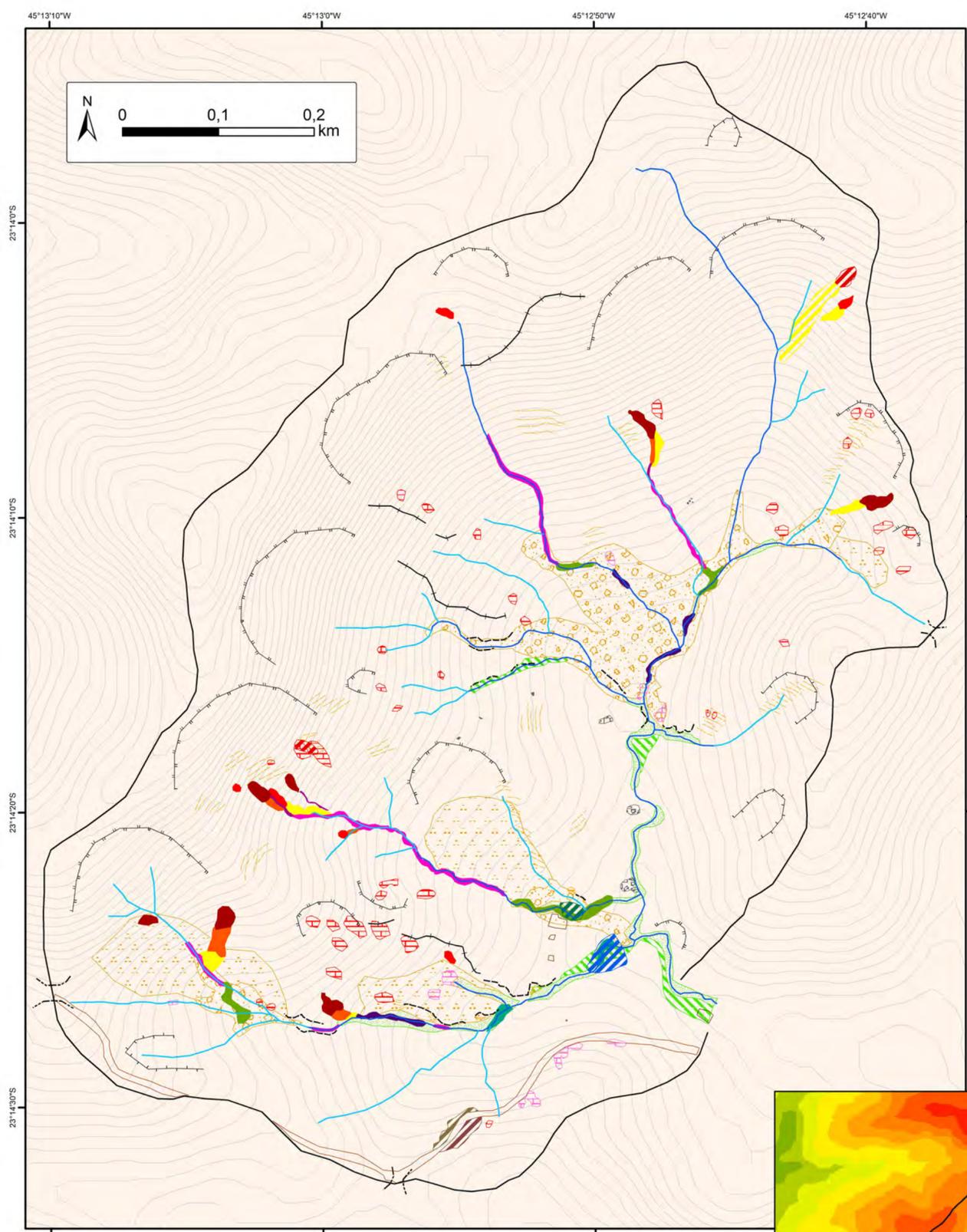


GEOMORPHODYNAMICS - RINCÃO



Hydrography

- Perennial stream
- Non-perennial stream
- Paleochannel
- Lake

Topography

- Contour line (5m)
- Drainage divide
- Saddle
- Convex slope break
- Amphitheater-shaped valley head
- Secondary amphitheater-shaped hollow
- Valley floor scarp (riverbank)

Denudational landforms

- Drainage divide
- Saddle
- Convex slope break
- Amphitheater-shaped valley head
- Secondary amphitheater-shaped hollow
- Valley floor scarp (riverbank)

Depositional landforms

- Alluvial plain
- Alluvial terrace
- Alluvial fan
- Debris cone
- Colluvial slope

Rock Erosion Features

- Block field (tor, nubbin, castle koppie)
- Boulder
- Rock sheet
- Rock rapid in channel

Human Infrastructure

- Road or path
- Building

Lithology

- Quartzite (Neoproterozoic)
- Peraluminous Granite (Paleozoic)
- Calc-alkaline Granite (Neoproterozoic)
- Schist (Neoproterozoic)

Preterite morphodynamics

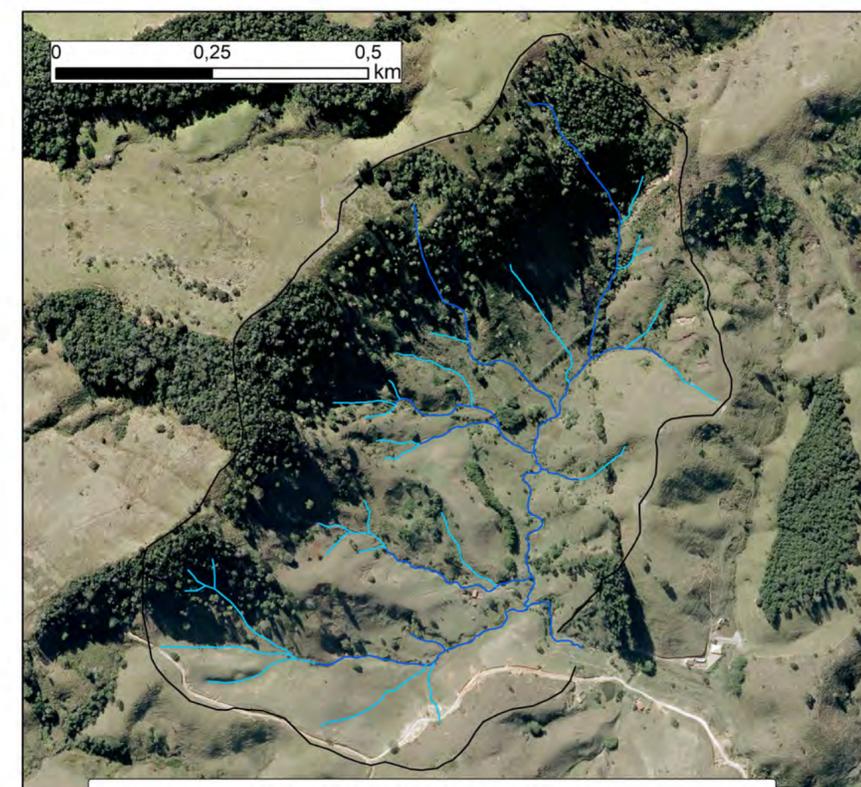
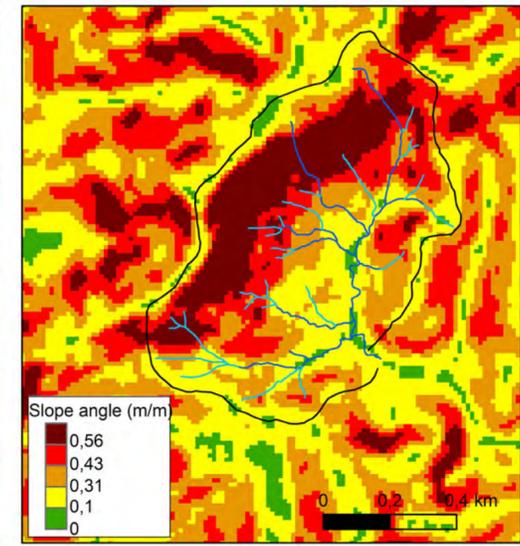
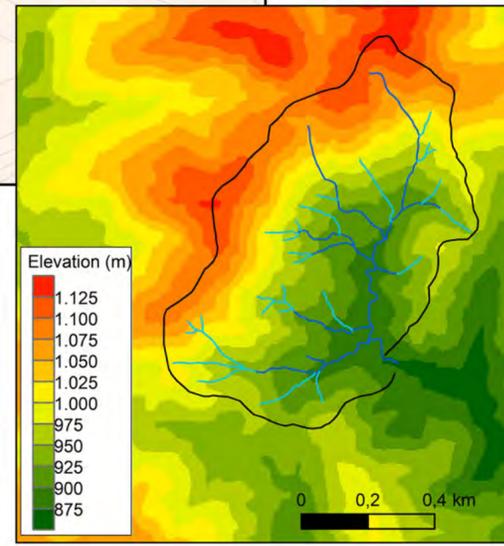
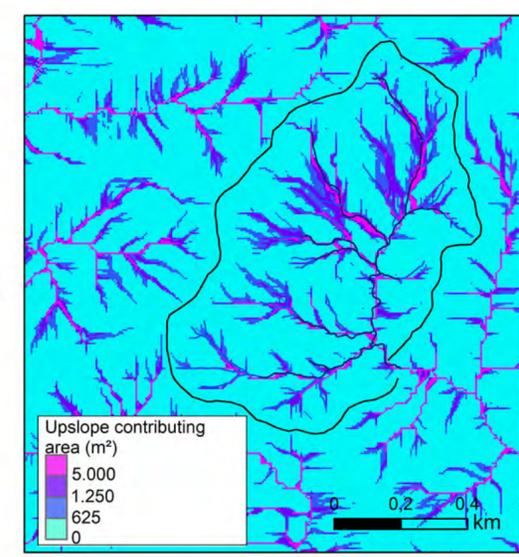
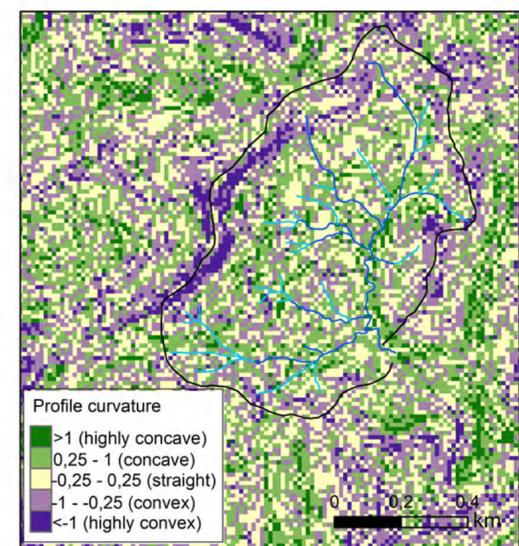
- Rill
- Terracette
- Landslide scar
- Inactive linear erosive features
- Bank erosion

Morphodynamics of the 2009/2010 event

- Translational landslide (rollover type)
- Translational landslide (tail type)
- Slump
- Runout area of the landslide
- Road slope failure
- Channel scoured by debris flow
- Channel reshaped by debris flow or fluvial incision
- Landslide deposit
- Road slope failure deposit
- In-channel or levee debris flow deposit
- Debris flow lobe
- Coarse mixed deposit
- Medium-grained mixed deposit
- Fine-grained mixed deposit
- Fine-grained flood deposit

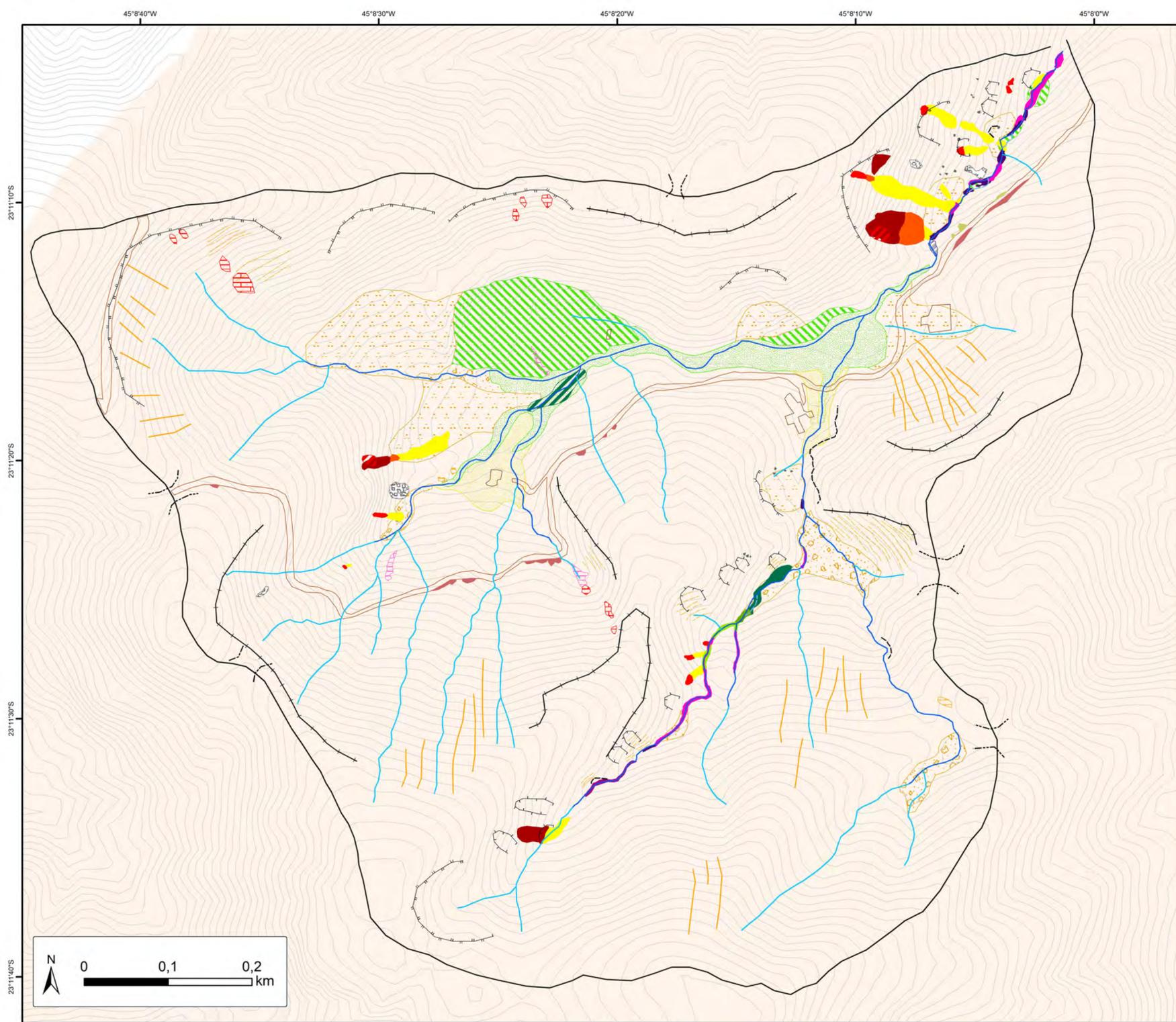
Post-2010 morphodynamics and anthropogenic changes

- Landslide
- Active linear erosive feature
- Road slope failure
- Landslide deposit
- Road slope failure deposit
- Undifferentiated deposit
- Artificial lake

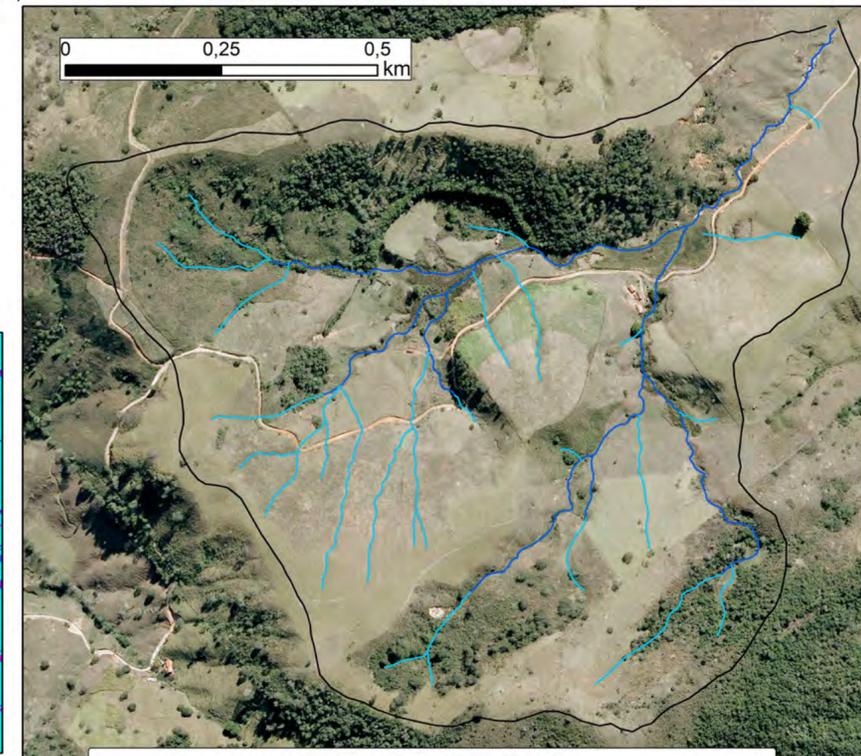
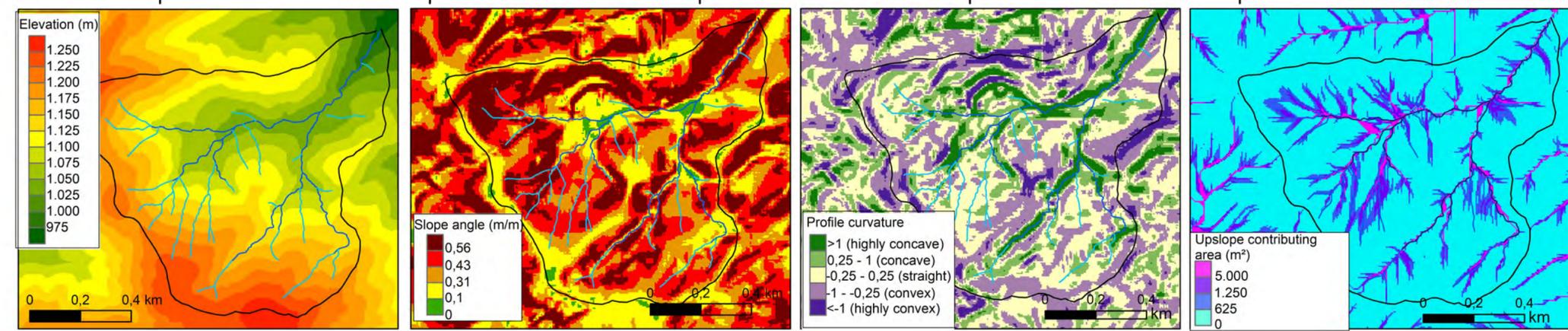


Orthophoto with 1-meter resolution. Source: "Mapeia São Paulo" Project produced by Empresa Paulista de Planejamento Metropolitano S/A (EMPLASA), 2010/2011.

APPENDIX II

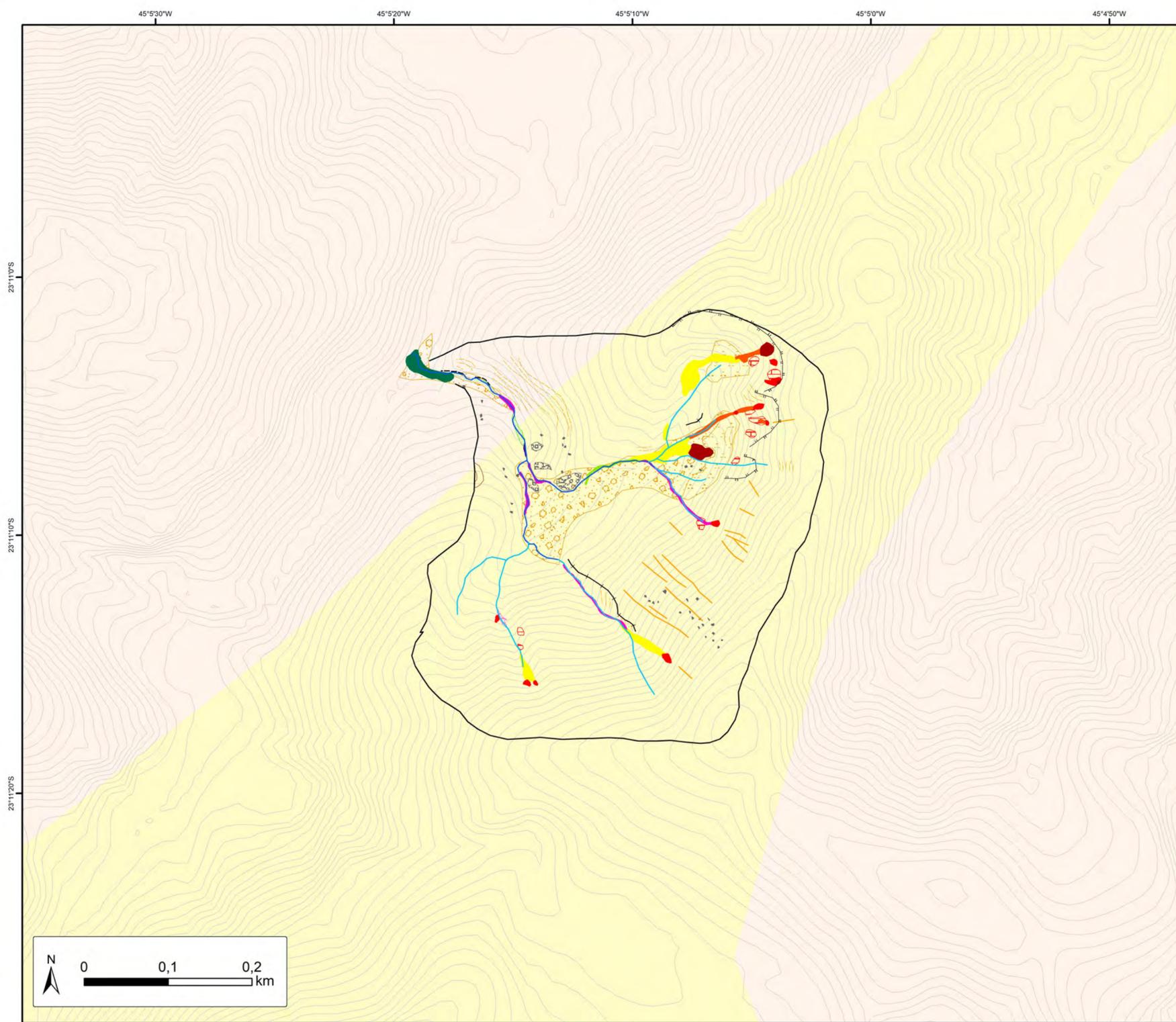


- Hydrography**
 - Perennial stream
 - Non-perennial stream
 - Paleochannel
 - Lake
- Topography**
 - Contour line (5m)
- Denudational landforms**
 - Drainage divide
 - Saddle
 - Convex slope break
 - Amphitheater-shaped valley head
 - Secondary amphitheater-shaped hollow
 - Valley floor scarp (riverbank)
- Depositional landforms**
 - Alluvial plain
 - Alluvial terrace
 - Alluvial fan
 - Debris cone
 - Colluvial slope
- Rock Erosion Features**
 - Block field (tor, nubbin, castle koppie)
 - Boulder
 - Rock sheet
 - Rock rapid in channel
- Human Infrastructure**
 - Road or path
 - Building
- Lithology**
 - Quartzite (Neoproterozoic)
 - Peraluminous Granite (Paleozoic)
 - Calc-alkaline Granite (Neoproterozoic)
 - Schist (Neoproterozoic)
- Preterite morphodynamics**
 - Rill
 - Terracette
 - Landslide scar
 - Inactive linear erosive features
 - Bank erosion
- Morphodynamics of the 2009/2010 event**
 - Translational landslide (rollover type)
 - Translational landslide (tail type)
 - Slump
 - Runout area of the landslide
 - Road slope failure
 - Channel scoured by debris flow
 - Channel reshaped by debris flow or fluvial incision
 - Landslide deposit
 - Road slope failure deposit
 - In-channel or levee debris flow deposit
 - Debris flow lobe
 - Coarse mixed deposit
 - Medium-grained mixed deposit
 - Fine-grained mixed deposit
 - Fine-grained flood deposit
- Post-2010 morphodynamics and anthropogenic changes**
 - Landslide
 - Active linear erosive feature
 - Road slope failure
 - Landslide deposit
 - Road slope failure deposit
 - Undifferentiated deposit
 - Artificial lake

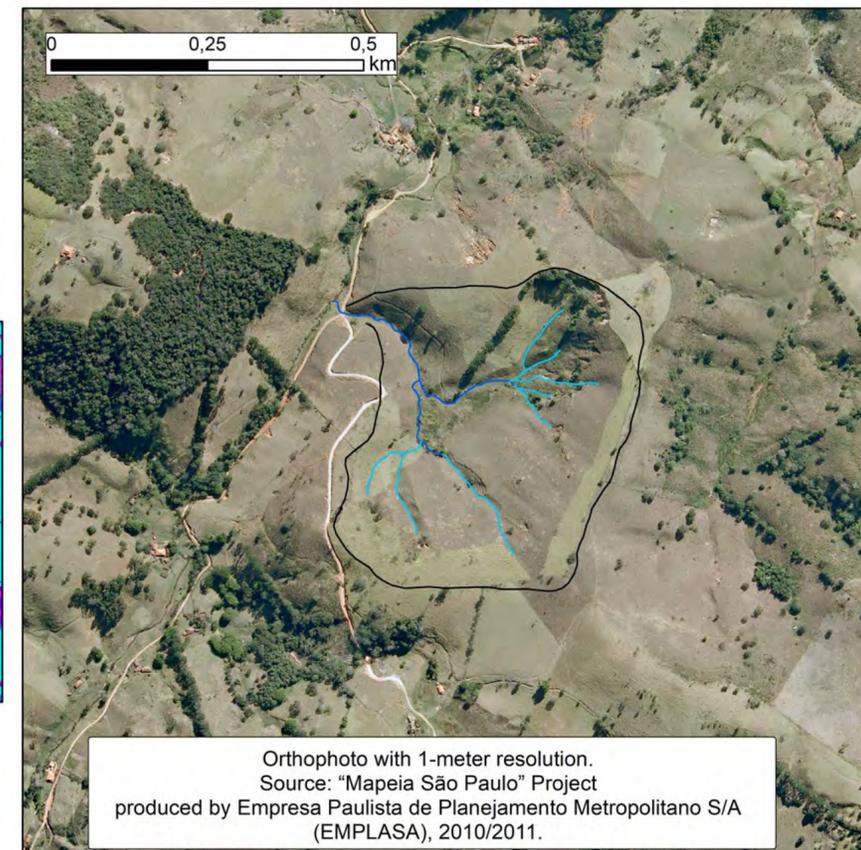
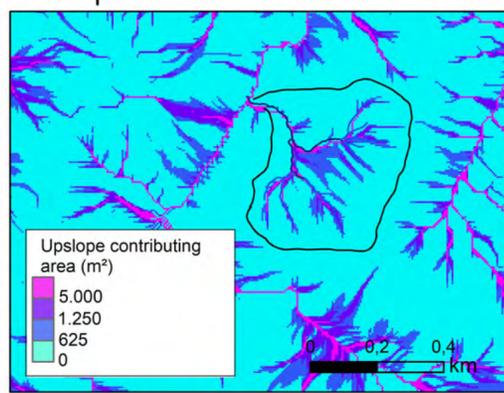
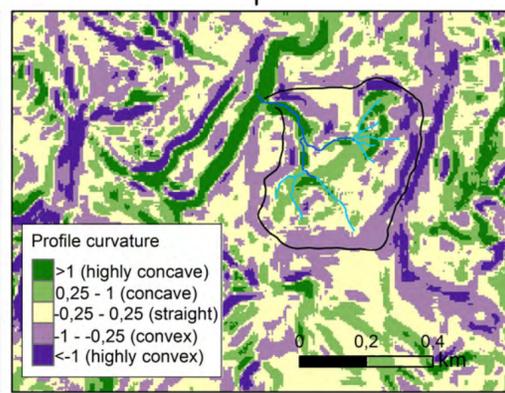
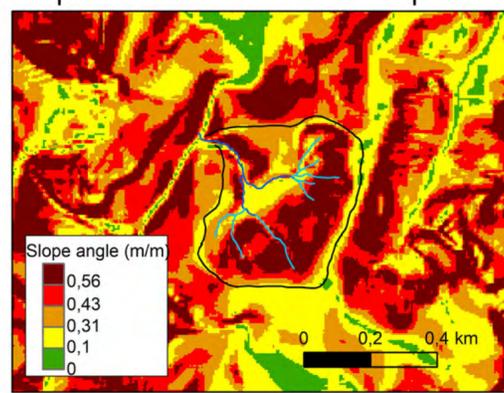
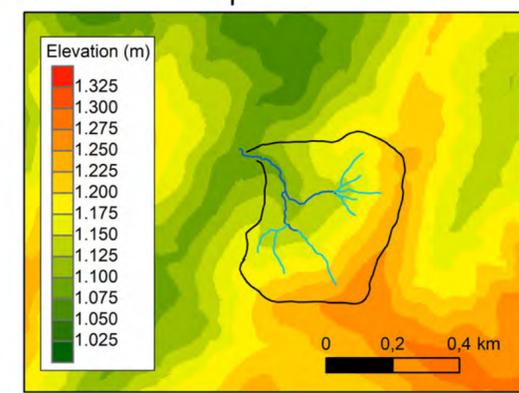


Orthophoto with 1-meter resolution. Source: "Mapeia São Paulo" Project produced by Empresa Paulista de Planejamento Metropolitano S/A (EMPLASA), 2010/2011.

GEOMORPHODYNAMICS - TREMEMBÉ



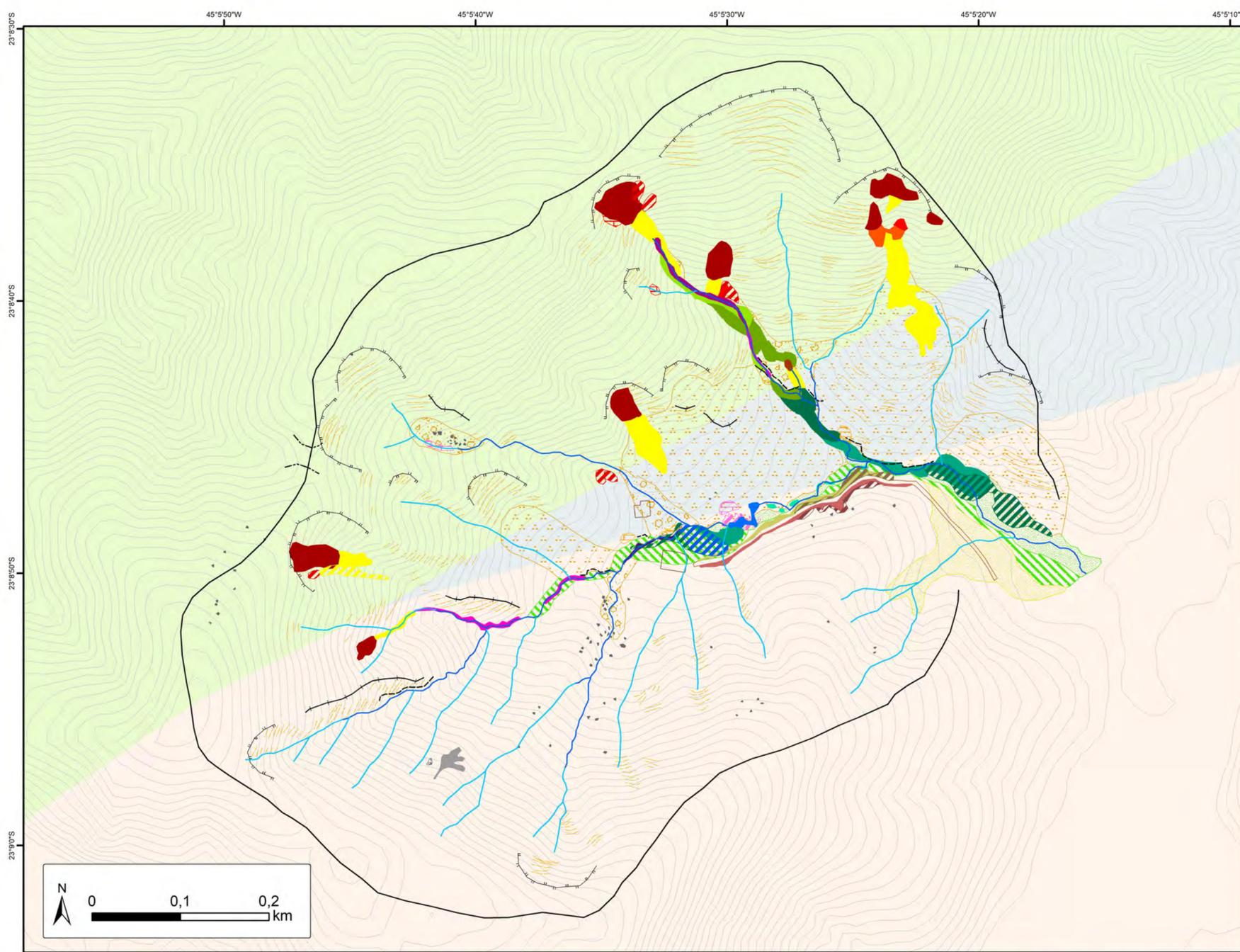
- Hydrography**
 - Perennial stream
 - Non-perennial stream
 - Paleochannel
 - Lake
- Topography**
 - Contour line (5m)
- Denudational landforms**
 - Drainage divide
 - Saddle
 - Convex slope break
 - Amphitheater-shaped valley head
 - Secondary amphitheater-shaped hollow
 - Valley floor scarp (riverbank)
- Depositional landforms**
 - Alluvial plain
 - Alluvial terrace
 - Alluvial fan
 - Debris cone
 - Colluvial slope
- Rock Erosion Features**
 - Block field (tor, nubbin, castle koppie)
 - Boulder
 - Rock sheet
 - Rock rapid in channel
- Human Infrastructure**
 - Road or path
 - Building
- Lithology**
 - Quartzite (Neoproterozoic)
 - Peraluminous Granite (Paleozoic)
 - Calc-alkaline Granite (Neoproterozoic)
 - Schist (Neoproterozoic)
- Preterite morphodynamics**
 - Rill
 - Terracette
 - Landslide scar
 - Inactive linear erosive features
 - Bank erosion
- Morphodynamics of the 2009/2010 event**
 - Translational landslide (rollover type)
 - Translational landslide (tail type)
 - Slump
 - Runout area of the landslide
 - Road slope failure
 - Channel scoured by debris flow
 - Channel reshaped by debris flow or fluvial incision
 - Landslide deposit
 - Road slope failure deposit
 - In-channel or levee debris flow deposit
 - Debris flow lobe
 - Coarse mixed deposit
 - Medium-grained mixed deposit
 - Fine-grained mixed deposit
 - Fine-grained flood deposit
- Post-2010 morphodynamics and anthropogenic changes**
 - Landslide
 - Active linear erosive feature
 - Road slope failure
 - Landslide deposit
 - Road slope failure deposit
 - Undifferentiated deposit
 - Artificial lake



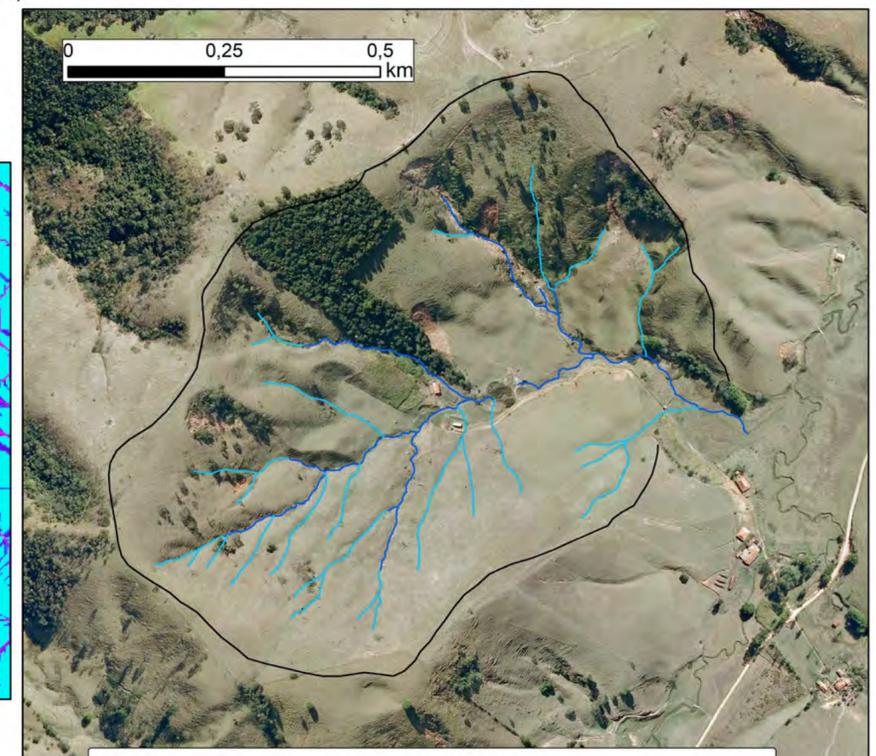
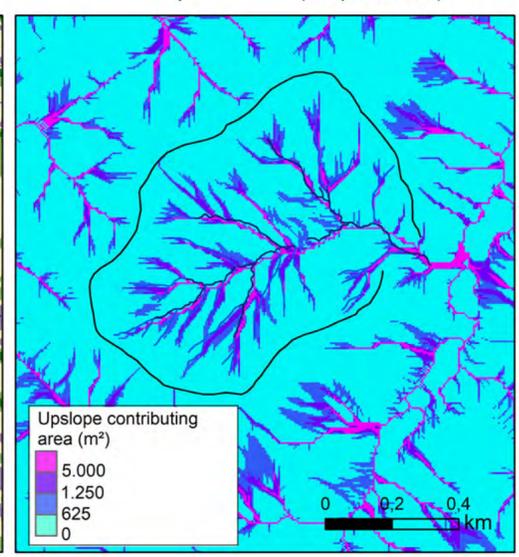
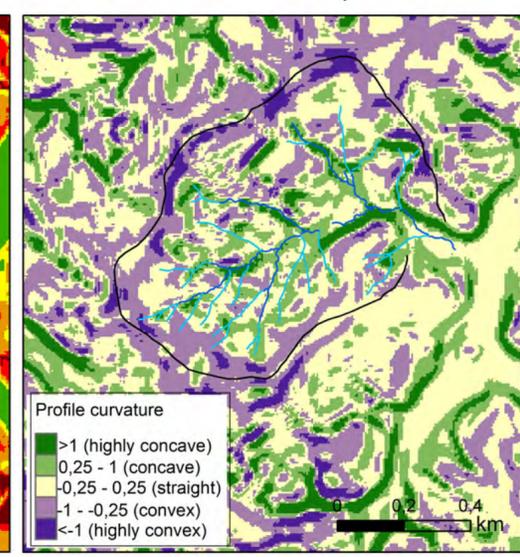
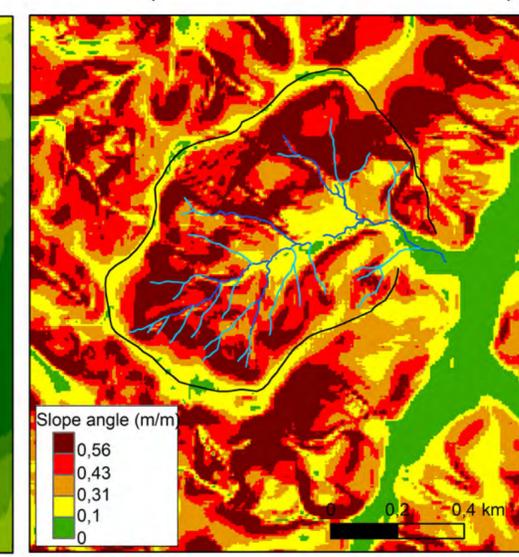
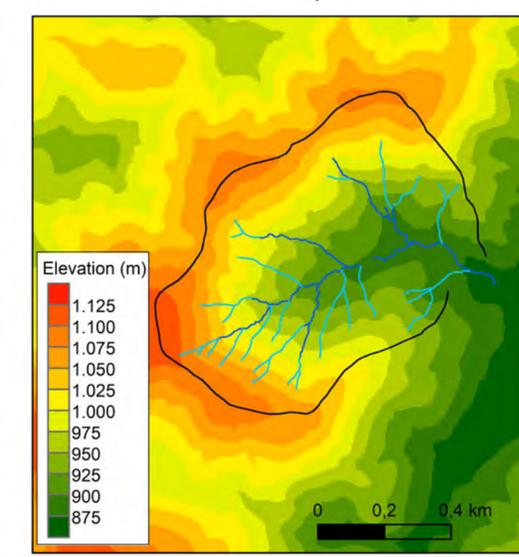
Orthophoto with 1-meter resolution.
Source: "Mapeia São Paulo" Project
produced by Empresa Paulista de Planejamento Metropolitano S/A
(EMPLASA), 2010/2011.

APPENDIX II

GEOMORPHODYNAMICS - CATIOCA



- Hydrography**
 - Perennial stream
 - Non-perennial stream
 - Paleochannel
 - Lake
- Topography**
 - Contour line (5m)
- Denudational landforms**
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 - Amphitheater-shaped valley head
 - Secondary amphitheater-shaped hollow
 - Valley floor scarp (riverbank)
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 - Alluvial plain
 - Alluvial terrace
 - Alluvial fan
 - Debris cone
 - Colluvial slope
- Rock Erosion Features**
 - Block field (tor, nubbin, castle koppie)
 - Boulder
 - Rock sheet
 - Rock rapid in channel
- Human Infrastructure**
 - Road or path
 - Building
- Lithology**
 - Quartzite (Neoproterozoic)
 - Peraluminous Granite (Paleozoic)
 - Calc-alkaline Granite (Neoproterozoic)
 - Schist (Neoproterozoic)
- Preterite morphodynamics**
 - Rill
 - Terracette
 - Landslide scar
 - Inactive linear erosive features
 - Bank erosion
- Morphodynamics of the 2009/2010 event**
 - Translational landslide (rollover type)
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 - Debris flow lobe
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 - Medium-grained mixed deposit
 - Fine-grained mixed deposit
 - Fine-grained flood deposit
- Post-2010 morphodynamics and anthropogenic changes**
 - Landslide
 - Active linear erosive feature
 - Road slope failure
 - Landslide deposit
 - Road slope failure deposit
 - Undifferentiated deposit
 - Artificial lake



Orthophoto with 1-meter resolution.
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APPENDIX II