

Contents

1	Introduction	1
	References	3
2	Review of the Existing Risk Assessment Methods	7
	References	11
3	Study Areas	15
	References	19
4	Used Methodology	21
4.1	General Description and Calculation of the Assessment Indexes	21
4.2	The Role of Aerial Images and GIS into Risk Assessment to Storms	27
4.3	Database Components of the Assessment Indexes	29
4.3.1	Coastal Forcing Index	29
4.3.2	Susceptibility Index—Coastal Characteristics	31
4.3.3	Vulnerability Index—Vulnerable Targets	33
	References	36
5	Spatial Distribution of Assessment Indexes	39
5.1	Coastal Forcing Index (CFI)	39
5.2	Susceptibility Index (SI)	41
5.3	Hazard Index (HI)	43
5.4	Vulnerability Index (VI)	46
5.4.1	Socioeconomic Index (VsI)	46
5.4.2	Ecological Index (VeI)	49
5.4.3	Heritage Index (VhI)	49
5.5	Risk Index (RI)	50
	References	52

- 6 Final Reflections. 55**
 - 6.1 Data Management 55
 - 6.2 Index Validation 56
 - 6.2.1 Methodological Concerns 57
 - References 61

Risk Assessment of Storms in Coastal Zones: Case
Studies from Cartagena (Colombia) and Cadiz (Spain)

Rangel-Buitrago, N.G.; Anfuso, G.

2015, XII, 63 p. 11 illus., 10 illus. in color., Softcover

ISBN: 978-3-319-15843-3