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LESによる強制振動角柱に作用する変動風力の解析

LARGE EDDY SIMULATION OF UNSTEADY PRESSURE FIELD ACTING ON OSCILLATING PRISM

9行を標準とする

ゴシック, 14 pt

風工学¹⁾

構造剛²⁾

環境良子³⁾

Manabu KAZEKO¹⁾, Tsuyoshi KOZO²⁾ and Yoshiko KANKYO³⁾

3行

約10ワード(約60文字) × 12行を標準とする

ABSTRACT

Unsteady velocity-pressure fields around an oscillating square prism are analyzed by means of Large Eddy Simulation (LES). The accuracy of the numerical results is assessed by comparison with experimental data

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. a good agreement with the experimental data in terms of, 1) the phase angle between the displacement of the oscillating prism and the negative pressure acting on the side face, 2) the correlations of the pressures across the side face.

Key Words: LES, Oscillating prism, Unsteady pressure field

3, 4の英文キーワードを付ける

2行

1.はじめに

本文の開始

著者らは既報において2次元角柱周りの流れに対してLESの2次元計算、3次元計算を比較し、3次元LESの結果が静止角柱に作用する

ゴシック, 10.5 pt

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1ページ目最終行

参考文献

最終ページ結び

1) Bearman, P.W. and Obasaju, E.D.: An Experimental Study of Pressure Fluctuations on Fixed and Oscillating Square-section Cylinders, *J. Fluid Mech.*, vol.119, pp.297-321, 1982

2) Hirt, C.W. et al.: An Arbitrary Lagrangian-Eulerian Computing Method for All Flow Speeds, *J. Comp. Phys.*, 14, pp.227-253, 1974

3) 環境良子、構造剛、風工学、2次元角柱周辺の乱流数値解析(その2)、日本建築学会大会学術講演梗概集、pp.209-210, 1991

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Instruction for a camera-ready manuscript

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LARGE EDDY SIMULATION OF UNSTEADY PRESSURE FIELD ACTING ON OSCILLATING PRISM

14 pt

9 lines

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3 lines

10 words × 12 lines abstract

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about 9-line space

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Key Words: LES, Oscillating prism, Unsteady pressure field

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1. INTRODUCTION

Distributions of the fluctuating surface pressure and the wind forces acting on bluff-shaped bodies are of great practical interest in the field of structural

10.5 pt

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REFERENCES

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1) Bearman, P.W. and Obasaju, E.D.: An Experimental Study of Pressure Fluctuations on Fixed and Oscillating Square-section Cylinders, *J. Fluid Mech.*, vol.119, pp.297-321, 1982

2) Hirt, C.W. et al.: An Arbitrary Lagrangian-Eulerian Computing Method for All Flow Speeds, *J. Comp. Phys.*, 14, pp.227-253, 1974

3) Kankyo, Y., Kozo, T. and Kazeko, M., Numerical Study on Air Flow around 2D Square Prism (Part 2), Summaries of Technical Papers of Annual Meeting Architectural Institute of Japan, pp.209-210, 1991 (in Japanese)

42

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[本文](#)

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論文の最後

参考文献

- 1) Bearman, P.W. and Obasaju, E.D.: An Experimental Study of Pressure Fluctuations on Fixed and Oscillating Square-section Cylinders, *J. Fluid Mech.*, vol.119, pp.297-321, 1982
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REFERENCES

- 4) Bearman, P.W. and Obasaju, E.D.: An Experimental Study of Pressure Fluctuations on Fixed and Oscillating Square-section Cylinders, *J. Fluid Mech.*, vol.119, pp.297-321, 1982
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