



Simulation Summary Report

Project Title: En-passant Model Square

Description: Quasi-Static, 2D, Fracture Analysis, Isotropic

Created By: pmasscasestudies

Project Created: 07/13/2023-15:55

Report Created: 10/31/2023-10:23

Analysis Type: Fracture Analysis

Solver: quasi-static

Dimension: 2

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    "hour": "15",
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    "day": "13",
    "minute": "55"
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        "num_save": 1,
        "ratio_segment": 1,
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    "dimension": 2,
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          "G": 16666.7,
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          "Xc": 0,
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          "Stcr": 0,
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    "max_bond_breakage": 6,
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    "models": [
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            "geometry": {
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              "length": [40, 40],
              "type": "rectangle",
              "yaw": 0,
              "center": [20, 20]
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            "material": {
              "name": "mat1",
              "roll": 0,
              "pitch": 0,
              "type": "constant",
              "yaw": 0,
              "dimension": 2,
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                "grid_type": "quadrilateral2D",
                "horizon_type": "circle",
                "hr": 0.38,
                "dx": 0.125,
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                "yaw": 0
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            "failure_zones": [],
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            "boundary_zones": [
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                  "name": "geo1",
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                  "type": "rectangle",
                  "yaw": 0,
                  "center": [20, 0]
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                  "name": "geo1",
                  "length": [40, 1],
                  "type": "rectangle",
                  "yaw": 0,
                  "center": [20, 0]
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                "dimension": 2,
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                  "type": "rectangle",
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                  "type": "displacement",
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                  "direction": "Y"
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            "cracks": [],
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            "dimension": 2,
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                "dimension": 2,
                "geometry": {
                  "name": "geo1",
                  "length": [16, 1],
                  "type": "rectangle",
                  "yaw": 0,
                  "center": [0, 21.5]
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              {
                "name": "notch2",
                "dimension": 2,
                "geometry": {
                  "name": "geo1",
                  "length": [16, 1],
                  "type": "rectangle",
                  "yaw": 0,
                  "center": [40, 18.5]
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              }
            ],
            "inclusions": [],
            "inclusion_damage": "true",
            "project_id": "fcbf9cff-b554-43ee-85c2-60d78cc59dfa",
            "description": "Quasi-Static, 2D, Fracture Analysis, Isotropic"
          }
        ]
      }
    ]
  }
}
```

Undeformed Grid

Number of Points: 101376

min-x: 0.0625

max-x: 39.9375

min-y: 0.0625

max-y: 39.9375



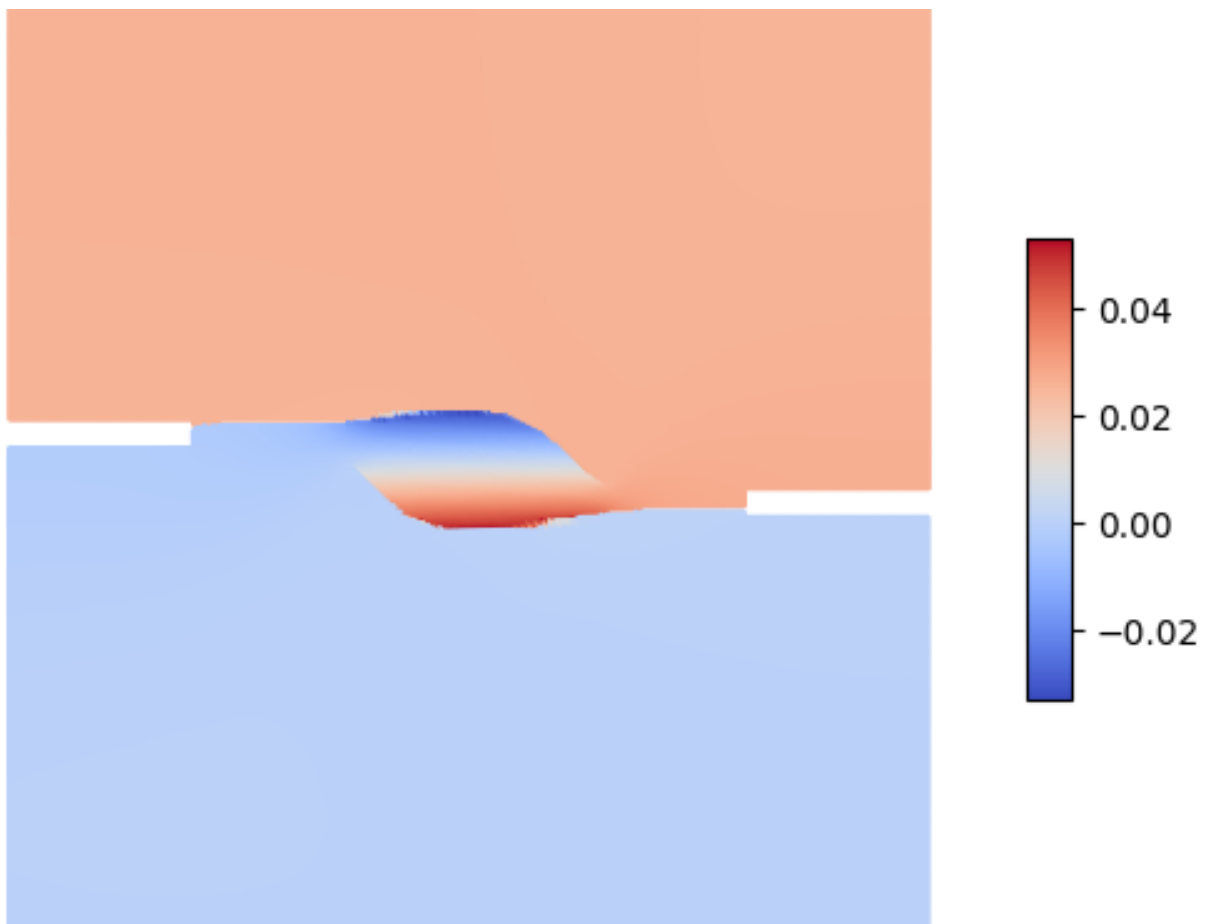
Run Name: run0

Solution Output: out_0_990

Field: u-x

min-u-x: -0.0329567

max-u-x: 0.053271



Run Name: run0

Solution Output: out_0_990

Field: u-y

min-u-y: -0.00101449

max-u-y: 0.198608



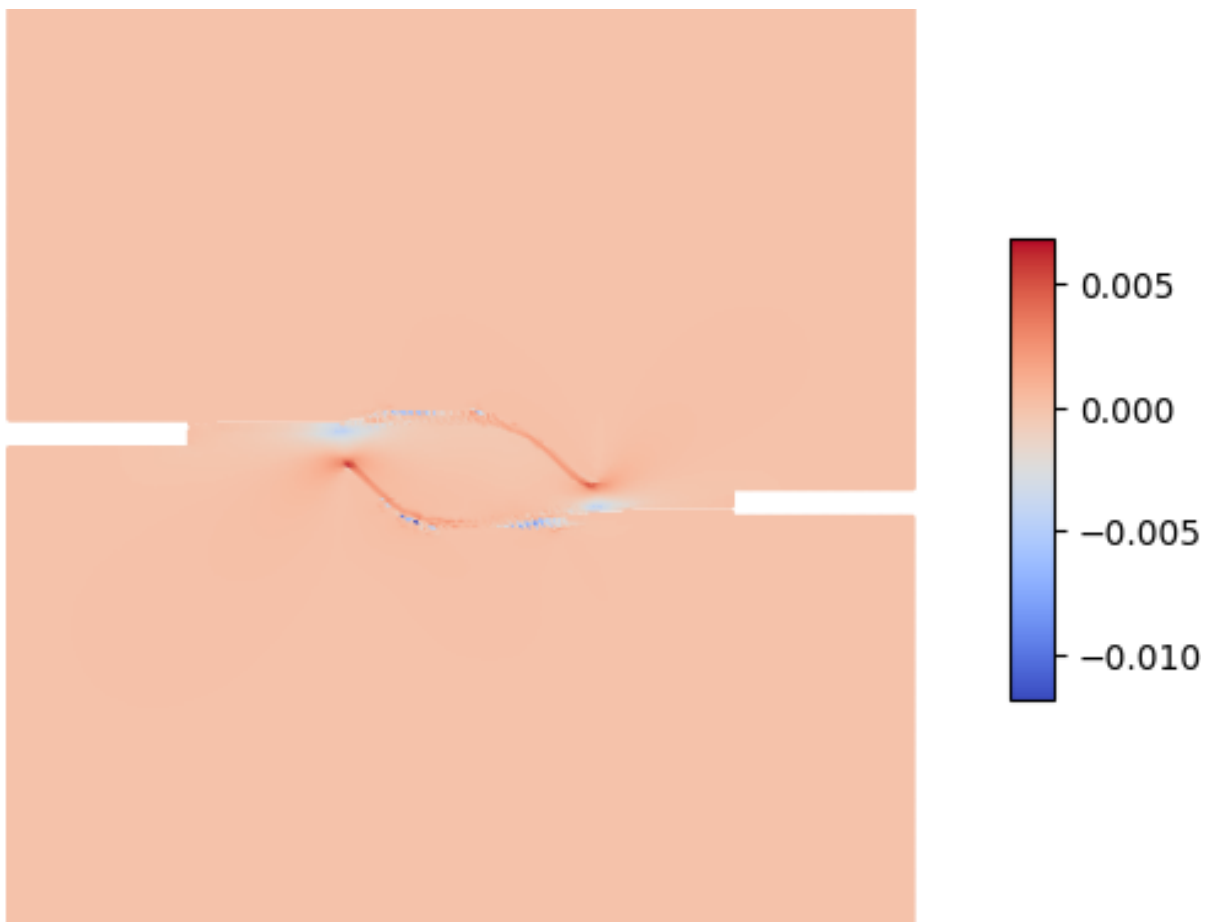
Run Name: run0

Solution Output: out_0_990

Field: e-x

min-e-x: -0.0117961

max-e-x: 0.00687583



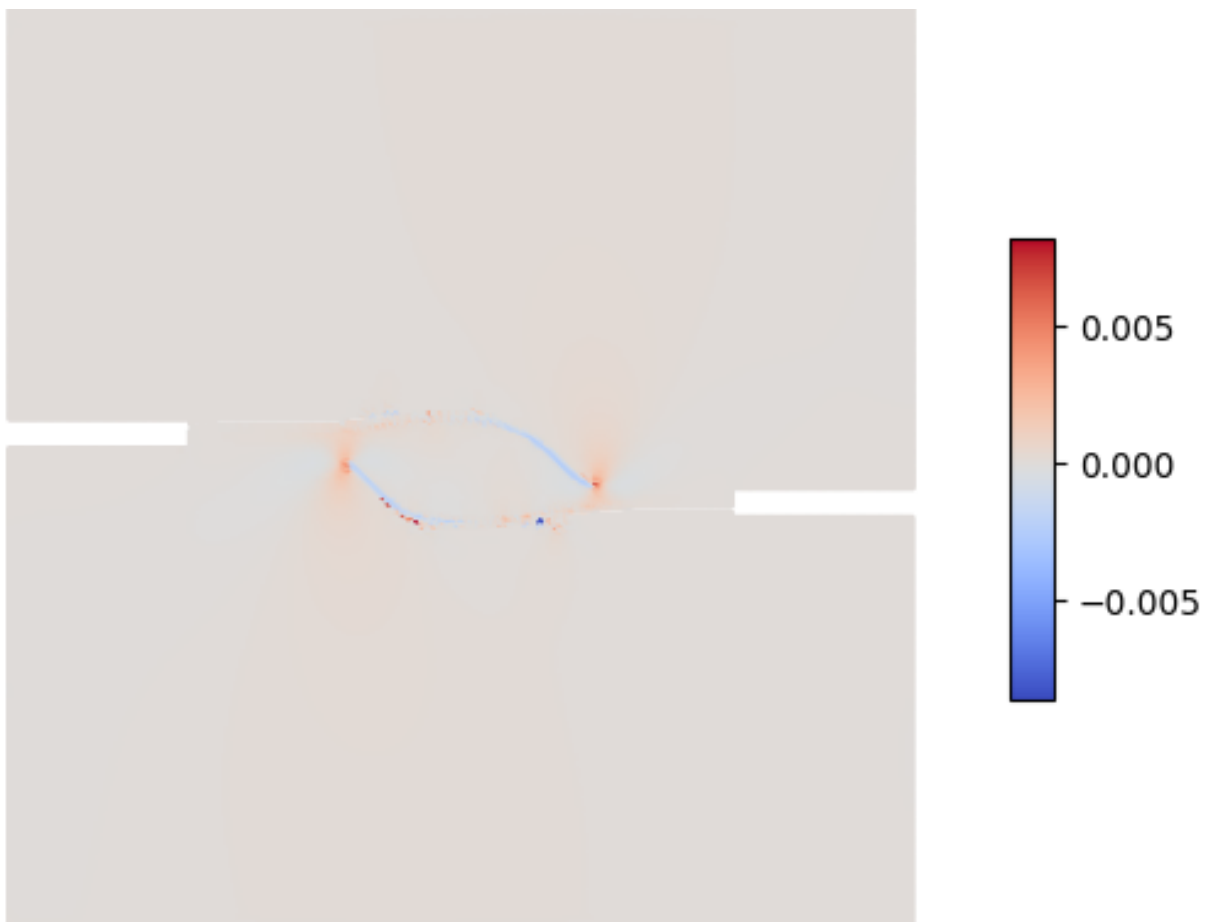
Run Name: run0

Solution Output: out_0_990

Field: e-y

min-e-y: -0.00861948

max-e-y: 0.00819454



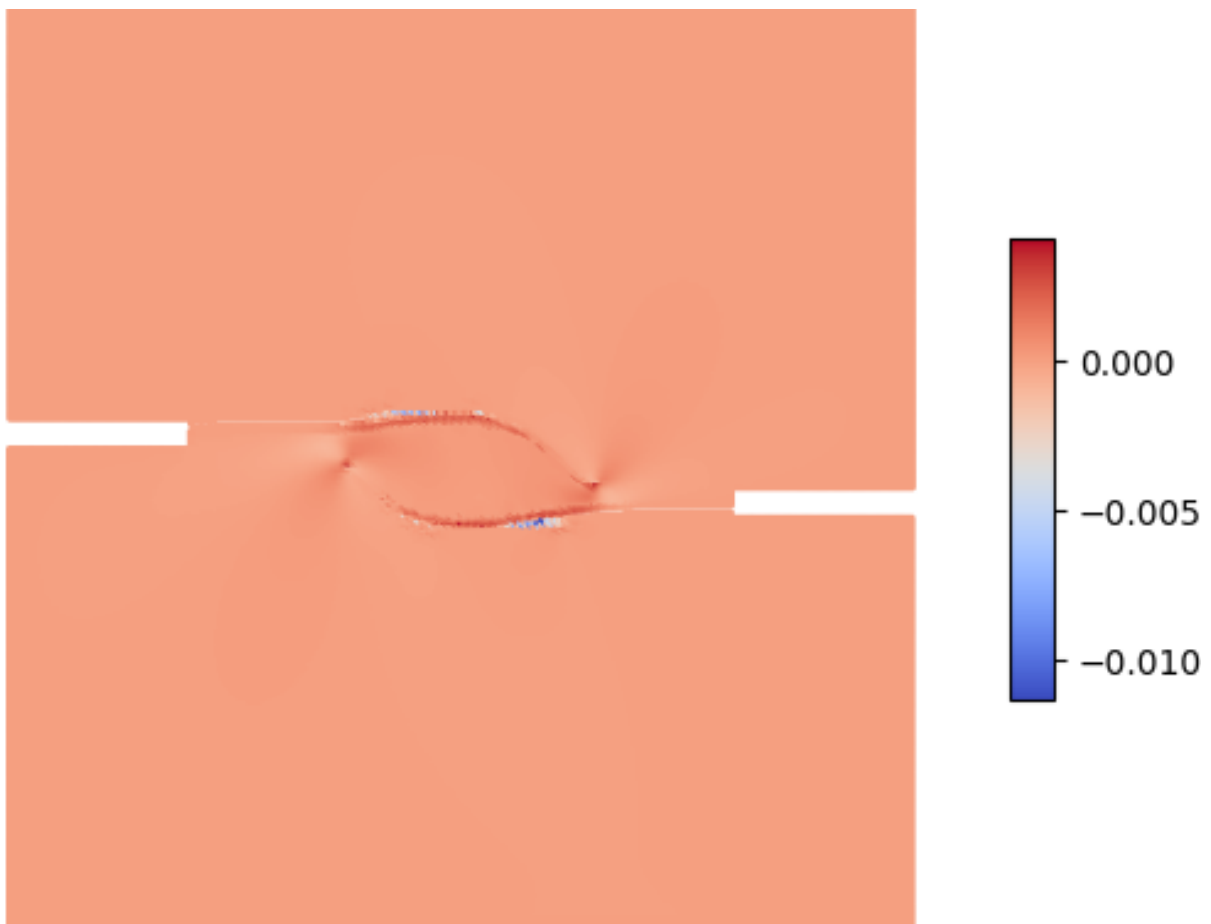
Run Name: run0

Solution Output: out_0_990

Field: e-xy

min-e-xy: -0.0113041

max-e-xy: 0.00406406



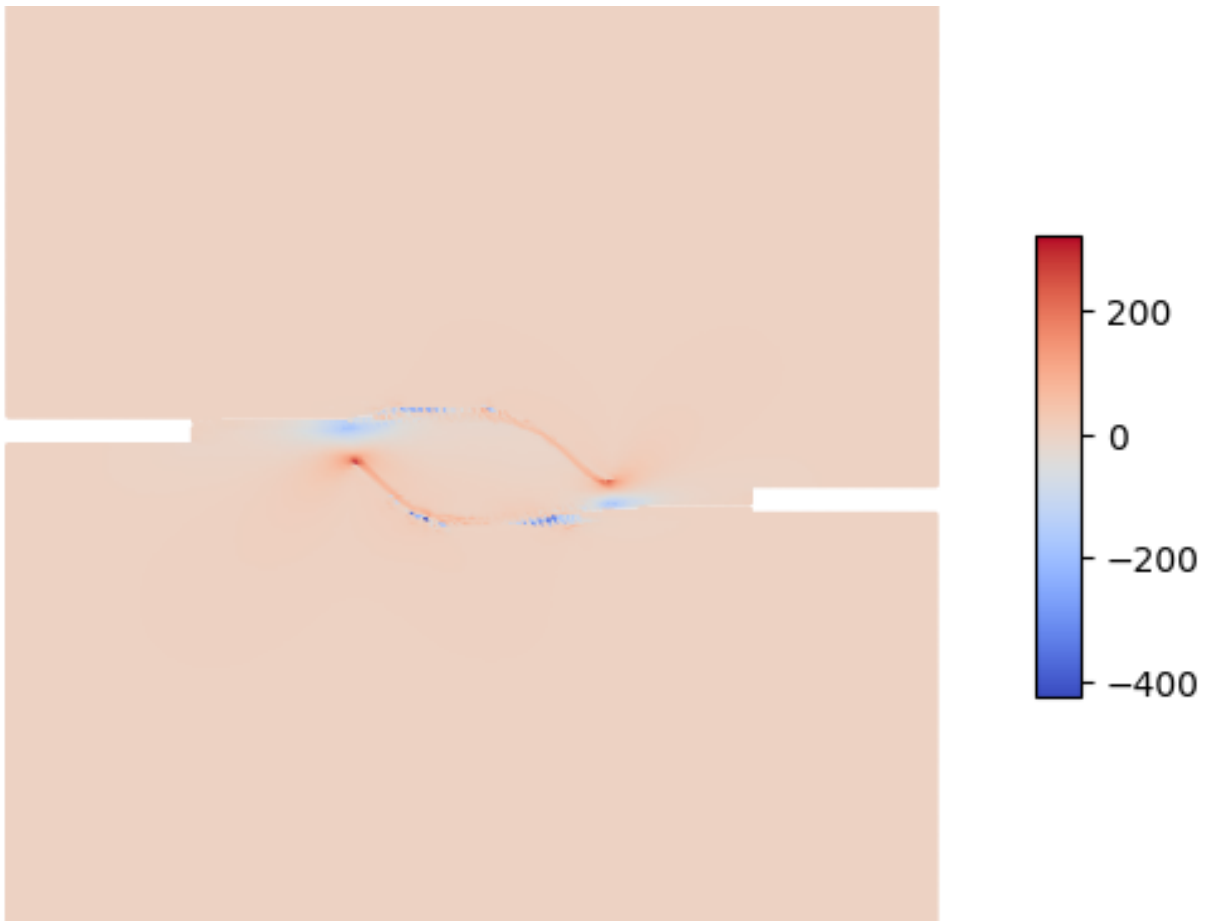
Run Name: run0

Solution Output: out_0_990

Field: s-x

min-s-x: -423.215

max-s-x: 321.296



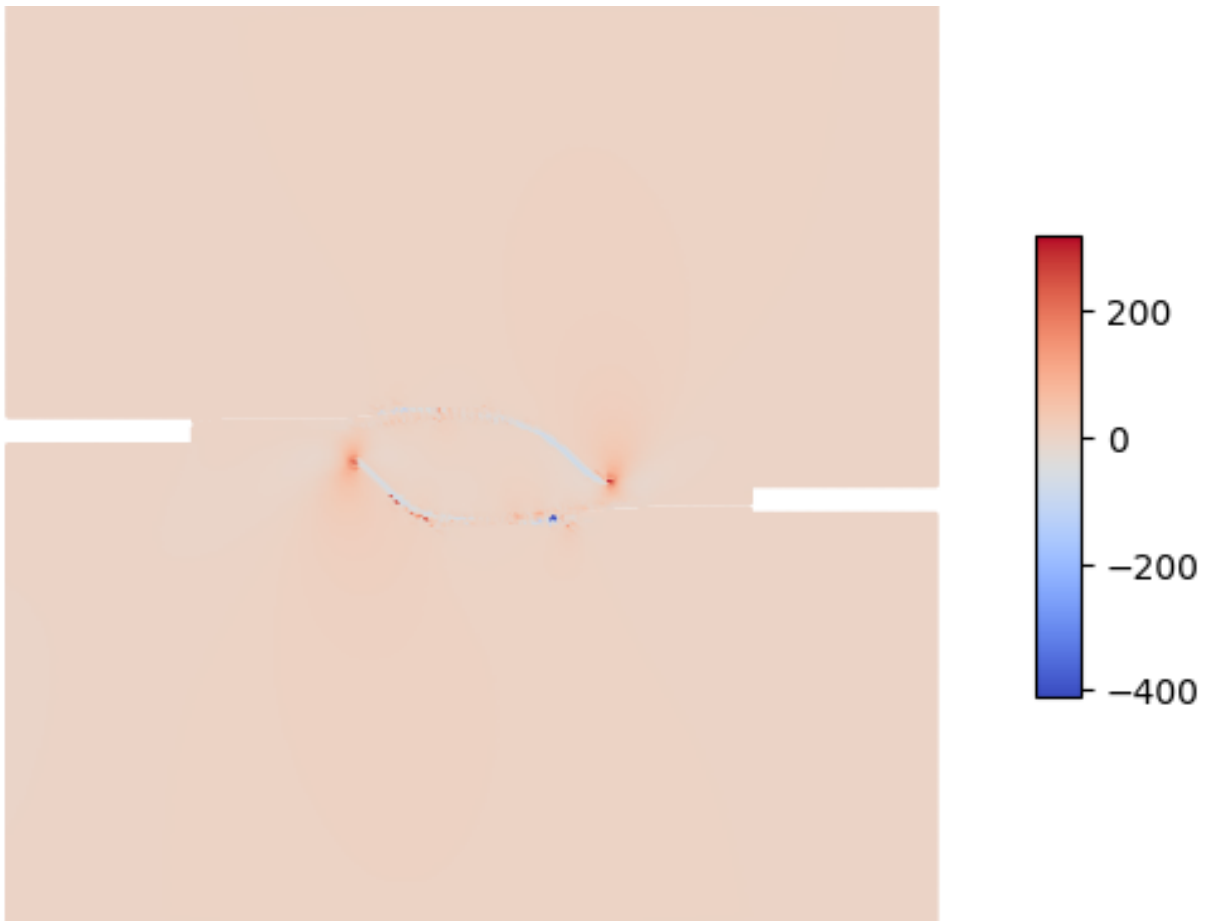
Run Name: run0

Solution Output: out_0_990

Field: s-y

min-s-y: -408.703

max-s-y: 319.158



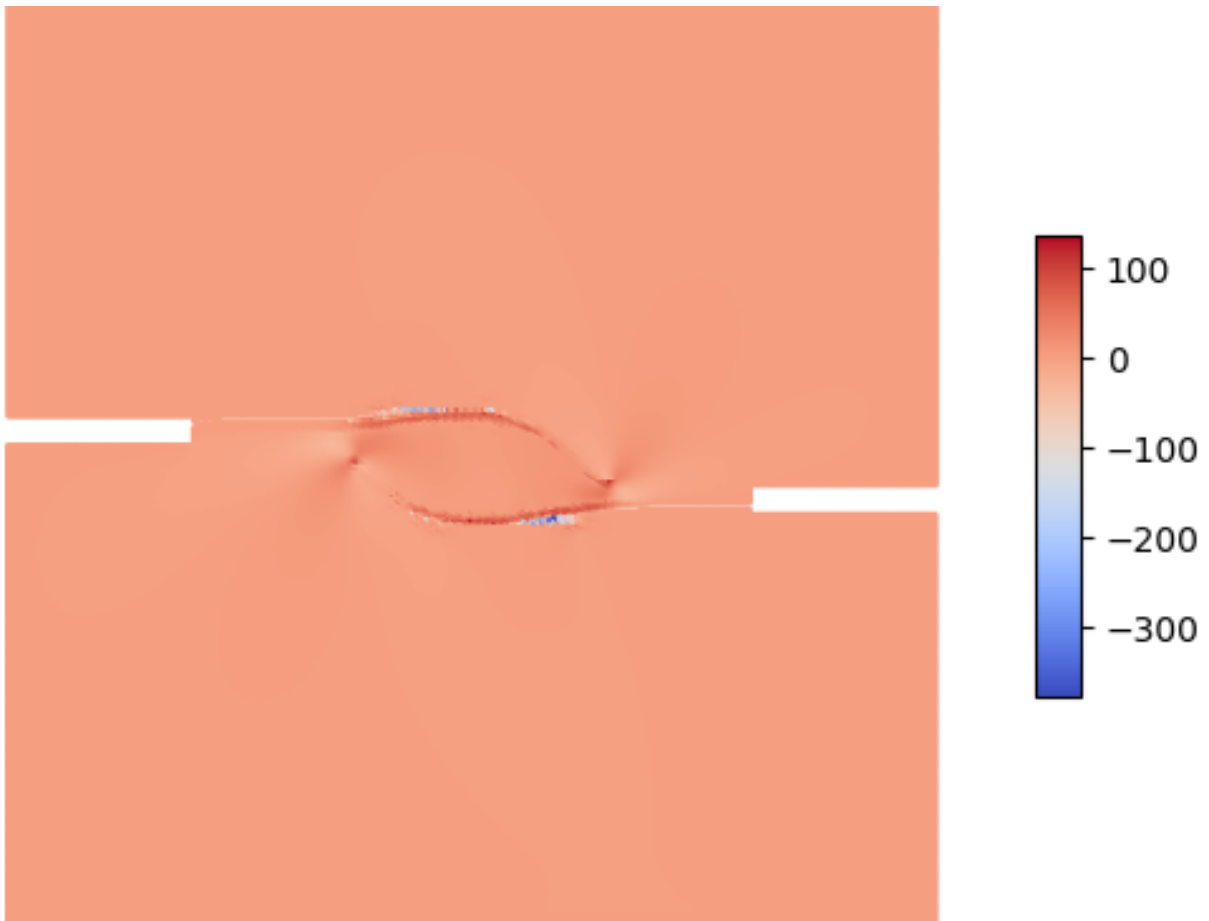
Run Name: run0

Solution Output: out_0_990

Field: s-xy

min-s-xy: -376.805

max-s-xy: 135.469



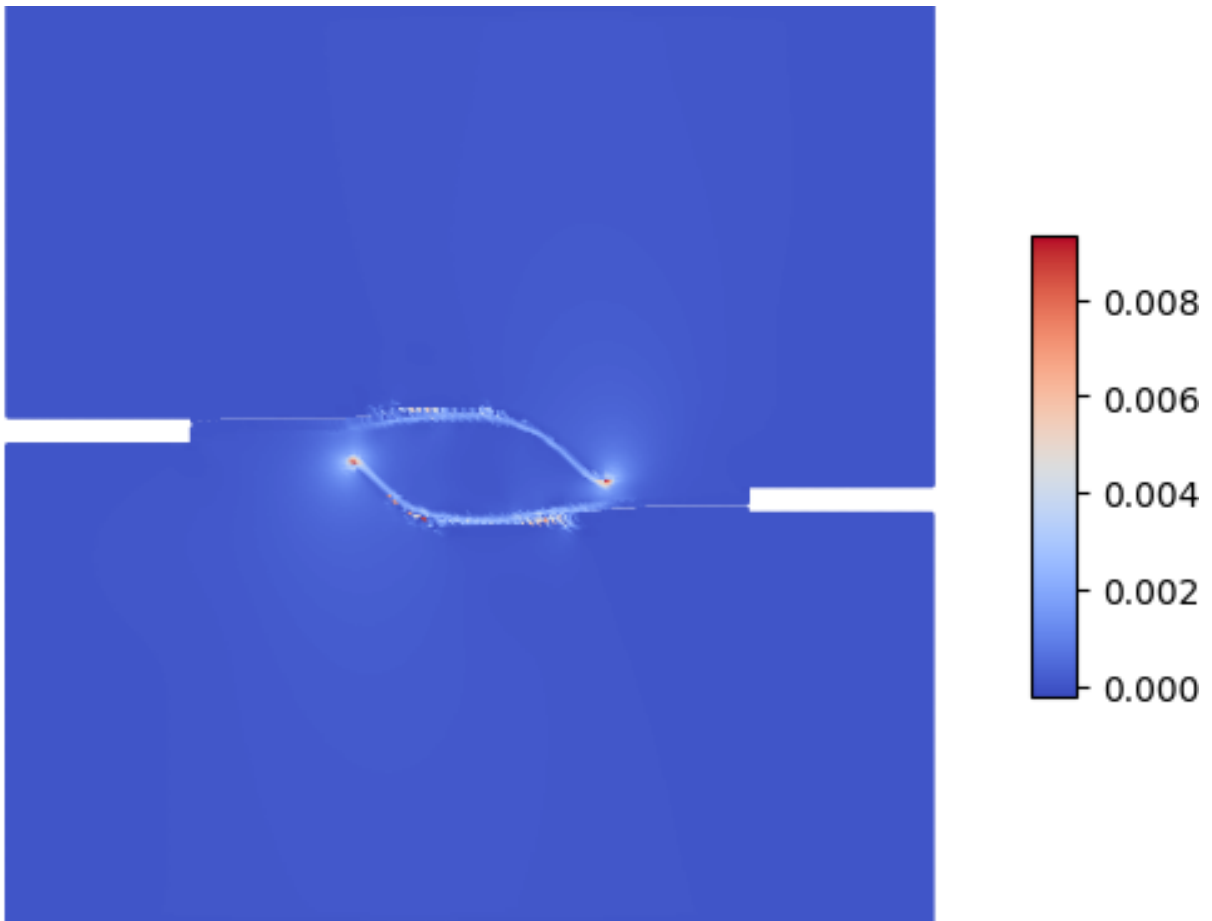
Run Name: run0

Solution Output: out_0_990

Field: e-p1

min-e-p1: -0.000187734

max-e-p1: 0.00932958



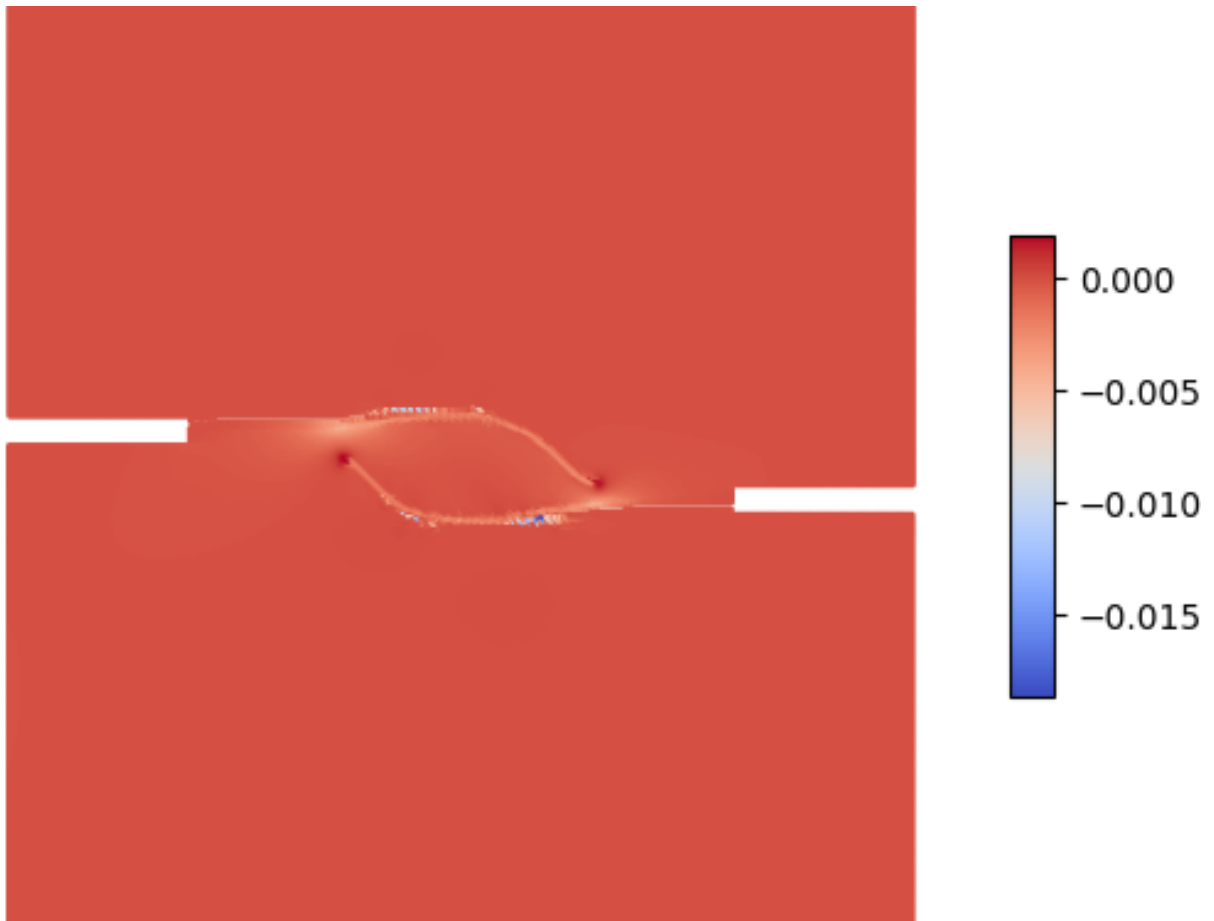
Run Name: run0

Solution Output: out_0_990

Field: e-p2

min-e-p2: -0.018666

max-e-p2: 0.00194263



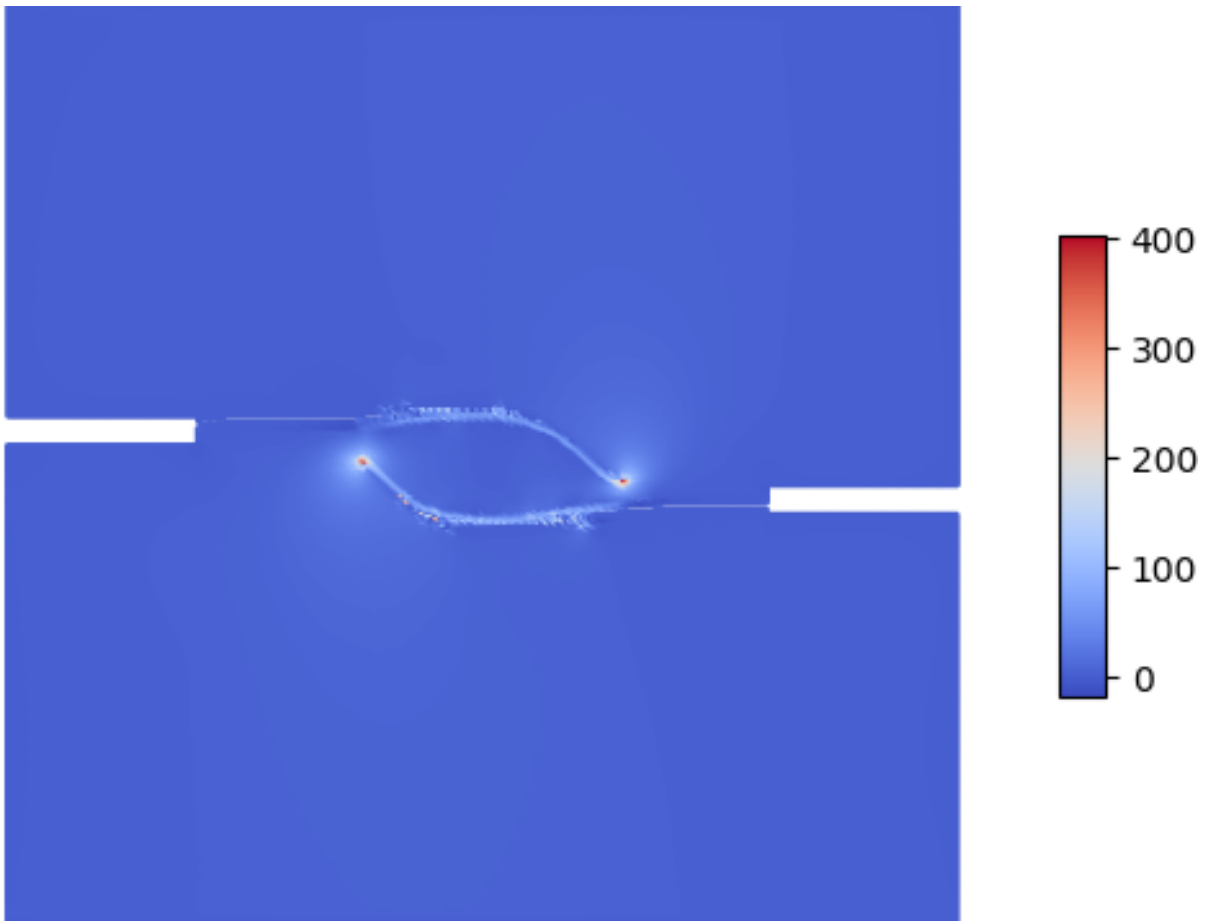
Run Name: run0

Solution Output: out_0_990

Field: s-p1

min-s-p1: -18.0511

max-s-p1: 402.524



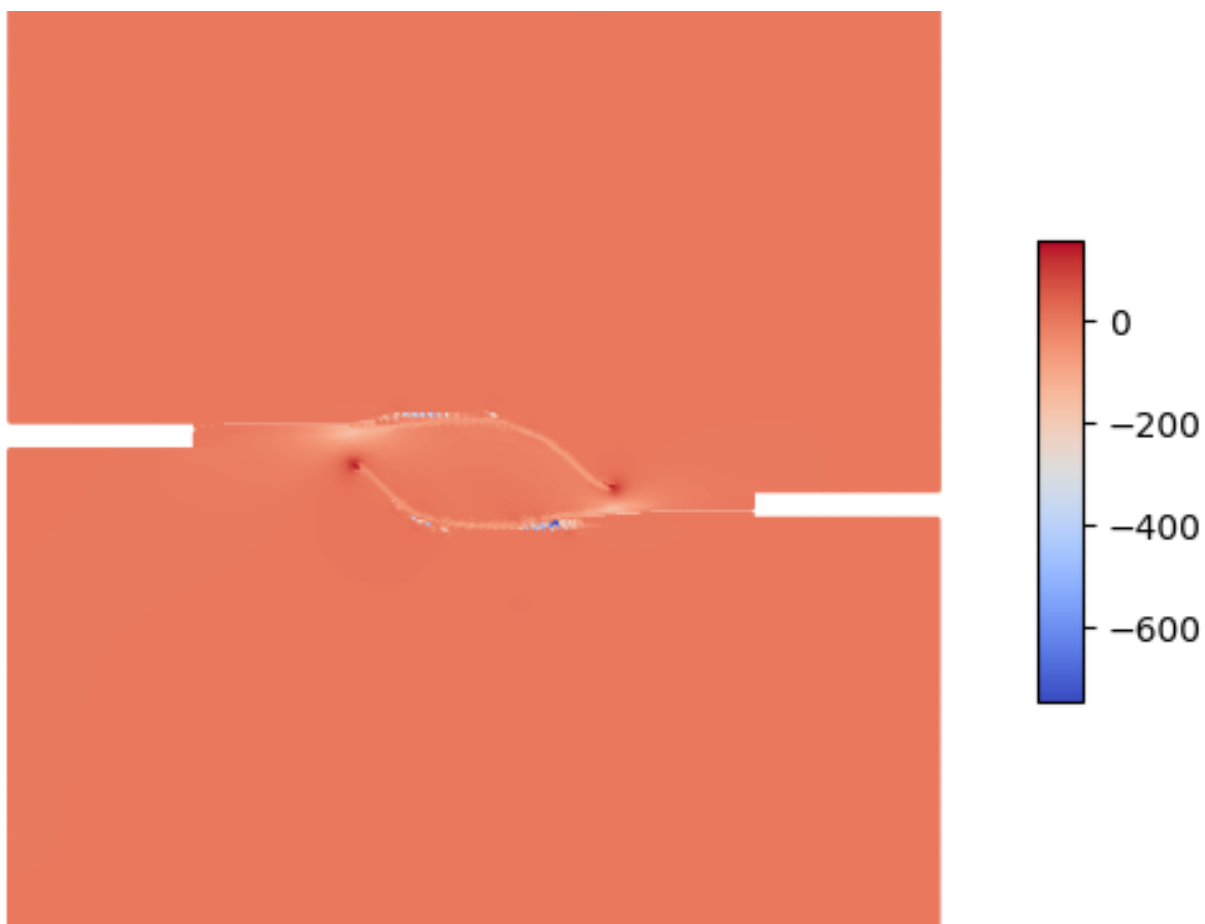
Run Name: run0

Solution Output: out_0_990

Field: s-p2

min-s-p2: -743.588

max-s-p2: 156.856



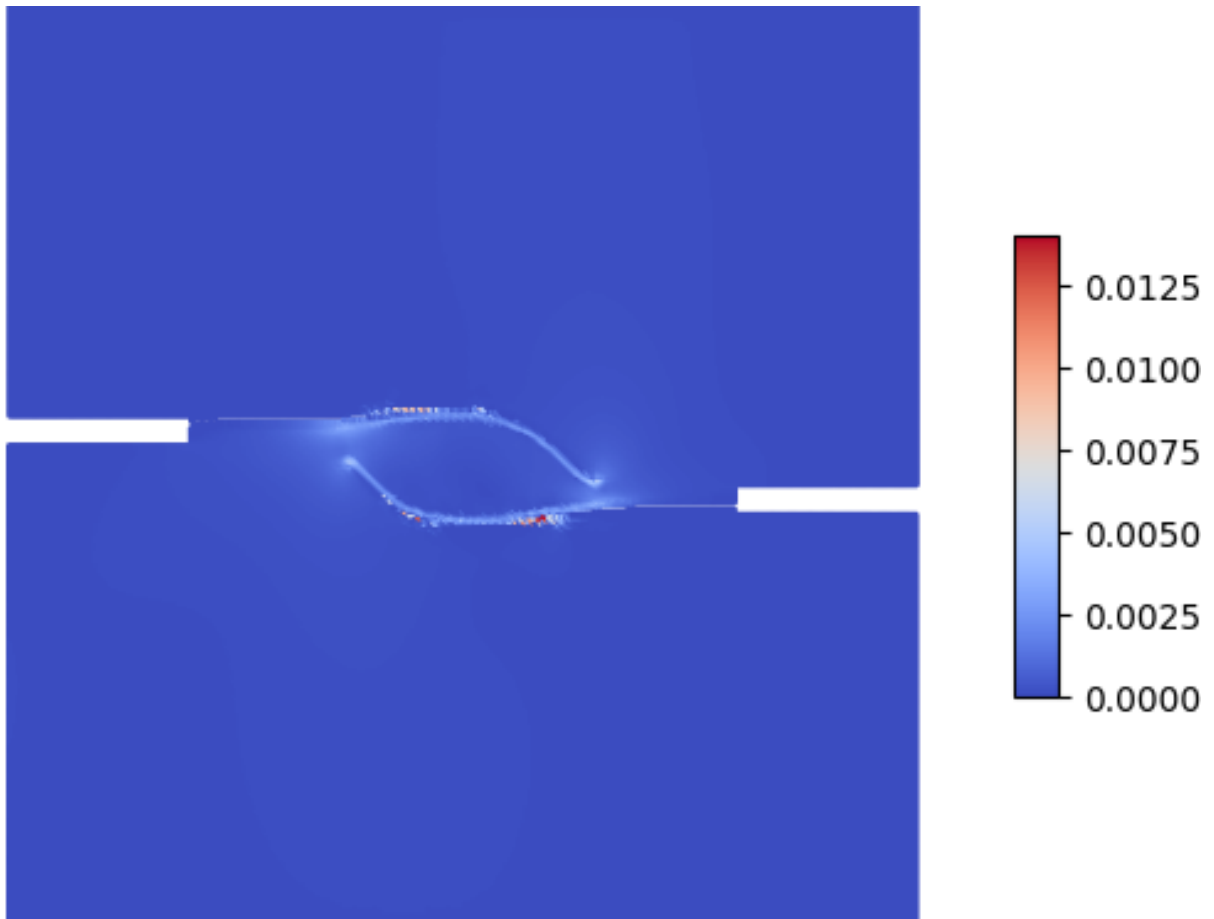
Run Name: run0

Solution Output: out_0_990

Field: e-eq

min-e-eq: 0.0

max-e-eq: 0.0140119



Run Name: run0

Solution Output: out_0_990

Field: s-eq

min-s-eq: 0.0

max-s-eq: 751.339



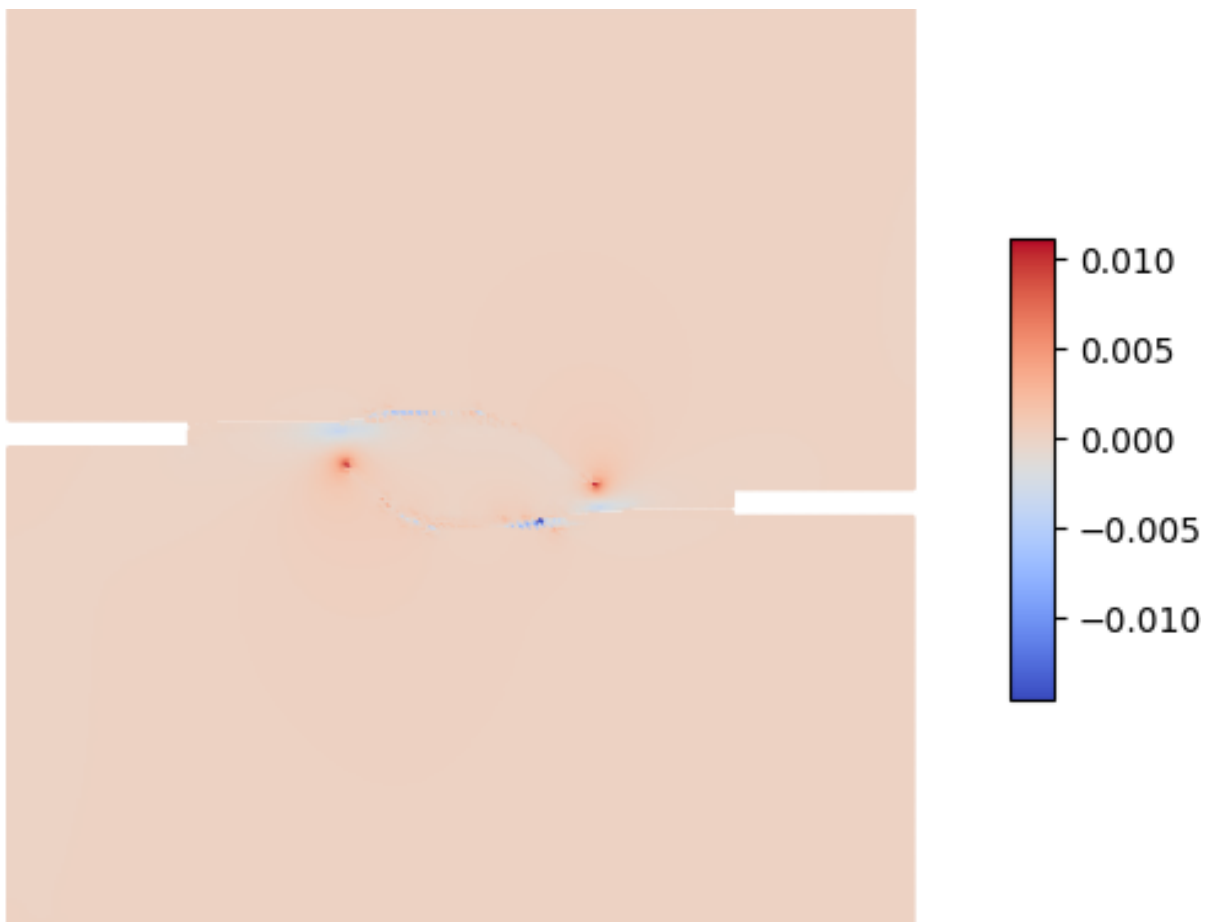
Run Name: run0

Solution Output: out_0_990

Field: e-vol

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max-e-vol: 0.0110809



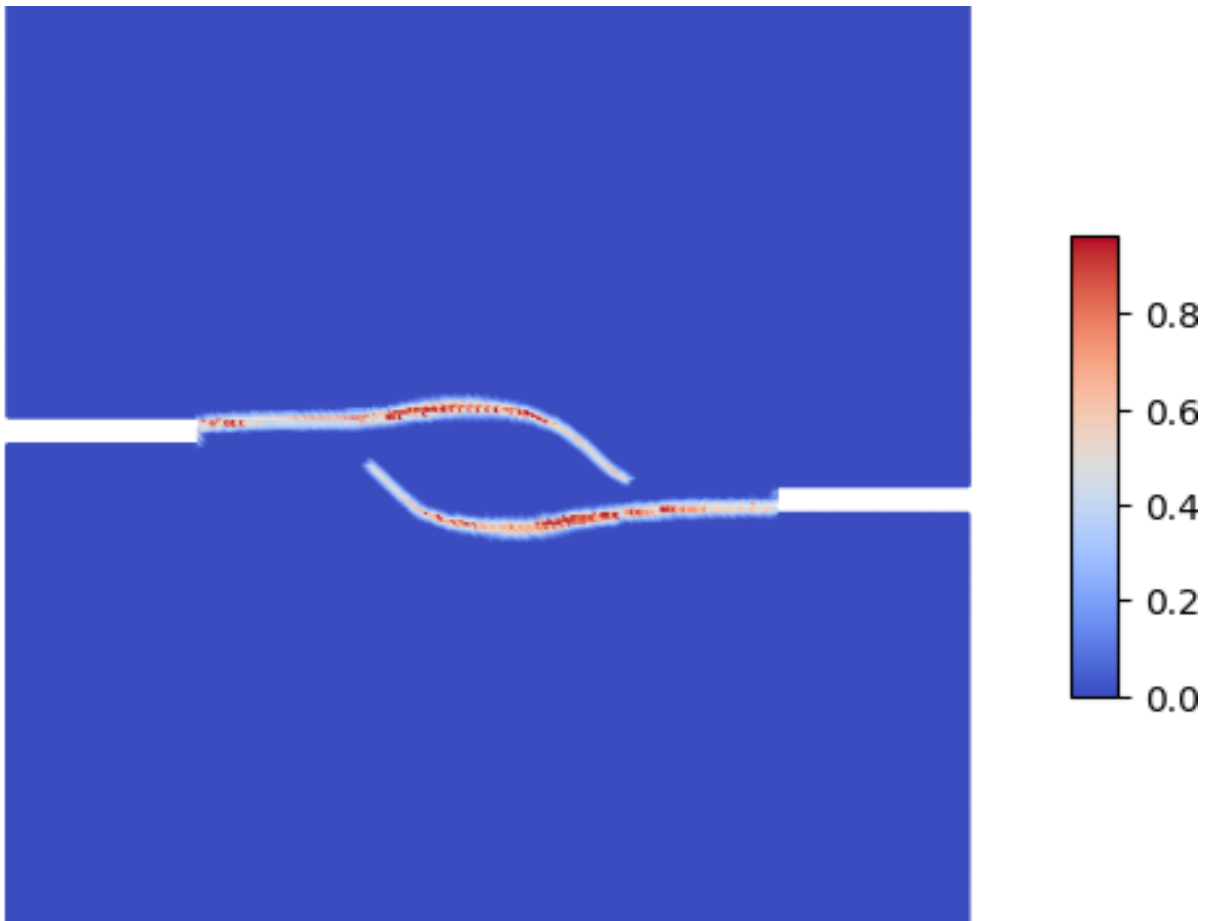
Run Name: run0

Solution Output: out_0_990

Field: damage-ini

min-damage-ini: 0.0

max-damage-ini: 0.964286



Run Name: run0

Solution Output: out_0_990

Field: damage

min-damage: 0.0

max-damage: 0.964286

