Figure S1B. A visual comparison between the Ground Truth (GT) and the corresponding Filtered Geomorphic Reference Models (FGRMs) belonging (Scenario 2, , Experiment_3) to differentiate substrate units from the rest of elements. Left, Ground Truth (GT) model (Figure 2c) where outcrops of substrate materials are valued as 100, while the rest are valued as 200. Right, the respective FGRMs obtained (in the head of each filter appears the acronymous FCFR#, where # is the Filter Radius, FR used as cut-Off frequency), unit valued as 1 is area of bedrock detected by the filter whereas 2 is area detected as not bedrock

Figure S2B. A visual comparison between the Ground Truth (GT) and the corresponding Filtered Geomorphic Reference Models (FGRMs) belonging (Scenario 2, Experiment_4) to differentiate superficial units from the rest of elements. Left, Ground Truth (GT) model (Figure 2d) where outcrops of superficial units are valued as 100, while the rest are valued as 200. Right, the respective FGRMs obtained (in the head of each filter appears the acronymous FCFR#, where # is the Filter Radius, FR used as cut-Off frequency), unit valued as 1 is area of superficial unit detected by the filter whereas 2 is area detected as not superficial unit

Figure S3B. A visual comparison between the Ground Truth (GT) and the corresponding Filtered Geomorphic Reference Models (FGRMs) belonging (Scenario 2, Experiment_5) to differentiate anthropic relieves from the rest of elements. Left, Ground Truth (GT) model (Figure 2d) where outcrops of anthropic units are valued as 100, while the rest are valued as 200. Right, the respective FGRMs obtained (in the head of each filter appears the acronymous FCFR#, where # is the Filter Radius, FR used as cut-Off frequency), unit valued as 1 is area of anthropic relieve detected by the filter whereas 2 is area detected as not anthropic relieve

Figure S4B. A visual comparison between the Ground Truth (GT) and the corresponding Filtered Geomorphic Reference Models (FGRMs) belonging (Scenario 2, Experiment_6) to differentiate dolines and karstic depressions from the rest of elements. Left, Ground Truth (GT) model (Figure 2d) where dolines are valued as 100, while the rest are valued as 200. Right, the respective FGRMs obtained (in the head of each filter appears the acronymous FCFR#, where # is the Filter Radius, FR used as cut-Off frequency), unit valued as 1 is area of dolines detected by the filter whereas 2 is area detected as not doline.