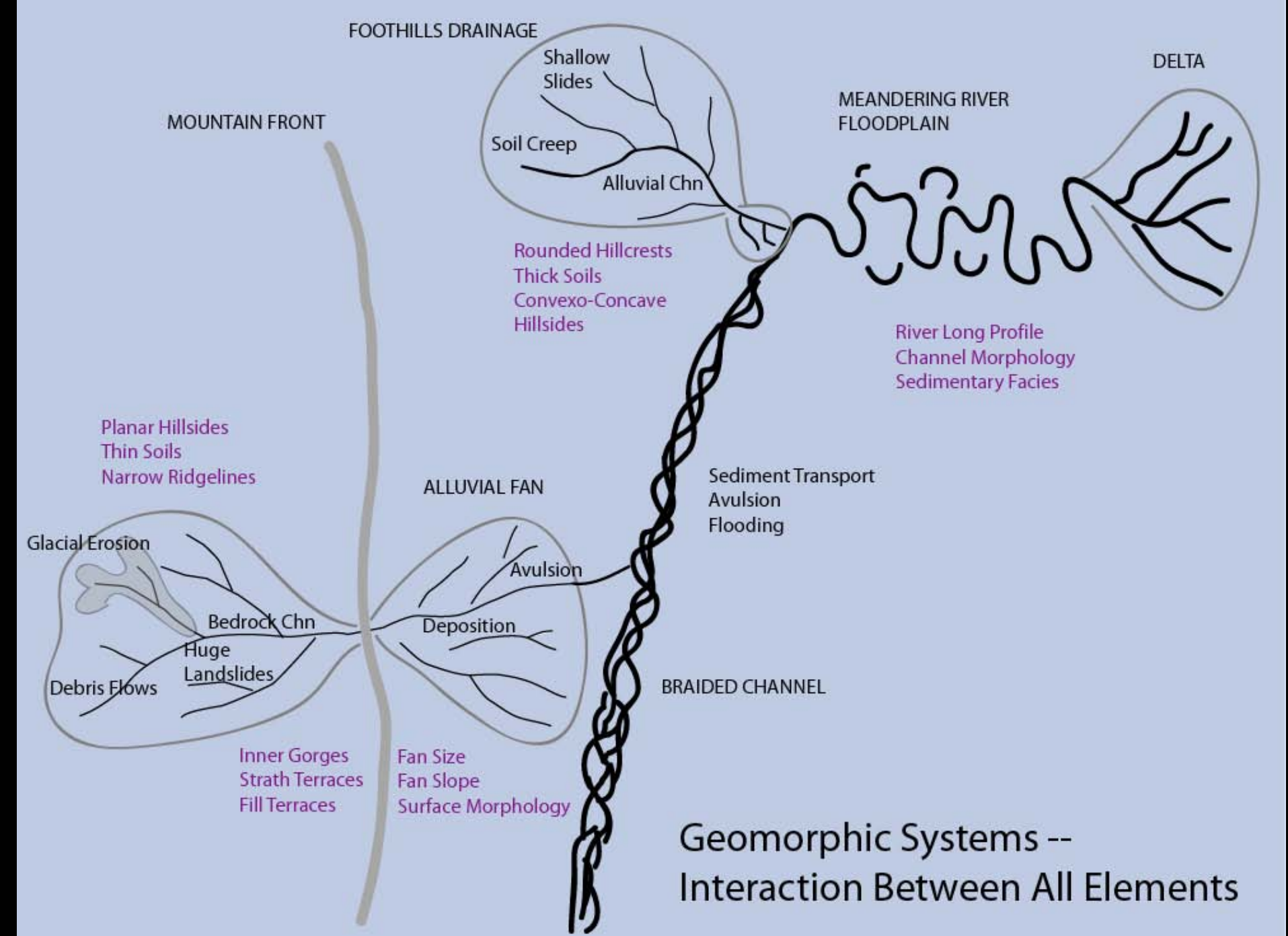
Unless otherwise noted, all images are courtesy of NASA.



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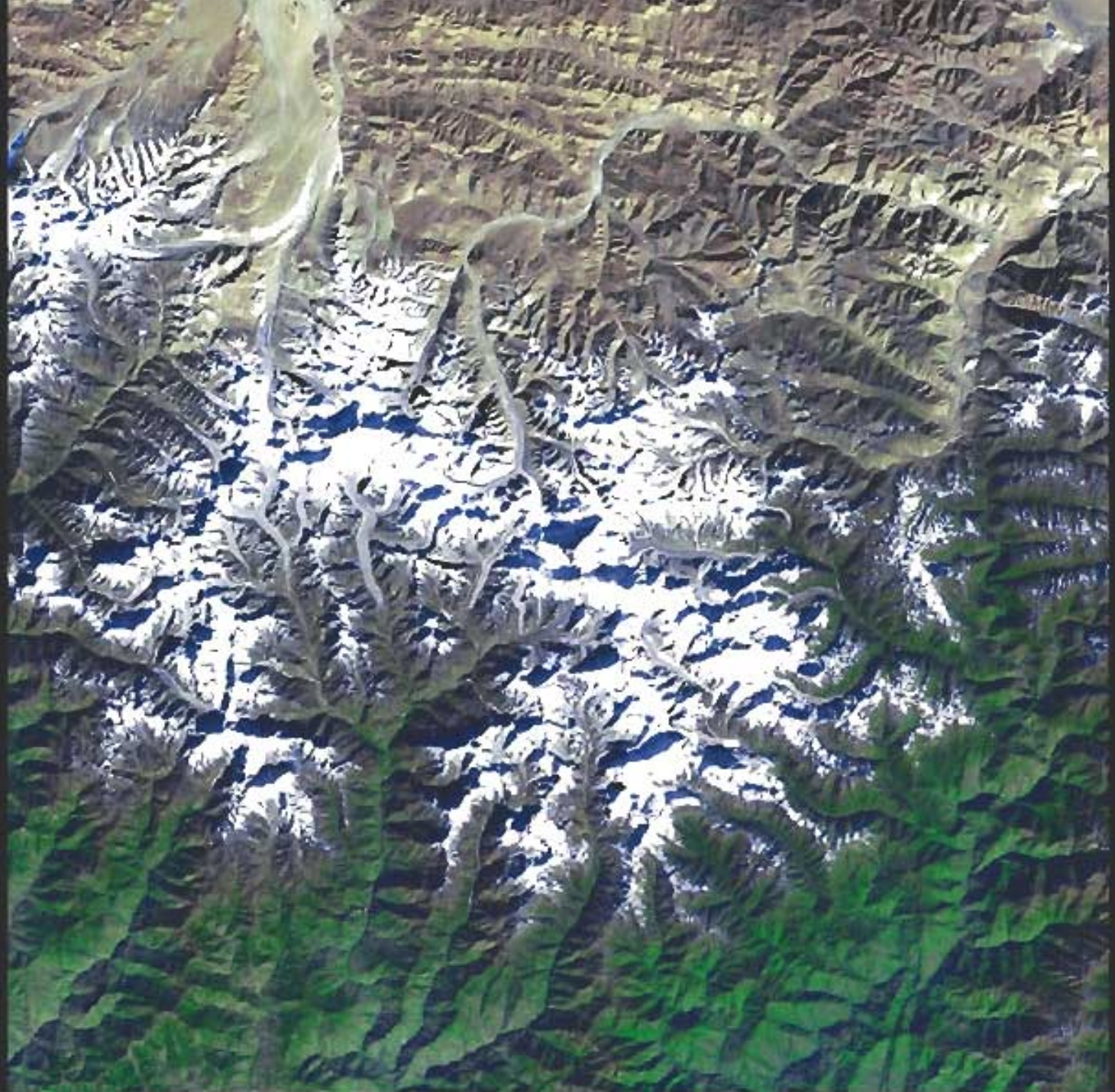

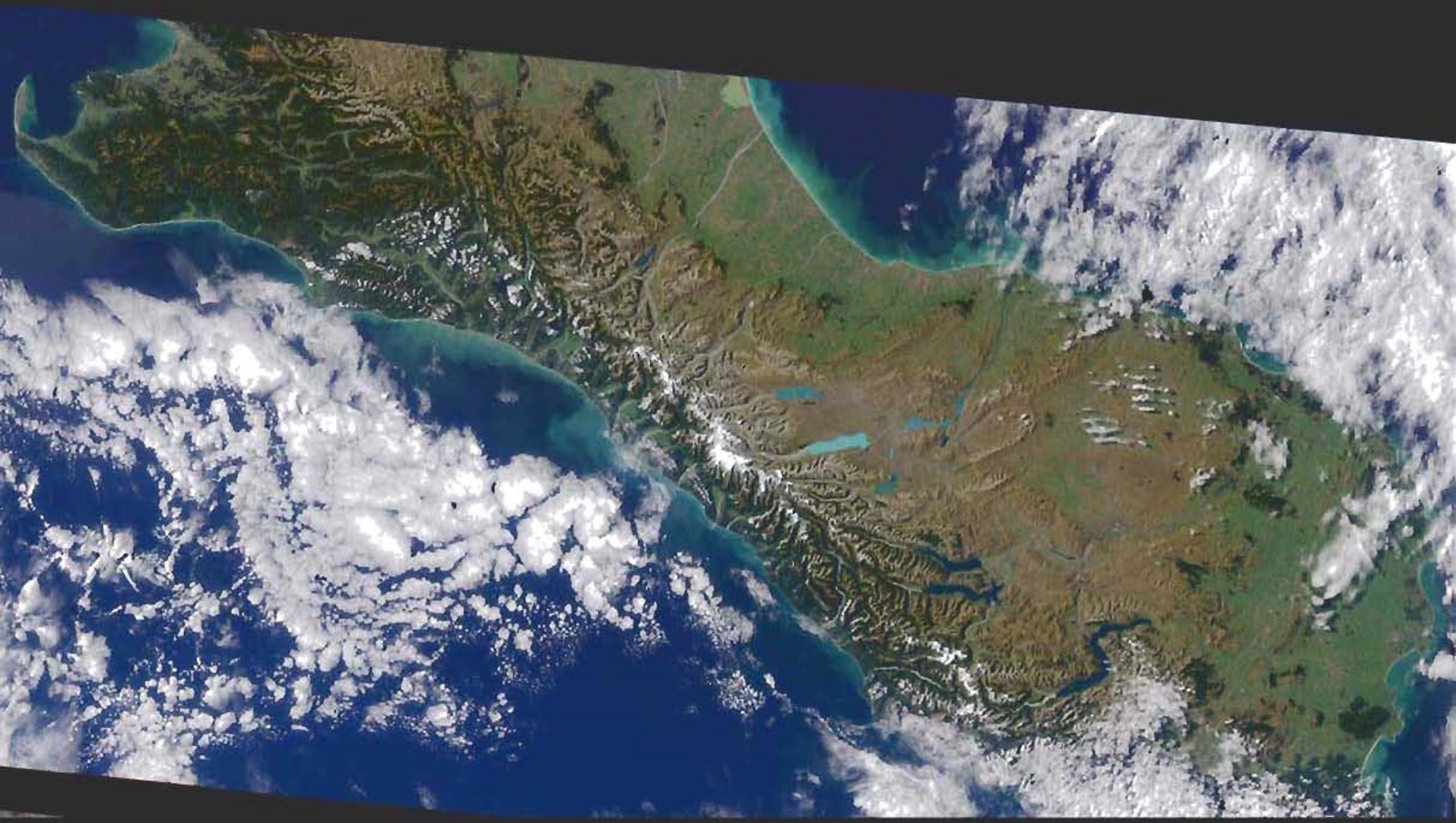

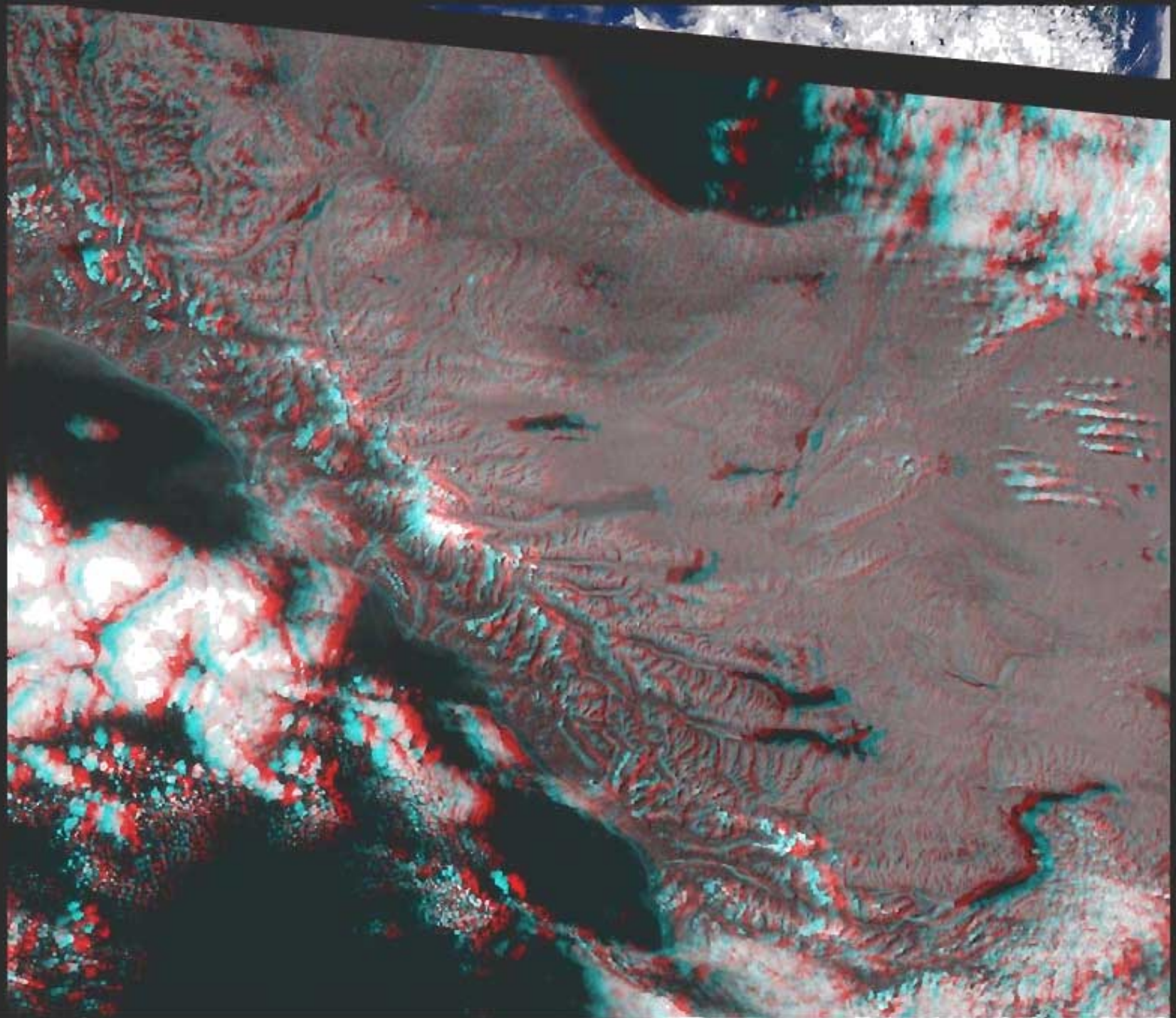

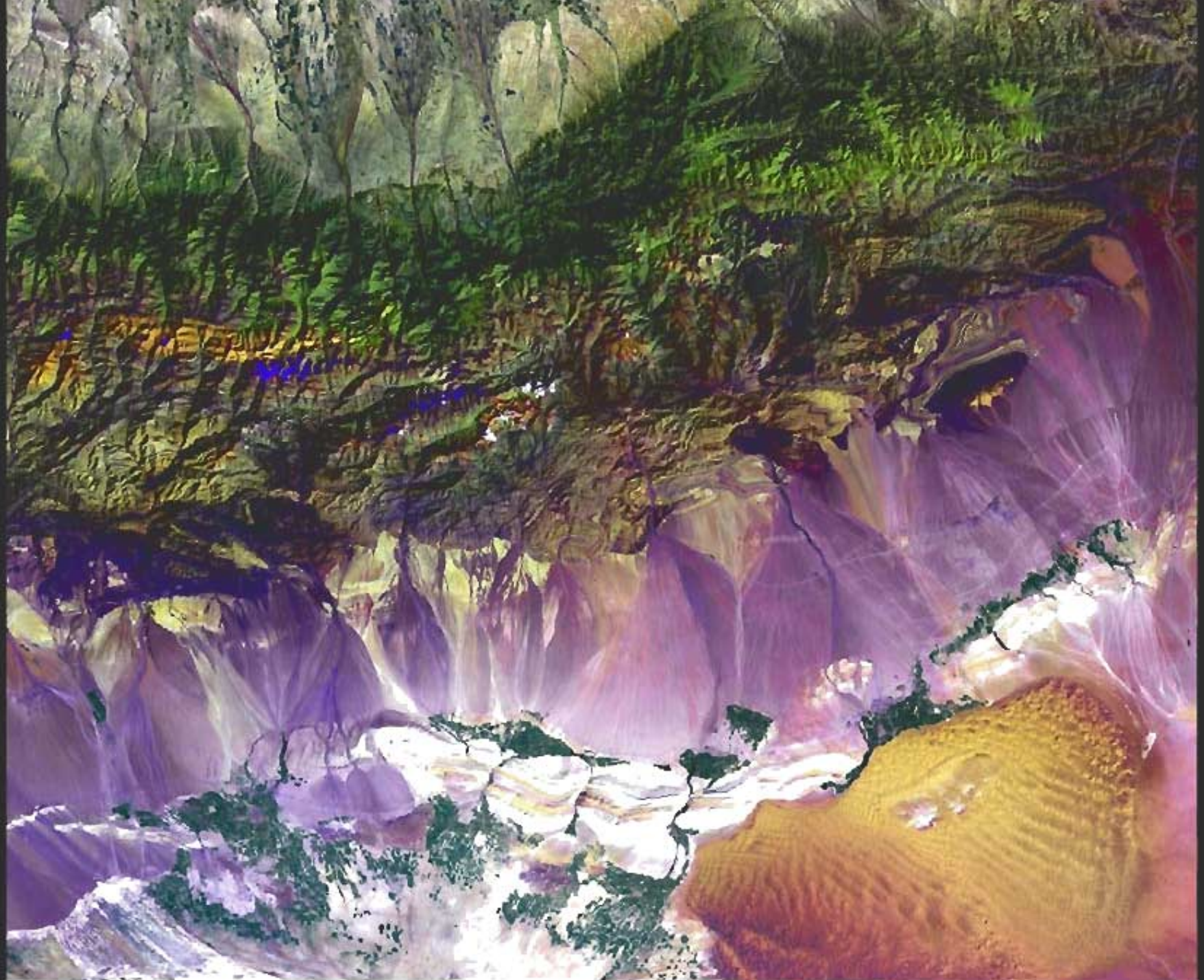

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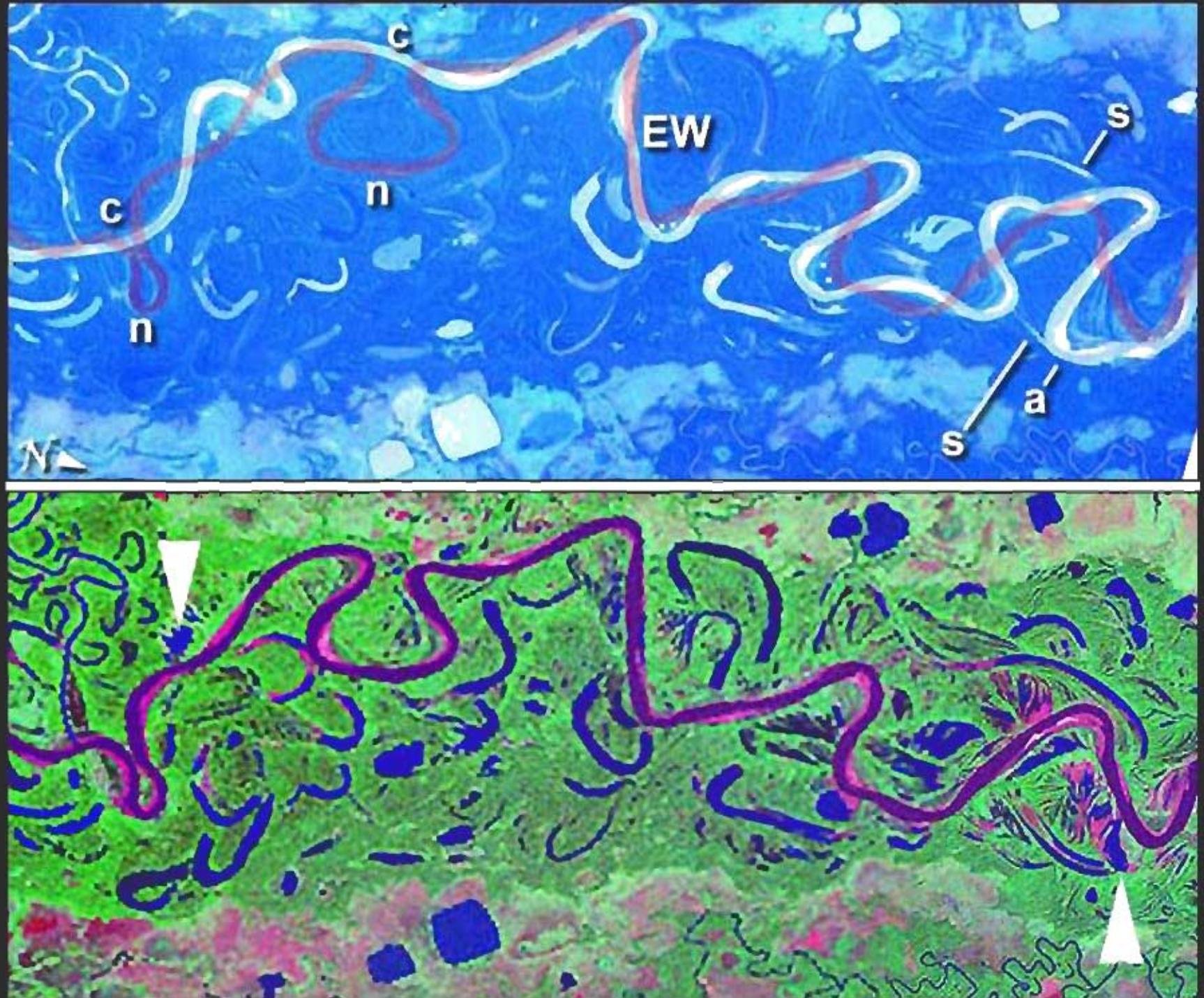
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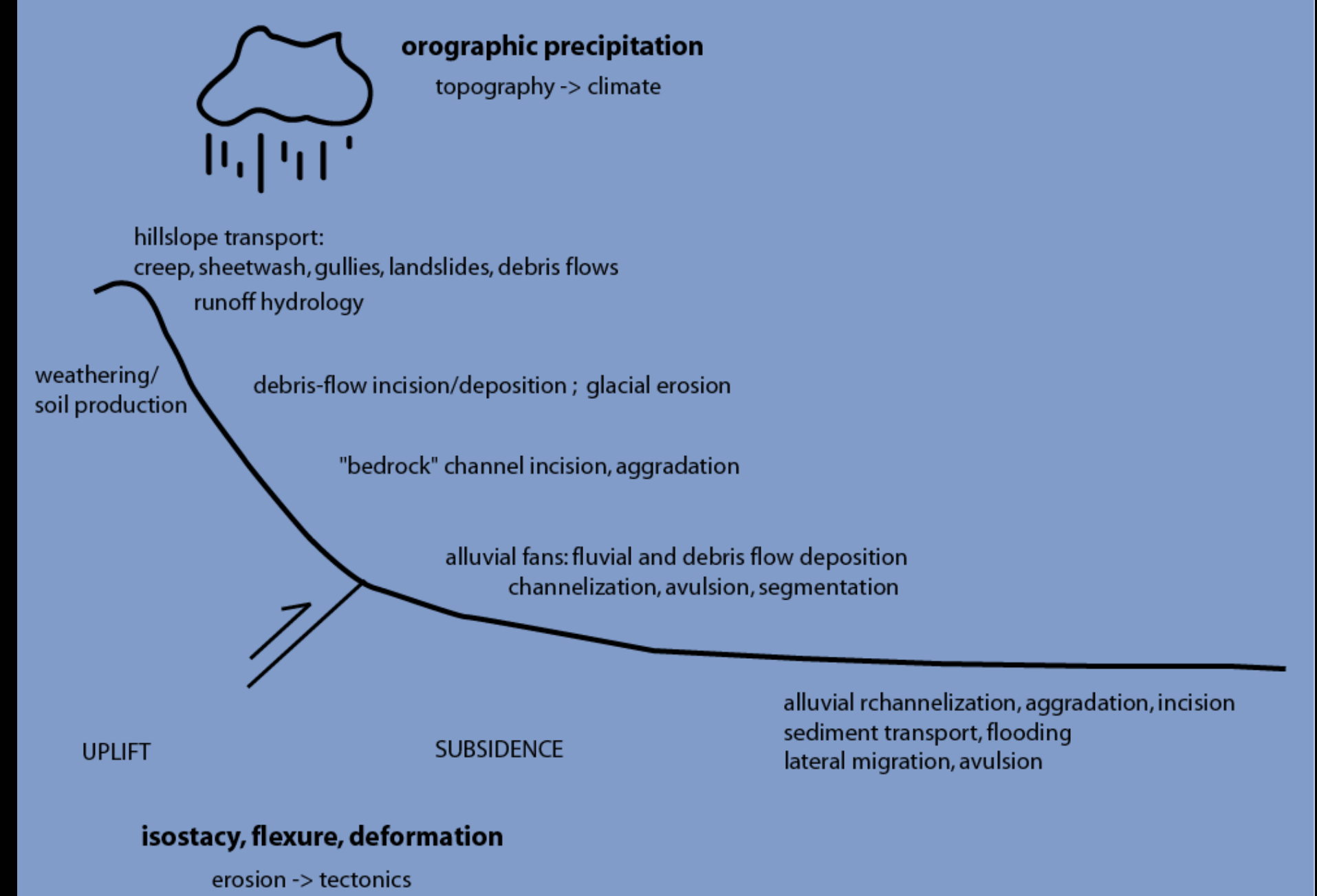

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orographic precipitation

topography -> climate

hillslope transport:
creep, sheetwash, gullies, landslides, debris flows

runoff hydrology

=> hillslope form, gradient, length
drainage density
sediment supply (rate / size)

weathering/
soil production

debris-flow incision/deposition ; glacial erosion

"bedrock" channel incision, aggradation

alluvial fans: fluvial and debris flow deposition
channelization, avulsion, segmentation

alluvial rchannelization, aggradation, incision
sediment transport, flooding
lateral migration, avulsion

UPLIFT

SUBSIDENCE

isostacy, flexure, deformation

erosion -> tectonics

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=> river profiles, topographic skeleton
valley form, channel morphology
fill and strath terraces

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channelization, avulsion, segmentation

=> fan size, slope, texture
hazard, sediment facies

alluvial rchannelization, aggradation, incision
sediment transport, flooding
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isostacy, flexure, deformation

erosion -> tectonics

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hazard, sediment facies

alluvial rchannelization, aggradation, incision
sediment transport, flooding
lateral migration, avulsion

UPLIFT

SUBSIDENCE

=> channel slope, width,
form, floodplain
hazard, facies

isostacy, flexure, deformation

erosion -> tectonics

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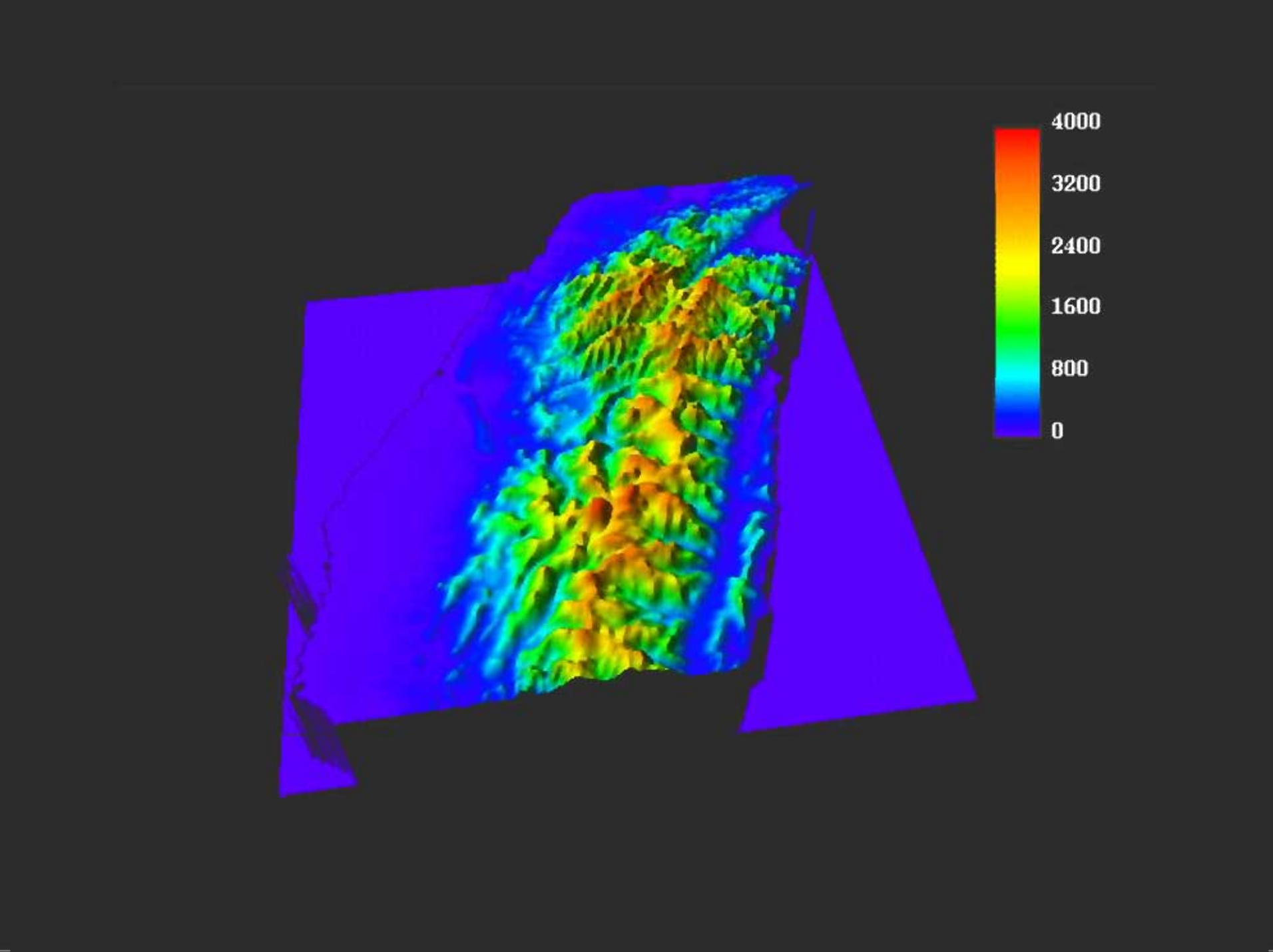
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