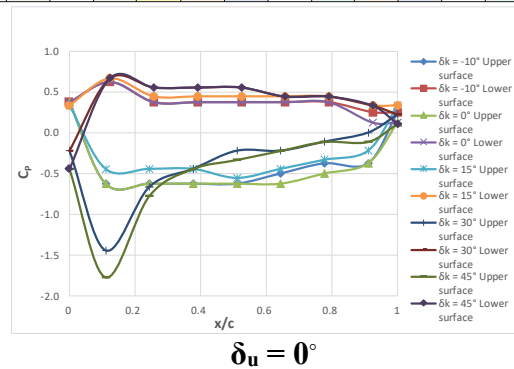
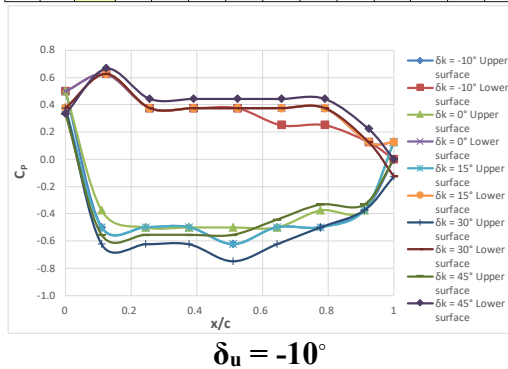
$\delta_u = 30^\circ$



$\delta_u = 45^\circ$

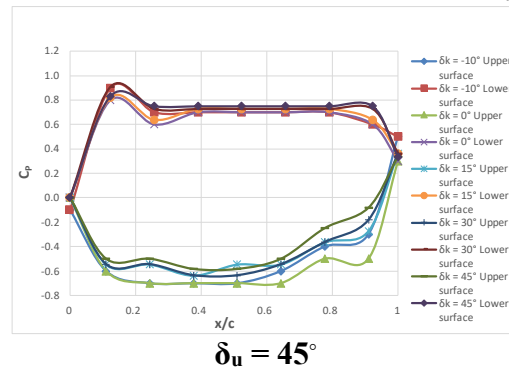
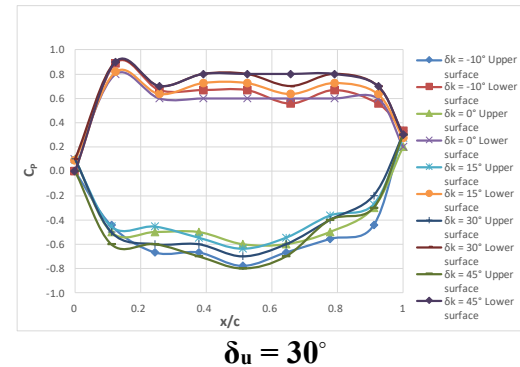
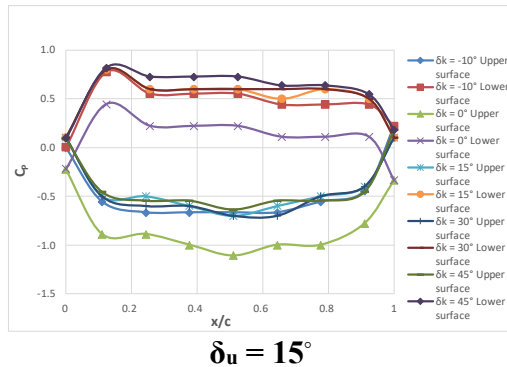
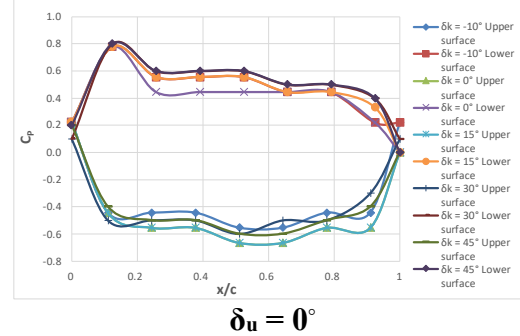
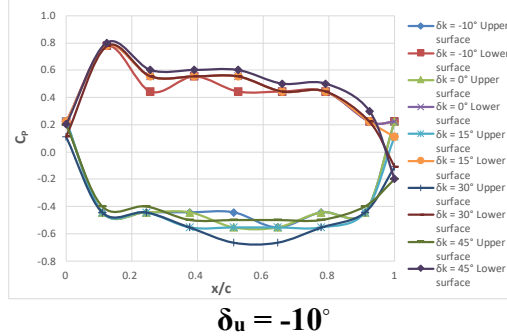
7. Sudut serang *airfoil* (α) 15° dan Kecepatan *freestream* (U_0) 9 m/s

δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	0.5	-0.5	0.6	-0.5	0.4	-0.5	0.4	-0.6	0.4	-0.5	0.3	-0.5	0.3	-0.4	0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0
	0	0.5	-0.4	0.6	-0.5	0.4	-0.5	0.4	-0.5	0.4	-0.5	0.4	-0.4	0.4	-0.4	0.1	0.1	0.8	-0.1	0.0	0.1	-0.1	-0.1	0.0	0.0	
	15	0.4	-0.5	0.6	-0.5	0.4	-0.5	0.4	-0.6	0.4	-0.5	0.4	-0.5	0.4	-0.4	0.1	0.1	-0.3	0.0	0.0	0.1	-0.1	-0.3	0.3	-0.1	
	30	0.4	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.8	0.4	-0.6	0.4	-0.5	0.4	-0.4	0.1	-0.1	-0.4	-0.1	-0.1	0.0	-0.3	-0.4	0.5	-0.3	
	45	0.3	-0.6	0.7	-0.6	0.4	-0.6	0.4	-0.6	0.4	-0.4	0.4	-0.3	0.4	-0.3	0.2	0.0	-0.2	0.0	0.0	0.1	0.0	-0.4	0.7	-0.2	
0	-10	0.4	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.6	0.4	-0.5	0.4	-0.4	0.4	-0.4	0.3	0.3	-0.1	-0.1	0.0	0.0	0.1	-0.1	-0.1	0.0	
	0	0.4	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.6	0.4	-0.6	0.4	-0.5	0.4	-0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	
	15	0.3	-0.4	0.7	-0.4	0.4	-0.4	0.4	-0.6	0.4	-0.4	0.4	-0.3	0.4	-0.2	0.3	0.3	0.3	0.1	0.1	0.2	0.0	-0.1	0.2	0.0	
	30	-0.2	-1.4	0.7	-0.7	0.6	-0.4	0.6	-0.2	0.6	-0.2	0.4	-0.1	0.4	0.0	0.3	0.2	0.6	0.1	0.2	0.2	0.0	-0.1	0.6	0.0	
	45	-0.4	-1.8	0.7	-0.8	0.6	-0.4	0.6	-0.3	0.6	-0.2	0.4	-0.1	0.4	-0.1	0.3	0.1	0.3	0.0	0.1	0.2	0.0	-0.3	0.7	-0.2	
15	-10	-0.1	-1.6	0.8	-0.9	0.5	-0.5	0.5	-0.4	0.5	-0.3	0.5	-0.1	0.5	-0.1	0.5	0.5	0.0	0.0	0.4	0.0	0.3	-0.4	-0.1	0.0	
	0	-0.3	-1.7	0.7	-0.7	0.6	-0.4	0.6	-0.2	0.6	-0.2	0.4	-0.1	0.6	0.0	0.4	0.2	0.4	0.0	0.3	0.1	0.1	-0.2	0.1	0.1	
	15	-0.4	-1.8	0.8	-0.7	0.6	-0.4	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	0.0	0.4	0.2	0.1	0.0	0.3	0.1	0.0	-0.3	0.3	0.0	
	30	-0.4	-1.9	0.8	-0.7	0.6	-0.4	0.6	-0.3	0.6	-0.2	0.6	-0.2	0.6	-0.1	0.4	0.1	0.2	0.0	0.3	0.1	-0.3	-0.2	0.4	-0.1	
	45	-0.6	-1.9	0.8	-0.7	0.6	-0.4	0.6	-0.3	0.6	-0.2	0.6	-0.2	0.6	-0.2	0.4	0.1	0.3	0.0	0.3	0.1	-0.2	-0.4	0.7	-0.3	
30	-10	-0.2	-1.6	0.8	-0.7	0.6	-0.4	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.7	0.0	0.7	0.6	0.3	0.0	0.6	0.1	0.3	-0.2	0.0	0.1	
	0	-0.5	-2.1	0.9	-0.8	0.6	-0.5	0.6	-0.4	0.6	-0.3	0.6	-0.3	0.6	-0.1	0.6	0.3	0.8	0.0	0.6	0.1	0.0	-0.4	0.1	0.1	
	15	-0.6	-2.1	0.9	-0.8	0.6	-0.6	0.6	-0.5	0.6	-0.3	0.6	-0.3	0.8	-0.1	0.6	0.3	0.8	0.0	0.6	0.1	-0.3	-0.4	0.3	0.0	
	30	-0.6	-2.1	0.9	-0.8	0.6	-0.5	0.6	-0.4	0.6	-0.3	0.6	-0.1	0.8	0.0	0.6	0.3	0.6	-0.1	0.5	0.0	-0.4	-0.4	0.5	-0.3	
	45	-0.8	-2.3	0.9	-0.9	0.6	-0.6	0.8	-0.4	0.8	-0.3	0.6	-0.3	0.8	-0.1	0.6	0.3	0.3	-0.1	0.5	0.0	-0.4	-0.5	0.8	-0.3	
45	-10	-0.3	-2.0	0.8	-0.9	0.5	-0.6	0.5	-0.5	0.6	-0.4	0.5	-0.3	0.6	-0.3	0.6	0.5	0.1	-0.3	0.8	-0.1	0.3	-0.4	-0.3	0.0	
	0	-0.6	-1.9	0.8	-0.8	0.6	-0.6	0.6	-0.4	0.7	-0.2	0.6	-0.2	0.7	-0.2	0.6	0.2	0.7	-0.2	0.7	0.0	0.0	-0.4	0.0	0.0	
	15	-0.7	-2.0	0.8	-0.8	0.6	-0.6	0.7	-0.4	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.6	0.2	0.7	-0.2	0.7	0.0	-0.2	-0.4	0.2	0.0	
	30	-0.7	-2.1	0.8	-0.8	0.6	-0.6	0.7	-0.4	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.6	0.2	0.6	-0.1	0.7	0.0	-0.3	-0.3	0.4	-0.2	
	45	-0.8	-1.8	0.8	-0.6	0.7	-0.4	0.7	-0.3	0.7	-0.2	0.7	-0.1	0.7	-0.1	0.7	0.3	0.2	-0.1	0.7	0.0	-0.1	-0.3	0.7	-0.2	



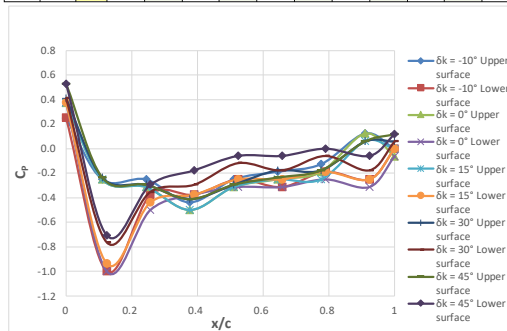
8. Sudut serang *airfoil* (α) 20° dan Kecepatan *freestream* (U_0) 9 m/s

δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	0.2	-0.4	0.8	-0.4	0.4	-0.4	0.6	-0.4	0.6	-0.6	0.6	-0.6	0.4	-0.4	0.4	-0.4	0.2	-0.2	-0.1	0.0	0.0	-0.2	-0.2	-0.1	-0.1
	0	0.2	-0.4	0.8	-0.4	0.6	-0.4	0.6	-0.6	0.6	-0.6	0.4	-0.4	0.4	-0.4	0.2	0.2	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2	0.0	-0.1	
	15	0.2	-0.4	0.8	-0.4	0.6	-0.6	0.6	-0.6	0.6	-0.6	0.4	-0.6	0.4	-0.4	0.2	0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.3	0.2	-0.2	
	30	0.1	-0.4	0.8	-0.4	0.6	-0.6	0.6	-0.7	0.6	-0.7	0.4	-0.6	0.4	-0.4	0.2	-0.1	-0.1	-0.1	-0.1	0.0	-0.3	-0.3	0.4	-0.2	
	45	0.2	-0.4	0.8	-0.4	0.6	-0.5	0.6	-0.5	0.6	-0.5	0.5	-0.5	0.5	-0.4	0.3	-0.2	0.2	-0.1	0.0	0.0	-0.2	-0.3	0.7	-0.2	
0	-10	0.2	-0.4	0.8	-0.4	0.6	-0.4	0.6	-0.6	0.6	-0.6	0.4	-0.4	0.4	-0.4	0.2	0.2	0.6	-0.1	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	
	0	0.2	-0.4	0.8	-0.6	0.4	-0.6	0.4	-0.7	0.4	-0.7	0.4	-0.6	0.4	-0.6	0.2	0.0	-0.1	-0.2	0.0	0.0	-0.3	-0.2	0.0	-0.1	
	15	0.2	-0.4	0.8	-0.6	0.6	-0.6	0.6	-0.7	0.6	-0.7	0.4	-0.6	0.4	-0.6	0.3	0.0	0.3	-0.1	0.0	0.0	-0.4	-0.3	0.2	-0.2	
	30	0.1	-0.5	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.6	-0.5	0.5	-0.5	0.5	-0.3	0.4	0.1	0.0	-0.1	0.1	0.0	-0.4	-0.3	0.5	-0.2	
	45	0.2	-0.4	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.5	-0.4	0.4	0.0	0.4	0.0	0.1	0.1	-0.2	-0.3	0.8	-0.2	
15	-10	0.0	-0.6	0.8	-0.7	0.6	-0.7	0.6	-0.7	0.6	-0.7	0.4	-0.6	0.4	-0.4	0.4	0.2	-0.2	-0.2	0.3	0.0	-0.2	-0.3	-0.1	-0.1	
	0	-0.2	-0.9	0.4	-0.9	0.2	-1.0	0.2	-1.1	0.2	-1.0	0.1	-1.0	0.1	-0.8	0.1	-0.3	0.1	-0.1	0.3	0.0	-0.3	-0.3	0.1	-0.1	
	15	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.5	-0.5	0.6	-0.4	0.5	0.1	0.2	-0.1	0.3	0.1	-0.3	-0.2	0.3	-0.1	
	30	0.1	-0.5	0.8	-0.6	0.6	-0.6	0.6	-0.7	0.6	-0.7	0.6	-0.5	0.6	-0.4	0.5	0.1	0.2	-0.1	0.3	0.1	-0.4	-0.3	0.5	-0.2	
	45	0.1	-0.5	0.8	-0.5	0.7	-0.5	0.7	-0.6	0.7	-0.5	0.6	-0.5	0.6	-0.5	0.5	0.2	-0.1	0.0	0.4	0.2	-0.3	-0.2	0.7	-0.2	
30	-10	0.0	-0.4	0.9	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.6	-0.6	0.7	-0.4	0.6	0.3	0.4	-0.2	0.6	0.0	-0.1	-0.4	-0.1	-0.1	
	0	0.1	-0.5	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.6	-0.6	0.6	-0.5	0.6	-0.3	0.6	0.2	0.8	0.0	0.6	0.1	-0.3	-0.3	0.1	-0.1	
	15	0.1	-0.5	0.8	-0.5	0.6	-0.5	0.7	-0.6	0.7	-0.5	0.6	-0.4	0.7	-0.3	0.6	0.3	0.3	0.0	0.6	0.2	-0.3	-0.2	0.4	-0.1	
	30	0.1	-0.5	0.9	-0.6	0.7	-0.6	0.8	-0.7	0.8	-0.6	0.7	-0.4	0.8	-0.2	0.7	0.3	0.7	0.0	0.6	0.2	-0.3	-0.2	0.6	-0.2	
	45	0.0	-0.6	0.9	-0.6	0.7	-0.7	0.8	-0.8	0.8	-0.7	0.8	-0.4	0.8	-0.3	0.7	0.3	0.4	-0.1	0.6	0.2	-0.4	-0.3	0.8	-0.2	
45	-10	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.5	0.2	-0.1	0.7	0.1	0.0	-0.4	-0.1	-0.1	
	0	0.0	-0.6	0.8	-0.7	0.6	-0.7	0.7	-0.7	0.7	-0.7	0.7	-0.5	0.7	-0.5	0.6	0.3	0.6	-0.1	0.7	0.0	-0.3	-0.4	0.1	-0.1	
	15	0.0	-0.5	0.8	-0.5	0.6	-0.6	0.7	-0.5	0.7	-0.5	0.7	-0.4	0.7	-0.3	0.6	0.4	0.8	-0.1	0.7	0.1	-0.4	-0.3	0.4	-0.1	
	30	0.0	-0.5	0.9	-0.5	0.7	-0.6	0.7	-0.6	0.7	-0.5	0.7	-0.4	0.7	-0.2	0.7	0.4	0.8	-0.1	0.7	0.2	-0.4	-0.3	0.5	-0.2	
	45	0.0	-0.5	0.8	-0.5	0.8	-0.6	0.8	-0.6	0.8	-0.5	0.8	-0.3	0.8	-0.1	0.8	0.3	0.8	0.0	0.8	0.2	-0.3	-0.2	0.8	-0.2	

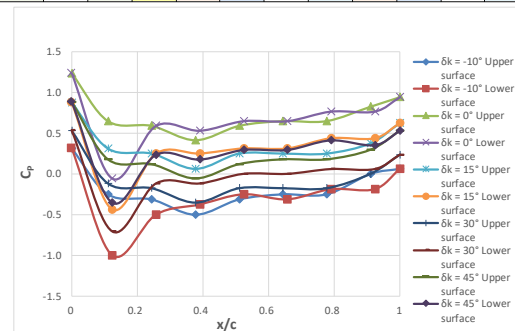


9. Sudut serang *airfoil* (α) -10° dan Kecepatan *freestream* (U_0) 15 m/s

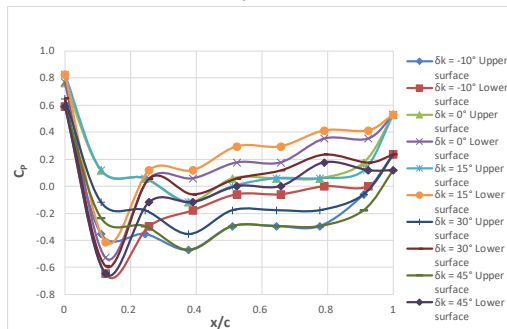
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.3	-0.3	-1.0	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.3	-0.1	-0.2	0.1	-0.3	0.0	0.1	-0.4	-0.4	-0.2	0.3	-0.4	-0.4	-0.1
	0	0.4	-0.3	-1.0	-0.3	-0.5	-0.5	-0.4	-0.3	-0.3	-0.3	-0.2	-0.3	0.1	-0.3	-0.1	-0.4	-0.3	-0.5	-0.1	0.3	-0.6	-0.4	-0.1	
	15	0.4	-0.3	-0.9	-0.3	-0.4	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-0.2	0.1	-0.3	0.0	-0.4	-0.3	-0.4	-0.1	0.0	-0.6	-0.1	-0.1	
	30	0.4	-0.2	-0.8	-0.3	-0.4	-0.4	-0.3	-0.3	-0.1	-0.2	-0.2	-0.2	0.1	-0.2	0.1	-0.1	-0.3	-0.4	0.0	-0.2	-0.4	0.2	-0.3	
	45	0.5	-0.2	-0.7	-0.3	-0.3	-0.4	-0.2	-0.3	-0.1	-0.2	-0.1	-0.2	0.0	0.1	-0.1	0.1	-0.4	-0.3	-0.4	-0.1	-0.2	-0.6	0.5	-0.5
0	-10	0.3	-0.3	-1.0	-0.3	-0.5	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	0.0	-0.2	0.1	0.3	-0.4	-0.4	-0.1	0.2	-0.4	-0.4	-0.1
	0	1.2	0.6	-0.1	0.6	0.6	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.9	-1.1	-0.3	-0.4	0.0	0.2	-0.5	-0.3	0.0
	15	0.9	0.3	-0.4	0.3	0.3	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6	-0.6	-0.4	-0.4	0.0	-0.1	-0.6	-0.1	-0.1
	30	0.5	-0.1	-0.7	-0.2	-0.1	-0.4	-0.1	-0.2	0.0	-0.2	0.0	-0.2	0.1	0.0	0.1	0.2	-0.9	-0.4	-0.4	0.0	-0.4	-0.5	0.1	-0.4
	45	0.9	0.2	-0.4	0.1	0.2	-0.1	0.2	0.1	0.3	0.2	0.3	0.2	0.4	0.3	0.4	0.5	-0.1	-0.3	-0.3	0.0	-0.4	-0.5	0.4	-0.5
15	-10	0.6	-0.4	-0.6	-0.4	-0.3	-0.5	-0.2	-0.3	-0.1	-0.3	-0.1	-0.3	0.0	-0.1	0.0	0.2	0.4	-0.5	-0.1	-0.1	0.2	-0.4	-0.4	0.0
	0	0.8	0.1	-0.5	0.1	0.1	-0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.4	0.2	0.4	0.5	0.2	-0.4	-0.2	-0.1	0.2	-0.5	-0.3	0.0
	15	0.8	0.1	-0.4	0.1	0.1	-0.1	0.1	0.0	0.3	0.1	0.3	0.1	0.4	0.1	0.4	0.5	0.4	-0.4	-0.1	0.0	-0.2	-0.5	-0.1	0.0
	30	0.6	-0.1	-0.6	-0.2	0.1	-0.4	-0.1	-0.2	0.1	-0.2	0.1	-0.2	0.2	-0.1	0.2	0.2	0.2	-0.4	-0.1	-0.1	-0.5	-0.4	0.1	-0.3
	45	0.6	-0.2	-0.6	-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.1	0.1	-0.5	-0.4	-0.1	0.0	-0.4	-0.5	0.5	-0.4
30	-10	0.7	-0.4	-0.4	-0.3	-0.1	-0.4	-0.1	-0.3	0.0	-0.2	0.0	-0.3	0.2	-0.1	0.2	0.3	0.0	-0.4	0.2	-0.3	0.3	-0.4	-0.3	0.0
	0	0.5	-0.3	-0.8	-0.4	-0.2	-0.5	-0.2	-0.4	-0.1	-0.3	-0.1	-0.4	0.1	-0.3	0.2	0.1	0.4	-0.3	0.1	-0.2	0.2	-0.5	-0.3	0.0
	15	0.6	-0.2	-0.6	-0.3	-0.1	-0.4	-0.1	-0.3	0.0	-0.3	0.1	-0.3	0.2	-0.2	0.2	0.2	0.3	-0.2	0.1	-0.2	-0.2	-0.4	0.0	0.0
	30	0.6	-0.3	-0.6	-0.3	-0.1	-0.4	-0.1	-0.3	0.1	-0.3	0.1	-0.3	0.2	-0.2	0.2	0.2	0.4	-0.3	0.2	-0.3	-0.4	-0.3	0.2	-0.3
	45	0.6	-0.3	-0.5	-0.3	-0.1	-0.5	-0.1	-0.3	0.1	-0.3	0.1	-0.3	0.2	-0.3	0.2	0.1	-0.3	-0.3	0.1	-0.3	-0.4	-0.4	0.4	-0.4
45	-10	0.8	-0.4	-0.3	-0.4	-0.1	-0.5	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.1	0.3	0.3	0.2	-0.4	0.4	-0.3	0.2	-0.4	-0.4	-0.1
	0	0.6	-0.2	-0.6	-0.3	-0.1	-0.4	-0.1	-0.3	0.1	-0.2	0.1	-0.2	0.3	-0.2	0.3	0.2	0.8	-0.4	0.4	-0.4	0.3	-0.6	-0.3	0.0
	15	0.6	-0.3	-0.6	-0.3	-0.1	-0.4	-0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.2	0.3	0.2	0.8	-0.4	0.4	-0.4	-0.3	-0.5	-0.1	-0.1
	30	0.6	-0.3	-0.5	-0.3	-0.1	-0.5	-0.1	-0.3	0.1	-0.3	0.2	-0.3	0.3	-0.2	0.3	0.2	0.6	-0.4	0.4	-0.4	-0.6	-0.5	0.1	-0.4
	45	0.6	-0.3	-0.4	-0.3	0.0	-0.6	0.0	-0.3	0.1	-0.3	0.2	-0.3	0.3	-0.2	0.3	0.2	0.8	-0.4	0.4	-0.4	-0.7	-0.6	0.4	-0.4



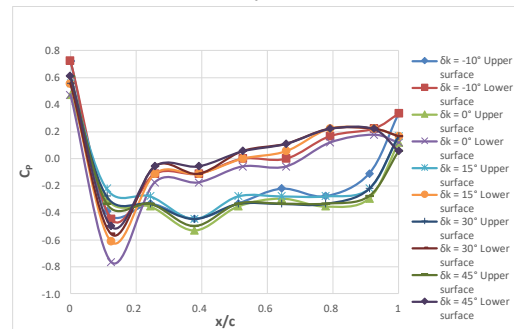
$\delta u = -10^\circ$



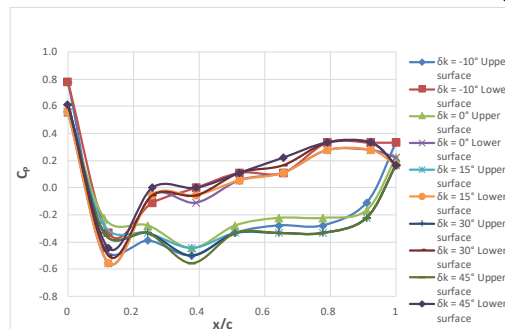
$\delta u = 0^\circ$



$\delta u = 15^\circ$



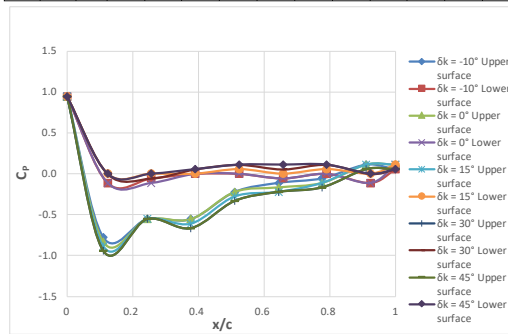
$\delta u = 30^\circ$



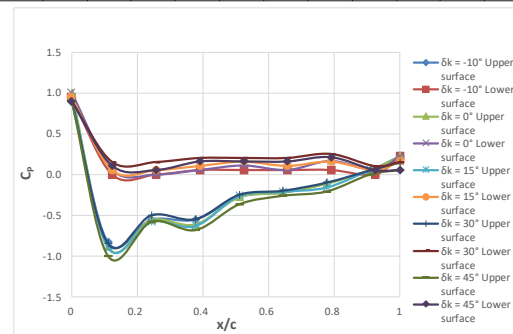
$\delta u = 45^\circ$

10. Sudut serang *airfoil* (α) 0° dan Kecepatan *freestream* (U_0) 15 m/s

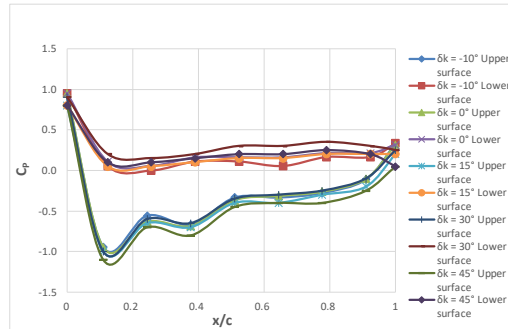
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.9	-0.8	-0.1	-0.6	-0.1	-0.6	0.0	-0.2	0.0	-0.2	-0.1	-0.1	0.0	0.1	-0.1	0.1	-0.2	-0.2	-0.3	0.0	0.2	-0.2	-0.3	0.1
	0	0.9	-0.8	-0.1	-0.6	-0.1	-0.6	0.0	-0.2	0.0	-0.2	-0.1	-0.1	0.0	0.1	-0.1	0.1	0.3	-0.2	-0.3	0.1	0.2	-0.3	-0.3	0.1
	15	0.9	-0.9	0.0	-0.6	0.0	-0.6	0.0	-0.3	0.1	-0.2	0.0	-0.1	0.1	0.1	0.0	0.1	0.2	-0.3	-0.3	0.1	0.1	-0.4	0.0	0.0
	30	0.9	-0.9	0.0	-0.6	-0.1	-0.7	0.1	-0.3	0.1	-0.2	0.1	-0.2	0.1	0.1	0.0	0.1	0.2	-0.3	-0.3	0.1	-0.2	-0.4	0.2	-0.3
	45	0.9	-0.9	0.0	-0.6	0.0	-0.7	0.1	-0.3	0.1	-0.2	0.1	-0.2	0.1	0.1	0.0	0.1	0.4	-0.3	-0.3	0.0	-0.2	-0.5	0.5	-0.4
0	-10	0.9	-0.8	0.0	-0.6	0.0	-0.6	0.1	-0.3	0.1	-0.2	0.1	-0.1	0.1	0.1	0.0	0.2	0.1	-0.3	-0.2	0.1	0.2	-0.2	-0.2	0.1
	0	1.0	-0.9	0.1	-0.6	0.0	-0.6	0.1	-0.3	0.1	-0.2	0.1	-0.1	0.2	0.1	0.1	0.2	0.2	-0.2	-0.1	0.1	0.3	-0.3	-0.2	0.1
	15	0.9	-0.9	0.1	-0.6	0.1	-0.6	0.1	-0.3	0.2	-0.2	0.1	-0.2	0.2	0.1	0.1	0.2	-0.5	-0.2	-0.1	0.1	0.0	-0.3	0.0	0.0
	30	0.9	-0.9	0.2	-0.5	0.2	-0.6	0.2	-0.3	0.2	-0.2	0.2	-0.1	0.3	0.1	0.1	0.2	0.6	-0.1	0.0	0.1	-0.3	-0.2	0.3	-0.1
	45	0.9	-1.0	0.1	-0.6	0.1	-0.7	0.2	-0.4	0.2	-0.3	0.2	-0.2	0.2	0.0	0.1	0.1	0.7	-0.2	-0.1	0.1	-0.5	-0.5	0.5	-0.4
15	-10	0.9	-0.9	0.1	-0.6	0.0	-0.7	0.1	-0.3	0.1	-0.3	0.1	-0.3	0.2	-0.1	0.2	0.3	0.6	-0.3	0.1	-0.1	0.3	-0.3	-0.3	0.1
	0	0.9	-0.9	0.1	-0.6	0.1	-0.7	0.2	-0.4	0.2	-0.3	0.2	-0.3	0.2	-0.1	0.2	0.3	0.5	-0.1	0.1	0.0	0.3	-0.4	-0.2	0.1
	15	0.8	-1.0	0.1	-0.7	0.1	-0.7	0.1	-0.4	0.2	-0.4	0.2	-0.3	0.2	-0.2	0.2	0.2	0.6	-0.1	0.1	0.1	0.0	-0.3	0.1	0.0
	30	0.9	-1.0	0.2	-0.6	0.2	-0.7	0.2	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.1	0.3	0.3	0.6	-0.1	0.1	0.1	-0.3	-0.3	0.3	-0.2
	45	0.8	-1.1	0.1	-0.7	0.1	-0.8	0.2	-0.5	0.2	-0.4	0.2	-0.4	0.3	-0.3	0.2	0.1	0.8	-0.1	0.1	0.1	-0.4	-0.5	0.5	-0.4
30	-10	0.9	-0.9	0.2	-0.6	0.1	-0.6	0.2	-0.3	0.2	-0.3	0.3	-0.1	0.3	-0.1	0.3	0.4	0.6	-0.3	0.3	-0.2	0.3	-0.3	-0.3	0.1
	0	1.0	-1.0	0.2	-0.6	0.2	-0.6	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.4	-0.3	0.4	0.4	0.8	-0.1	0.3	-0.2	0.3	-0.4	-0.2	0.1
	15	0.9	-1.0	0.2	-0.6	0.2	-0.7	0.3	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.2	0.4	0.4	0.8	-0.1	0.3	-0.2	0.0	-0.4	0.1	0.0
	30	0.9	-1.1	0.3	-0.6	0.2	-0.7	0.3	-0.4	0.4	-0.4	0.4	-0.3	0.4	-0.2	0.5	0.4	0.8	-0.2	0.3	-0.3	-0.3	-0.3	0.3	-0.3
	45	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.4	-0.3	0.4	-0.2	0.5	-0.1	0.5	0.3	0.6	-0.1	0.3	-0.2	-0.3	-0.5	0.5	-0.3
45	-10	0.9	-1.0	0.2	-0.6	0.1	-0.7	0.2	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.1	0.4	-0.2	0.6	-0.4	0.5	-0.2	0.3	-0.4	-0.4	0.0
	0	0.9	-1.1	0.3	-0.6	0.2	-0.7	0.3	-0.4	0.4	-0.3	0.4	-0.3	0.5	-0.2	0.5	0.4	0.5	-0.3	0.5	-0.4	0.2	-0.4	-0.3	0.0
	15	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.4	-0.3	0.4	-0.2	0.5	-0.1	0.5	0.4	0.4	-0.2	0.6	-0.3	0.0	-0.4	0.0	0.0
	30	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.4	-0.3	0.4	-0.2	0.5	-0.1	0.5	0.3	0.6	-0.1	0.5	-0.3	-0.3	-0.4	0.2	-0.2
	45	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.4	-0.3	0.4	-0.3	0.4	-0.2	0.6	-0.1	0.6	0.3	0.1	-0.2	0.5	-0.3	-0.5	-0.5	0.5	-0.5



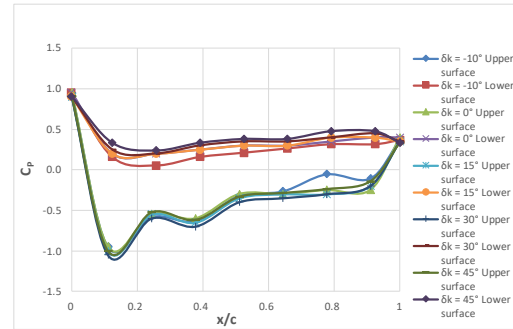
$\delta u = -10^\circ$



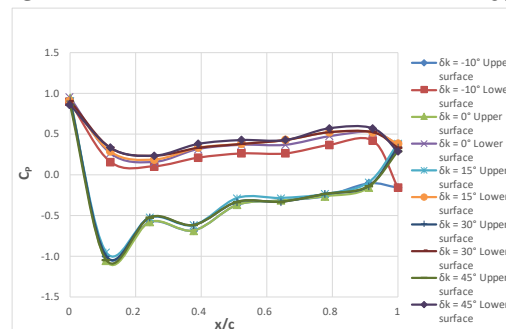
$\delta u = 0^\circ$



$\delta u = 15^\circ$



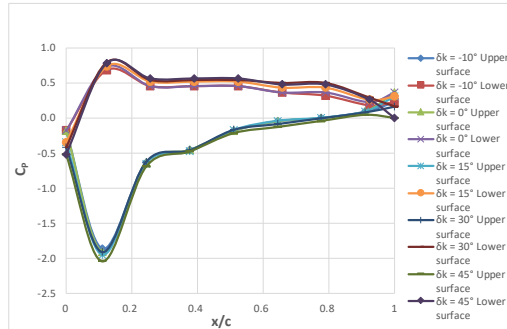
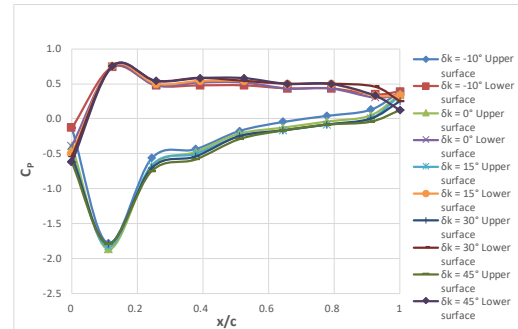
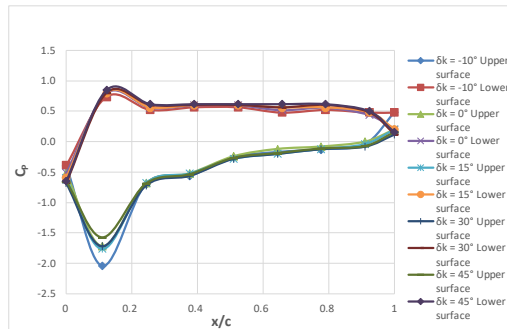
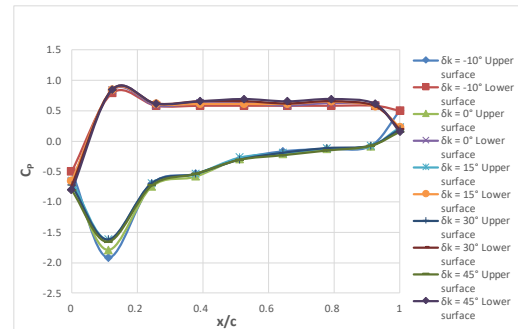
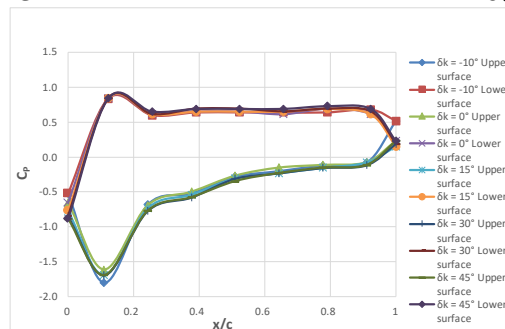
$\delta u = 30^\circ$



$\delta u = 45^\circ$

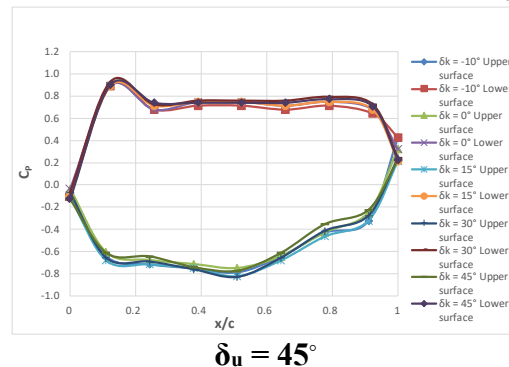
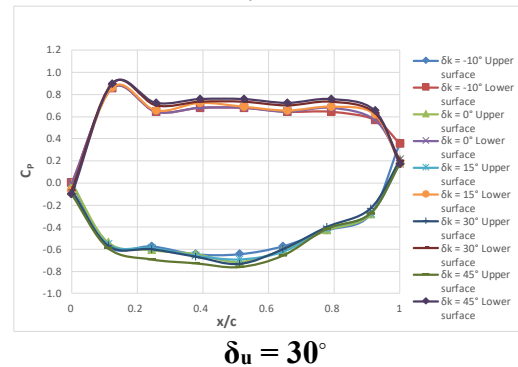
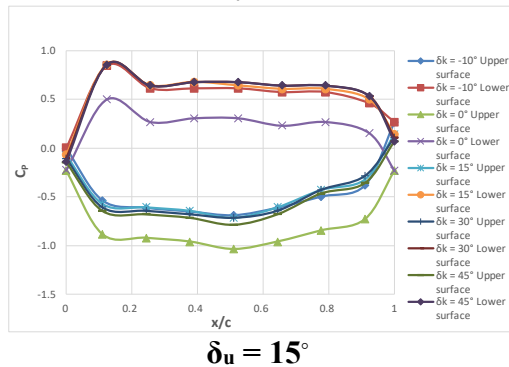
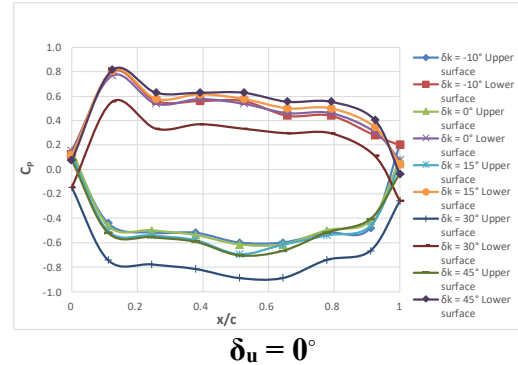
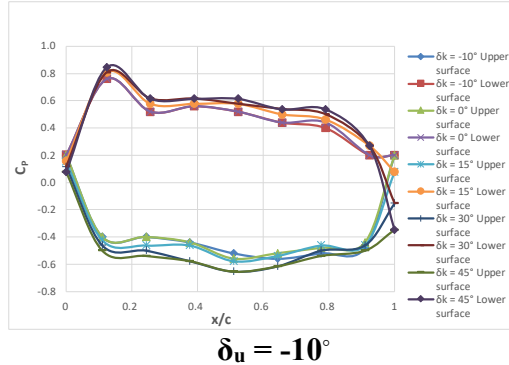
11. Sudut serang *airfoil* (α) 15° dan Kecepatan *freestream* (U_0) 15 m/s

δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	-0.2	-1.9	0.7	-0.6	0.5	-0.5	0.5	-0.2	0.5	0.0	0.4	0.0	0.3	0.1	0.2	0.2	0.0	0.0	0.0	0.2	0.3	-0.1	0.0	0.1
	0	-0.2	-1.9	0.7	-0.6	0.5	-0.5	0.5	-0.2	0.5	0.0	0.4	0.0	0.4	0.1	0.2	0.4	0.7	0.0	0.0	0.2	0.2	-0.2	0.0	0.1
	15	-0.3	-2.0	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	0.0	0.4	0.0	0.4	0.1	0.3	0.3	-0.2	0.0	0.0	0.2	0.2	-0.2	0.3	0.0
	30	-0.4	-1.9	0.8	-0.6	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.5	0.0	0.5	0.1	0.3	0.2	-0.2	0.0	0.1	0.2	0.0	-0.2	0.5	0.0
	45	-0.5	-2.0	0.8	-0.7	0.6	-0.5	0.6	-0.2	0.6	-0.1	0.5	0.0	0.5	0.0	0.3	0.0	-0.3	0.0	0.0	0.1	0.0	-0.3	0.7	-0.3
0	-10	-0.1	-1.8	0.7	-0.6	0.5	-0.4	0.5	-0.2	0.5	0.0	0.4	0.0	0.4	0.1	0.3	0.4	0.0	0.0	0.2	0.2	0.3	-0.1	0.0	0.2
	0	-0.4	-1.9	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.0	0.3	0.3	0.0	0.0	0.1	0.1	0.2	-0.2	0.1	0.1
	15	-0.5	-1.8	0.8	-0.7	0.5	-0.5	0.5	-0.3	0.5	-0.2	0.5	-0.1	0.5	0.0	0.3	0.3	0.3	0.0	0.1	0.2	0.0	-0.2	0.3	0.0
	30	-0.5	-1.8	0.8	-0.7	0.5	-0.5	0.6	-0.3	0.5	-0.2	0.5	-0.1	0.5	0.0	0.5	0.3	0.5	0.0	0.1	0.2	-0.1	-0.2	0.5	0.0
	45	-0.6	-1.8	0.8	-0.8	0.5	-0.6	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.3	0.1	0.5	0.0	0.1	0.2	-0.2	-0.3	0.7	-0.3
15	-10	-0.4	-2.0	0.7	-0.7	0.5	-0.6	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.5	0.5	0.1	0.0	0.4	0.0	0.3	-0.3	0.0	0.1
	0	-0.5	-1.7	0.8	-0.7	0.6	-0.5	0.6	-0.2	0.6	-0.1	0.5	-0.1	0.6	0.0	0.4	0.2	0.2	0.0	0.4	0.2	0.0	-0.3	0.1	0.2
	15	-0.6	-1.8	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	0.0	0.5	0.2	-0.1	0.0	0.4	0.2	-0.1	-0.3	0.3	0.0
	30	-0.7	-1.7	0.8	-0.7	0.6	-0.6	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.5	0.1	0.1	0.0	0.4	0.2	-0.4	-0.2	0.5	-0.1
	45	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.5	0.2	0.2	0.0	0.3	0.2	-0.3	-0.3	0.7	-0.2
30	-10	-0.5	-1.9	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.6	0.5	0.3	-0.1	0.5	0.0	0.3	-0.3	0.0	0.1
	0	-0.7	-1.8	0.8	-0.8	0.6	-0.6	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.6	0.2	0.7	0.0	0.5	0.1	0.0	-0.4	0.1	0.1
	15	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.7	-0.1	0.6	0.2	0.5	0.0	0.5	0.1	-0.2	-0.3	0.3	0.0
	30	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.7	-0.1	0.6	0.2	0.4	0.0	0.5	0.1	-0.3	-0.2	0.5	-0.1
	45	-0.8	-1.7	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.6	0.2	0.3	-0.1	0.5	0.1	-0.4	-0.3	0.7	-0.2
45	-10	-0.5	-1.8	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.7	0.5	0.2	-0.2	0.7	-0.2	0.2	-0.3	-0.1	0.1
	0	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.7	-0.1	0.6	0.2	0.6	-0.1	0.7	0.0	0.0	-0.3	0.1	0.2
	15	-0.8	-1.7	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.6	0.2	0.6	-0.1	0.7	0.0	-0.2	-0.4	0.3	0.0
	30	-0.8	-1.7	0.8	-0.8	0.6	-0.6	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.7	0.2	0.6	-0.1	0.7	0.0	-0.3	-0.2	0.5	-0.2
	45	-0.9	-1.7	0.8	-0.8	0.7	-0.6	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.7	0.2	0.2	-0.2	0.7	-0.1	-0.3	-0.3	0.7	-0.2


 $\delta_u = -10^\circ$

 $\delta_u = 0^\circ$

 $\delta_u = 15^\circ$

 $\delta_u = 30^\circ$

 $\delta_u = 45^\circ$

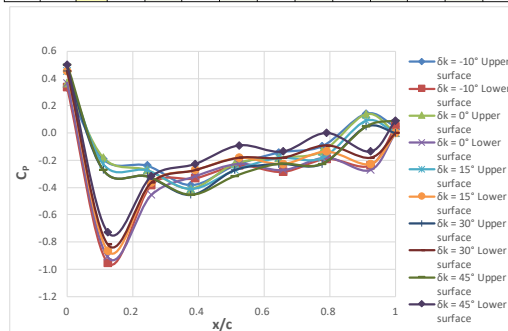
12. Sudut serang *airfoil* (α) 20° dan Kecepatan *freestream* (U_0) 15 m/s

δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	0.2	-0.4	0.8	-0.4	0.5	-0.4	0.6	-0.5	0.5	-0.6	0.4	-0.5	0.4	-0.5	0.2	0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	-0.2	0.0	-0.1
	0	0.2	-0.4	0.8	-0.4	0.5	-0.4	0.6	-0.6	0.5	-0.5	0.4	-0.5	0.4	-0.4	0.2	0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.2	0.0	-0.1	
	15	0.2	-0.4	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.6	-0.5	0.5	-0.5	0.5	-0.5	0.3	0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.2	0.3	-0.1	
	30	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.3	-0.3	0.5	-0.2	
	45	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.3	-0.3	0.2	-0.2	-0.1	-0.1	-0.3	-0.3	0.7	-0.3	
0	-10	0.1	-0.4	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.6	-0.6	0.4	-0.5	0.4	-0.5	0.3	0.2	0.4	-0.2	0.0	0.0	-0.3	-0.3	-0.2	-0.1	
	0	0.2	-0.5	0.8	-0.5	0.5	-0.5	0.6	-0.6	0.5	-0.6	0.5	-0.5	0.5	-0.4	0.3	0.1	-0.2	-0.1	0.1	0.0	-0.3	-0.2	0.0	-0.1	
	15	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.3	0.0	0.3	-0.1	0.1	0.0	-0.4	-0.3	0.3	-0.2	
	30	-0.1	-0.7	0.6	-0.8	0.3	-0.8	0.4	-0.9	0.3	-0.9	0.3	-0.7	0.3	-0.7	0.1	-0.3	-0.1	-0.1	0.1	0.0	-0.4	-0.3	0.5	-0.1	
	45	0.1	-0.5	0.8	-0.6	0.6	-0.6	0.6	-0.7	0.6	-0.7	0.6	-0.5	0.6	-0.4	0.4	0.0	0.4	-0.1	0.1	0.0	-0.3	-0.3	0.7	-0.2	
15	-10	0.0	-0.5	0.8	-0.6	0.6	-0.7	0.6	-0.7	0.6	-0.6	0.6	-0.5	0.6	-0.4	0.5	0.3	-0.2	-0.1	0.3	0.0	-0.2	-0.3	-0.1	-0.1	
	0	-0.2	-0.9	0.5	-0.9	0.3	-1.0	0.3	-1.0	0.3	-1.0	0.2	-0.8	0.3	-0.7	0.2	-0.2	0.1	-0.1	0.3	0.1	-0.3	-0.3	0.1	-0.1	
	15	-0.1	-0.6	0.9	-0.6	0.6	-0.6	0.7	-0.7	0.6	-0.6	0.6	-0.4	0.6	-0.3	0.5	0.1	0.0	0.0	0.4	0.1	-0.3	-0.2	0.3	-0.1	
	30	-0.1	-0.6	0.9	-0.6	0.6	-0.7	0.7	-0.7	0.7	-0.6	0.6	-0.4	0.6	-0.3	0.5	0.1	0.2	0.0	0.4	0.1	-0.3	-0.2	0.5	-0.1	
	45	-0.1	-0.6	0.9	-0.7	0.6	-0.7	0.7	-0.8	0.7	-0.7	0.6	-0.5	0.6	-0.4	0.5	0.1	-0.3	-0.1	0.4	0.1	-0.4	-0.3	0.7	-0.2	
30	-10	0.0	-0.6	0.9	-0.6	0.6	-0.6	0.7	-0.6	0.7	-0.6	0.6	-0.4	0.6	-0.3	0.6	0.4	0.4	-0.1	0.6	0.1	-0.1	-0.2	0.0	0.0	
	0	0.0	-0.5	0.9	-0.6	0.6	-0.6	0.7	-0.7	0.7	-0.6	0.6	-0.4	0.7	-0.3	0.6	0.2	0.5	0.0	0.6	0.1	-0.3	-0.3	0.1	0.0	
	15	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.2	0.2	0.0	0.6	0.1	-0.3	-0.2	0.3	-0.1	
	30	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.2	0.6	0.2	0.4	-0.1	0.6	0.1	-0.3	-0.2	0.5	-0.1	
	45	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.8	-0.7	0.7	-0.4	0.8	-0.3	0.7	0.2	0.2	-0.1	0.6	0.1	-0.4	-0.3	0.7	-0.2	
45	-10	-0.1	-0.6	0.9	-0.7	0.7	-0.8	0.7	-0.8	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.4	0.5	-0.1	0.7	0.1	-0.1	-0.4	-0.1	-0.1	
	0	0.0	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.8	-0.6	0.7	-0.4	0.8	-0.3	0.7	0.3	0.8	-0.1	0.8	0.1	-0.3	-0.3	0.1	-0.1	
	15	-0.1	-0.7	0.9	-0.7	0.7	-0.8	0.8	-0.8	0.8	-0.7	0.7	-0.5	0.8	-0.3	0.7	0.2	0.4	-0.1	0.8	0.1	-0.4	-0.3	0.3	-0.2	
	30	-0.1	-0.7	0.9	-0.7	0.7	-0.8	0.8	-0.8	0.8	-0.7	0.8	-0.4	0.8	-0.3	0.7	0.2	0.8	-0.1	0.8	0.1	-0.4	-0.3	0.6	-0.2	
	45	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.8	0.7	-0.6	0.7	-0.4	0.8	-0.2	0.7	0.2	0.8	-0.1	0.7	0.1	-0.5	-0.3	0.7	-0.2	

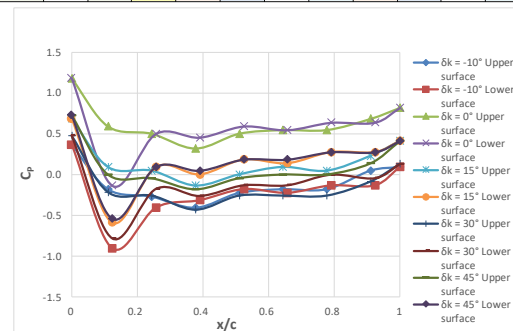


13. Sudut serang *airfoil* (α) -10° dan Kecepatan *freestream* (U_0) 17 m/s

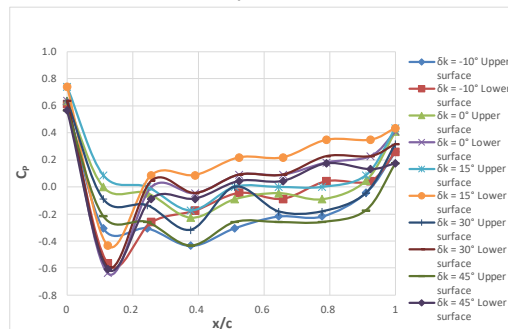
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.3	-0.2	-1.0	-0.2	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	-0.3	-0.1	-0.2	0.1	-0.2	0.0	0.1	-0.3	-0.4	-0.1	0.3	-0.4	-0.3	0.0
	0	0.4	-0.2	-0.9	-0.3	-0.5	-0.4	-0.3	-0.2	-0.2	-0.2	-0.3	-0.1	-0.2	0.1	-0.3	0.0	-0.3	-0.2	-0.4	0.0	0.3	-0.5	-0.3	0.0
	15	0.5	-0.2	-0.9	-0.3	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	0.1	-0.2	0.0	-0.3	-0.3	-0.4	0.0	0.1	-0.5	-0.1	0.0
	30	0.5	-0.3	-0.8	-0.3	-0.4	-0.5	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	-0.2	0.0	-0.1	-0.3	-0.4	0.0	-0.3	-0.5	0.1	-0.3
	45	0.5	-0.3	-0.7	-0.3	-0.3	-0.5	-0.2	-0.3	-0.1	-0.2	-0.1	-0.2	0.0	0.0	-0.1	0.1	-0.2	-0.3	-0.4	0.0	-0.3	-0.7	0.5	-0.5
0	-10	0.4	-0.2	-0.9	-0.3	-0.4	-0.4	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	-0.1	0.1	0.3	-0.4	-0.3	0.0	0.2	-0.4	-0.4	0.0
	0	1.2	0.6	-0.1	0.5	0.5	0.3	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.7	0.6	0.8	-0.8	-0.3	-0.4	0.0	0.3	-0.5	-0.3	0.0
	15	0.7	0.1	-0.6	0.0	0.1	-0.1	0.0	0.0	0.2	0.1	0.1	0.0	0.3	0.2	0.3	0.4	-0.5	-0.3	-0.3	0.0	0.0	-0.5	-0.1	0.0
	30	0.5	-0.2	-0.8	-0.3	-0.2	-0.4	-0.3	-0.3	-0.1	-0.3	-0.1	-0.3	0.0	-0.1	0.0	0.1	-0.7	-0.3	-0.3	0.0	-0.3	-0.4	0.1	-0.3
	45	0.7	0.0	-0.5	0.0	0.1	-0.2	0.0	0.0	0.2	0.0	0.2	0.0	0.3	0.1	0.3	0.4	0.0	-0.4	-0.3	0.0	-0.4	-0.5	0.4	-0.5
15	-10	0.6	-0.3	-0.6	-0.3	-0.3	-0.4	-0.2	-0.3	0.0	-0.2	-0.1	-0.2	0.0	0.0	0.0	0.3	0.3	-0.4	0.0	0.0	0.3	-0.3	-0.3	0.0
	0	0.6	0.0	-0.6	0.0	0.0	-0.2	0.0	-0.1	0.1	0.0	0.1	-0.1	0.2	0.0	0.2	0.4	0.2	-0.3	-0.1	0.0	0.2	-0.5	-0.3	0.0
	15	0.7	0.1	-0.4	0.0	0.1	-0.2	0.1	0.0	0.2	0.0	0.2	0.0	0.3	0.1	0.3	0.4	0.4	-0.3	-0.1	0.0	-0.1	-0.4	0.0	0.0
	30	0.6	-0.1	-0.6	-0.1	0.0	-0.3	0.0	0.0	0.1	-0.2	0.1	-0.2	0.2	0.0	0.2	0.3	0.3	-0.4	-0.1	0.0	-0.4	-0.3	0.2	-0.3
	45	0.6	-0.2	-0.6	-0.3	-0.1	-0.4	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.1	0.2	-0.5	-0.3	-0.1	0.0	-0.3	-0.4	0.5	-0.3
30	-10	0.7	-0.4	-0.4	-0.4	-0.2	-0.5	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.1	-0.1	0.2	0.3	0.1	-0.4	0.1	-0.3	0.2	-0.4	-0.4	0.0
	0	0.5	-0.3	-0.7	-0.3	-0.2	-0.5	-0.2	-0.3	0.0	-0.3	0.0	-0.3	0.1	-0.2	0.1	0.2	0.4	-0.3	0.0	-0.2	0.3	-0.5	-0.2	0.0
	15	0.5	-0.3	-0.7	-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.2	0.1	0.3	-0.2	0.1	-0.2	-0.1	-0.5	0.0	0.0
	30	0.6	-0.3	-0.6	-0.3	0.0	-0.5	-0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.2	0.3	0.3	-0.4	-0.3	0.2	-0.3	-0.4	-0.3	0.2	-0.3
	45	0.6	-0.3	-0.5	-0.3	0.0	-0.5	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.3	0.3	0.1	-0.4	-0.3	0.1	-0.2	-0.4	-0.4	0.5	-0.4
45	-10	0.8	-0.4	-0.3	-0.4	-0.1	-0.5	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.1	0.3	0.3	0.2	-0.5	0.5	-0.3	0.3	-0.4	-0.4	0.0
	0	0.5	-0.3	-0.7	-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.3	0.2	0.9	-0.5	0.4	-0.5	0.3	-0.6	-0.3	0.0
	15	0.6	-0.3	-0.6	-0.3	0.0	-0.5	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.2	0.3	0.3	0.8	-0.4	0.4	-0.4	-0.2	-0.5	-0.1	0.0
	30	0.6	-0.3	-0.5	-0.3	0.0	-0.5	0.0	-0.3	0.1	-0.3	0.2	-0.3	0.3	-0.2	0.3	0.2	0.6	-0.4	0.4	-0.4	-0.6	-0.5	0.2	-0.3
	45	0.7	-0.3	-0.5	-0.3	0.0	-0.5	0.0	-0.3	0.1	-0.3	0.2	-0.3	0.3	-0.2	0.3	0.3	0.8	-0.4	0.4	-0.4	-0.6	-0.6	0.4	-0.5



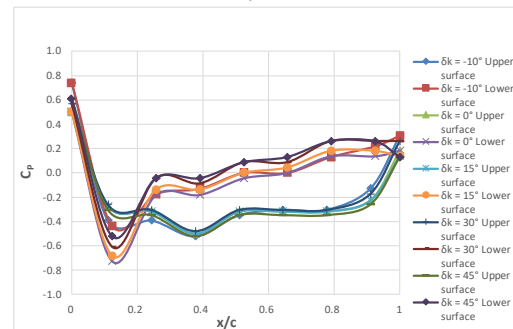
$\delta u = -10^\circ$



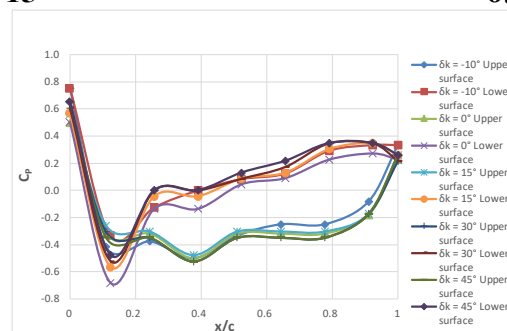
$\delta u = 0^\circ$



$\delta u = 15^\circ$



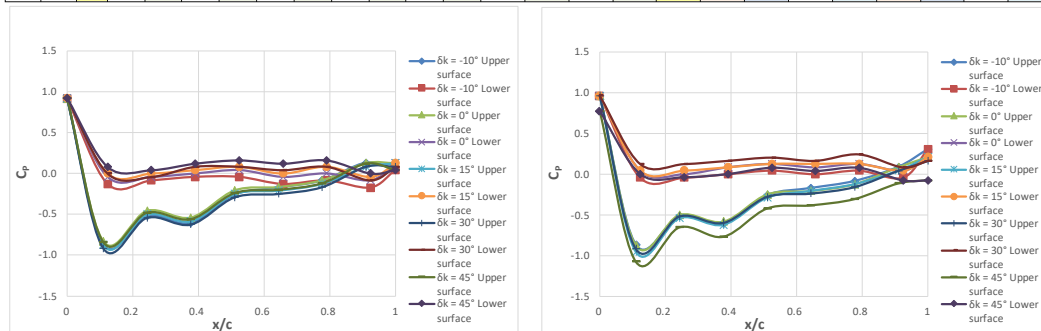
$\delta u = 30^\circ$



$\delta u = 45^\circ$

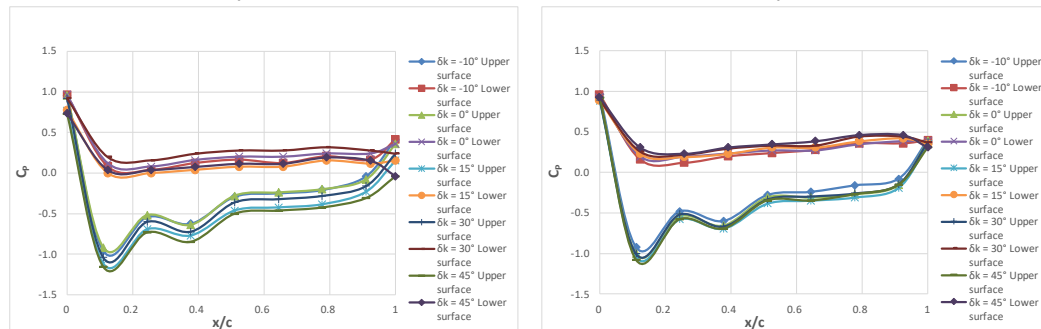
14. Sudut serang *airfoil* (α) 0° dan Kecepatan *freestream* (U_0) 17 m/s

δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	0.9	-0.9	-0.1	-0.5	-0.1	-0.6	0.0	-0.3	0.0	-0.2	-0.1	-0.1	-0.1	0.0	0.1	-0.2	0.0	-0.3	-0.2	-0.3	0.0	0.2	-0.3	-0.3	0.0
	0	0.9	-0.8	0.0	-0.5	0.0	-0.5	0.0	-0.2	0.0	-0.2	0.0	-0.1	0.0	0.1	-0.1	0.1	0.2	-0.2	-0.3	0.0	0.3	-0.3	-0.3	0.1	
	15	0.9	-0.9	0.0	-0.5	0.0	-0.6	0.0	-0.3	0.1	-0.2	0.0	-0.1	0.1	0.1	0.0	0.1	0.2	-0.3	-0.3	0.1	0.1	-0.4	0.0	0.0	
	30	0.9	-0.9	0.0	-0.5	0.0	-0.6	0.1	-0.3	0.1	-0.3	0.0	-0.2	0.1	0.1	-0.1	0.1	0.1	-0.3	-0.3	0.1	-0.1	-0.4	0.2	-0.3	
	45	0.9	-0.8	0.1	-0.5	0.0	-0.6	0.1	-0.2	0.2	-0.2	0.1	-0.1	0.2	0.1	0.0	0.0	0.4	-0.2	-0.3	0.0	-0.1	-0.4	0.5	-0.4	
0	-10	1.0	-0.9	0.0	-0.5	0.0	-0.6	0.0	-0.3	0.0	-0.2	0.0	-0.1	0.0	0.1	0.0	0.3	0.0	-0.3	-0.2	0.0	0.3	-0.3	-0.3	0.1	
	0	1.0	-0.9	0.0	-0.5	0.0	-0.6	0.1	-0.3	0.1	-0.2	0.1	-0.1	0.1	0.1	0.0	0.2	0.1	-0.1	-0.1	0.1	0.3	-0.3	-0.1	0.1	
	15	1.0	-1.0	0.0	-0.5	0.0	-0.6	0.1	-0.3	0.1	-0.2	0.1	-0.1	0.1	0.0	0.0	0.2	-0.4	-0.1	-0.1	0.0	0.0	-0.3	0.0	0.0	
	30	1.0	-0.9	0.1	-0.5	0.1	-0.6	0.2	-0.3	0.2	-0.2	0.2	-0.2	0.2	0.0	0.1	0.2	0.7	-0.1	0.0	0.1	-0.4	-0.2	0.2	-0.2	
	45	0.8	-1.1	0.0	-0.7	0.0	-0.8	0.0	-0.4	0.1	-0.4	0.0	-0.3	0.1	-0.1	-0.1	-0.1	0.6	-0.2	-0.1	0.0	-0.4	-0.4	0.5	-0.3	
15	-10	1.0	-1.0	0.1	-0.5	0.0	-0.6	0.1	-0.3	0.2	-0.3	0.1	-0.2	0.2	0.0	0.2	0.4	0.4	-0.3	0.1	0.0	0.3	-0.3	-0.3	0.1	
	0	1.0	-0.9	0.1	-0.5	0.1	-0.6	0.2	-0.3	0.2	-0.2	0.2	-0.2	0.2	-0.1	0.2	0.4	0.6	0.0	0.1	0.0	0.3	-0.3	-0.1	0.1	
	15	0.8	-1.1	0.0	-0.7	0.0	-0.8	0.0	-0.5	0.1	-0.4	0.1	-0.4	0.2	-0.2	0.1	0.2	0.5	0.0	0.1	0.0	0.0	-0.3	0.1	0.0	
	30	0.9	-1.0	0.2	-0.6	0.2	-0.7	0.2	-0.4	0.3	-0.3	0.3	-0.3	0.3	-0.2	0.3	0.2	0.5	-0.1	0.1	0.0	-0.4	-0.3	0.2	-0.2	
	45	0.7	-1.2	0.0	-0.7	0.0	-0.8	0.1	-0.5	0.1	-0.5	0.1	-0.4	0.2	-0.3	0.2	0.0	0.7	-0.1	0.1	0.0	-0.4	-0.5	0.5	-0.3	
30	-10	1.0	-0.9	0.2	-0.5	0.1	-0.6	0.2	-0.3	0.2	-0.2	0.3	-0.2	0.4	-0.1	0.4	0.4	0.6	-0.3	-0.2	0.4	-0.3	-0.3	0.3	0.1	
	0	0.9	-1.0	0.2	-0.5	0.2	-0.7	0.2	-0.3	0.3	-0.3	0.3	-0.3	0.3	-0.2	0.4	0.4	0.7	-0.1	0.3	-0.2	0.2	-0.4	-0.2	0.1	
	15	0.9	-1.0	0.2	-0.6	0.2	-0.7	0.2	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.2	0.4	0.3	0.8	-0.1	0.3	-0.2	0.0	-0.5	0.0	0.0	
	30	0.9	-1.0	0.3	-0.5	0.2	-0.7	0.3	-0.3	0.3	-0.3	0.3	-0.3	0.4	-0.1	0.4	0.4	0.8	-0.1	0.3	-0.2	-0.2	-0.3	0.3	-0.2	
	45	0.9	-1.1	0.3	-0.6	0.2	-0.7	0.3	-0.3	0.3	-0.3	0.4	-0.3	0.5	-0.2	0.5	0.3	0.5	-0.2	0.3	-0.3	-0.4	-0.5	0.5	-0.4	
45	-10	0.9	-1.0	0.2	-0.5	0.2	-0.6	0.2	-0.3	0.3	-0.3	0.3	-0.2	0.4	-0.1	0.5	0.4	0.5	-0.3	0.5	-0.2	0.3	-0.3	-0.3	0.0	
	0	1.0	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.3	-0.3	0.3	-0.2	0.5	-0.1	0.5	0.3	0.5	-0.2	0.5	-0.3	0.2	-0.4	-0.2	0.0	
	15	0.9	-1.0	0.3	-0.5	0.2	-0.7	0.3	-0.3	0.3	-0.3	0.4	-0.3	0.5	-0.2	0.5	0.3	0.3	-0.2	0.5	-0.3	-0.1	-0.5	0.0	0.0	
	30	0.9	-1.0	0.3	-0.5	0.3	-0.7	0.4	-0.3	0.4	-0.3	0.4	-0.2	0.6	-0.1	0.6	0.4	0.4	-0.1	0.6	-0.3	-0.3	-0.4	0.3	-0.2	
	45	0.9	-1.1	0.4	-0.6	0.3	-0.7	0.4	-0.4	0.4	-0.3	0.4	-0.2	0.6	-0.1	0.6	0.3	0.1	-0.2	0.6	-0.4	-0.5	-0.5	0.5	-0.4	



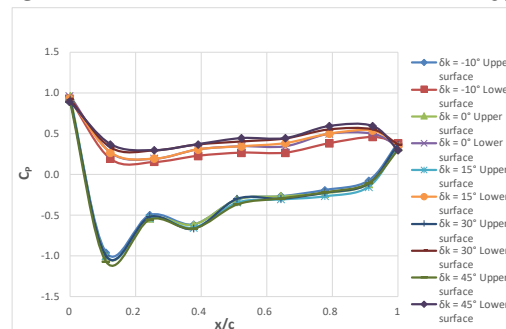
$\delta u = -10^\circ$

$\delta u = 0^\circ$



$\delta u = 15^\circ$

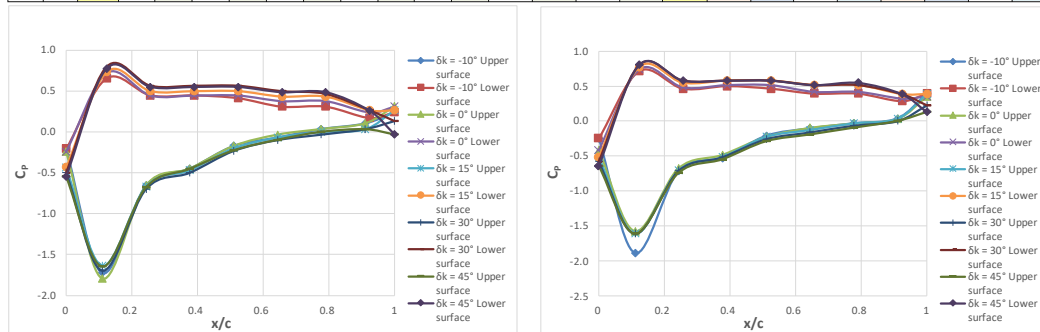
$\delta u = 30^\circ$



$\delta u = 45^\circ$

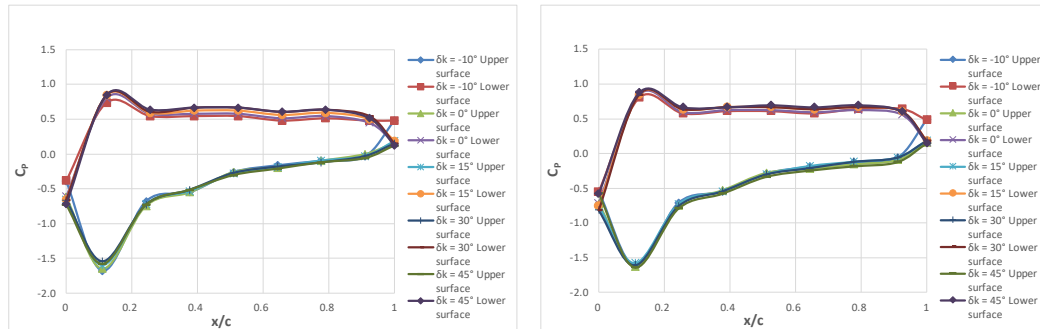
15. Sudut serang *airfoil* (α) 15° dan Kecepatan *freestream* (U_0) 17 m/s

δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	-0.2	-1.7	0.7	-0.7	0.4	-0.4	0.4	-0.2	0.4	-0.1	0.3	0.0	0.3	0.1	0.2	0.2	0.0	0.0	0.0	0.2	0.2	-0.2	0.0	0.1
	0	-0.2	-1.8	0.7	-0.7	0.4	-0.4	0.4	-0.2	0.4	0.0	0.4	0.0	0.4	0.1	0.2	0.3	0.6	0.0	0.0	0.2	0.2	-0.2	0.0	0.1
	15	-0.4	-1.6	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.0	0.3	0.3	-0.2	0.0	0.1	0.2	0.2	-0.2	0.3	0.0
	30	-0.5	-1.7	0.8	-0.7	0.6	-0.5	0.6	-0.2	0.6	-0.1	0.5	0.0	0.5	0.0	0.3	0.1	-0.2	0.0	0.1	0.2	0.1	-0.2	0.5	-0.1
	45	-0.5	-1.6	0.8	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.5	0.0	0.5	0.0	0.3	0.0	-0.3	0.0	0.0	0.1	0.0	-0.3	0.7	-0.2
0	-10	-0.3	-1.9	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.0	0.3	0.4	0.0	0.0	0.1	0.1	0.3	-0.2	0.0	0.1
	0	-0.4	-1.6	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.0	0.3	0.4	0.1	0.0	0.1	0.1	0.2	-0.2	0.1	0.2
	15	-0.5	-1.6	0.8	-0.7	0.5	-0.5	0.6	-0.2	0.6	-0.1	0.5	0.0	0.5	0.0	0.4	0.4	0.3	0.0	0.2	0.2	0.1	-0.2	0.3	0.1
	30	-0.6	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.4	0.2	0.5	0.0	0.2	0.2	-0.1	-0.2	0.5	0.0
	45	-0.6	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.4	0.1	0.4	0.0	0.1	0.2	-0.2	-0.3	0.7	-0.2
15	-10	-0.4	-1.7	0.7	-0.7	0.5	-0.5	0.5	-0.3	0.5	-0.2	0.5	-0.1	0.5	0.0	0.5	0.5	0.1	0.0	0.4	0.1	0.3	-0.3	0.0	0.2
	0	-0.6	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.5	0.2	0.1	0.0	0.3	0.1	0.0	-0.3	0.1	0.2
	15	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	0.0	0.5	0.2	-0.1	0.0	0.3	0.2	-0.1	-0.3	0.3	0.0
	30	-0.7	-1.5	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.6	0.0	0.5	0.2	0.2	0.0	0.4	0.2	-0.3	-0.2	0.5	-0.1
	45	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.6	-0.1	0.5	0.1	0.2	0.0	0.4	0.2	-0.4	-0.3	0.7	-0.2
30	-10	-0.5	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.6	0.5	0.3	-0.1	0.6	0.0	0.3	-0.3	0.0	0.1
	0	-0.7	-1.6	0.8	-0.8	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.2	0.6	-0.1	0.6	0.2	0.6	0.0	0.5	0.1	0.0	-0.4	0.1	0.2
	15	-0.8	-1.6	0.8	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.7	-0.1	0.6	0.2	0.4	0.0	0.5	0.1	-0.2	-0.3	0.3	0.0
	30	-0.8	-1.6	0.8	-0.8	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.7	-0.1	0.6	0.2	0.3	0.0	0.5	0.1	-0.4	-0.2	0.5	-0.1
	45	-0.6	-1.6	0.9	-0.8	0.7	-0.6	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.6	0.2	0.3	-0.1	0.5	0.1	-0.5	-0.4	0.7	-0.2
45	-10	-0.6	-1.6	0.8	-0.7	0.6	-0.6	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.7	-0.1	0.7	0.5	0.1	-0.2	0.7	-0.2	0.3	-0.3	-0.1	0.1
	0	-0.8	-1.7	0.8	-0.8	0.6	-0.6	0.7	-0.3	0.7	-0.2	0.6	-0.2	0.7	-0.1	0.6	0.2	0.5	-0.2	0.7	0.0	0.0	-0.4	0.0	0.1
	15	-0.8	-1.6	0.8	-0.8	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.6	0.1	0.5	-0.1	0.7	0.0	-0.2	-0.4	0.3	0.0
	30	-0.9	-1.7	0.9	-0.8	0.7	-0.6	0.7	-0.4	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.7	0.2	0.6	-0.1	0.7	-0.1	-0.4	-0.2	0.5	-0.2
	45	-0.9	-1.6	0.9	-0.8	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.1	0.7	-0.1	0.7	0.2	0.1	-0.1	0.7	-0.1	-0.3	-0.3	0.7	-0.2



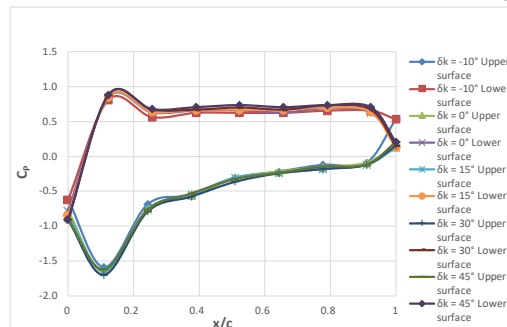
$\delta u = -10^\circ$

$\delta u = 0^\circ$



$\delta u = 15^\circ$

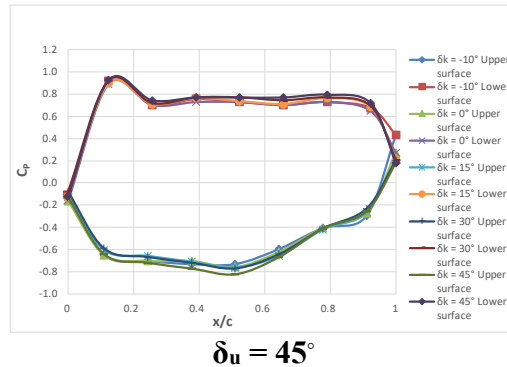
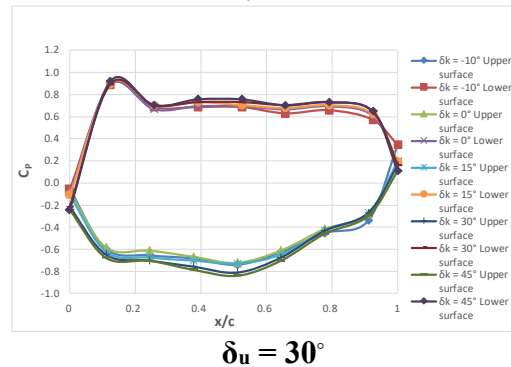
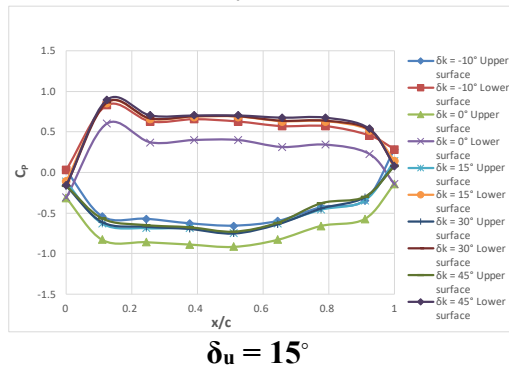
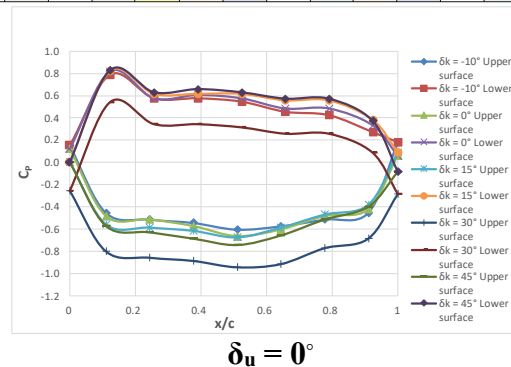
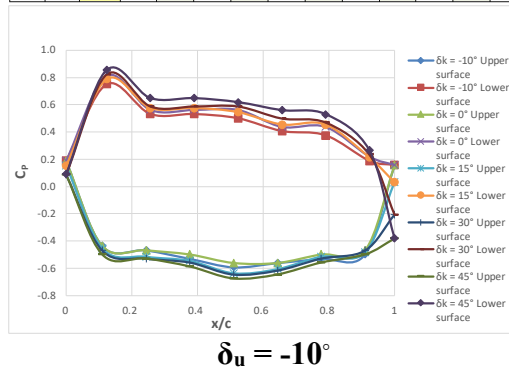
$\delta u = 30^\circ$



$\delta u = 45^\circ$

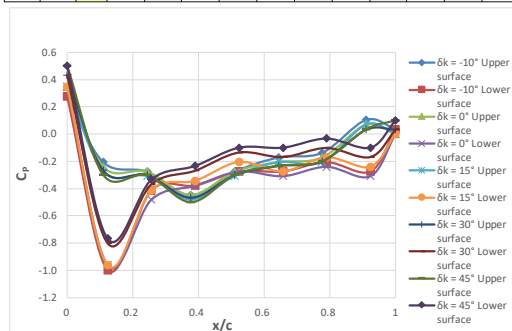
16. Sudut serang *airfoil* (α) 20° dan Kecepatan *freestream* (U_0) 17 m/s

δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.2	-0.4	0.8	-0.5	0.5	-0.5	0.6	-0.6	0.5	-0.6	0.4	-0.5	0.4	-0.5	0.2	0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	-0.2	-0.1
	0	0.2	-0.4	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.6	-0.6	0.4	-0.5	0.4	-0.5	0.2	0.2	-0.3	-0.2	-0.1	-0.1	-0.3	-0.3	0.0	-0.1
	15	0.2	-0.5	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.5	-0.6	0.5	-0.5	0.5	-0.5	0.2	0.0	-0.2	-0.2	-0.1	-0.1	-0.4	-0.3	0.2	-0.2
	30	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.2	-0.2	-0.3	-0.1	-0.1	-0.1	-0.4	-0.3	0.5	-0.2
0	45	0.1	-0.5	0.9	-0.5	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.3	-0.4	0.2	-0.1	-0.1	-0.1	-0.3	-0.4	0.7	-0.3
	-10	0.2	-0.5	0.8	-0.5	0.6	-0.5	0.6	-0.6	0.5	-0.6	0.5	-0.5	0.4	-0.5	0.3	0.2	0.4	-0.2	0.0	-0.1	-0.2	-0.3	-0.2	-0.1
	0	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.5	-0.5	0.5	-0.4	0.3	0.1	-0.2	-0.2	0.1	0.0	-0.3	-0.2	0.1	-0.1
	15	0.0	-0.6	0.8	-0.6	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.6	-0.5	0.6	-0.4	0.4	0.1	0.3	-0.1	0.1	0.1	-0.3	-0.2	0.3	-0.1
15	30	-0.3	-0.8	0.5	-0.9	0.3	-0.9	0.3	-0.9	0.3	-0.9	0.3	-0.8	0.3	-0.7	0.1	-0.3	-0.1	-0.1	0.1	0.0	-0.4	-0.3	0.5	-0.1
	45	0.0	-0.6	0.8	-0.6	0.6	-0.7	0.7	-0.7	0.6	-0.7	0.6	-0.5	0.6	-0.4	0.4	-0.1	0.3	-0.1	0.1	0.0	-0.4	-0.3	0.7	-0.2
	-10	0.0	-0.5	0.8	-0.6	0.6	-0.6	0.7	-0.7	0.6	-0.6	0.6	-0.4	0.6	-0.3	0.5	0.3	-0.2	-0.1	0.3	0.1	-0.1	-0.3	-0.1	-0.1
	0	-0.3	-0.8	0.6	-0.9	0.4	-0.9	0.4	-0.9	0.4	-0.8	0.3	-0.7	0.3	-0.6	0.2	-0.1	0.1	0.0	0.4	0.1	-0.2	-0.3	0.1	0.0
30	15	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.6	-0.5	0.6	-0.3	0.5	0.1	0.1	0.0	0.4	0.1	-0.3	-0.3	0.3	-0.1
	30	-0.2	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.6	0.6	-0.4	0.6	-0.3	0.5	0.1	0.2	-0.1	0.4	0.1	-0.4	-0.3	0.5	-0.2
	45	-0.2	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.5	0.1	-0.3	0.0	0.4	0.1	-0.4	-0.3	0.7	-0.2
	-10	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.6	-0.5	0.7	-0.3	0.6	0.3	0.3	-0.1	0.6	0.1	-0.1	-0.3	-0.1	-0.1
45	0	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.2	0.4	0.0	0.6	0.1	-0.2	-0.3	0.1	0.0
	15	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.2	0.1	0.0	0.6	0.2	-0.4	-0.3	0.4	-0.1
	30	-0.2	-0.6	0.9	-0.7	0.7	-0.8	0.7	-0.8	0.7	-0.7	0.7	-0.4	0.7	-0.3	0.6	0.2	0.2	-0.1	0.6	0.1	-0.4	-0.3	0.5	-0.2
	45	-0.2	-0.7	0.9	-0.7	0.7	-0.8	0.8	-0.8	0.8	-0.7	0.7	-0.5	0.7	-0.3	0.6	0.1	0.0	-0.1	0.6	0.1	-0.5	-0.3	0.7	-0.2
55	-10	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.7	0.4	0.2	-0.1	0.7	0.1	-0.1	-0.3	-0.1	-0.1
	0	-0.2	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.3	0.6	-0.1	0.8	0.1	-0.2	-0.3	0.1	-0.1
	15	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.7	-0.7	0.7	-0.4	0.8	-0.3	0.7	0.2	0.4	-0.1	0.8	0.1	-0.4	-0.3	0.3	-0.1
	30	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.8	-0.6	0.7	-0.4	0.8	-0.2	0.7	0.2	0.8	-0.1	0.7	0.1	-0.4	-0.3	0.5	-0.2
65	45	-0.1	-0.6	0.9	-0.7	0.7	-0.8	0.8	-0.8	0.8	-0.7	0.8	-0.4	0.8	-0.3	0.7	0.2	0.8	-0.2	0.7	0.1	-0.6	-0.3	0.7	-0.3

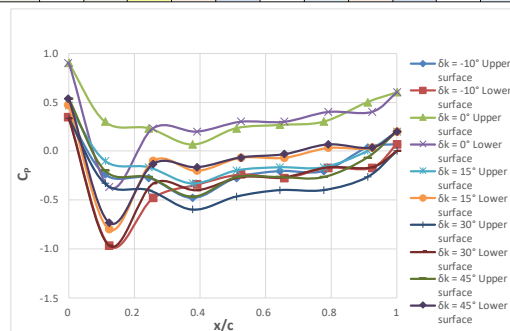


17. Sudut serang *airfoil* (α) -10° dan Kecepatan *freestream* (U_0) 20 m/s

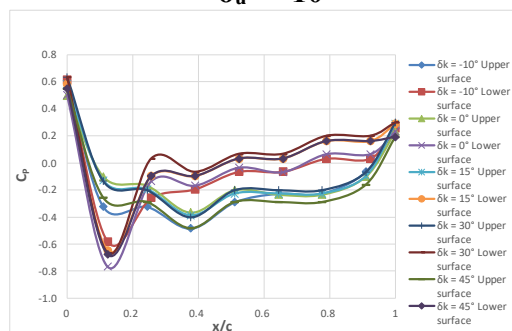
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI					
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3	
-10	-10	0	-0.3	-0.2	-1.0	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.3	-0.1	-0.2	0.1	-0.3	0.0	0.0	-0.4	-0.4	-0.1	0.3	-0.4	-0.4	0.0
	0	0.3	-0.2	-1.0	-0.3	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.3	-0.2	-0.2	0.1	-0.3	0.0	-0.1	-0.3	-0.4	-0.1	0.3	-0.6	-0.4	0.0	
	15	0.3	-0.3	-1.0	-0.3	-0.4	-0.5	-0.3	-0.3	-0.2	-0.2	-0.3	-0.2	-0.2	0.1	-0.2	0.0	-0.2	-0.3	-0.4	0.0	0.2	-0.6	-0.1	-0.1	
	30	0.4	-0.3	-0.8	-0.3	-0.4	-0.5	-0.3	-0.3	-0.1	-0.2	-0.2	-0.2	-0.1	0.0	-0.2	0.0	0.0	-0.3	-0.4	0.0	-0.2	-0.4	0.1	-0.3	
	45	0.5	-0.3	-0.8	-0.3	-0.3	-0.5	-0.2	-0.3	-0.1	-0.2	-0.1	-0.2	0.0	0.0	-0.1	0.1	-0.1	-0.4	-0.4	0.0	-0.2	-0.6	0.5	-0.5	
0	-10	0.3	-0.2	-1.0	-0.3	-0.5	-0.5	-0.3	-0.3	-0.2	-0.2	-0.3	-0.2	-0.2	0.0	-0.2	0.1	0.3	-0.4	-0.3	-0.1	0.2	-0.4	-0.4	0.0	
	0	0.9	0.3	-0.4	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.6	-0.7	-0.3	-0.4	0.0	0.3	-0.6	-0.3	0.0	
	15	0.5	-0.1	-0.8	-0.2	-0.1	-0.3	-0.2	-0.2	-0.1	-0.2	-0.1	-0.2	0.0	0.0	0.0	0.2	-0.7	-0.3	-0.3	0.0	0.1	-0.5	-0.1	0.0	
	30	0.3	-0.3	-1.0	-0.4	-0.3	-0.6	-0.4	-0.5	-0.3	-0.4	-0.3	-0.4	-0.2	-0.3	-0.2	0.0	-0.8	-0.3	-0.3	0.0	-0.3	-0.4	0.1	-0.3	
	45	0.5	-0.2	-0.7	-0.3	-0.1	-0.5	-0.2	-0.3	-0.1	-0.3	0.0	-0.3	0.1	-0.1	0.0	0.2	0.0	-0.4	-0.3	0.0	-0.4	-0.6	0.4	-0.5	
15	-10	0.6	-0.3	-0.6	-0.3	-0.3	-0.5	-0.2	-0.3	-0.1	-0.2	-0.1	-0.2	0.0	-0.1	0.0	0.3	0.3	-0.4	-0.1	0.0	0.3	-0.4	-0.3	0.0	
	0	0.5	-0.1	-0.8	-0.2	-0.1	-0.4	-0.2	-0.2	0.0	-0.2	-0.1	-0.2	0.1	-0.1	0.1	0.2	0.2	-0.4	-0.2	0.0	0.3	-0.5	-0.3	0.0	
	15	0.6	-0.1	-0.6	-0.2	-0.1	-0.4	-0.1	-0.2	0.0	-0.2	0.0	-0.2	0.2	-0.1	0.2	0.3	0.4	-0.3	-0.1	0.0	0.0	-0.5	-0.1	0.0	
	30	0.6	-0.1	-0.7	-0.2	0.0	-0.4	-0.1	-0.2	0.1	-0.2	0.1	-0.2	0.2	-0.1	0.2	0.3	0.4	-0.4	-0.1	0.0	-0.3	-0.3	0.2	-0.3	
	45	0.5	-0.3	-0.7	-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.2	0.2	-0.2	-0.4	-0.1	0.0	-0.2	-0.5	0.5	-0.4	
30	-10	0.7	-0.4	-0.5	-0.3	-0.2	-0.5	-0.1	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.1	0.2	0.3	0.2	-0.4	0.2	-0.3	0.3	-0.4	-0.3	0.0	
	0	0.5	-0.3	-0.7	-0.3	-0.2	-0.5	-0.2	-0.3	0.0	-0.3	0.0	-0.3	0.1	-0.2	0.2	0.2	0.3	-0.3	0.1	-0.2	0.3	-0.5	-0.3	0.0	
	15	0.5	-0.3	-0.7	-0.3	-0.1	-0.5	-0.2	-0.3	0.0	-0.3	0.0	-0.3	0.2	-0.2	0.2	0.2	0.3	-0.3	0.1	-0.2	0.0	-0.5	-0.1	0.0	
	30	0.5	-0.3	-0.6	-0.3	0.0	-0.5	-0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.2	0.3	0.3	-0.3	-0.3	0.2	-0.3	-0.3	-0.3	0.2	-0.3	
	45	0.6	-0.3	-0.5	-0.3	0.0	-0.5	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.2	0.3	0.2	-0.5	-0.2	0.2	-0.2	-0.3	-0.4	0.5	-0.4	
45	-10	0.8	-0.5	-0.4	-0.4	-0.2	-0.5	0.0	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.1	0.3	0.3	0.2	-0.5	0.5	-0.3	0.2	-0.4	-0.4	-0.1	
	0	0.5	-0.3	-0.7	-0.3	-0.1	-0.5	-0.1	-0.3	0.0	-0.3	0.1	-0.3	0.2	-0.2	0.3	0.3	0.9	-0.5	0.4	-0.5	0.3	-0.6	-0.4	0.0	
	15	0.6	-0.3	-0.6	-0.3	-0.1	-0.5	-0.1	-0.3	0.1	-0.3	0.1	-0.3	0.3	-0.2	0.3	0.3	0.7	-0.4	0.4	-0.4	0.0	-0.5	-0.1	-0.1	
	30	0.6	-0.3	-0.5	-0.3	0.0	-0.5	0.0	-0.3	0.1	-0.3	0.2	-0.3	0.4	-0.2	0.4	0.3	0.7	-0.4	0.4	-0.4	-0.5	-0.4	0.2	-0.2	
	45	0.6	-0.3	-0.5	-0.3	0.0	-0.5	0.0	-0.3	0.2	-0.3	0.2	-0.3	0.4	-0.1	0.4	0.3	0.7	-0.4	0.4	-0.4	-0.5	-0.5	0.5	-0.4	



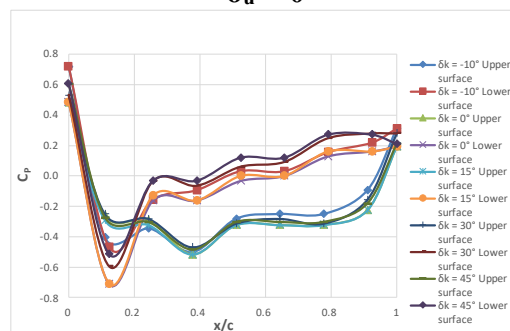
$\delta u = -10^\circ$



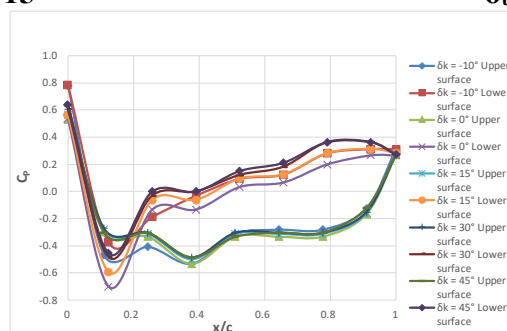
$\delta u = 0^\circ$



$\delta u = 15^\circ$



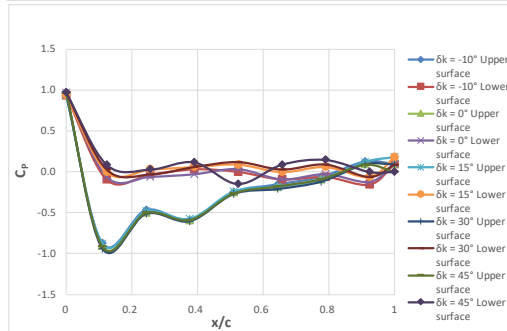
$\delta u = 30^\circ$



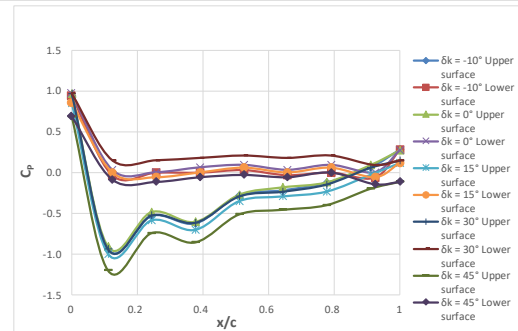
$\delta u = 45^\circ$

18. Sudut serang *airfoil* (α) 0° dan Kecepatan *freestream* (U_0) 20 m/s

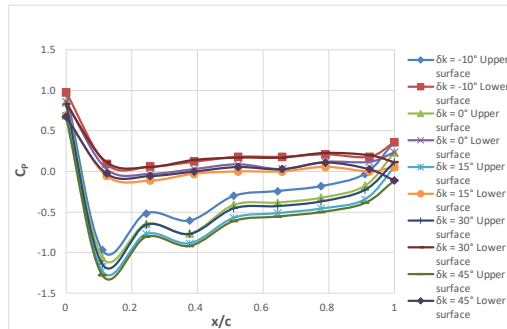
δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA					CP FLAP KENDALI			
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.9	-0.9	-0.1	-0.5	0.0	-0.6	0.0	-0.3	0.0	-0.2	-0.1	-0.1	-0.1	0.1	-0.2	0.1	-0.3	-0.2	-0.3	0.0	0.2	-0.3	-0.3	0.1
	0	1.0	-0.9	-0.1	-0.5	-0.1	-0.6	0.0	-0.3	0.0	-0.2	-0.1	-0.1	0.0	0.1	-0.1	0.1	0.1	-0.3	-0.3	0.0	0.2	-0.3	-0.3	0.1
	15	0.9	-0.9	0.0	-0.5	0.0	-0.6	0.1	-0.2	0.1	-0.2	0.0	-0.1	0.1	0.1	-0.1	0.2	0.2	-0.3	-0.3	0.1	0.1	-0.4	0.0	0.0
	30	1.0	-0.9	0.0	-0.5	0.0	-0.6	0.1	-0.3	0.1	-0.2	0.0	-0.1	0.1	0.1	-0.1	0.1	0.2	-0.2	-0.3	0.1	-0.1	-0.3	0.2	-0.2
	45	1.0	-0.9	0.1	-0.5	0.0	-0.6	0.1	-0.3	-0.1	-0.2	0.1	-0.1	0.1	0.1	0.0	0.0	0.6	-0.3	-0.3	0.1	-0.1	-0.4	0.5	-0.4
0	-10	0.9	-0.9	0.0	-0.5	0.0	-0.6	0.0	-0.3	0.0	-0.2	0.0	-0.1	0.0	0.1	-0.1	0.3	-0.1	-0.3	-0.3	0.1	0.3	-0.3	-0.3	0.1
	0	1.0	-0.9	0.0	-0.5	0.0	-0.6	0.1	-0.3	0.1	-0.2	0.0	-0.1	0.1	0.1	0.0	0.3	0.1	-0.1	-0.2	0.1	0.2	-0.3	-0.2	0.1
	15	0.9	-1.0	0.0	-0.6	-0.1	-0.7	0.0	-0.4	0.1	-0.3	0.0	-0.2	0.1	0.0	-0.1	0.1	-0.2	-0.1	-0.1	0.1	0.0	-0.3	0.0	0.0
	30	1.0	-0.9	0.1	-0.5	0.1	-0.6	0.2	-0.3	0.2	-0.2	0.2	-0.1	0.2	0.1	0.1	0.1	0.7	-0.1	-0.1	0.1	-0.4	-0.3	0.2	-0.1
	45	0.7	-1.2	-0.1	-0.7	-0.1	-0.9	-0.1	-0.5	0.0	-0.5	-0.1	-0.4	0.0	-0.2	-0.1	-0.1	0.7	-0.1	-0.1	0.1	-0.5	-0.4	0.5	-0.3
15	-10	0.9	-1.0	0.1	-0.5	0.1	-0.6	0.1	-0.3	0.2	-0.2	0.2	-0.2	0.2	0.0	0.2	0.4	0.3	-0.4	0.1	-0.1	0.3	-0.3	-0.3	0.1
	0	0.9	-1.1	0.0	-0.6	0.0	-0.8	0.0	-0.4	0.1	-0.4	0.0	-0.3	0.1	-0.2	0.1	0.2	0.5	0.0	0.1	0.0	0.2	-0.3	-0.2	0.1
	15	0.7	-1.2	-0.1	-0.8	-0.1	-0.9	0.0	-0.6	0.0	-0.5	0.0	-0.5	0.1	-0.3	0.0	0.1	0.5	0.0	0.1	0.1	-0.1	-0.3	0.1	0.0
	30	0.8	-1.1	0.1	-0.7	0.1	-0.8	0.1	-0.5	0.2	-0.4	0.2	-0.4	0.2	-0.2	0.2	0.1	0.5	-0.1	0.1	0.0	-0.3	-0.3	0.3	-0.2
	45	0.7	-1.3	0.0	-0.8	-0.1	-0.9	0.0	-0.6	0.1	-0.6	0.0	-0.5	0.1	-0.4	0.0	-0.1	0.6	-0.1	0.1	0.1	-0.5	-0.5	0.5	-0.4
30	-10	0.9	-1.0	0.1	-0.5	0.1	-0.6	0.2	-0.3	0.2	-0.3	0.2	-0.2	0.3	-0.1	0.3	0.3	0.6	-0.3	0.3	-0.2	0.3	-0.3	-0.3	0.1
	0	0.9	-1.0	0.2	-0.6	0.2	-0.7	0.2	-0.3	0.3	-0.3	0.2	-0.3	0.3	-0.2	0.4	0.4	0.7	-0.1	0.3	-0.2	0.2	-0.4	-0.2	0.1
	15	0.9	-1.1	0.3	-0.6	0.2	-0.7	0.3	-0.4	0.3	-0.3	0.3	-0.3	0.4	-0.1	0.4	0.4	0.9	-0.1	0.3	-0.2	0.0	-0.4	0.0	0.0
	30	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.4	-0.3	0.4	-0.2	0.4	-0.1	0.5	0.4	0.8	-0.1	0.3	-0.2	-0.2	0.3	0.3	-0.2
	45	0.9	-1.1	0.3	-0.6	0.2	-0.7	0.3	-0.4	0.4	-0.3	0.4	-0.3	0.5	-0.1	0.5	0.3	0.5	-0.1	0.3	-0.3	-0.4	-0.5	0.5	-0.4
45	-10	0.9	-1.0	0.2	-0.5	0.1	-0.6	0.2	-0.3	0.3	-0.3	0.3	-0.2	0.4	-0.1	0.5	0.4	0.5	-0.4	0.5	-0.2	0.3	-0.4	-0.4	0.0
	0	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.4	-0.3	0.4	-0.2	0.5	-0.1	0.5	0.4	0.5	-0.2	0.6	-0.3	0.2	-0.4	-0.2	0.1
	15	0.9	-1.0	0.3	-0.5	0.2	-0.6	0.3	-0.3	0.4	-0.3	0.4	-0.2	0.5	-0.1	0.5	0.4	0.3	-0.2	0.5	-0.3	-0.1	-0.5	0.0	0.0
	30	0.9	-1.1	0.3	-0.6	0.3	-0.7	0.3	-0.4	0.4	-0.3	0.4	-0.3	0.5	-0.1	0.6	0.4	0.3	-0.1	0.6	-0.3	-0.4	-0.4	0.2	-0.3
	45	0.9	-1.1	0.3	-0.6	0.3	-0.7	0.4	-0.3	0.4	-0.3	0.4	-0.2	0.6	-0.1	0.6	0.3	0.0	-0.2	0.6	-0.3	-0.6	-0.5	0.5	-0.4



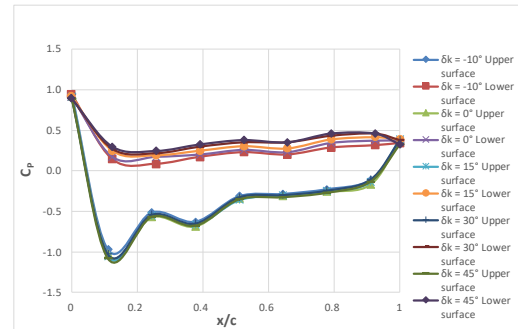
$\delta_u = -10^\circ$



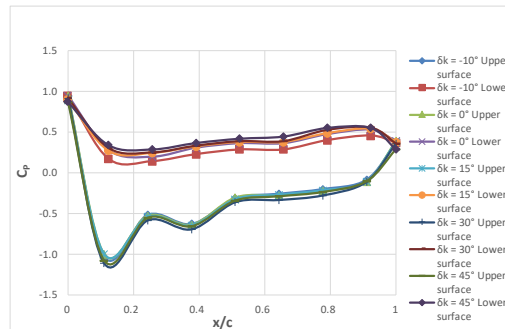
$\delta_u = 0^\circ$



$\delta_u = 15^\circ$



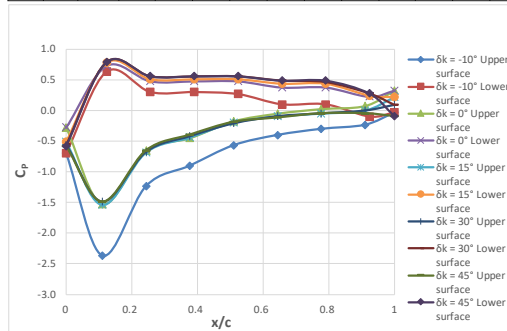
$\delta_u = 30^\circ$



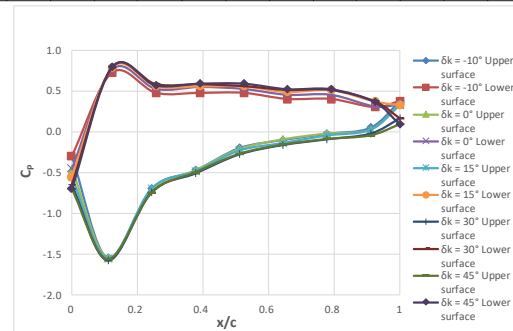
$\delta_u = 45^\circ$

19. Sudut serang *airfoil* (α) 15° dan Kecepatan *freestream* (U_0) 20 m/s

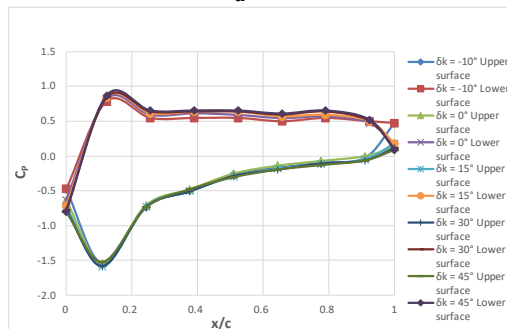
δu ($^\circ$)	δk ($^\circ$)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	-0.7	-2.4	0.6	-1.2	0.3	-0.9	0.3	-0.6	0.3	-0.4	0.1	-0.3	0.1	-0.2	-0.1	0.0	-0.3	-0.3	-0.4	-0.1	-0.1	-0.5	-0.4	-0.2
	0	-0.3	-1.5	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.1	0.2	0.3	0.6	0.0	0.0	0.2	0.1	-0.2	0.1	0.1
	15	-0.5	-1.5	0.8	-0.7	0.5	-0.4	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.0	0.2	0.2	-0.2	0.0	0.0	0.2	0.1	-0.2	0.3	0.0
	30	-0.6	-1.5	0.8	-0.7	0.6	-0.4	0.6	-0.2	0.6	-0.1	0.5	0.0	0.5	0.0	0.3	0.1	-0.1	0.0	0.0	0.2	0.1	-0.2	0.5	-0.1
	45	-0.6	-1.5	0.8	-0.7	0.6	-0.4	0.6	-0.2	0.6	-0.1	0.5	0.0	0.5	0.0	0.3	-0.1	-0.3	0.0	0.0	0.2	0.0	-0.3	0.7	-0.2
0	-10	-0.3	-1.6	0.7	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.4	0.0	0.4	0.1	0.3	0.4	0.0	0.0	0.1	0.1	0.3	-0.2	0.0	0.2
	0	-0.5	-1.5	0.8	-0.7	0.5	-0.5	0.5	-0.2	0.5	-0.1	0.5	0.0	0.5	0.0	0.3	0.3	0.0	0.0	0.1	0.1	0.1	-0.2	0.1	0.1
	15	-0.6	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.2	0.6	-0.1	0.5	0.0	0.5	0.0	0.4	0.3	0.3	0.0	0.1	0.2	0.0	-0.2	0.3	0.0
	30	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.4	0.2	0.4	0.0	0.1	0.2	-0.1	-0.2	0.5	0.0
	45	-0.7	-1.6	0.8	-0.8	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.5	-0.1	0.5	0.0	0.4	0.1	0.3	0.0	0.1	0.2	-0.2	-0.3	0.7	-0.3
15	-10	-0.5	-1.5	0.8	-0.7	0.5	-0.5	0.5	-0.3	0.5	-0.2	0.5	-0.1	0.5	0.0	0.5	0.5	0.0	0.0	0.4	0.1	0.3	-0.3	0.0	0.1
	0	-0.6	-1.5	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.1	0.5	-0.1	0.6	0.0	0.5	0.1	0.1	0.0	0.4	0.2	0.1	-0.3	0.1	0.2
	15	-0.7	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	0.0	0.5	0.2	0.1	0.0	0.4	0.2	-0.1	-0.3	0.3	0.0
	30	-0.8	-1.6	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.5	0.1	0.2	0.0	0.4	0.2	-0.2	-0.3	0.6	-0.1
	45	-0.8	-1.5	0.9	-0.7	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.7	-0.1	0.5	0.1	0.2	0.0	0.4	0.2	-0.3	-0.3	0.7	-0.2
30	-10	-0.6	-1.5	0.8	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.6	0.5	0.3	-0.1	0.6	0.0	0.3	-0.4	0.0	0.1
	0	-0.8	-1.6	0.9	-0.7	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.6	-0.1	0.6	0.2	0.6	0.0	0.6	0.1	0.0	-0.4	0.2	0.2
	15	-0.8	-1.6	0.9	-0.8	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.2	0.7	-0.1	0.6	0.2	0.2	0.0	0.6	0.1	-0.2	-0.3	0.3	0.0
	30	-0.9	-1.6	0.9	-0.7	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.1	0.7	-0.1	0.6	0.2	0.2	0.0	0.6	0.1	-0.3	-0.2	0.5	-0.1
	45	-1.0	-1.6	0.9	-0.8	0.7	-0.5	0.7	-0.3	0.7	-0.3	0.7	-0.2	0.7	-0.1	0.6	0.1	0.3	0.0	0.5	0.1	-0.5	-0.3	0.7	-0.2
45	-10	-0.7	-1.6	0.8	-0.8	0.6	-0.5	0.6	-0.3	0.6	-0.2	0.6	-0.1	0.7	-0.1	0.7	0.5	0.2	-0.2	0.7	-0.2	0.3	-0.3	-0.1	0.1
	0	-0.8	-1.6	0.9	-0.7	0.6	-0.5	0.7	-0.3	0.7	-0.2	0.6	-0.1	0.7	-0.1	0.6	0.1	0.3	-0.1	0.7	0.0	0.0	-0.4	0.1	0.1
	15	-0.9	-1.6	0.9	-0.8	0.7	-0.5	0.7	-0.3	0.7	-0.2	0.7	-0.2	0.7	-0.1	0.7	0.1	0.4	-0.1	0.7	0.0	-0.2	-0.4	0.3	0.0
	30	-1.0	-1.6	0.9	-0.8	0.7	-0.5	0.7	-0.3	0.7	-0.3	0.7	-0.2	0.7	-0.1	0.7	0.1	0.7	-0.1	0.7	0.0	-0.4	-0.2	0.5	-0.2
	45	-1.0	-1.6	0.9	-0.7	0.7	-0.5	0.7	-0.4	0.7	-0.3	0.7	-0.2	0.8	-0.1	0.7	0.2	0.0	-0.1	0.7	0.0	-0.3	-0.3	0.7	-0.3



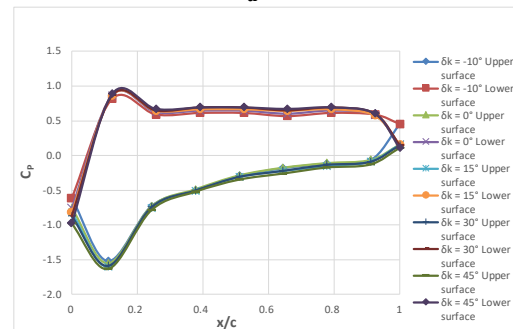
$\delta_u = -10^\circ$



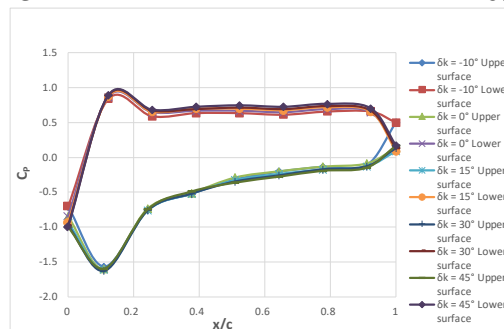
$\delta_u = 0^\circ$



$\delta_u = 15^\circ$



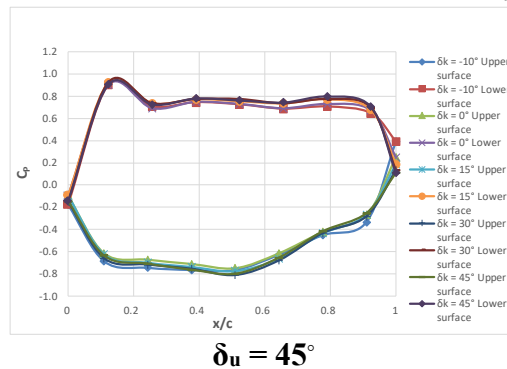
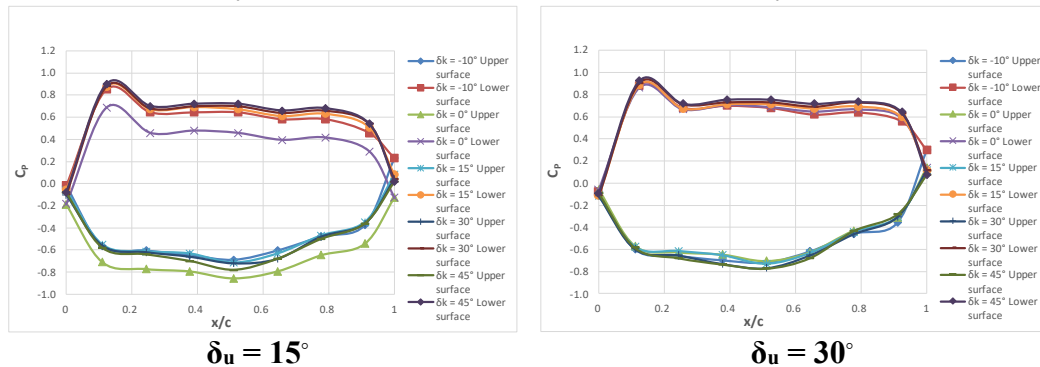
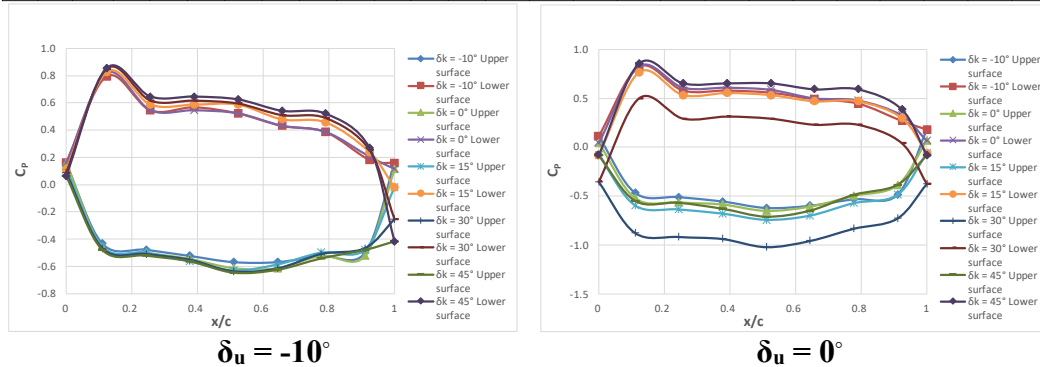
$\delta_u = 30^\circ$



$\delta_u = 45^\circ$

20. Sudut serang *airfoil* (α) 20° dan Kecepatan *freestream* (U_0) 20 m/s

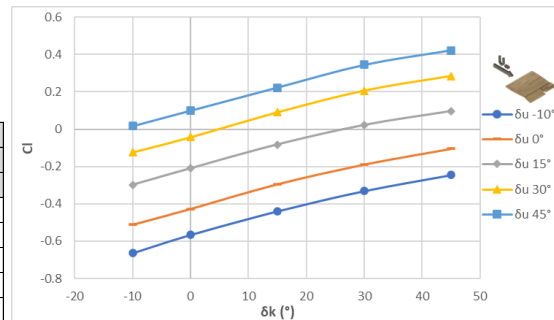
δu (°)	δk (°)	NILAI CP UNTUK AIRFOIL															CP FLAP UTAMA				CP FLAP KENDALI				
		h0	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h0	h1	h2	h3	h0	h1	h2	h3
-10	-10	0.2	-0.4	0.8	-0.5	0.5	-0.5	0.6	-0.6	0.5	-0.6	0.4	-0.5	0.4	-0.5	0.2	0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	-0.2	-0.1
	0	0.2	-0.5	0.8	-0.5	0.5	-0.5	0.5	-0.6	0.5	-0.6	0.4	-0.5	0.4	-0.5	0.2	0.1	-0.3	-0.2	-0.1	-0.2	-0.4	-0.3	-0.1	-0.2
	15	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.2	0.0	-0.1	-0.2	-0.1	-0.1	-0.4	-0.3	0.2	-0.2
	30	0.1	-0.5	0.9	-0.5	0.6	-0.6	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.4	-0.3	0.5	-0.2
	45	0.1	-0.5	0.9	-0.5	0.6	-0.6	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.5	-0.5	0.3	-0.4	0.1	-0.2	-0.1	-0.1	-0.4	-0.3	0.7	-0.3
0	-10	0.1	-0.5	0.8	-0.5	0.6	-0.6	0.6	-0.6	0.6	-0.6	0.5	-0.5	0.4	-0.5	0.3	0.2	0.4	-0.2	0.0	-0.1	-0.3	-0.3	0.0	-0.1
	0	0.0	-0.5	0.8	-0.6	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.5	-0.5	0.5	-0.4	0.3	0.1	-0.2	-0.1	0.1	0.0	-0.3	-0.3	0.0	-0.1
	15	-0.1	-0.6	0.8	-0.6	0.5	-0.7	0.6	-0.7	0.5	-0.7	0.5	-0.6	0.5	-0.5	0.3	-0.1	0.3	-0.1	0.1	0.0	-0.4	-0.3	0.3	-0.1
	30	-0.4	-0.9	0.5	-0.9	0.3	-0.9	0.3	-1.0	0.3	-1.0	0.2	-0.8	0.2	-0.7	0.0	-0.4	0.0	-0.1	0.1	0.0	-0.4	-0.3	0.5	-0.2
	45	-0.1	-0.6	0.9	-0.6	0.7	-0.6	0.7	-0.7	0.7	-0.7	0.6	-0.5	0.6	-0.4	0.4	-0.1	0.3	-0.1	0.1	0.0	-0.4	-0.3	0.7	-0.2
15	-10	0.0	-0.6	0.9	-0.6	0.6	-0.6	0.6	-0.7	0.6	-0.6	0.6	-0.5	0.6	-0.4	0.5	0.2	0.0	-0.1	0.3	0.0	-0.2	-0.3	-0.1	-0.1
	0	-0.2	-0.7	0.7	-0.8	0.5	-0.8	0.5	-0.9	0.5	-0.8	0.4	-0.6	0.4	-0.5	0.3	-0.1	0.1	0.0	0.4	0.1	-0.3	-0.3	0.1	-0.1
	15	-0.1	-0.6	0.9	-0.6	0.7	-0.6	0.7	-0.7	0.7	-0.6	0.6	-0.5	0.6	-0.3	0.5	0.1	0.0	0.0	0.4	0.1	-0.4	-0.3	0.3	-0.1
	30	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.7	0.7	-0.7	0.6	-0.5	0.7	-0.4	0.5	0.0	0.2	-0.1	0.4	0.1	-0.4	-0.3	0.5	-0.2
	45	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.4	0.5	0.0	0.0	-0.1	0.4	0.1	-0.5	-0.3	0.7	-0.2
30	-10	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.6	-0.5	0.6	-0.4	0.6	0.3	0.2	-0.1	0.6	0.1	-0.2	-0.3	-0.1	-0.1
	0	-0.1	-0.6	0.9	-0.6	0.7	-0.6	0.7	-0.7	0.7	-0.6	0.6	-0.4	0.7	-0.3	0.6	0.1	0.6	0.0	0.6	0.1	-0.3	-0.3	0.1	-0.1
	15	-0.1	-0.6	0.9	-0.6	0.7	-0.7	0.7	-0.7	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.6	0.1	0.1	0.0	0.6	0.1	-0.4	-0.3	0.3	-0.1
	30	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.7	-0.8	0.7	-0.7	0.7	-0.5	0.7	-0.3	0.6	0.1	0.2	-0.1	0.6	0.1	-0.5	-0.3	0.5	-0.2
	45	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.8	-0.7	0.7	-0.4	0.7	-0.3	0.6	0.1	0.0	-0.1	0.6	0.1	-0.5	-0.3	0.7	-0.2
45	-10	-0.2	-0.7	0.9	-0.7	0.7	-0.8	0.7	-0.8	0.7	-0.6	0.7	-0.5	0.7	-0.3	0.6	0.4	0.2	-0.1	0.7	0.0	-0.2	-0.4	-0.1	-0.1
	0	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.7	-0.6	0.7	-0.4	0.7	-0.3	0.7	0.3	0.7	-0.1	0.8	0.1	-0.3	-0.3	0.1	-0.1
	15	-0.1	-0.6	0.9	-0.7	0.7	-0.7	0.8	-0.8	0.8	-0.7	0.7	-0.4	0.8	-0.3	0.7	0.2	0.3	-0.1	0.8	0.1	-0.1	-0.3	0.3	-0.1
	30	-0.2	-0.7	0.9	-0.7	0.7	-0.8	0.8	-0.8	0.8	-0.7	0.7	-0.4	0.8	-0.3	0.7	0.1	0.7	-0.1	0.8	0.1	-0.5	-0.3	0.5	-0.2
	45	-0.1	-0.6	0.9	-0.7	0.7	-0.8	0.8	-0.8	0.8	-0.7	0.7	-0.4	0.8	-0.3	0.7	0.1	0.2	-0.1	0.7	0.1	-0.6	-0.3	0.7	-0.3



Lampiran 3 Nilai Koefisien Lift (C_L) Pendekatan Komputasi

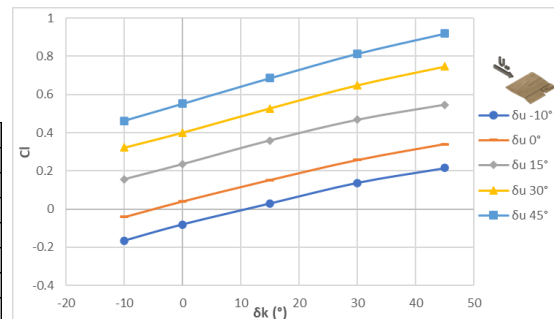
a. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.66321	-0.51215	-0.29871	-0.12409	0.01631
0	-0.5656	-0.42702	-0.21019	-0.04276	0.099188
15	-0.43891	-0.29485	-0.08236	0.090549	0.223031
30	-0.33055	-0.18896	0.022117	0.207044	0.344744
45	-0.24499	-0.10483	0.096531	0.285318	0.422653



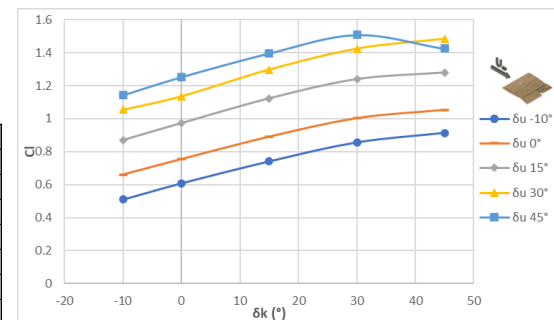
b. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.16604	-0.04029	0.155496	0.321951	0.462607
0	-0.08104	0.041167	0.235151	0.401075	0.551582
15	0.029014	0.15279	0.359725	0.527941	0.68578
30	0.137422	0.257067	0.468234	0.648778	0.813881
45	0.214591	0.340119	0.547353	0.746797	0.919297



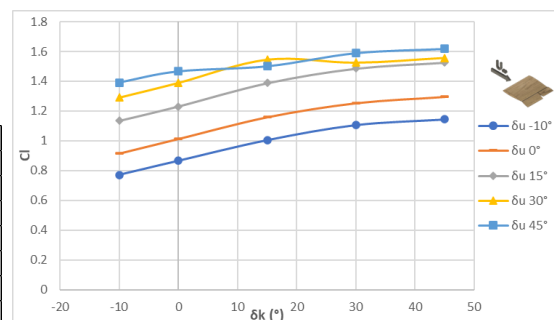
c. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.511024	0.660922	0.870165	1.055432	1.142817
0	0.608963	0.754621	0.973198	1.13667	1.252835
15	0.741701	0.890155	1.123211	1.297842	1.396367
30	0.85664	1.002968	1.240278	1.424333	1.508785
45	0.914443	1.053207	1.280566	1.484287	1.424698



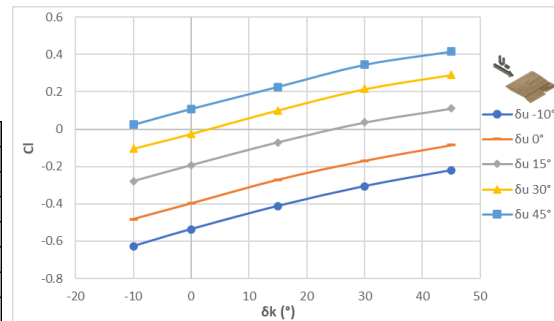
d. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.771665	0.914516	1.133422	1.290333	1.39131
0	0.86612	1.012881	1.230957	1.389341	1.466132
15	1.004517	1.158866	1.387711	1.545493	1.500603
30	1.105607	1.253275	1.485837	1.524949	1.589177
45	1.143184	1.295627	1.526168	1.557257	1.617527



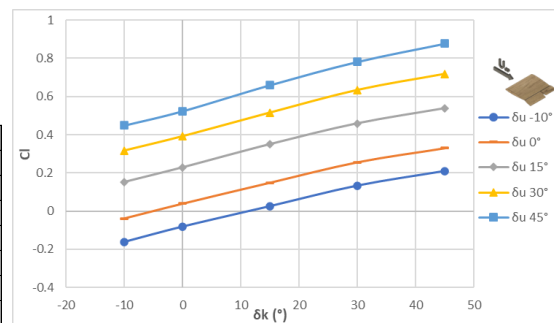
e. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.62746	-0.48179	-0.27886	-0.10492	0.024141
0	-0.53601	-0.39727	-0.19341	-0.02517	0.108731
15	-0.41197	-0.27044	-0.07087	0.101368	0.226903
30	-0.3055	-0.16857	0.035477	0.215465	0.344933
45	-0.22046	-0.08506	0.109942	0.291652	0.414969



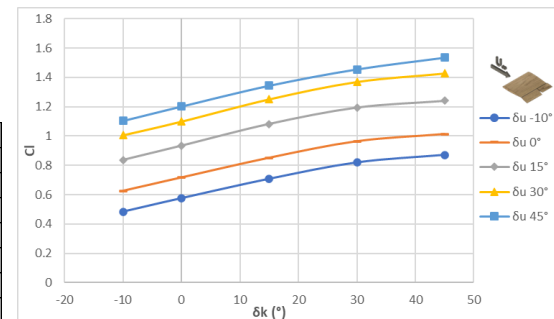
f. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.16123	-0.03837	0.151628	0.316497	0.449153
0	-0.08106	0.038887	0.228631	0.392027	0.524173
15	0.026382	0.148801	0.34999	0.515741	0.660247
30	0.134117	0.255906	0.45919	0.634342	0.782331
45	0.210668	0.329609	0.538251	0.718593	0.877468



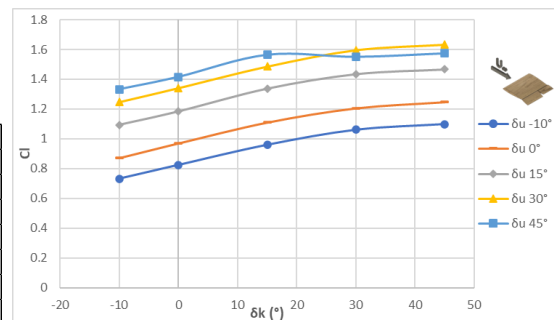
g. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.483699	0.625302	0.836361	1.004881	1.103337
0	0.575865	0.716255	0.933897	1.098554	1.20144
15	0.707778	0.850168	1.082475	1.25047	1.343249
30	0.819785	0.962885	1.194169	1.369515	1.454602
45	0.871113	1.011908	1.23972	1.427246	1.534271



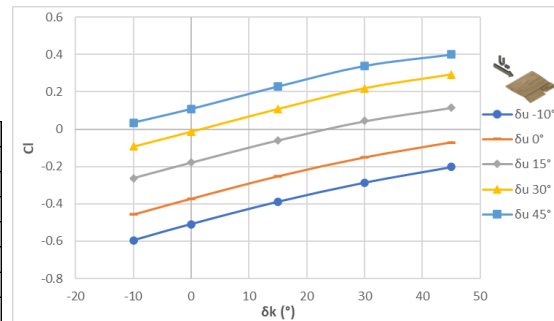
h. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.731869	0.871934	1.093405	1.246852	1.333519
0	0.824487	0.970614	1.18417	1.341253	1.416579
15	0.959777	1.110807	1.33787	1.486036	1.564748
30	1.06121	1.206631	1.435539	1.596724	1.550647
45	1.098977	1.24801	1.467176	1.633191	1.573706



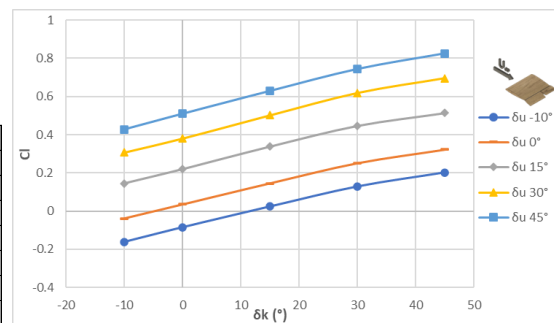
i. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.59661	-0.45595	-0.26223	-0.09334	0.034518
0	-0.50936	-0.37172	-0.17923	-0.01354	0.108471
15	-0.38917	-0.25219	-0.05951	0.107491	0.229169
30	-0.2863	-0.15152	0.043321	0.218645	0.340148
45	-0.20316	-0.07153	0.115208	0.291942	0.400878



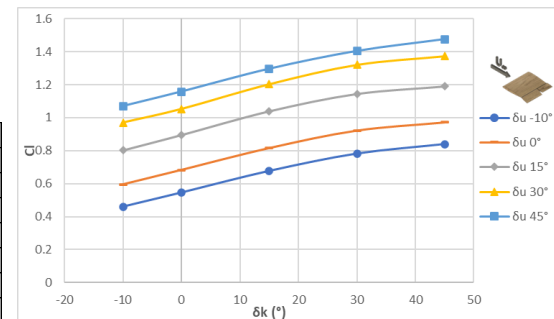
j. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.16119	-0.03886	0.144955	0.307821	0.42754
0	-0.0844	0.034719	0.220191	0.381316	0.509424
15	0.024398	0.145172	0.33846	0.502029	0.628754
30	0.129441	0.250698	0.446992	0.618834	0.743603
45	0.202782	0.321662	0.514264	0.696127	0.825137



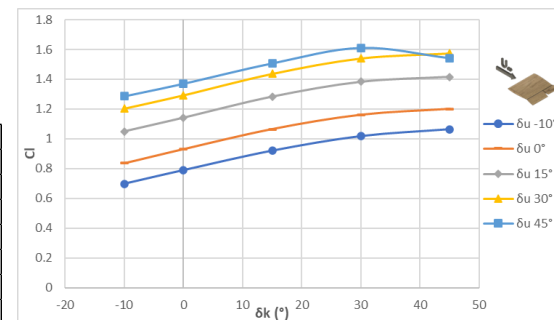
k. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.460286	0.595041	0.802421	0.970778	1.069185
0	0.545886	0.683194	0.895495	1.053771	1.157426
15	0.676271	0.816093	1.038882	1.203489	1.295573
30	0.781028	0.92271	1.143754	1.321762	1.403427
45	0.838608	0.97255	1.189352	1.374159	1.475177



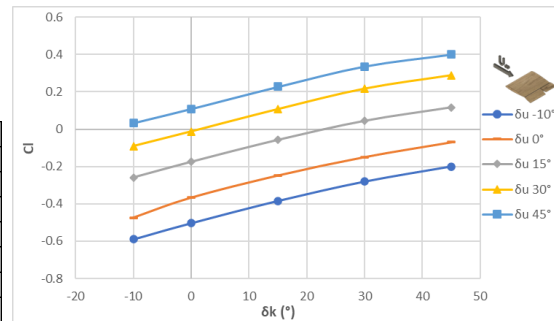
l. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.697737	0.836088	1.048348	1.202384	1.286978
0	0.788801	0.930529	1.140597	1.29272	1.370804
15	0.919142	1.064909	1.282849	1.437646	1.506065
30	1.016589	1.160799	1.382882	1.541704	1.609547
45	1.062644	1.199929	1.416134	1.575396	1.540854



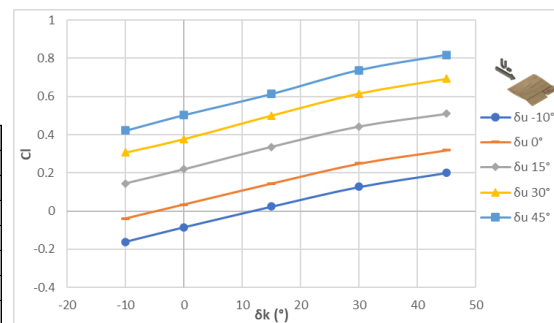
m. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.59009	-0.47491	-0.25903	-0.09092	0.032713
0	-0.50382	-0.36751	-0.17548	-0.01213	0.109048
15	-0.38504	-0.24839	-0.05794	0.107433	0.227188
30	-0.28159	-0.14922	0.043974	0.217492	0.3366
45	-0.2009	-0.06979	0.116198	0.289281	0.400322



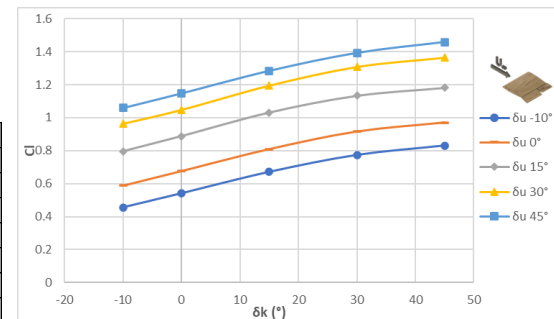
n. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.16123	-0.03985	0.144013	0.307533	0.422775
0	-0.08512	0.034031	0.218404	0.37837	0.503482
15	0.023366	0.144032	0.336161	0.501047	0.613447
30	0.126935	0.249059	0.443066	0.616201	0.737707
45	0.200651	0.319592	0.509166	0.693275	0.817158



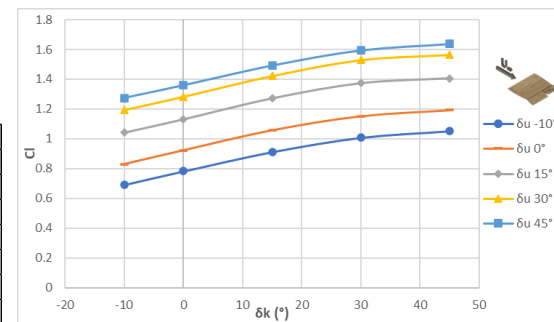
o. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.454976	0.589548	0.795754	0.964254	1.059706
0	0.540807	0.677389	0.888282	1.048618	1.147919
15	0.67097	0.809462	1.031621	1.194991	1.283277
30	0.774078	0.915378	1.133589	1.308364	1.39174
45	0.831413	0.969651	1.181939	1.364467	1.457162



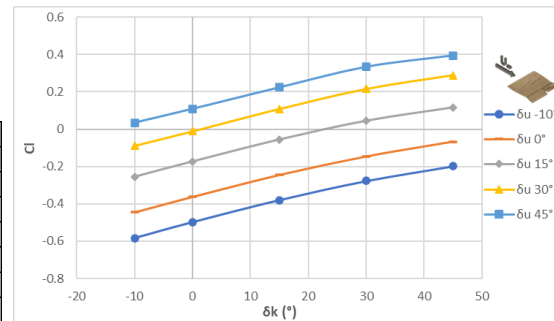
p. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.691276	0.829974	1.041354	1.19442	1.27382
0	0.781905	0.923112	1.131278	1.284264	1.359745
15	0.911528	1.057619	1.272057	1.423416	1.493166
30	1.007761	1.151528	1.373831	1.530218	1.595706
45	1.051935	1.192102	1.406571	1.565222	1.638863



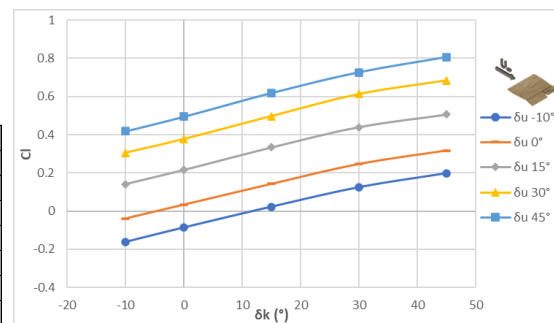
q. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.5836	-0.44581	-0.25498	-0.08834	0.034586
0	-0.49814	-0.36319	-0.17322	-0.01068	0.109004
15	-0.37982	-0.24533	-0.05547	0.108776	0.22381
30	-0.27762	-0.14591	0.044781	0.215756	0.334276
45	-0.19839	-0.06649	0.116489	0.289394	0.394911



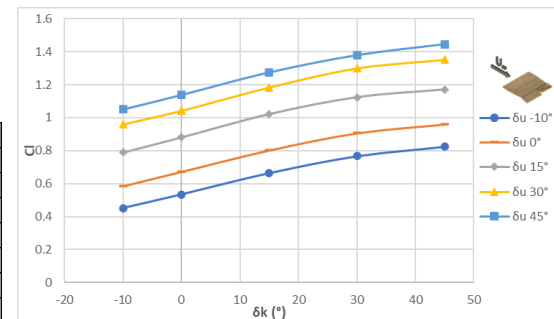
r. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.16134	-0.03975	0.141574	0.304927	0.418902
0	-0.08594	0.033123	0.215972	0.377509	0.495447
15	0.022647	0.142248	0.333514	0.497542	0.618904
30	0.124852	0.247094	0.440112	0.613691	0.727105
45	0.197752	0.317676	0.505451	0.684804	0.806313



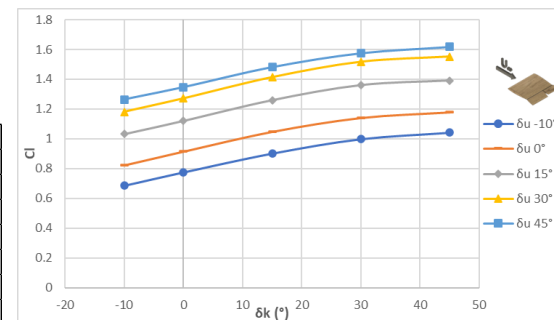
s. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.450878	0.583723	0.788752	0.958382	1.050454
0	0.534594	0.671776	0.88054	1.041727	1.138401
15	0.663609	0.801647	1.02115	1.18288	1.274816
30	0.766452	0.906111	1.123322	1.299411	1.37917
45	0.824304	0.960074	1.170407	1.351527	1.446111



t. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) 20°

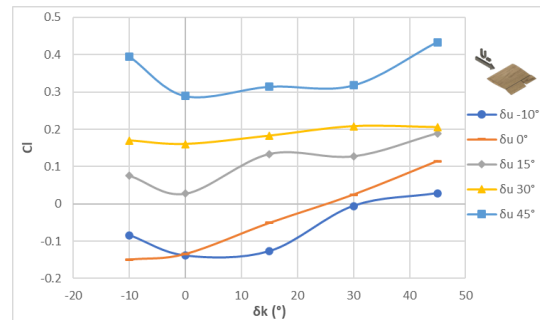
δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.684584	0.821895	1.031926	1.18211	1.264348
0	0.774389	0.914134	1.121032	1.271844	1.347182
15	0.901583	1.047441	1.260088	1.413713	1.482566
30	0.998755	1.140837	1.361495	1.51655	1.575808
45	1.042302	1.178545	1.39226	1.551405	1.618533



Lampiran 4 Nilai Koefisien Lift (C_L) Pendekatan Eksperimental

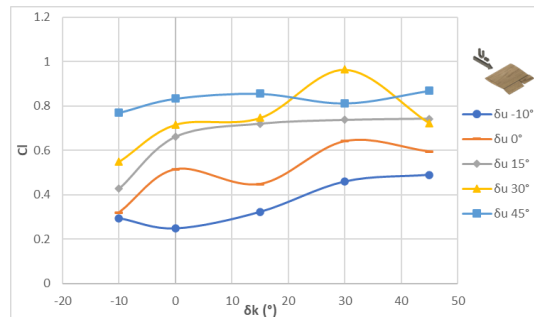
a. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.08388	-0.14888	0.075446	0.170124	0.394314
0	-0.13824	-0.13391	0.02779	0.160688	0.28894
15	-0.12634	-0.05079	0.133558	0.183018	0.314189
30	-0.00562	0.024729	0.1272	0.208503	0.317597
45	0.028342	0.114482	0.188658	0.205894	0.433548



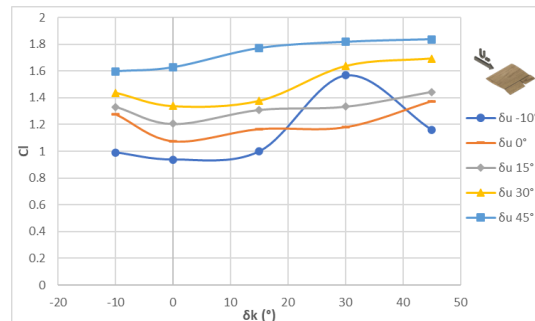
b. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.293516	0.319341	0.427262	0.548882	0.770349
0	0.247378	0.515162	0.66208	0.716648	0.834252
15	0.322101	0.448304	0.720916	0.747185	0.856322
30	0.45923	0.642067	0.737705	0.964945	0.813194
45	0.489277	0.5952	0.743361	0.722869	0.86989



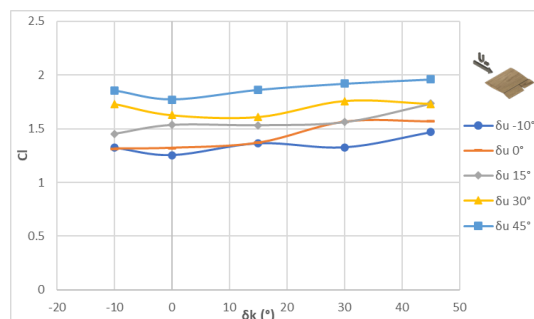
c. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.991248	1.274745	1.332473	1.43905	1.59822
0	0.938606	1.073829	1.205602	1.339701	1.628433
15	1.000323	1.165033	1.31004	1.379951	1.771552
30	1.568714	1.179222	1.333567	1.638027	1.817461
45	1.159088	1.373364	1.443277	1.693859	1.836586



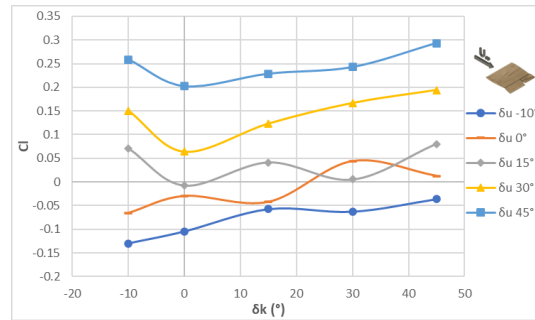
d. Kecepatan *freestream* (U_0) 6 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (C_L)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	1.322981	1.314731	1.453428	1.729574	1.857058
0	1.254293	1.321179	1.536309	1.627653	1.77234
15	1.364746	1.369093	1.532664	1.611891	1.863287
30	1.326826	1.566432	1.561526	1.758113	1.921652
45	1.46812	1.569051	1.733416	1.731319	1.961988



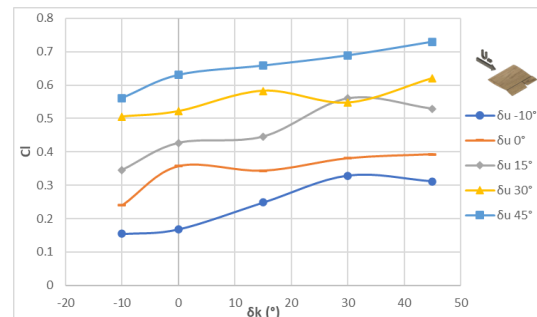
e. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.13017	-0.0657	0.070277	0.150097	0.25872
0	-0.1047	-0.02992	-0.00717	0.063973	0.202336
15	-0.05758	-0.0424	0.041156	0.12333	0.228864
30	-0.06299	0.043687	0.005379	0.166713	0.242833
45	-0.03654	0.012699	0.079699	0.193996	0.293427



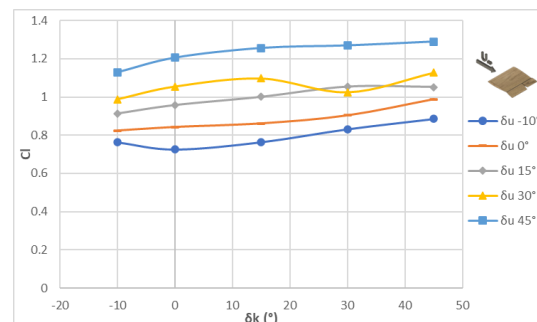
f. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.154404	0.239499	0.345908	0.505989	0.56105
0	0.168539	0.356982	0.42697	0.522185	0.630457
15	0.248092	0.343529	0.445922	0.583079	0.658357
30	0.328381	0.380816	0.560276	0.547753	0.688972
45	0.311332	0.392707	0.529222	0.620991	0.729885



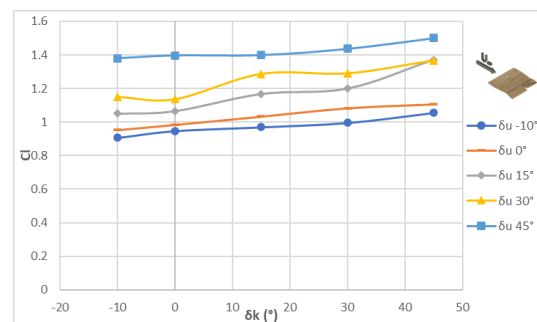
g. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.763261	0.824905	0.914136	0.987399	1.129012
0	0.726317	0.843385	0.957658	1.054803	1.205366
15	0.764802	0.862196	1.000359	1.097288	1.256054
30	0.832244	0.904277	1.053269	1.023777	1.269218
45	0.885743	0.988744	1.051614	1.128102	1.289531



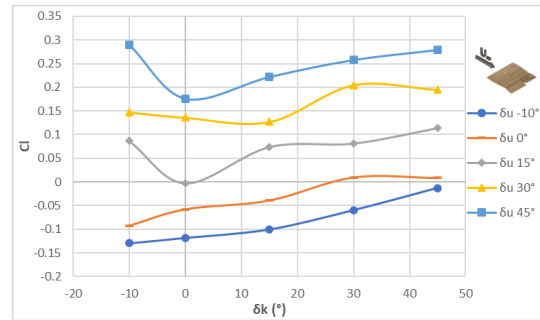
h. Kecepatan *freestream* (U_0) 9 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.906743	0.953073	1.049891	1.151468	1.37963
0	0.946958	0.983942	1.066063	1.137731	1.396632
15	0.969868	1.033249	1.167601	1.287277	1.398421
30	0.995724	1.083026	1.199934	1.289977	1.436243
45	1.055581	1.106049	1.370646	1.366563	1.500924



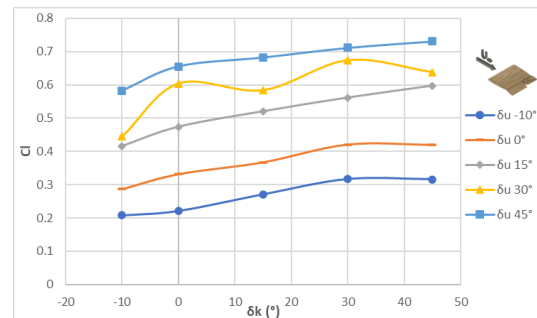
i. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.12909	-0.09235	0.086501	0.147252	0.289618
0	-0.11779	-0.05781	-0.00249	0.136106	0.175357
15	-0.10006	-0.03913	0.074321	0.127071	0.221792
30	-0.05968	0.009606	0.081612	0.204696	0.257852
45	-0.01326	0.008461	0.114011	0.194997	0.279247



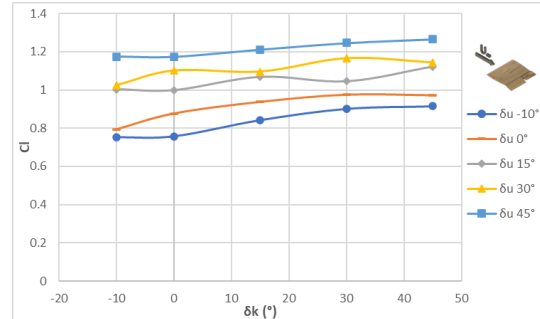
j. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.208453	0.286854	0.415847	0.445431	0.582239
0	0.222067	0.331563	0.473907	0.604489	0.655722
15	0.27135	0.367047	0.520422	0.584486	0.682425
30	0.316859	0.419883	0.561572	0.674006	0.711455
45	0.316267	0.41887	0.597284	0.638209	0.730865



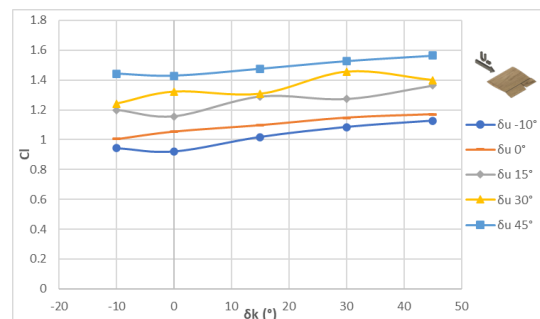
k. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.751147	0.794574	1.002965	1.025875	1.175113
0	0.756822	0.876773	0.998199	1.101673	1.17376
15	0.842026	0.936783	1.068243	1.096071	1.21149
30	0.901436	0.974148	1.044846	1.165542	1.246189
45	0.914642	0.970893	1.122798	1.143211	1.26618



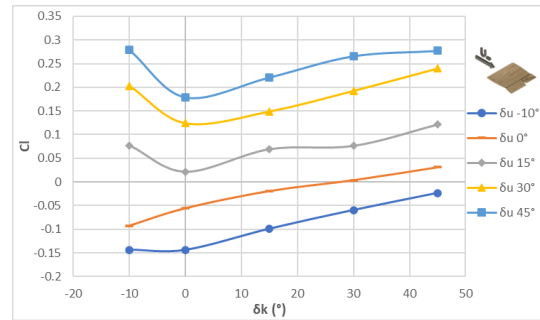
l. Kecepatan *freestream* (U_0) 15 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.942362	1.00637	1.199998	1.240904	1.442505
0	0.920491	1.055824	1.156421	1.322055	1.428935
15	1.018334	1.098026	1.290486	1.307347	1.476107
30	1.085293	1.147444	1.273444	1.457394	1.528475
45	1.127105	1.169371	1.364374	1.40016	1.565171



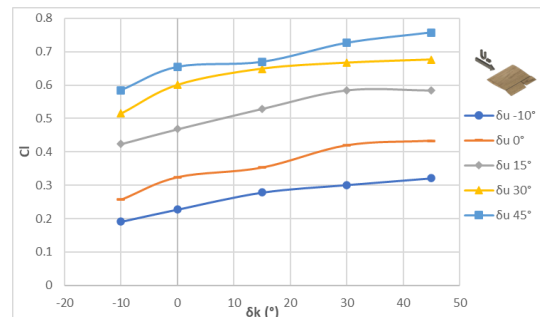
m. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.14372	-0.09294	0.077318	0.203462	0.278945
0	-0.14398	-0.05588	0.021572	0.124641	0.17834
15	-0.09895	-0.01947	0.069432	0.149477	0.220727
30	-0.0593	0.003572	0.076335	0.192901	0.2659
45	-0.02316	0.030923	0.121288	0.239972	0.277151



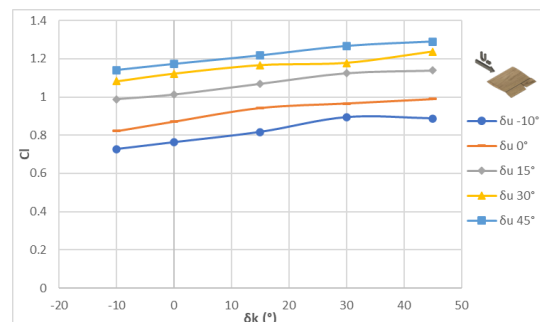
n. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.191218	0.25747	0.423668	0.514941	0.584828
0	0.22763	0.3247	0.468029	0.600668	0.654716
15	0.278396	0.353485	0.528934	0.649018	0.669619
30	0.301042	0.419985	0.584795	0.666821	0.726701
45	0.321074	0.433534	0.58421	0.676171	0.757711



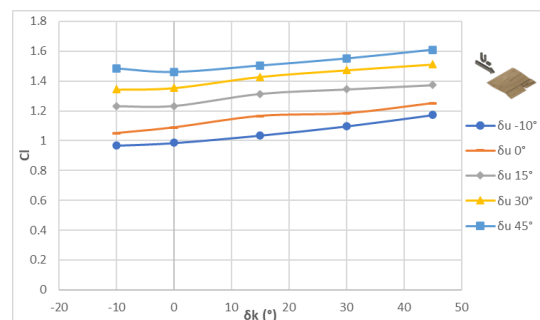
o. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.727415	0.821831	0.987823	1.08209	1.140861
0	0.763209	0.871608	1.012721	1.12219	1.17279
15	0.81703	0.942558	1.069337	1.16629	1.21742
30	0.893955	0.966219	1.125934	1.178414	1.266762
45	0.887183	0.988935	1.139468	1.237309	1.289632



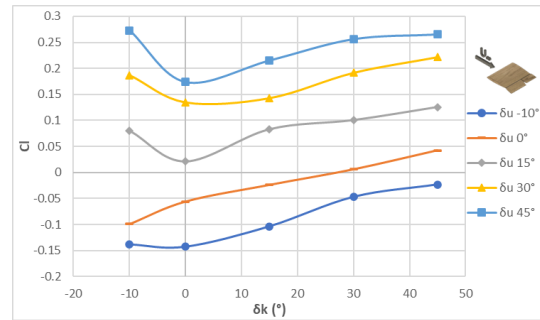
p. Kecepatan *freestream* (U_0) 17 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.967468	1.049881	1.230576	1.343859	1.485128
0	0.985493	1.088589	1.232734	1.354992	1.462574
15	1.03555	1.165966	1.31445	1.429364	1.505174
30	1.097249	1.183876	1.34453	1.473663	1.55163
45	1.17288	1.251991	1.373327	1.512357	1.609706



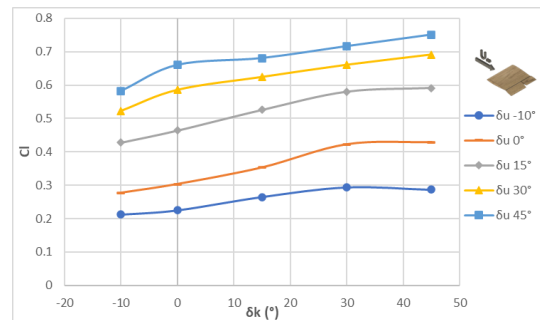
q. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) -10°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	-0.13818	-0.09921	0.08003	0.187158	0.273248
0	-0.14266	-0.05578	0.020889	0.134779	0.173729
15	-0.10346	-0.02376	0.082868	0.142921	0.215106
30	-0.04698	0.006032	0.100468	0.191481	0.256114
45	-0.02318	0.042515	0.12561	0.22148	0.265198



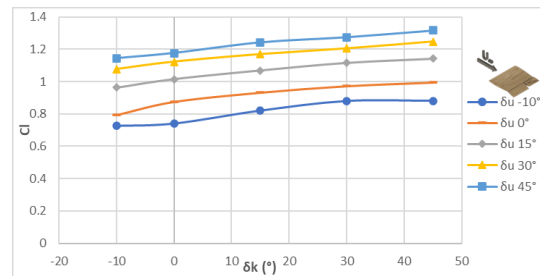
r. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) 0°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.211717	0.277147	0.427512	0.522415	0.582656
0	0.224814	0.303462	0.46393	0.585439	0.660535
15	0.264937	0.35324	0.525885	0.624161	0.680878
30	0.293842	0.422609	0.580498	0.660528	0.716456
45	0.286594	0.42904	0.59161	0.69125	0.750833



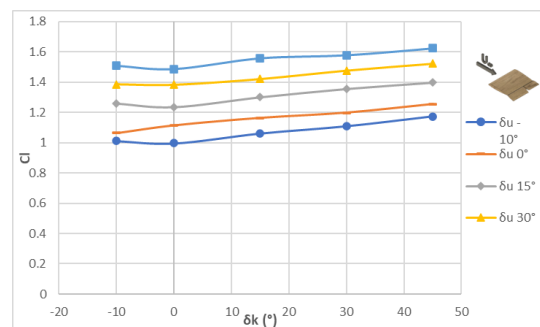
s. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) 15°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	0.728547	0.792491	0.962335	1.077354	1.144084
0	0.742787	0.874175	1.015445	1.123006	1.17664
15	0.821049	0.931285	1.069181	1.169116	1.242454
30	0.879566	0.971699	1.115901	1.204677	1.274461
45	0.880877	0.993907	1.14112	1.246891	1.315695

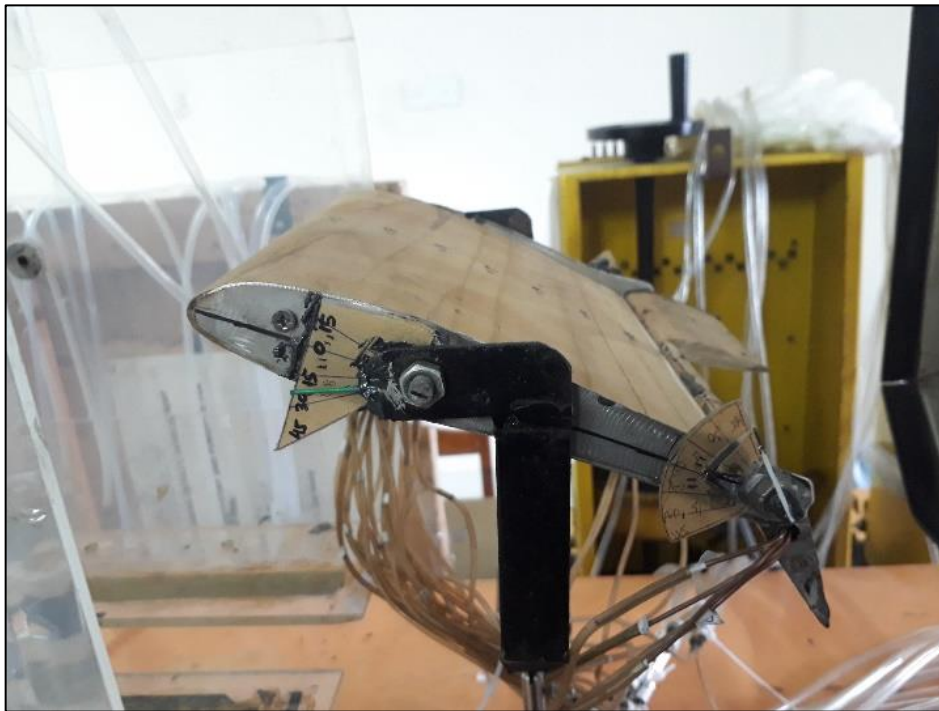


t. Kecepatan *freestream* (U_0) 20 m/s, sudut serang *airfoil* (α) 20°

δk ($^\circ$)	Koefisien Lift (CL)				
	Sudut δu ($^\circ$)				
	-10	0	15	30	45
-10	1.011895	1.063998	1.259161	1.385702	1.507536
0	0.996784	1.114675	1.235331	1.382643	1.485779
15	1.061679	1.16381	1.300931	1.421334	1.558353
30	1.109603	1.198089	1.35592	1.477772	1.578607
45	1.173905	1.254266	1.397609	1.52373	1.625107



Lampiran 5 Dokumentasi



Model benda uji



Studi literatur dan pengambilan data komputasi



Pengambilan data eksperimental



Analisa data dan penyusunan skripsi