# Contents

**PARISE, M. & GUNN, J.** Natural and anthropogenic hazards in karst areas: an introduction 1

**Collapse and subsidence hazards**

**BRINKMANN, R., WILSON, K., ELKO, N., SEALE, L. D., FLOREA, L. & VACHER, H. L.** Sinkhole distribution based on pre-development mapping in urbanized Pinellas County, Florida, USA 5

**WALTHAM, T. & LU, Z.** Natural and anthropogenic rock collapse over open caves 13

**NISIO, S., CARAMANNA, G. & CIOTOLI, G.** Sinkholes in Italy: first results on the inventory and analysis 23

**ARDAU, F., BALIA, R., BIANCO, M. & DE WAELE, J.** Assessment of cover-collapse sinkholes in SW Sardinia (Italy) 47

**SANTO, A., DEL PRETE, S., DI CRESCENZO, G. & ROTELLA, M.** Karst processes and slope instability: some investigations in the carbonate Apennine of Campania (southern Italy) 59

**MOCHALES, T., PUEYO, E. L., CASAS, A. M. & SORIANO, M. A.** Magnetic prospection as an efficient tool for doline detection: a case study in the central Ebro Basin (northern Spain) 73

**Hydrological hazards**

**COSSU, A., DE WAELE, J. & D’GREGORIO, F.** Coastal karst geomorphosites at risk? A case study: the floods of 6–11 December 2004 in central-east Sardinia 85

**GUNN, J.** Contributory area definition for groundwater source protection and hazard mitigation in carbonate aquifers 97

**ALLSHORN, S. J. L., BOTTRELL, S. H., WEST, L. J. & ODLING, N. E.** Rapid karstic bypass flow in the unsaturated zone of the Yorkshire chalk aquifer and implications for contaminant transport 111

**BOTTRELL, S. H.** Stable isotopes in aqueous sulphate as tracers of natural and contaminant sulphate sources: a reconnaissance study of the Xingwen karst aquifer, Sichuan, China 123

**DUCCI, D.** Intrinsic vulnerability of the Alburni karst system (southern Italy) 137

**DELLEROSE, M., PARISE, M. & ANDRIANI, G. F.** Evaluating the impact of quarrying on karst aquifers of Salento (southern Italy) 153

**Managing karst**

**DAY, M. J.** Natural and anthropogenic hazards in the karst of Jamaica 173

**CHALMIN, E., D’ORLYÉ, F., ZINGER, L., CHARLET, L., GEREMIA, R. A., ORIAL, G., MENU, M., BAFFIER, D. & REICHE, I.** Biotic versus abiotic calcite formation on prehistoric cave paintings: the Arcy-sur-Cure ‘Grande Grotte’ (Yonne, France) case 185

**Index** 199