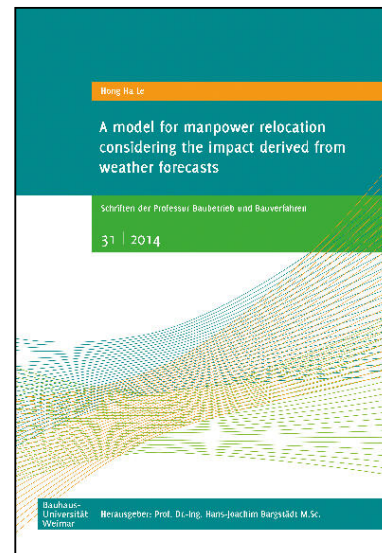


A model for manpower relocation considering the impact derived from weather forecasts

Weather conditions are common factors that cause disruptions for the construction process. In literature, current research has been focusing mainly on quantifying the impact of weather on the schedule in the planning phase based on weather data stochastically generated from historical data. In practice, the inclusion of weather effects in the schedule at the planning phase may not be accurate because of the inconsistency of weather conditions, the lack of useful information or experience of planners. Thus, control of projects during the execution phase concerning the impact derived from the weather forecasts is necessary to avoid project delays.

The goal of this research is to develop a simulation model to quantify the impact of weather forecasts on the look-ahead schedule and to provide a series of alternatives of manpower allocation for the weather-impacted construction sites. Thereby, the allocation alternatives are generated based on a procedure for relocating manpower among the sites. As a result, the look-ahead planning can be performed following adjustments of manpower allocations to avoid undesirable consequences due to the impact of weather.



Bauhaus-Universitätsverlag

1. Auflage 2014

Band 31 Schriften der Professur Baubetrieb und Bauverfahren

Softcover

21×29,5cm • 625 g

157 Seiten

Zahlreiche Abbildungen sowie Grafiken und Tabellen

Buchausgabe (D): 24,80 €

ISBN: 978-3-95773-161-6

eBook (PDF): 24,80 €

Download: <http://dx.doi.org/10.1466/20140922.04>