

Determining Dominant Wind Directions

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ELSEVIER SCIENCE BV, EUROPEAN JOURNAL OF OPERATIONAL RESEARCH; pp:
420-426; Vol: 90

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Summary

In this paper we address the problem of selecting a set of wind directions that could represent the wind regime at a location. This problem is cast in the form of a non-convex mathematical program. Important properties of the problem are discussed and a convergent solution algorithm is designed. The algorithm could yield local optimal solutions. A case study which involves the construction of a transition probability matrix for the wind at a location is presented.

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