

# 3D Geology Boot Camp



Dr. Ryan J. McCarty  
[rmccarty@Saddleback.edu](mailto:rmccarty@Saddleback.edu)

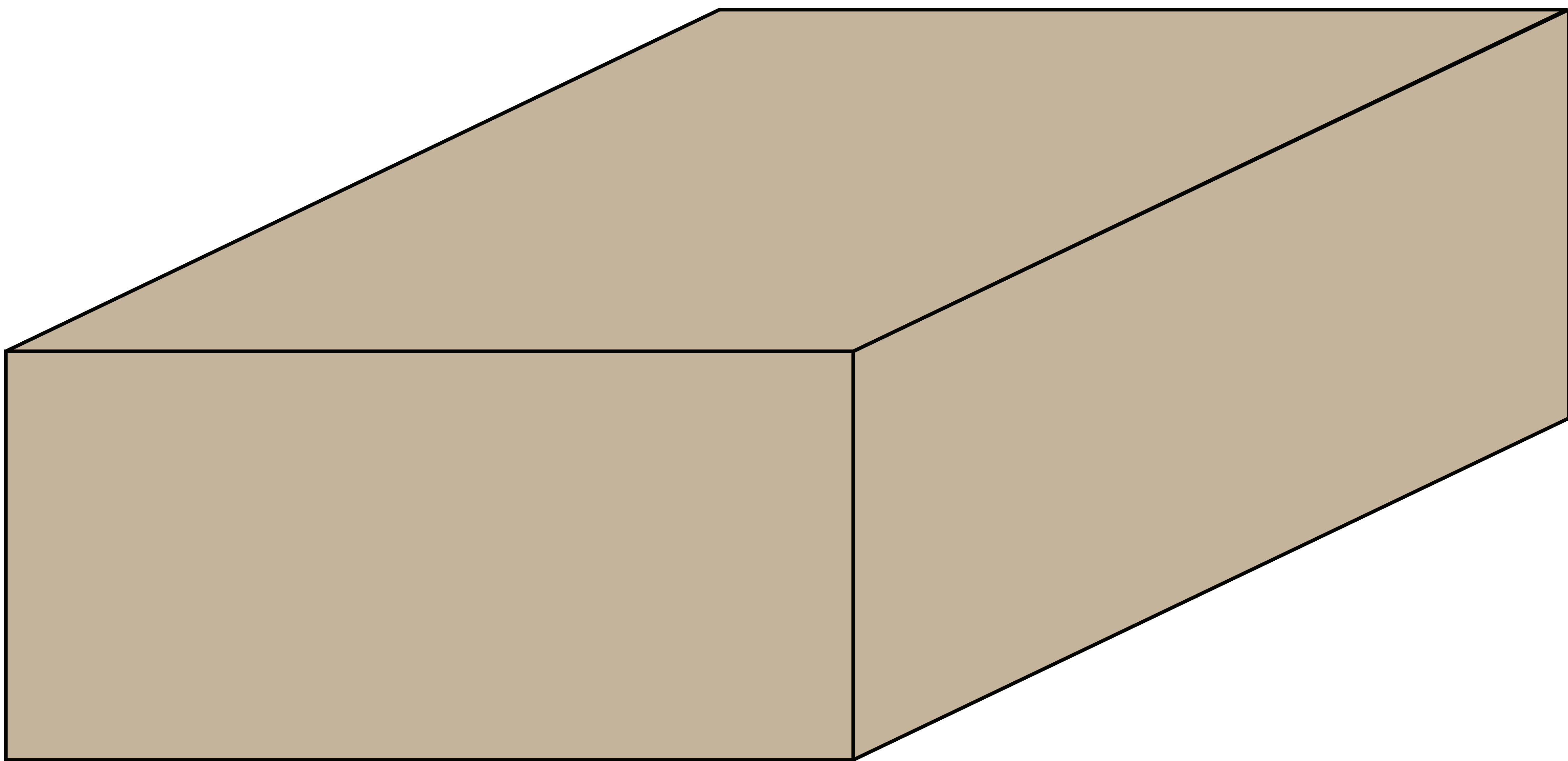
Office hours 8:30-9:00  
12:00-12:30, 5:00-6:00

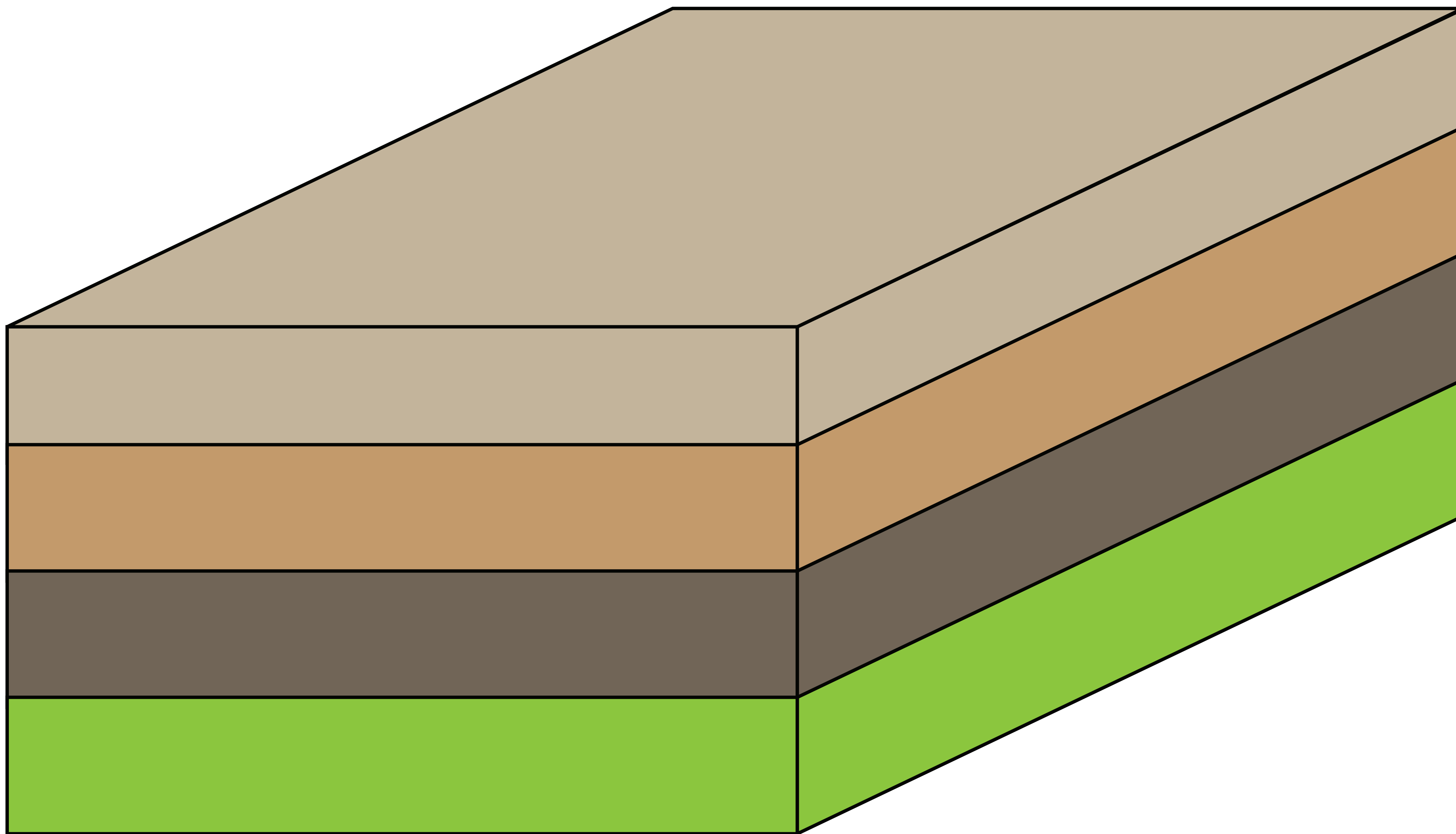


Cake!

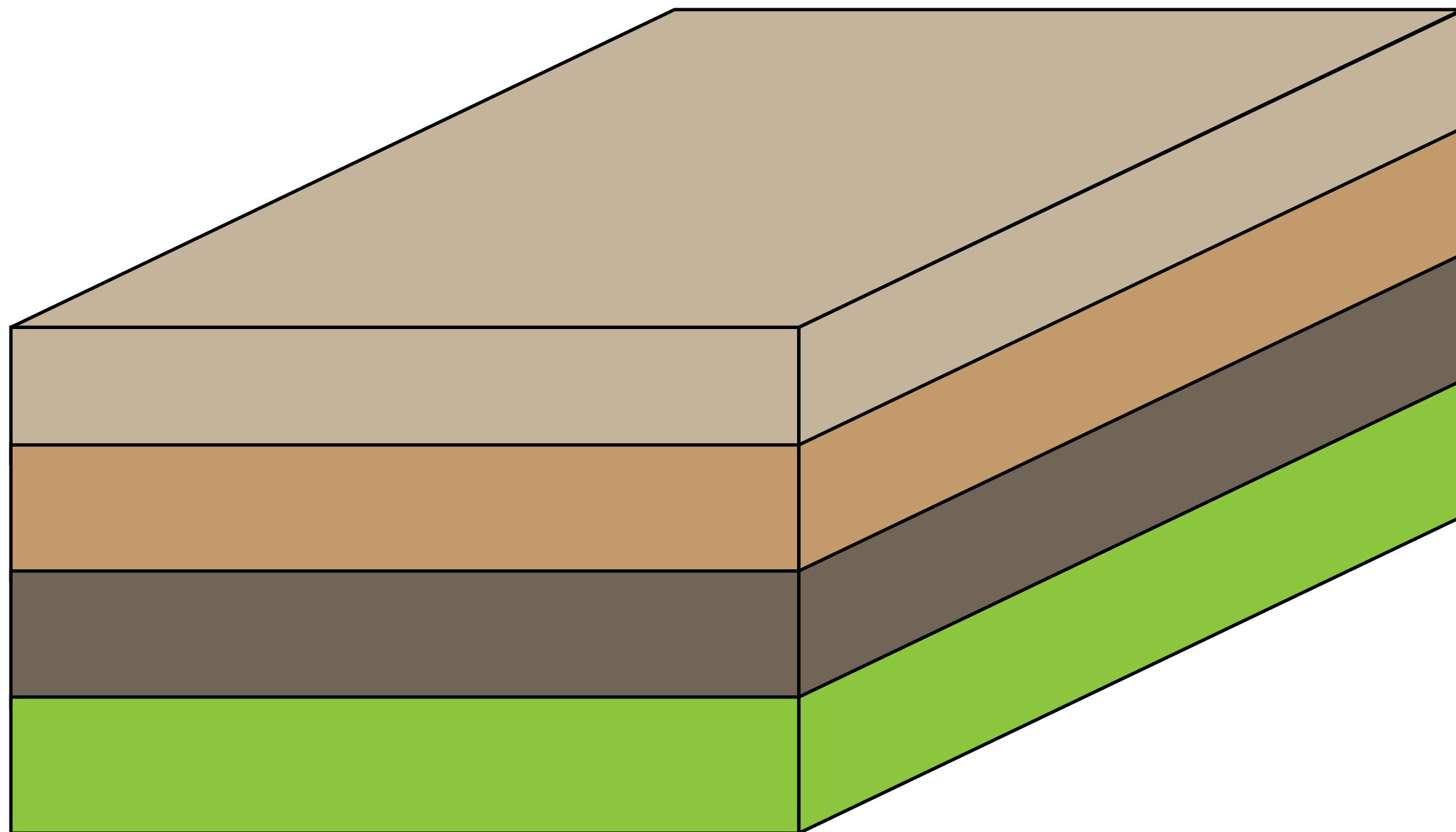
# Meyer Lemon Cheesecake Cake

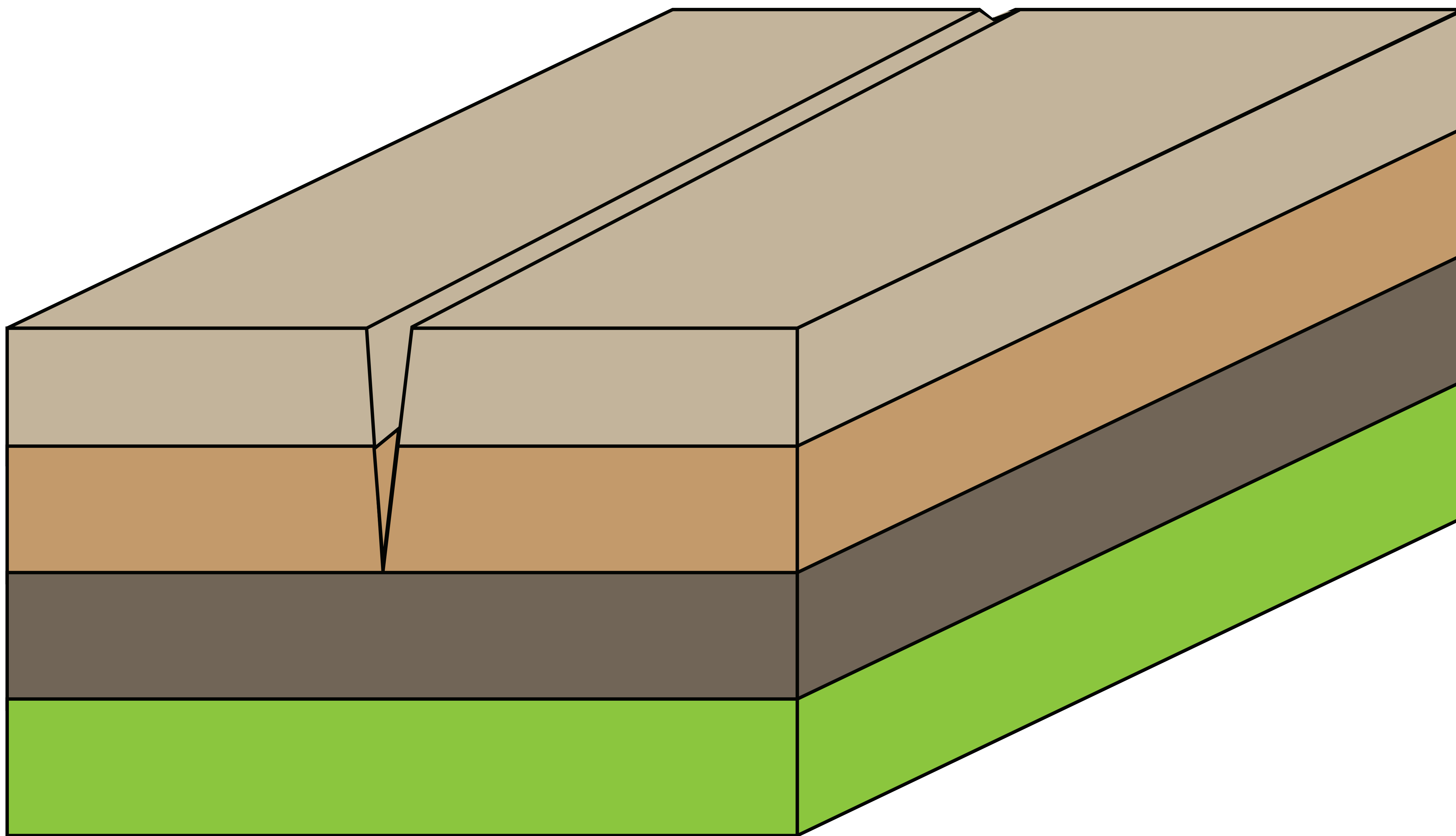






Which layer is oldest?



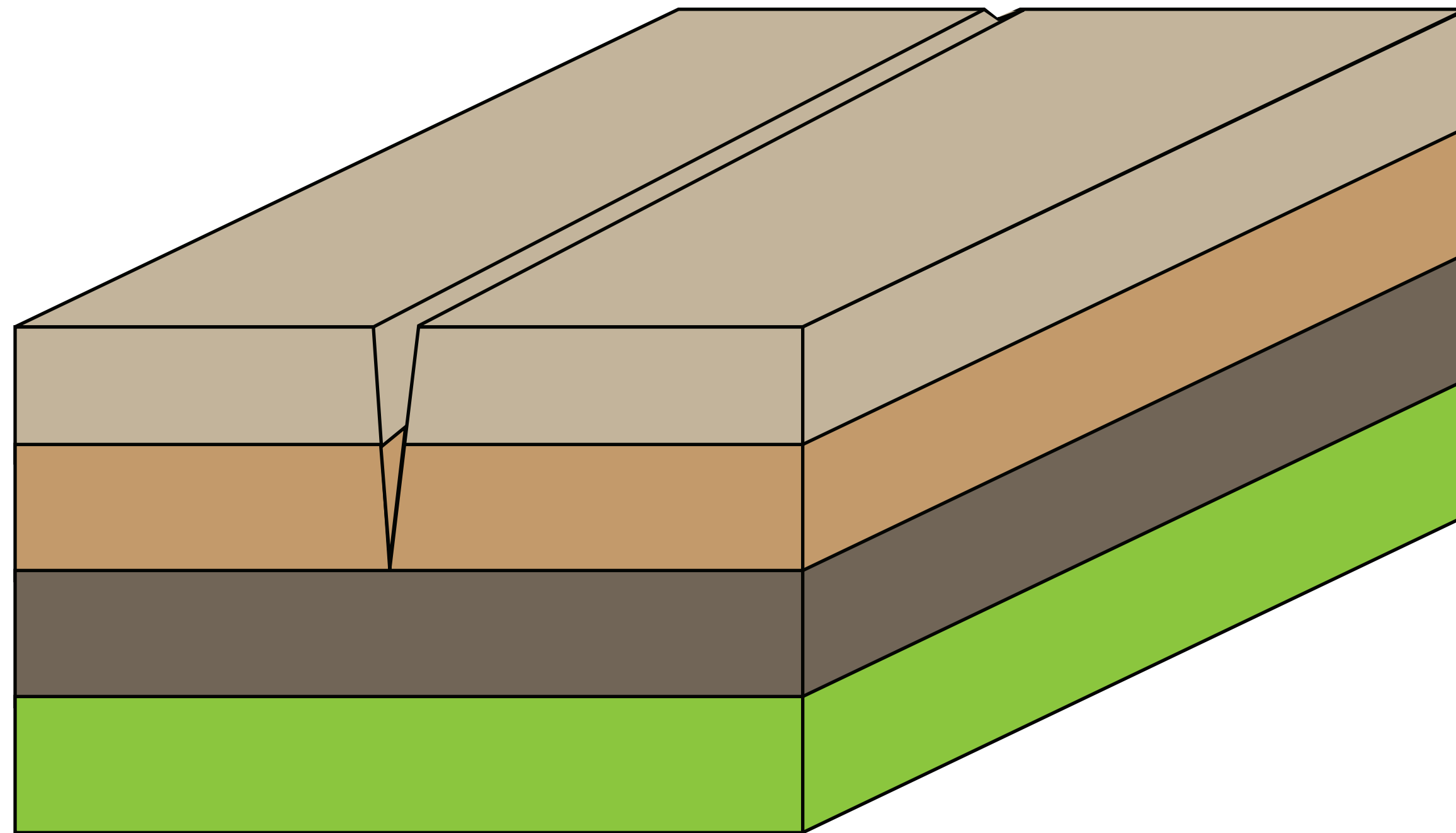


Which layer is oldest?

What is this new feature called?

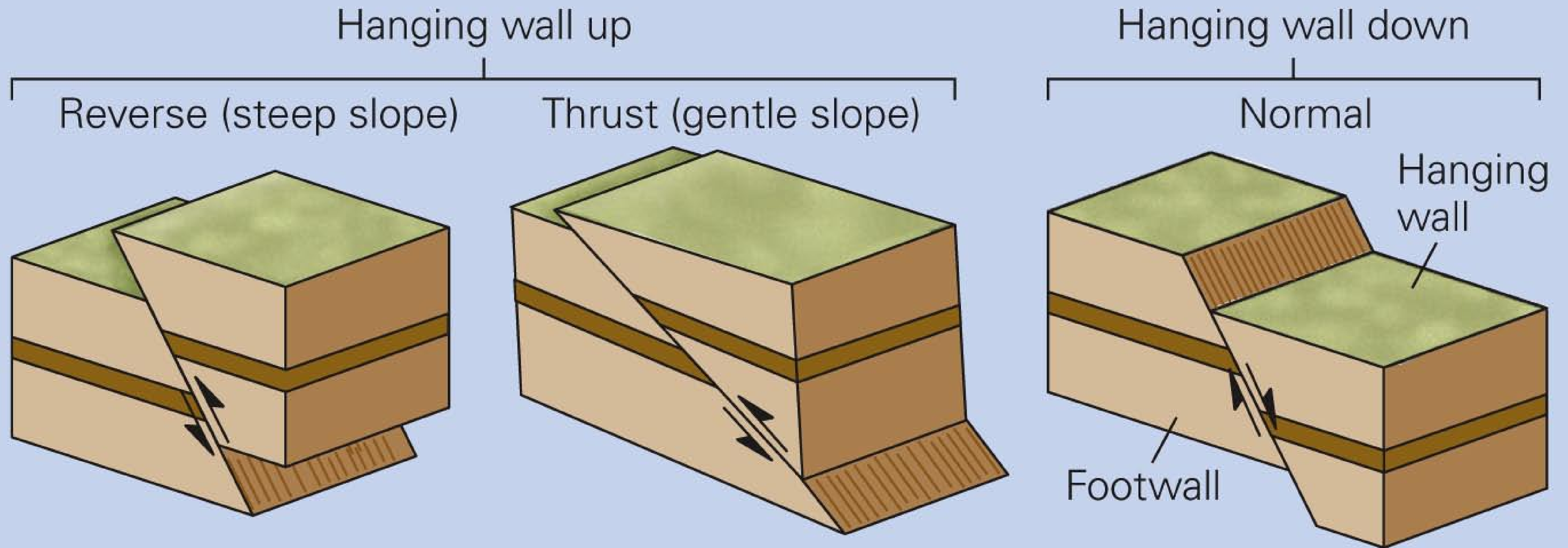
What might have formed this feature?

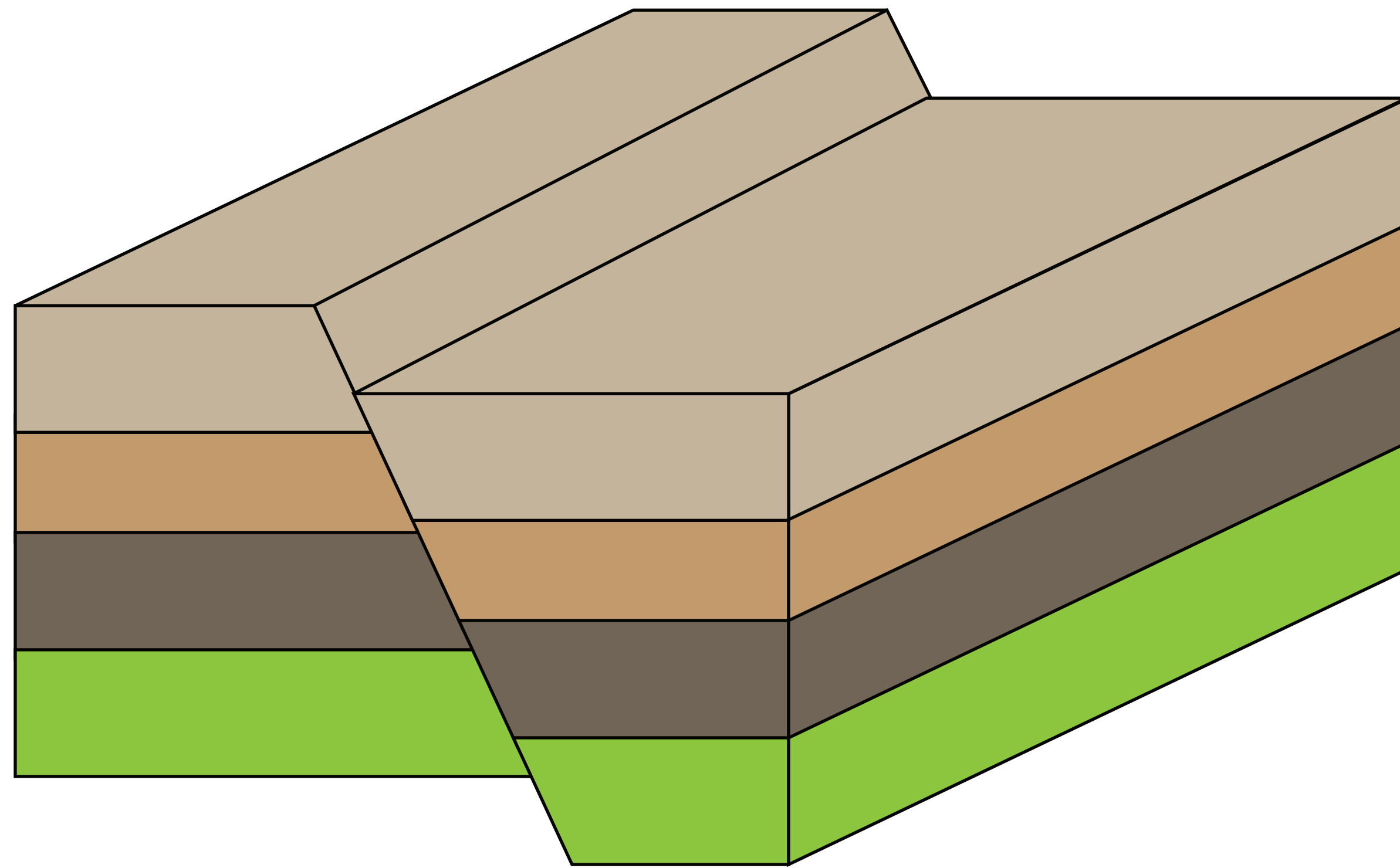
Draw on arrows of where  
the largest stress is?





## Dip-slip faults





Which block is the hanging wall?

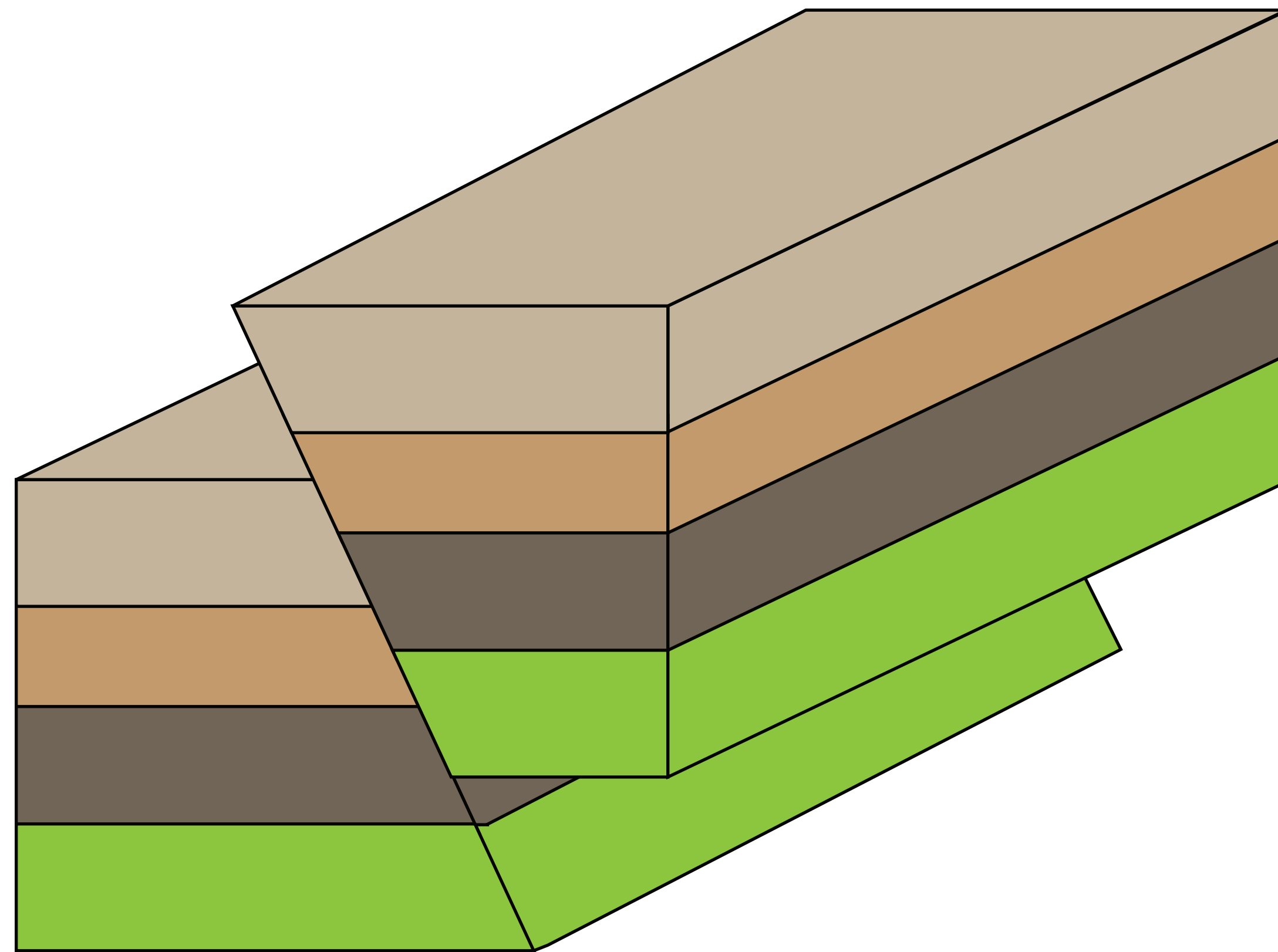
Which block is the foot wall?

How do you remember this?

What type of fault is this?

Where is the fault scarp?

Draw movement arrows



Which block is the hanging wall?

Which block is the foot wall?

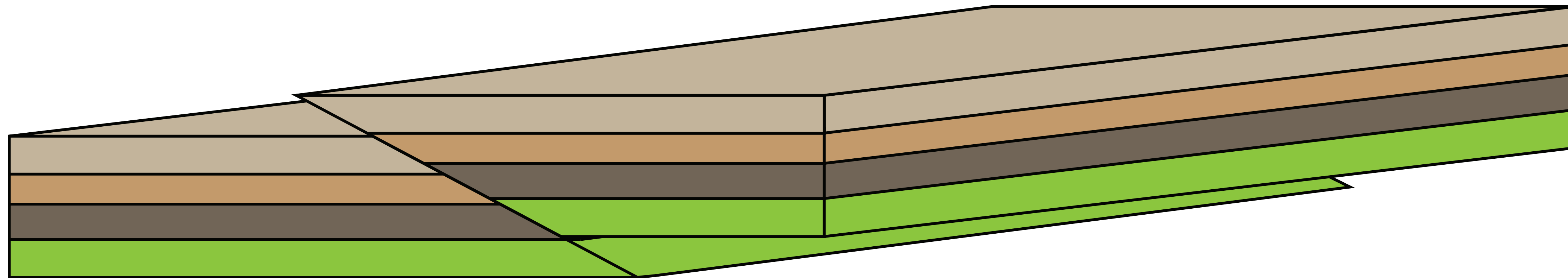
How do you remember this?

What type of fault is this?

Where do we measure the displacement?

Draw movement arrows

What type of fault is this?



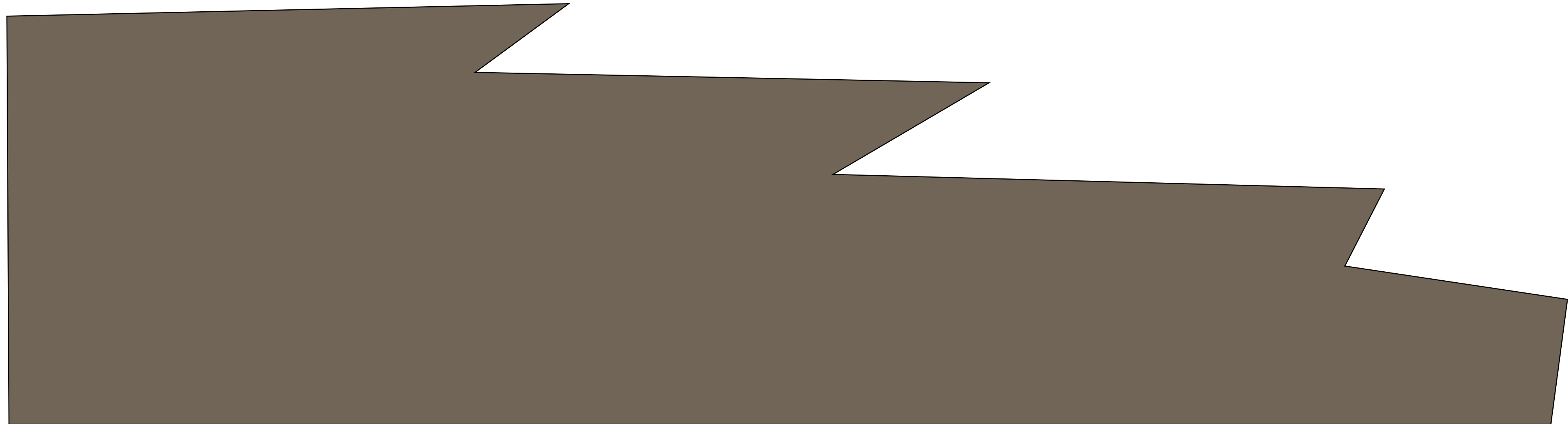


Polished surfaces called slicken slides





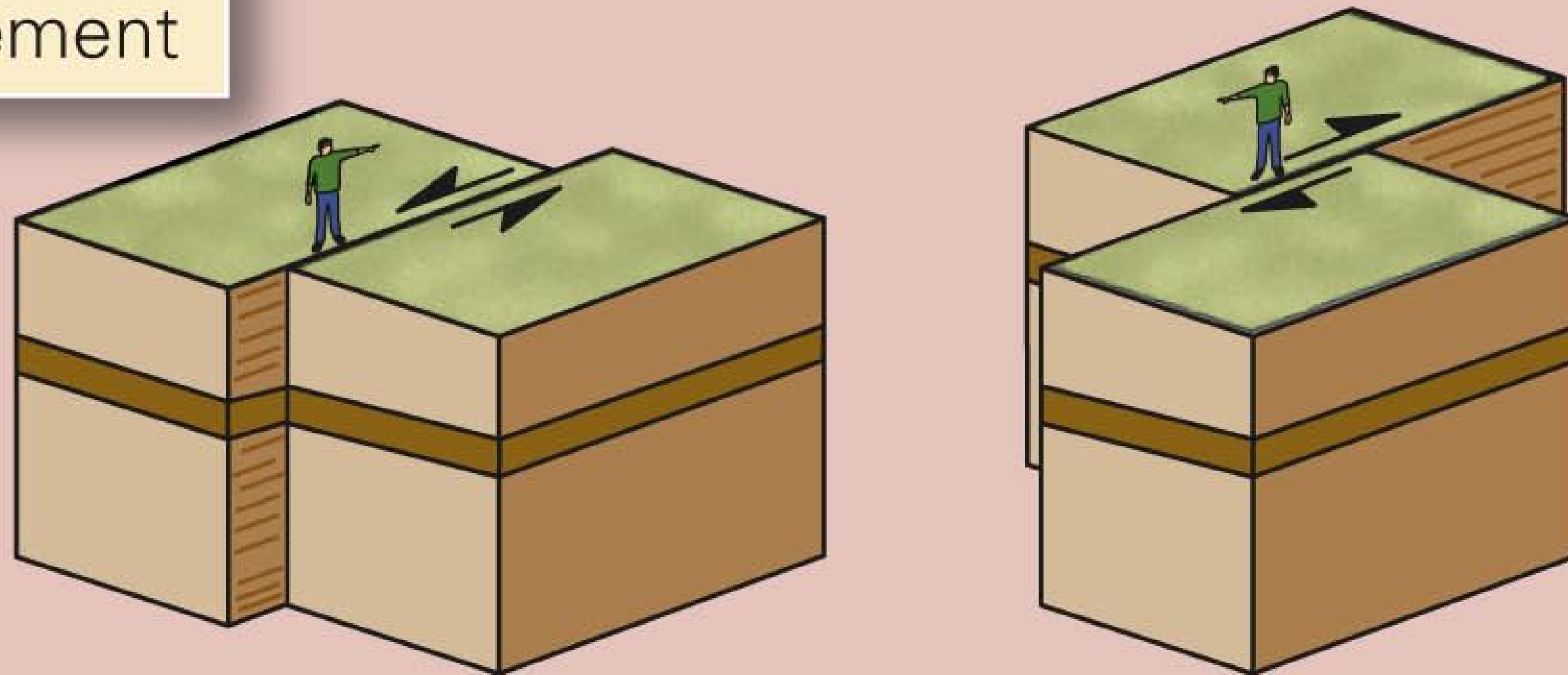
# Petting a hedgehog

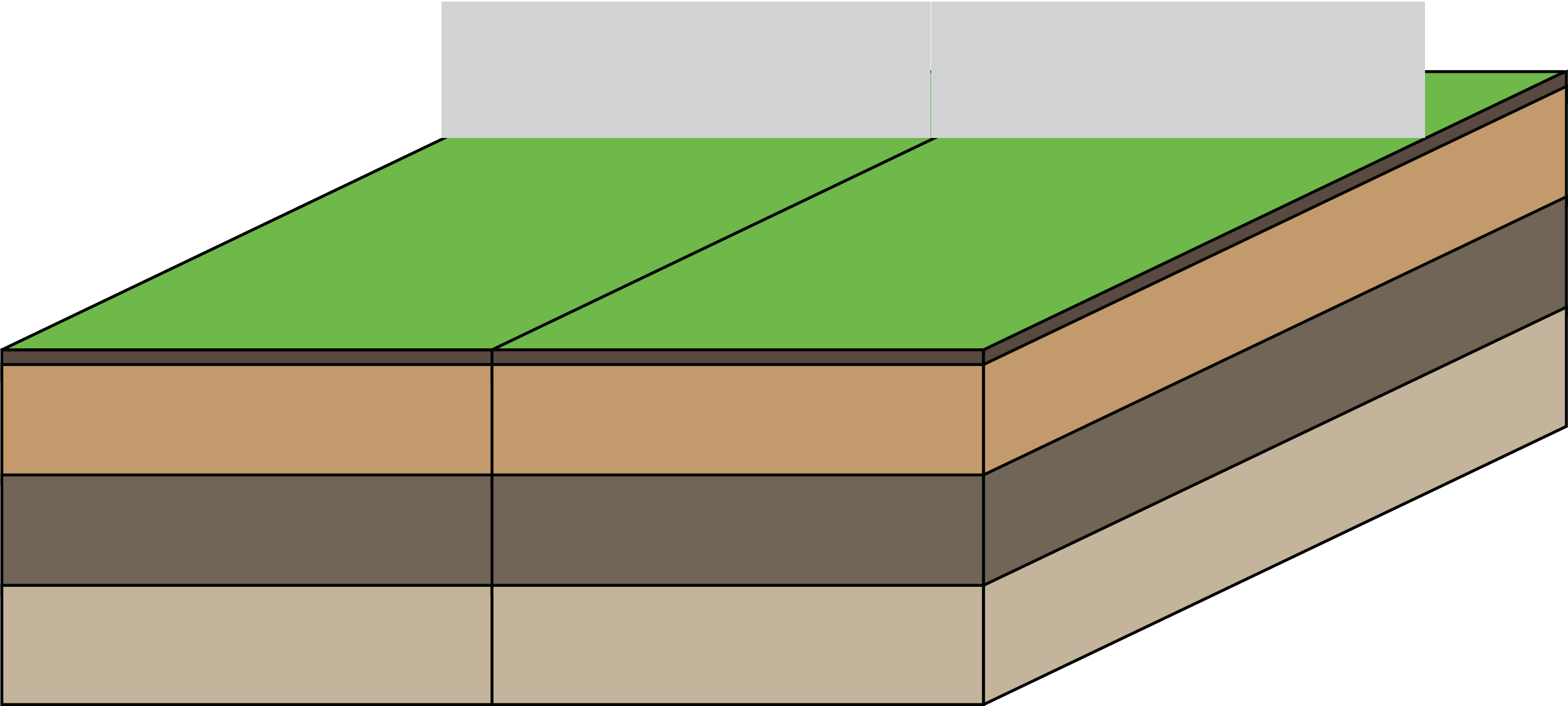


Left-lateral  
displacement

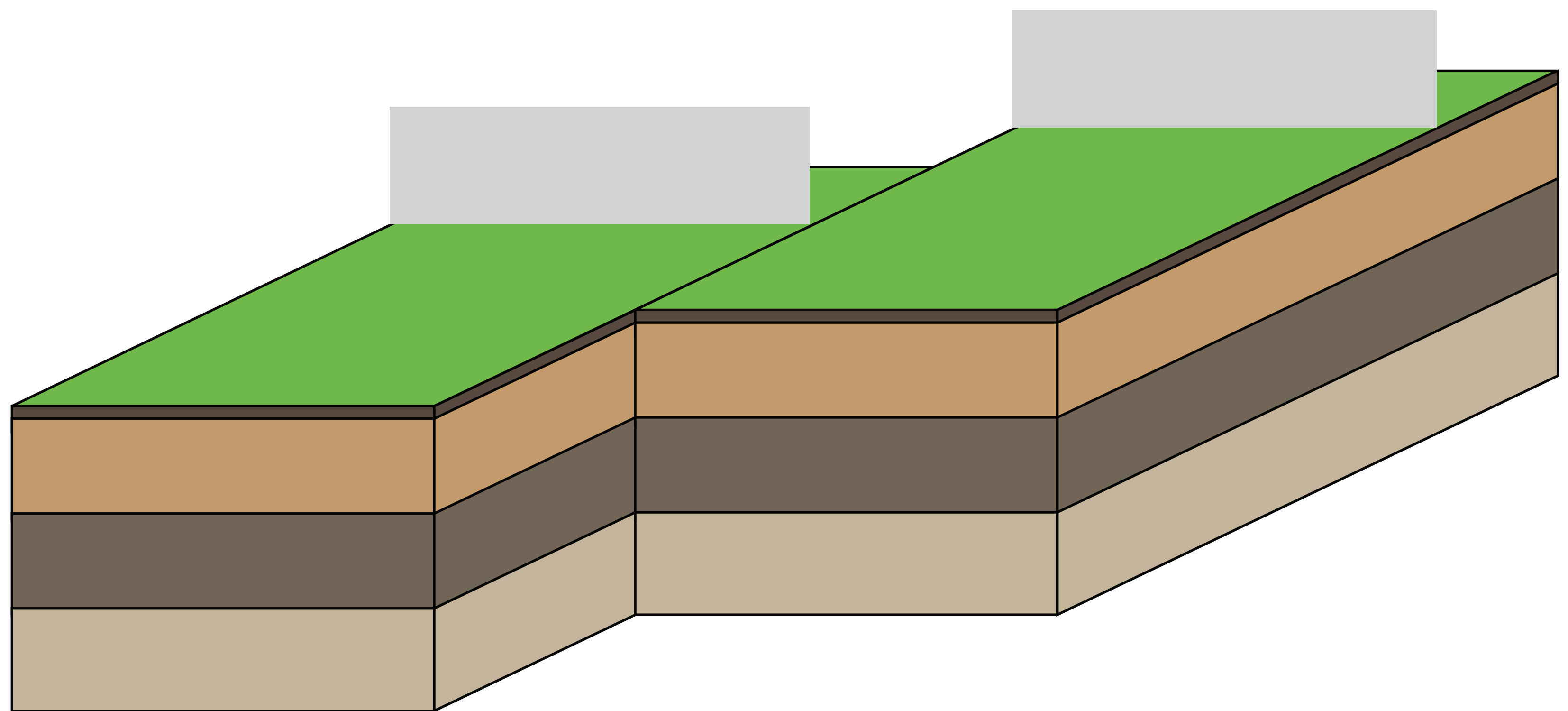
## Strike-slip faults

Right-lateral  
displacement

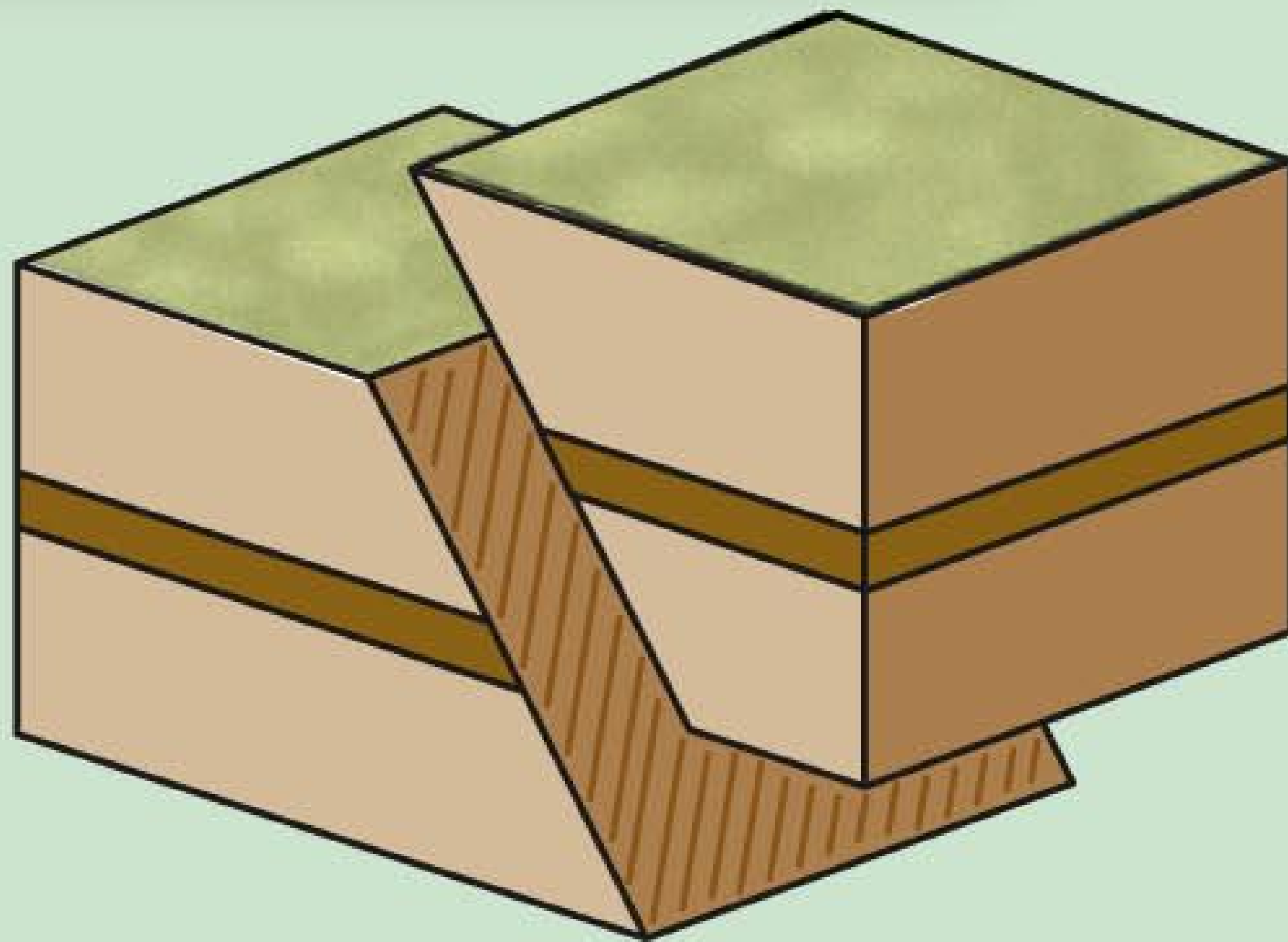






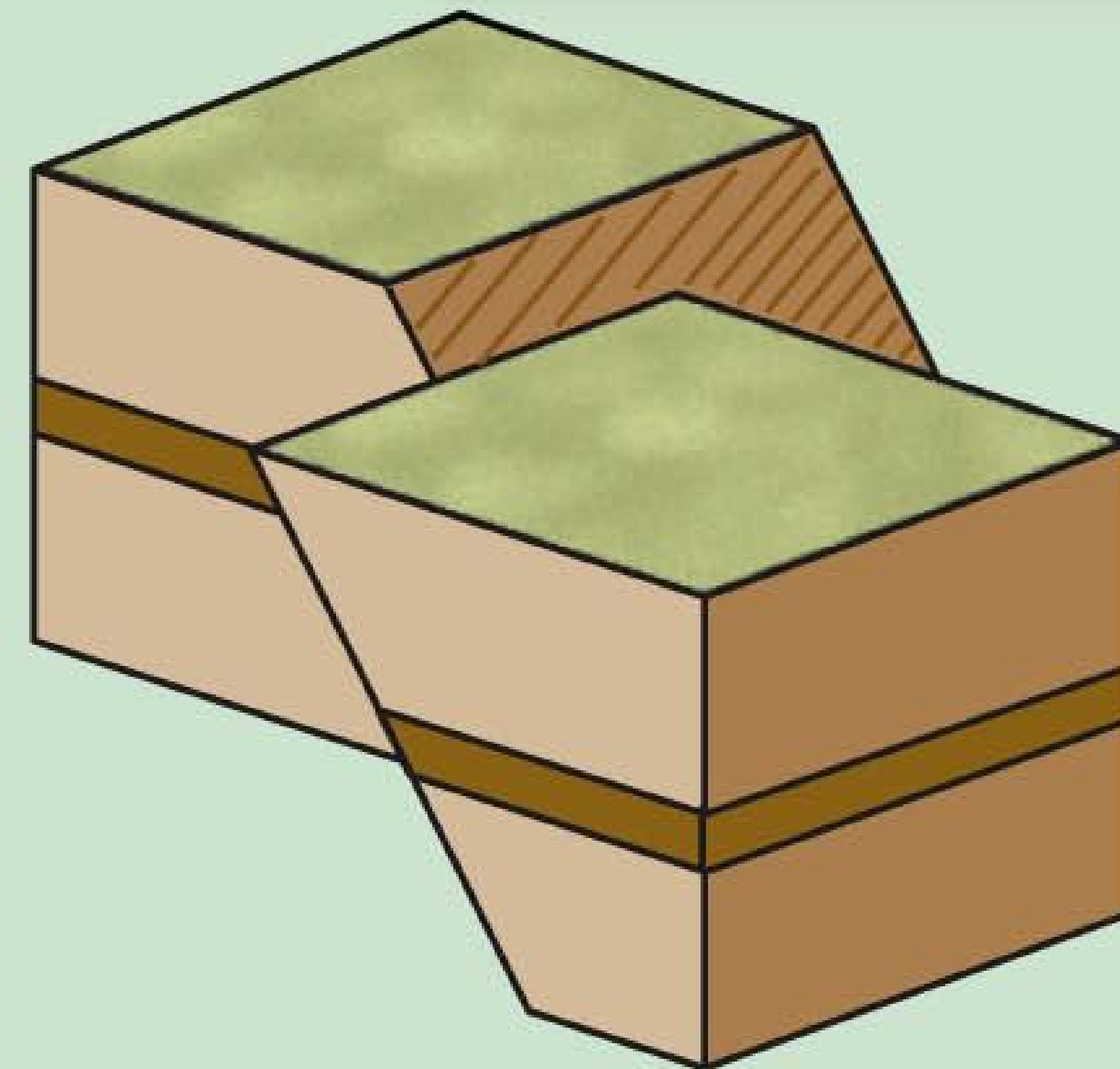


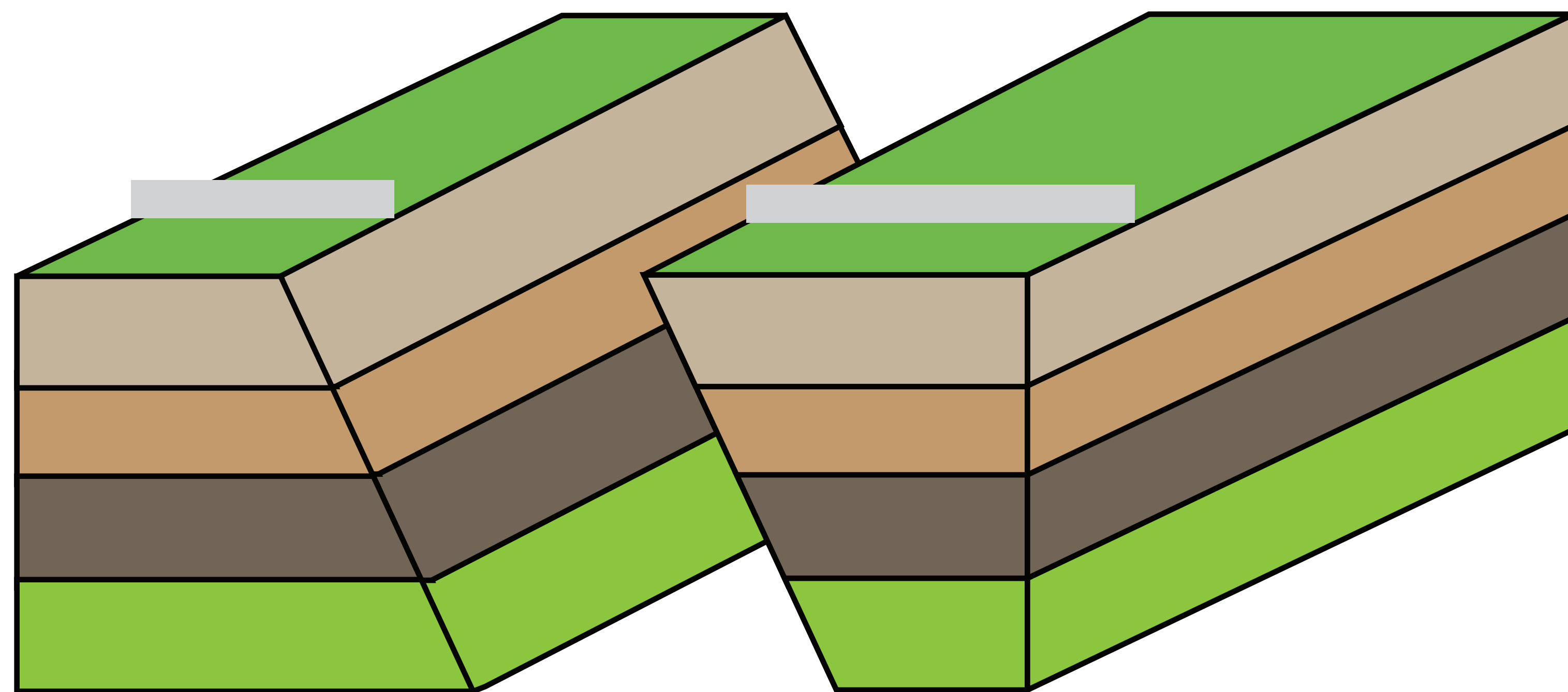
Reverse plus left-lateral displacement

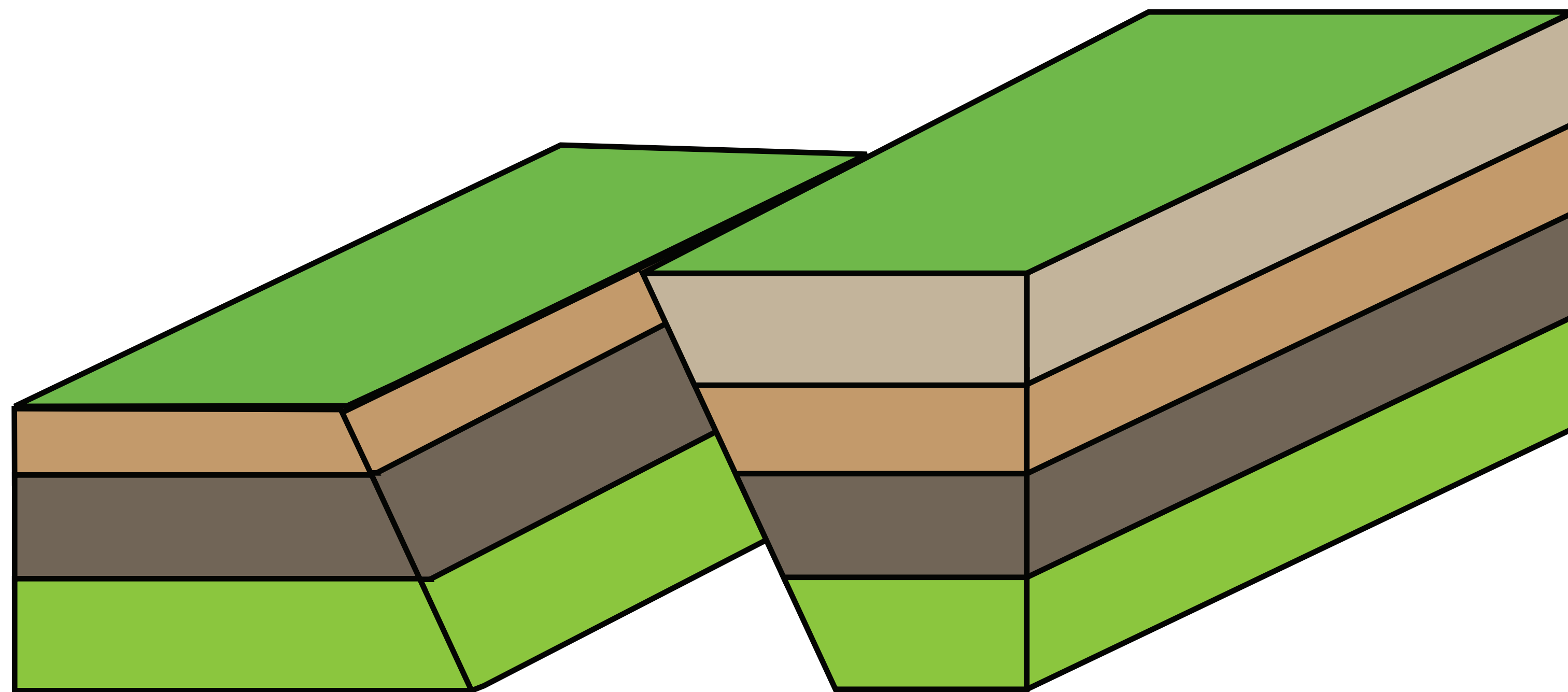


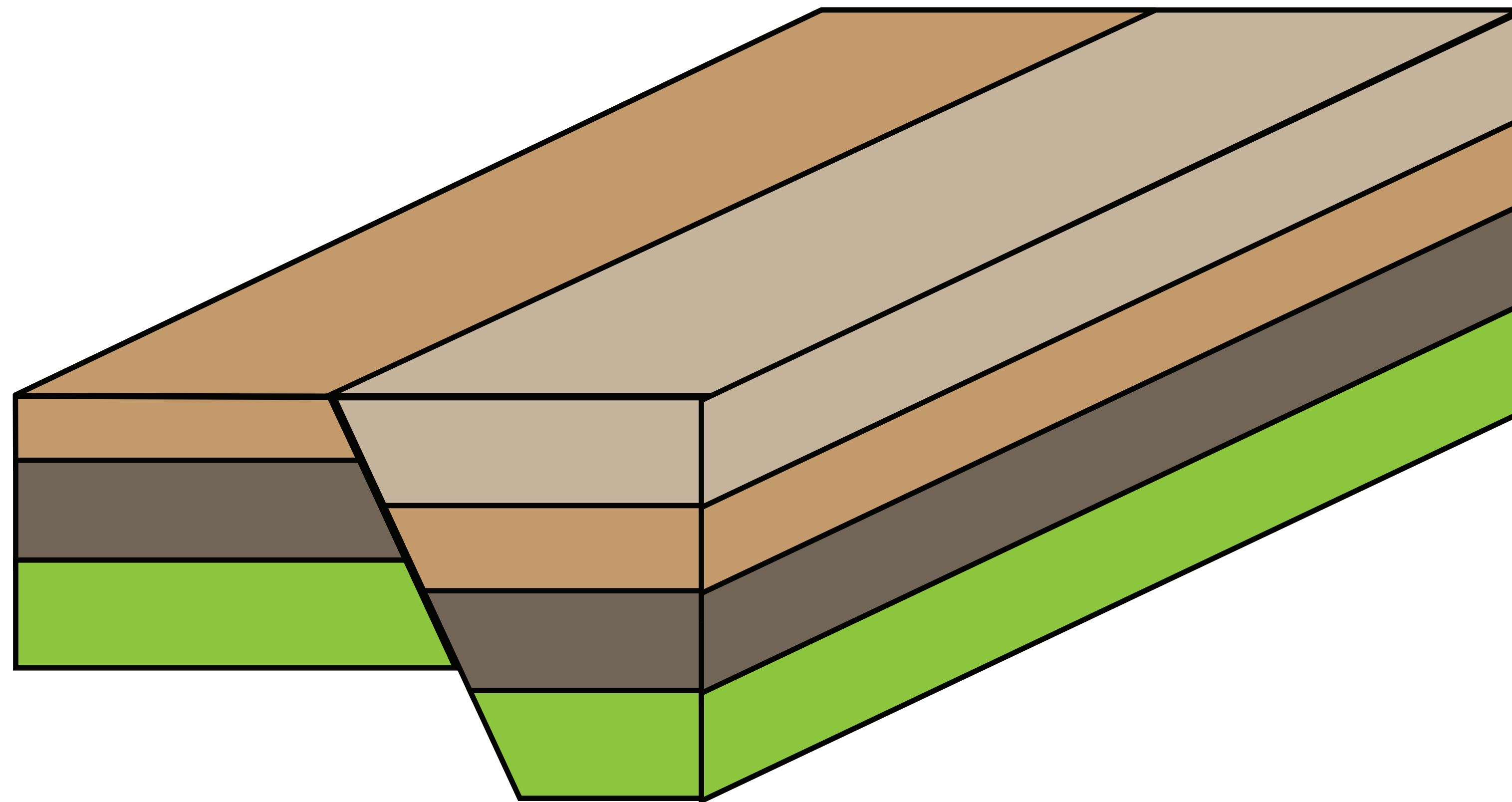
## Oblique-slip faults

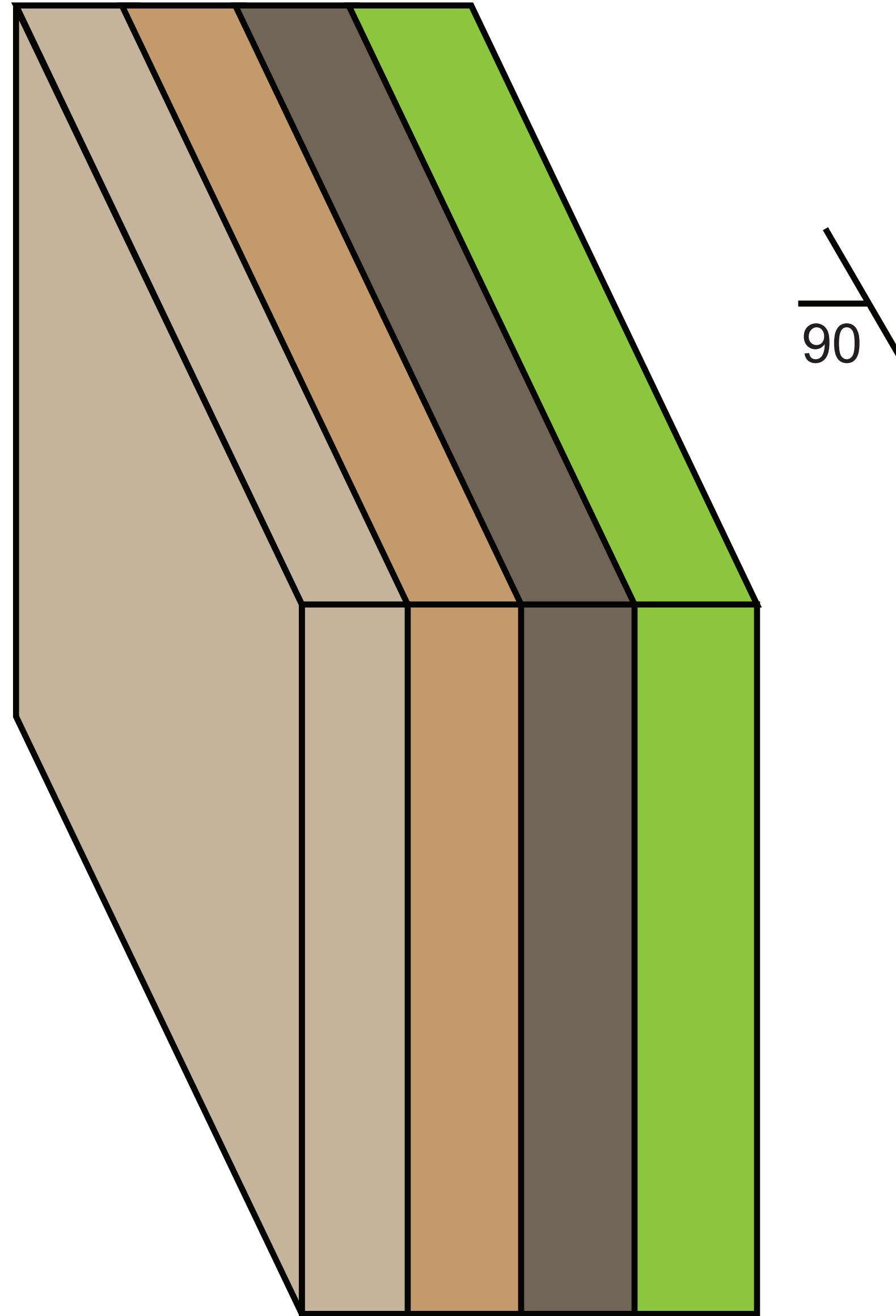
Normal plus right-lateral displacement



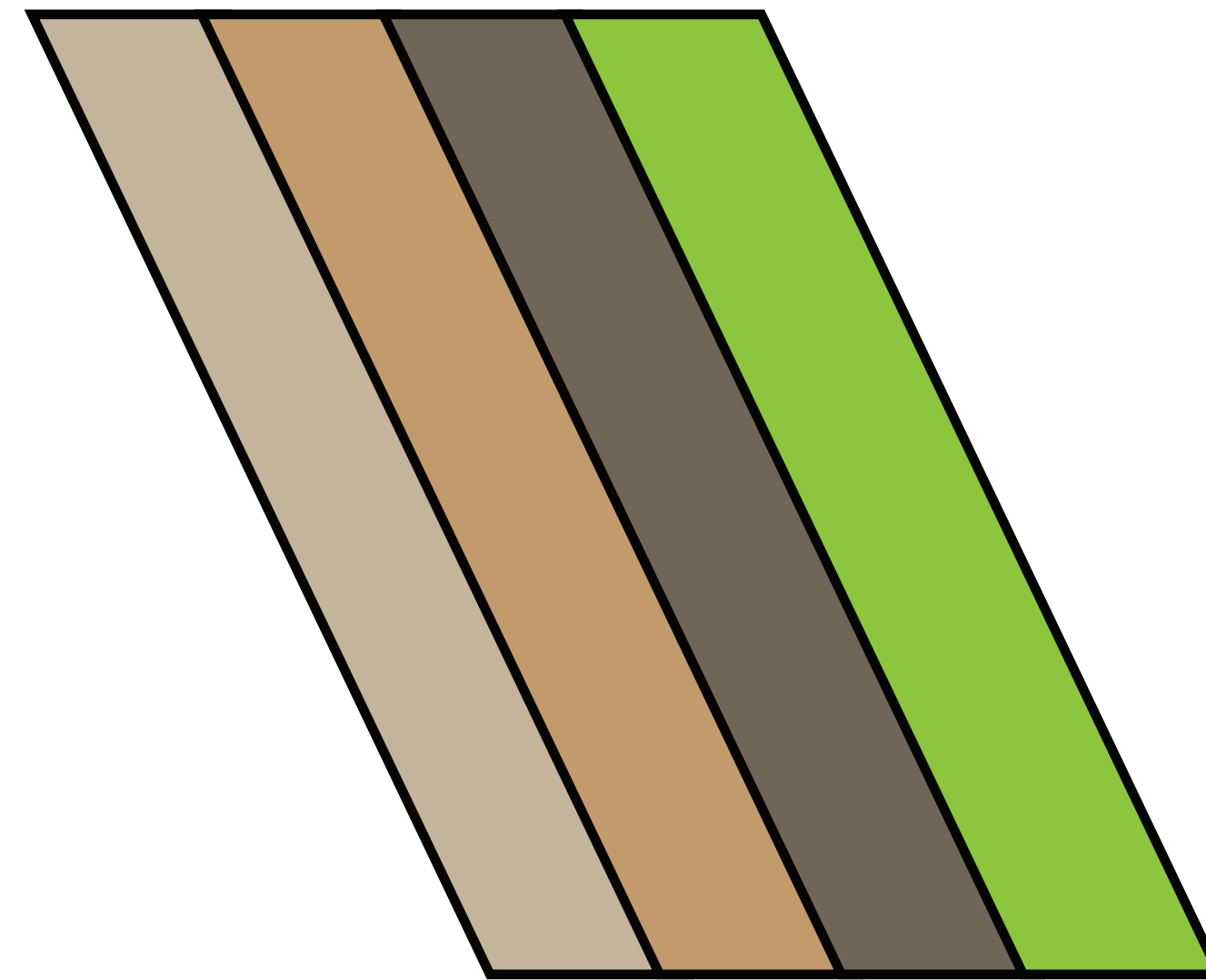






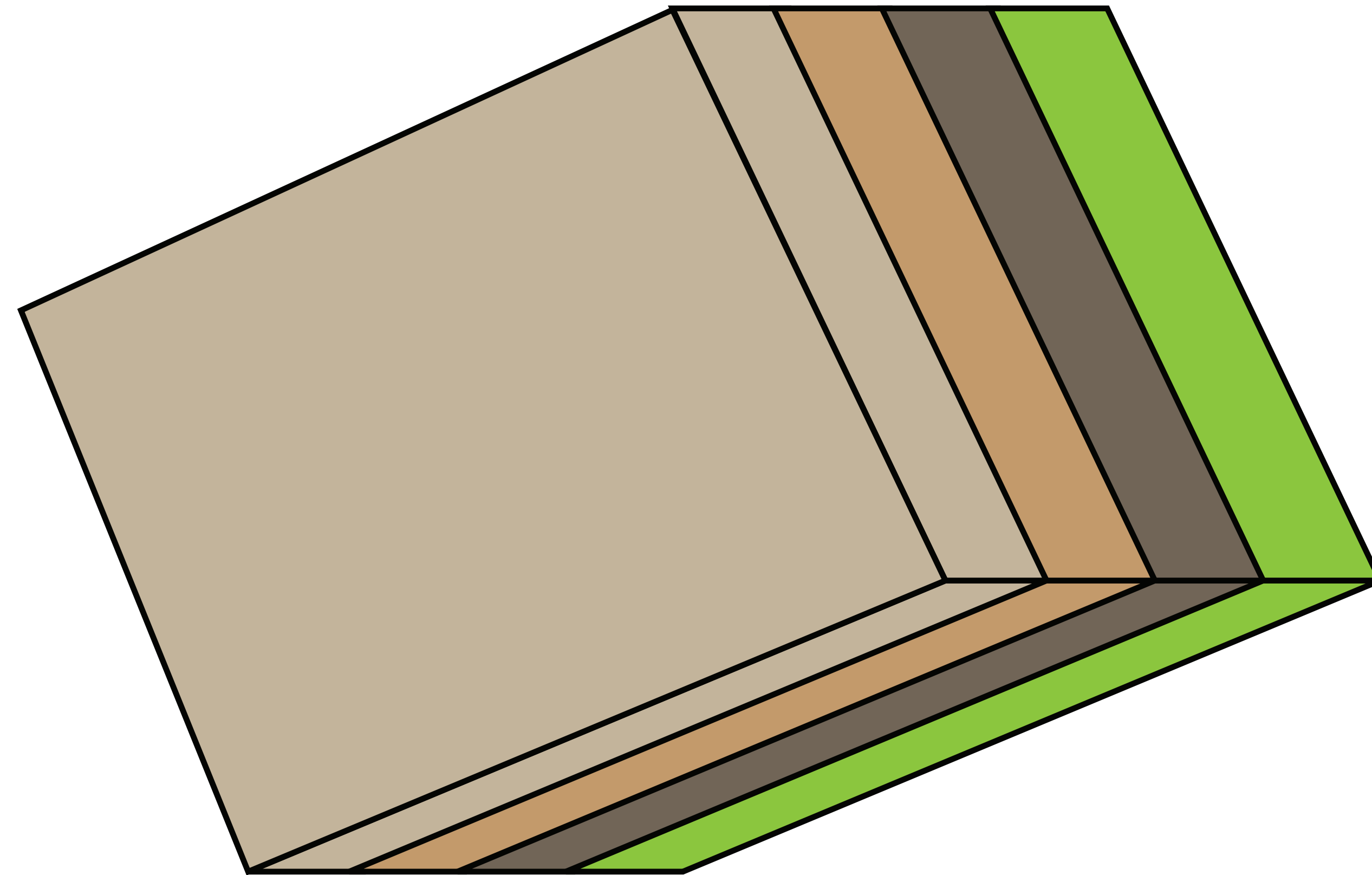


$\frac{45}{\text{---}}$



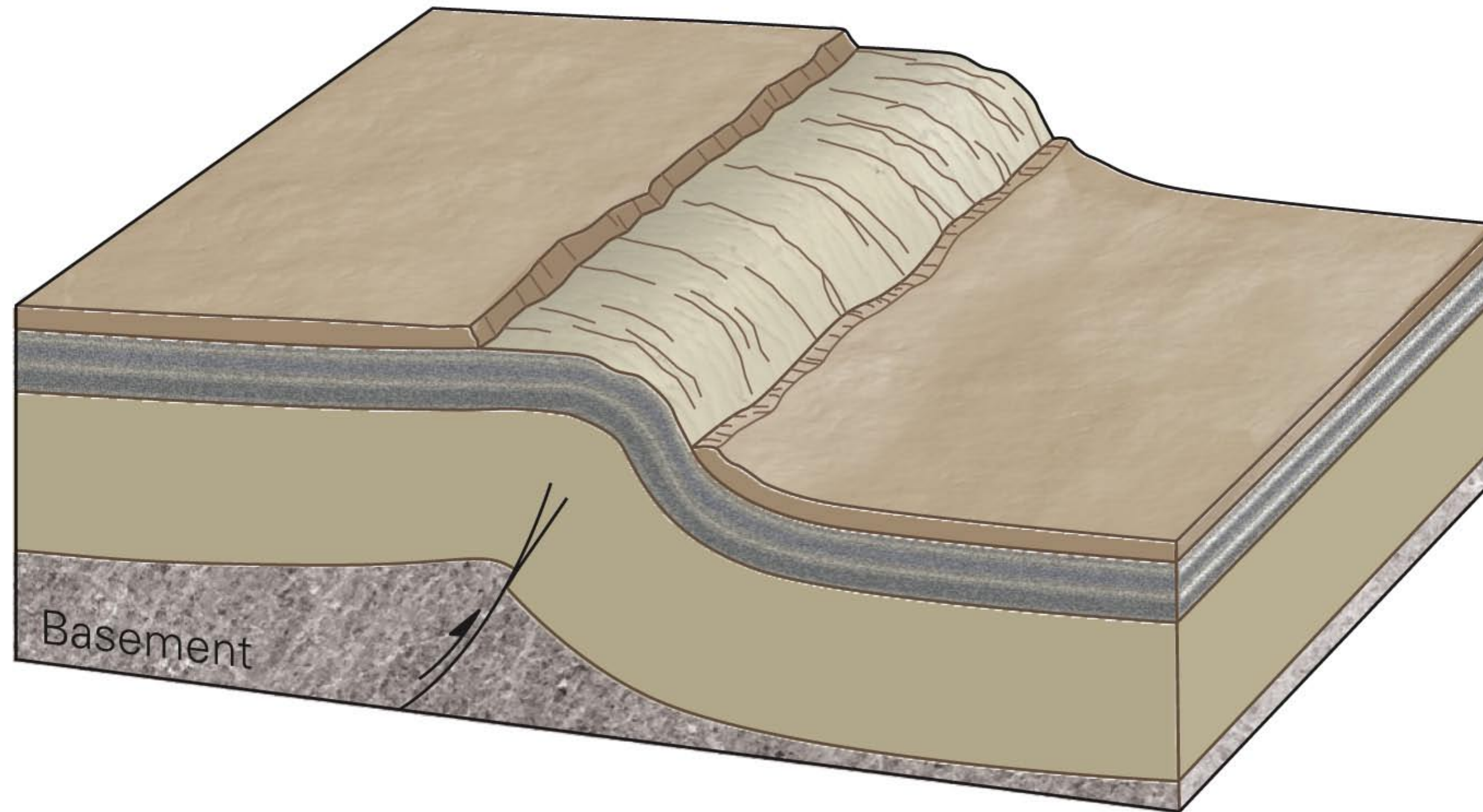
Draw the underground of this

$\frac{45}{\text{°}}$





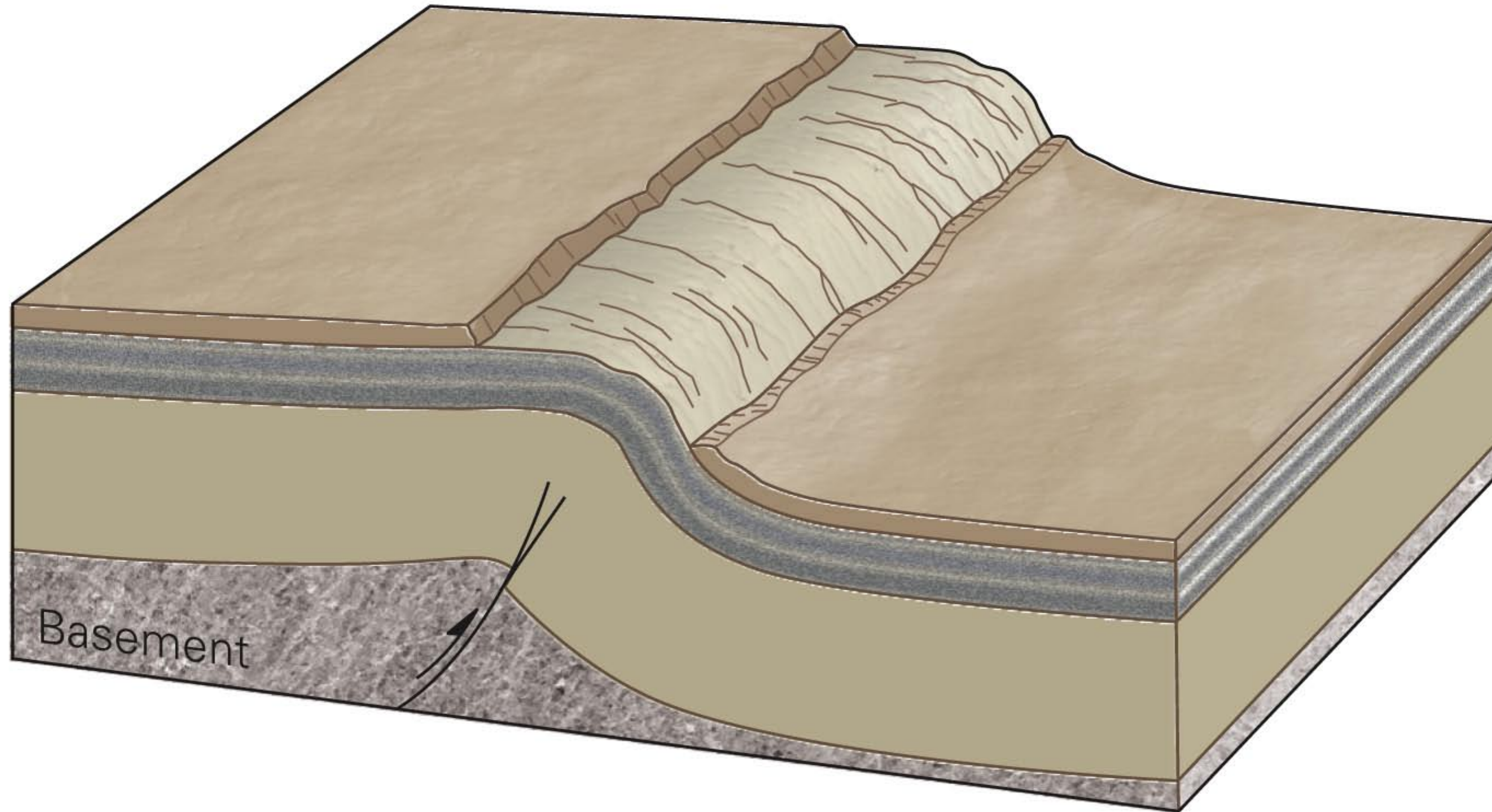
# Monocline



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# Monocline



Which block is the hanging wall?

Which block is the foot wall?

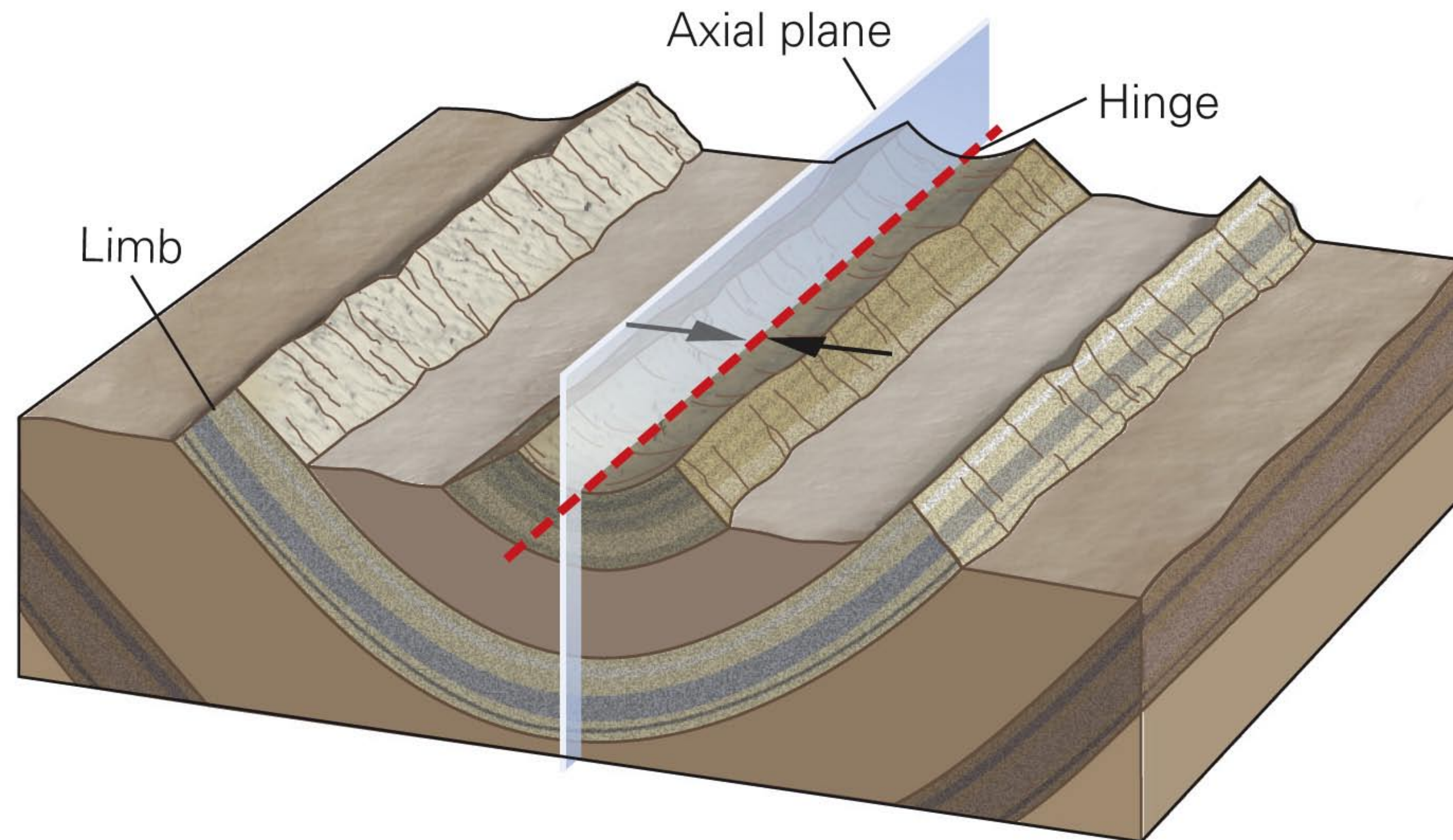
How do you remember this?

What type of fault is this?

Draw movement arrows



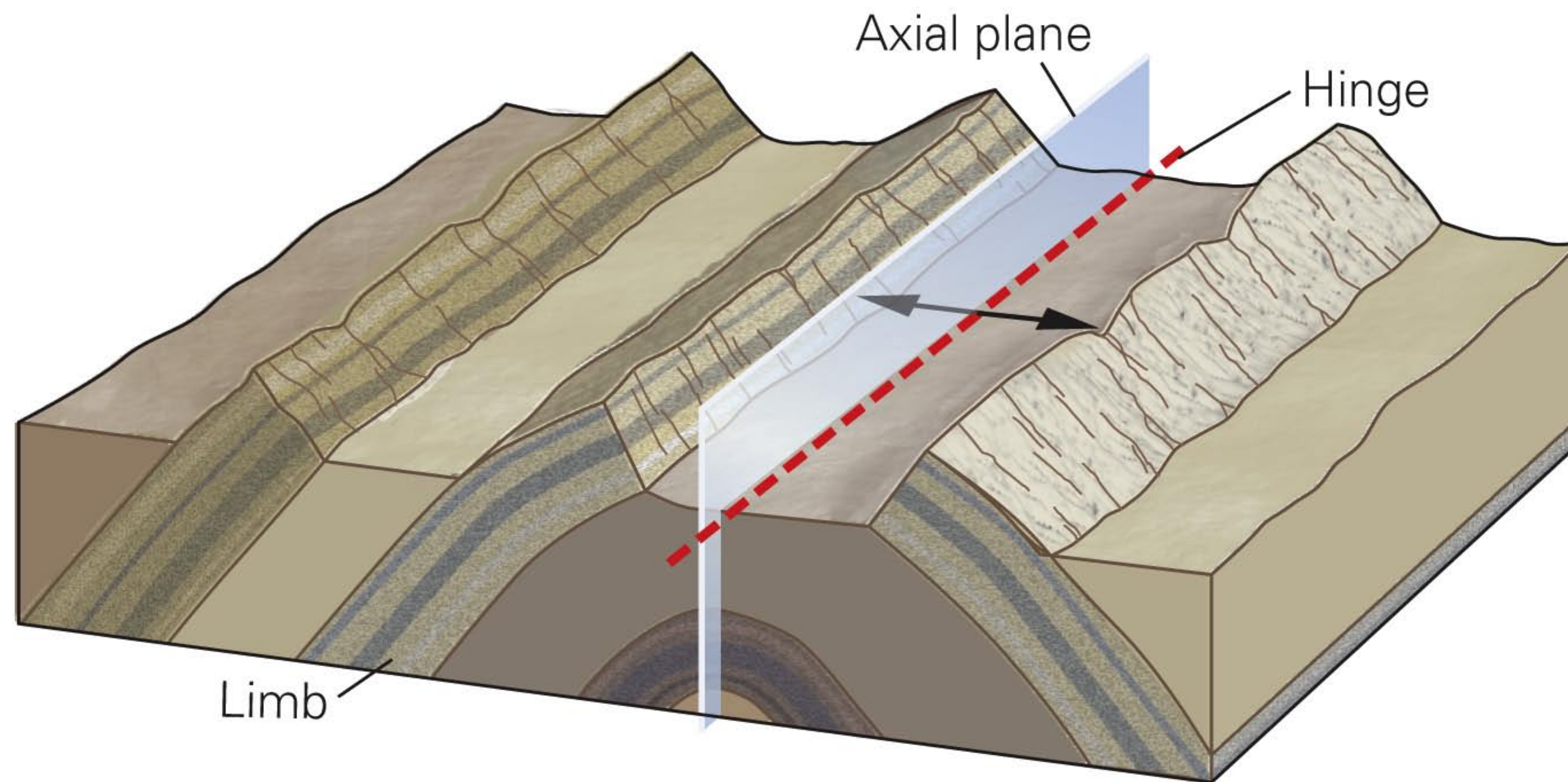
# Syncline



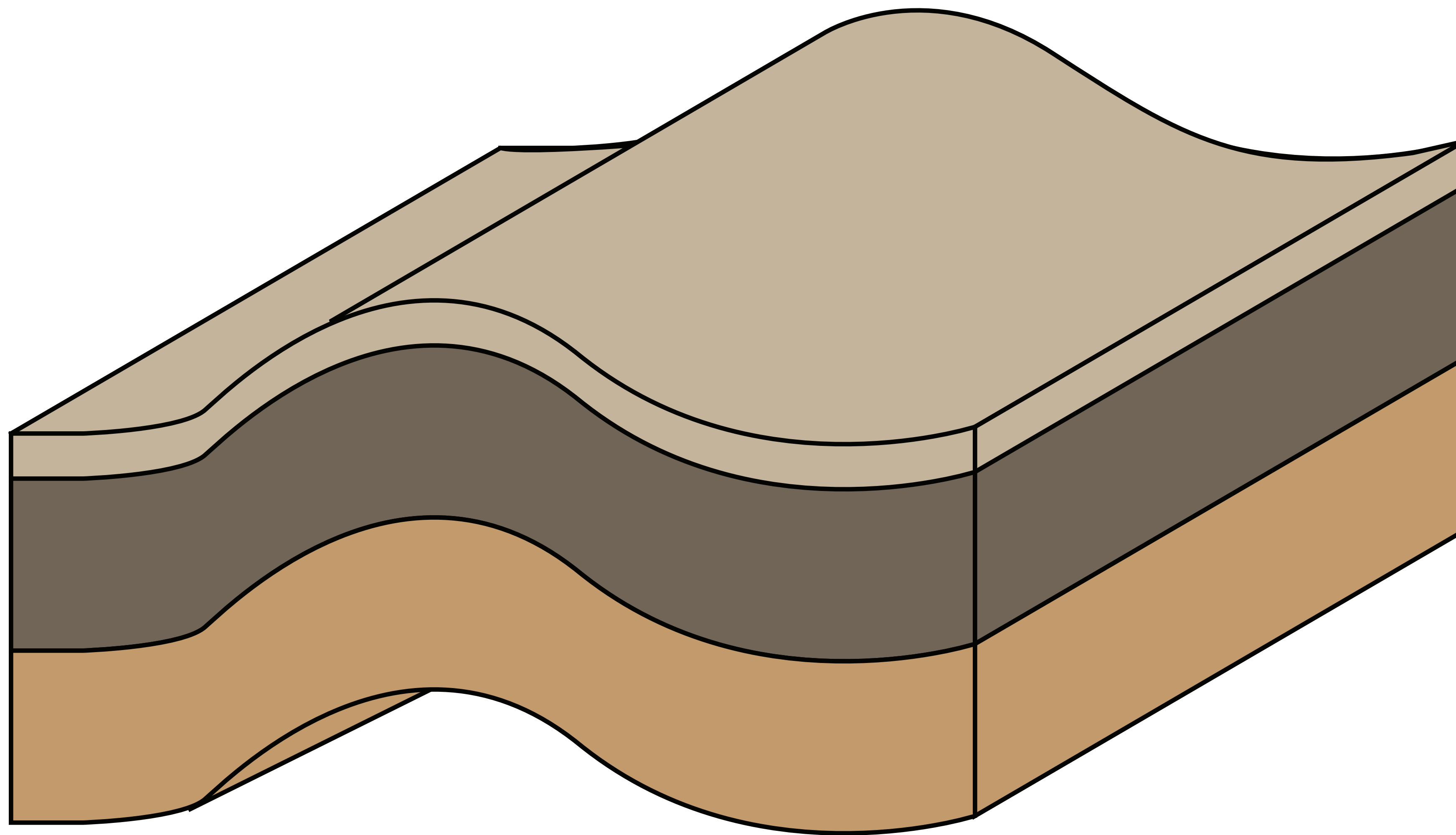
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# Anticline



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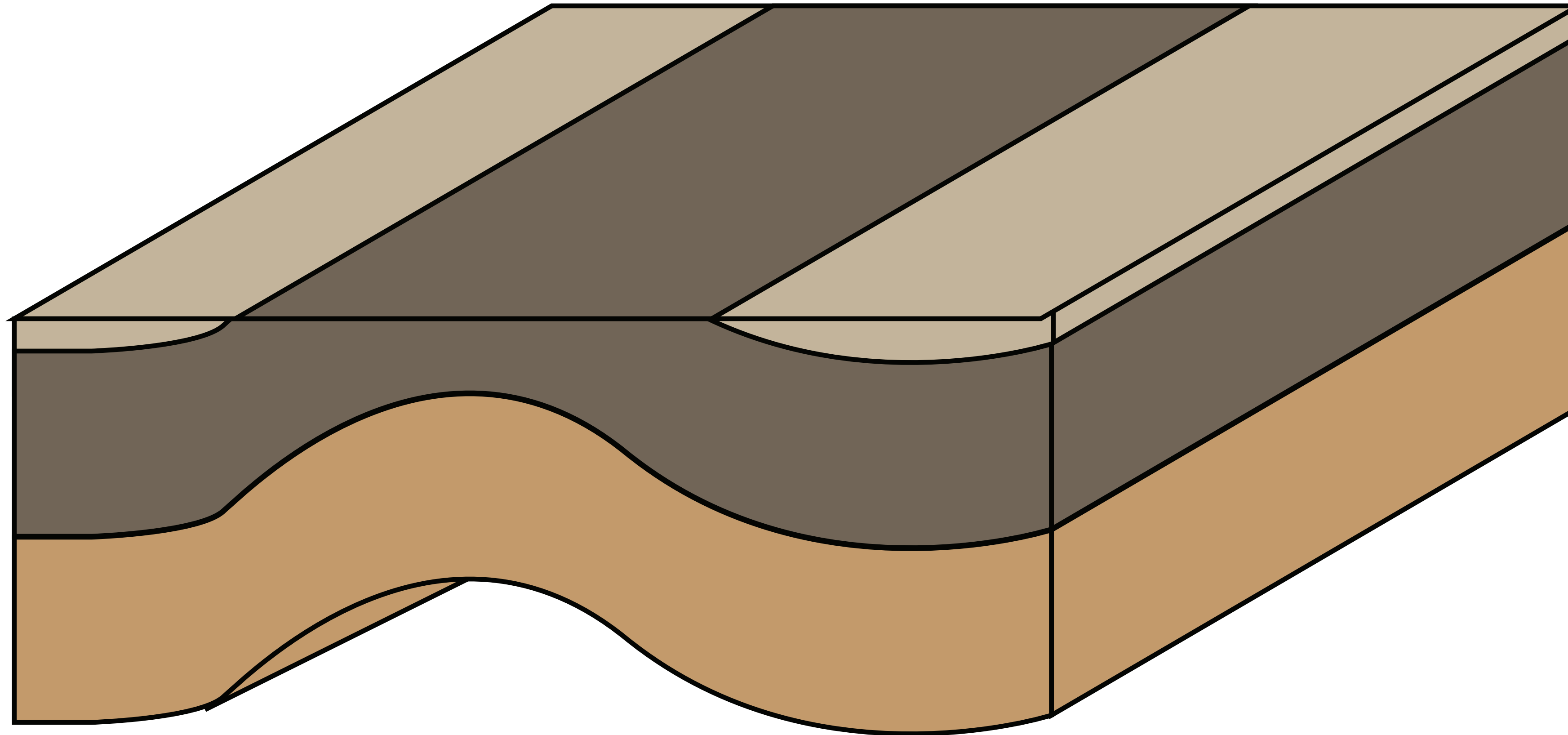


Draw the hinge

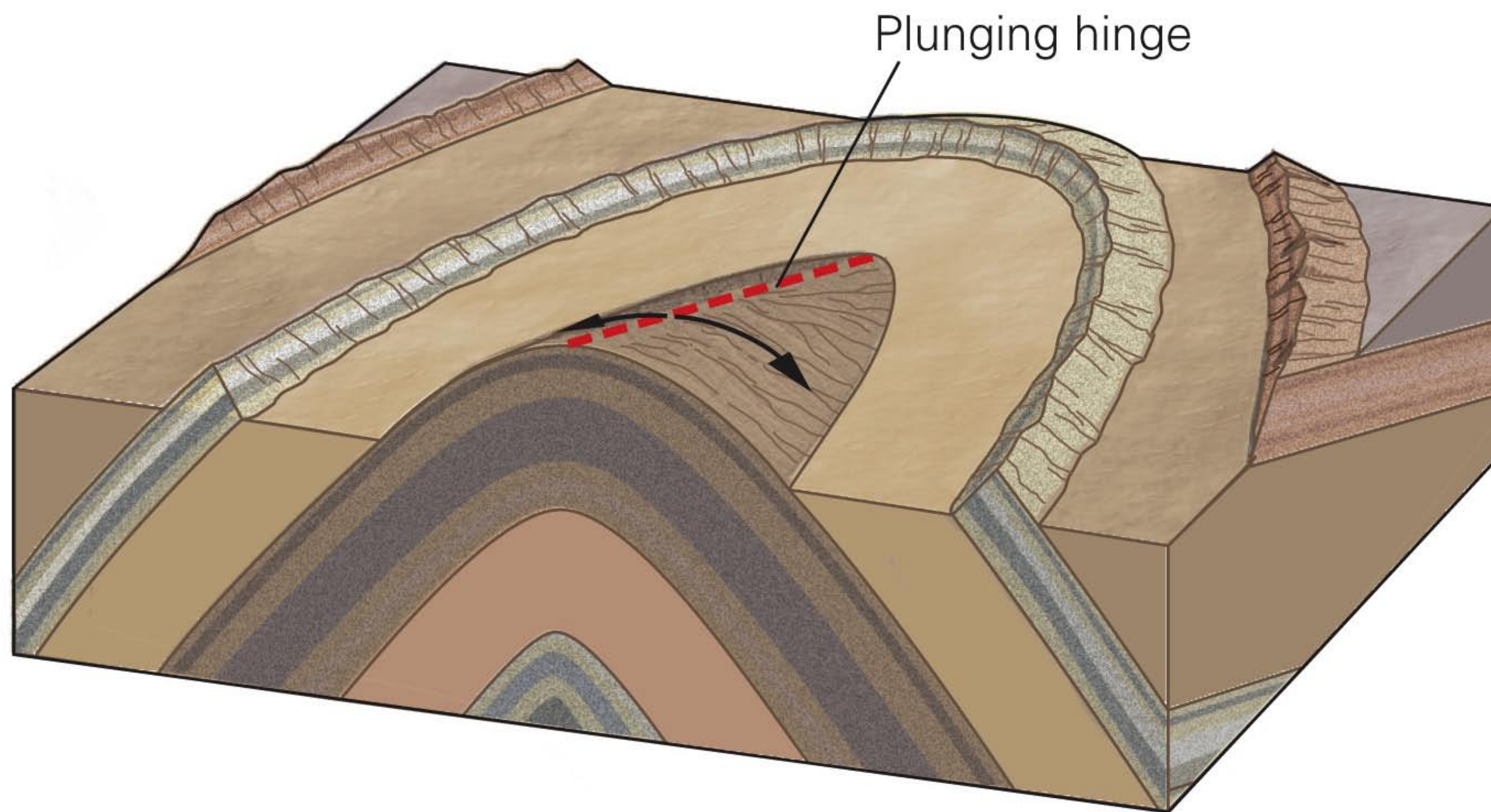
Draw the axial plane

what type of fold is this?

Draw a side



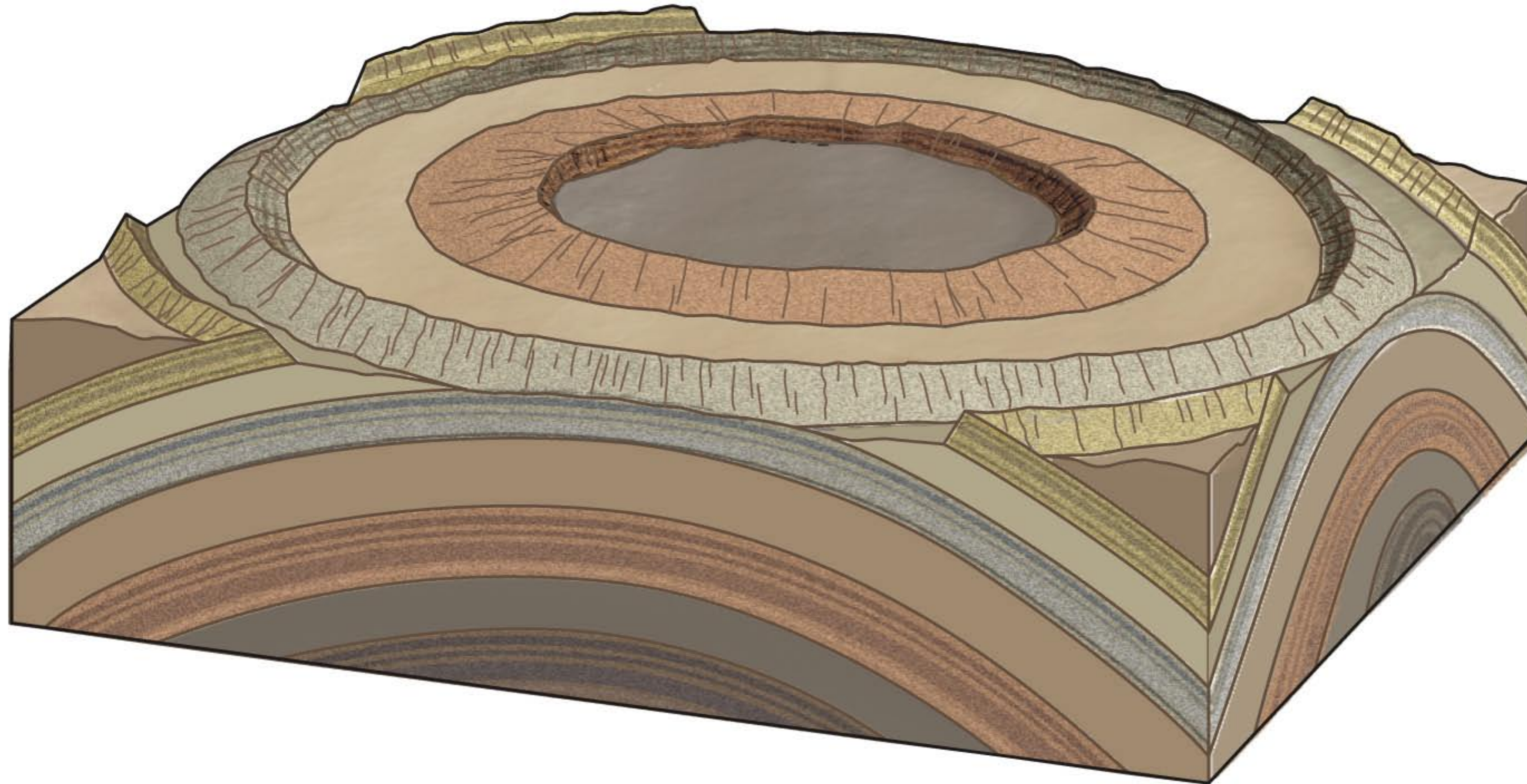




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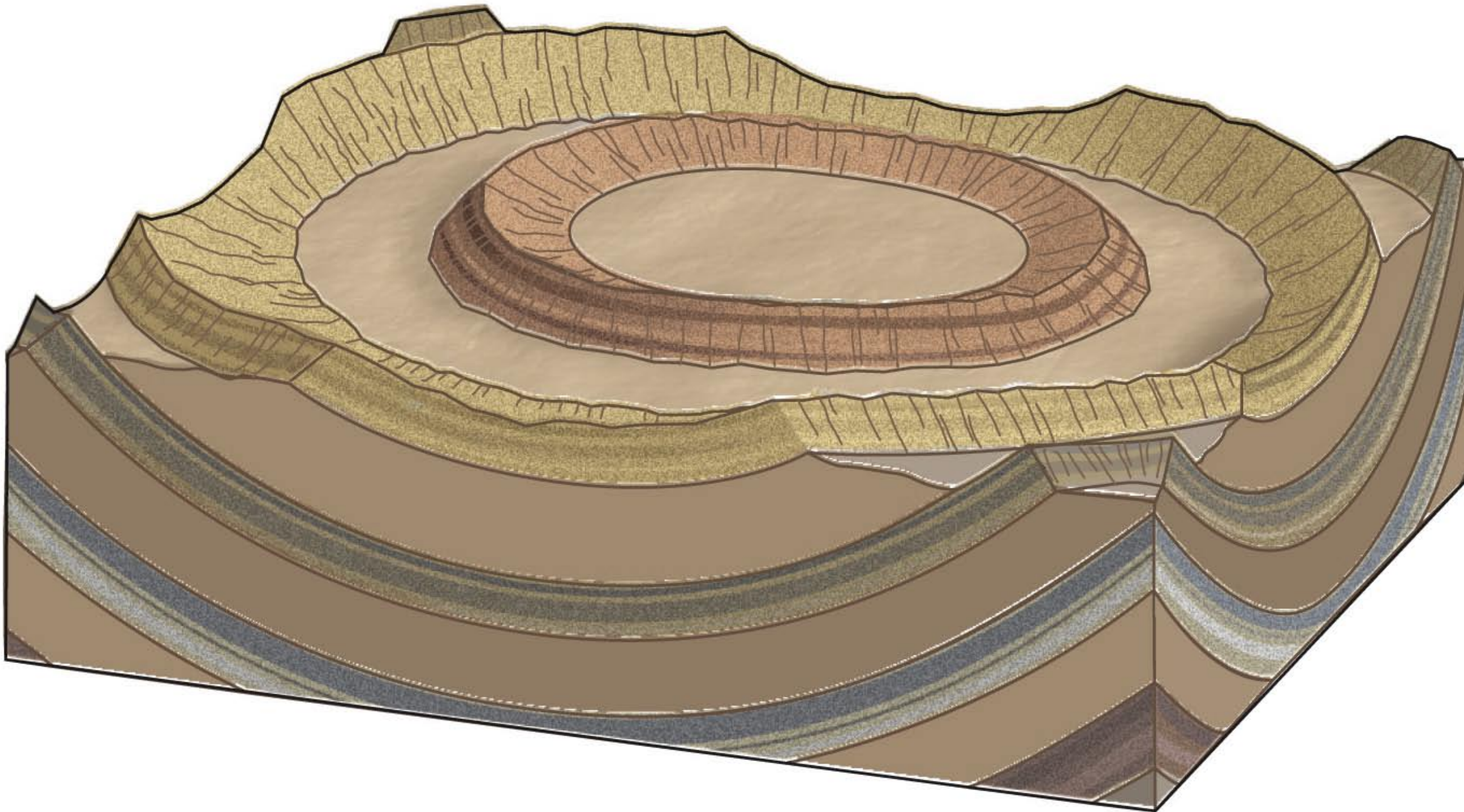
Which layer is oldest?



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Which layer is oldest?



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