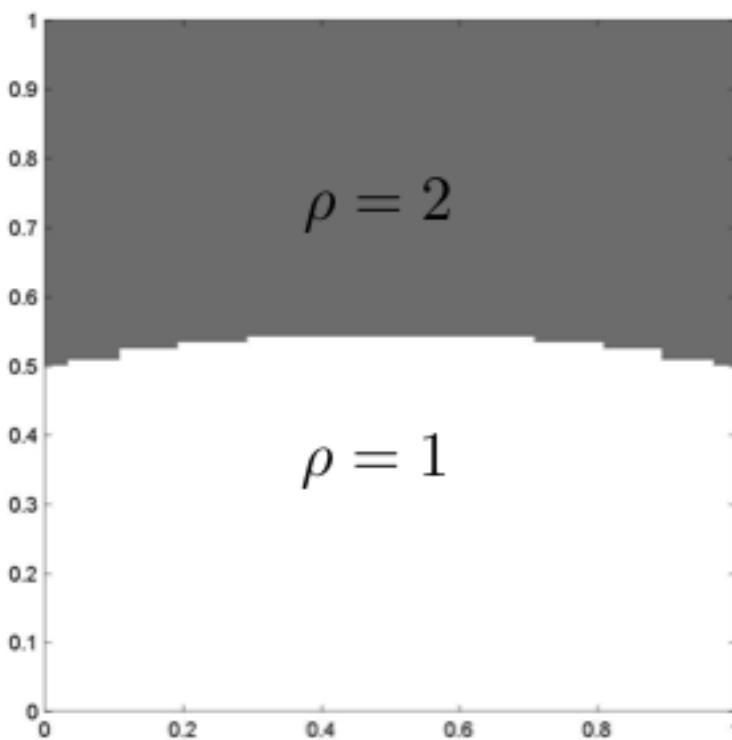


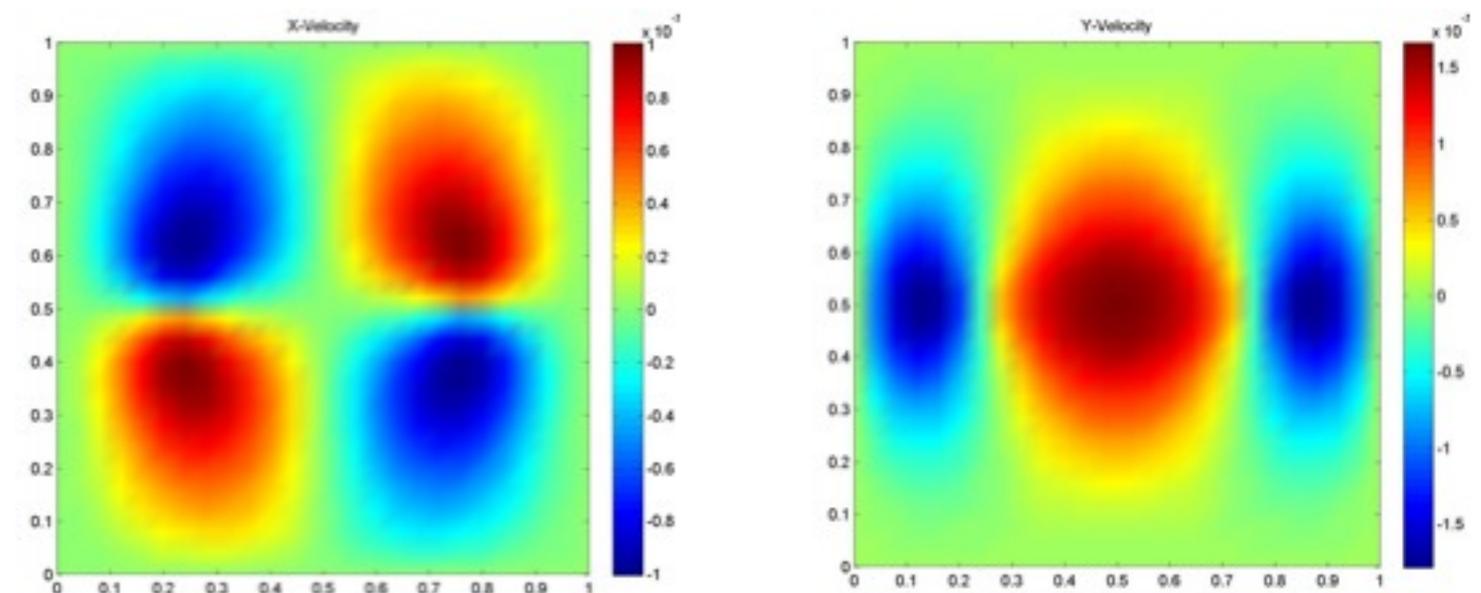
Q1Q1stab :: Incompressibility



Isoviscous

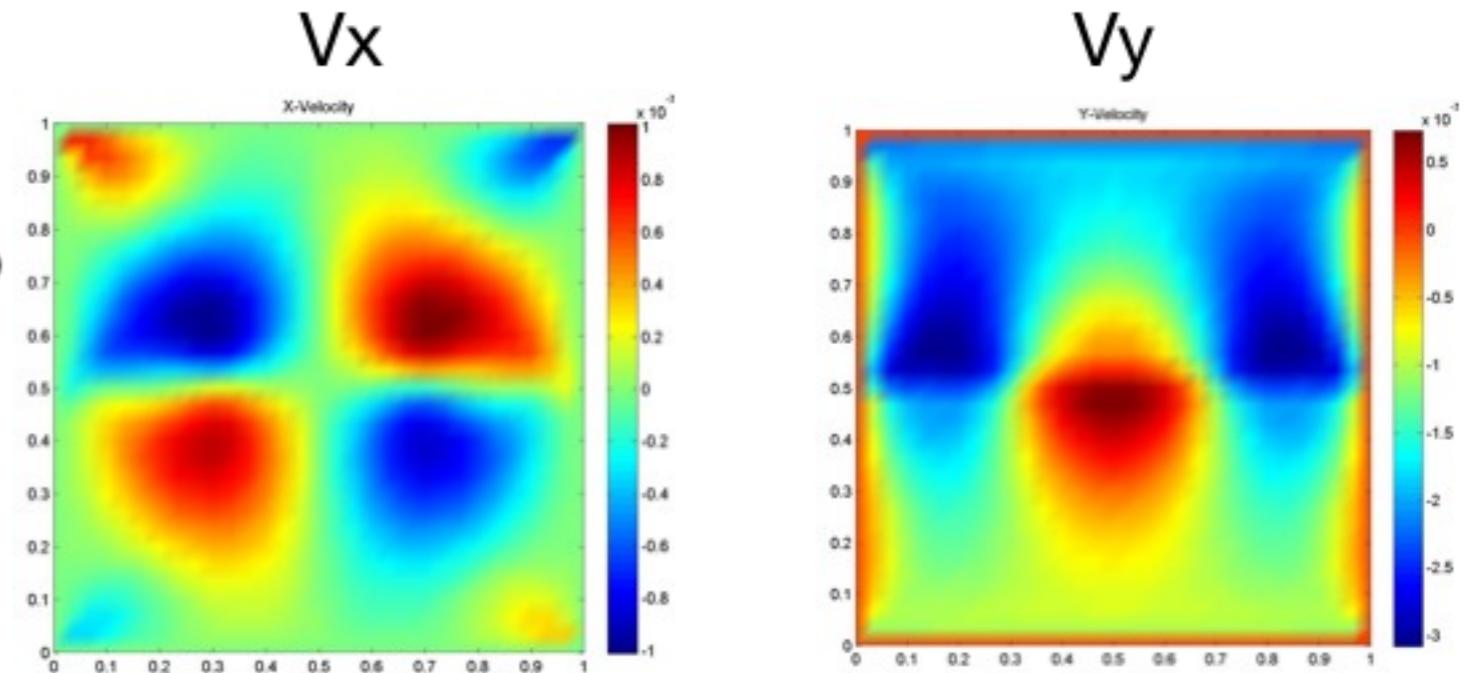
25x25
Q2Pm1

Reference solution

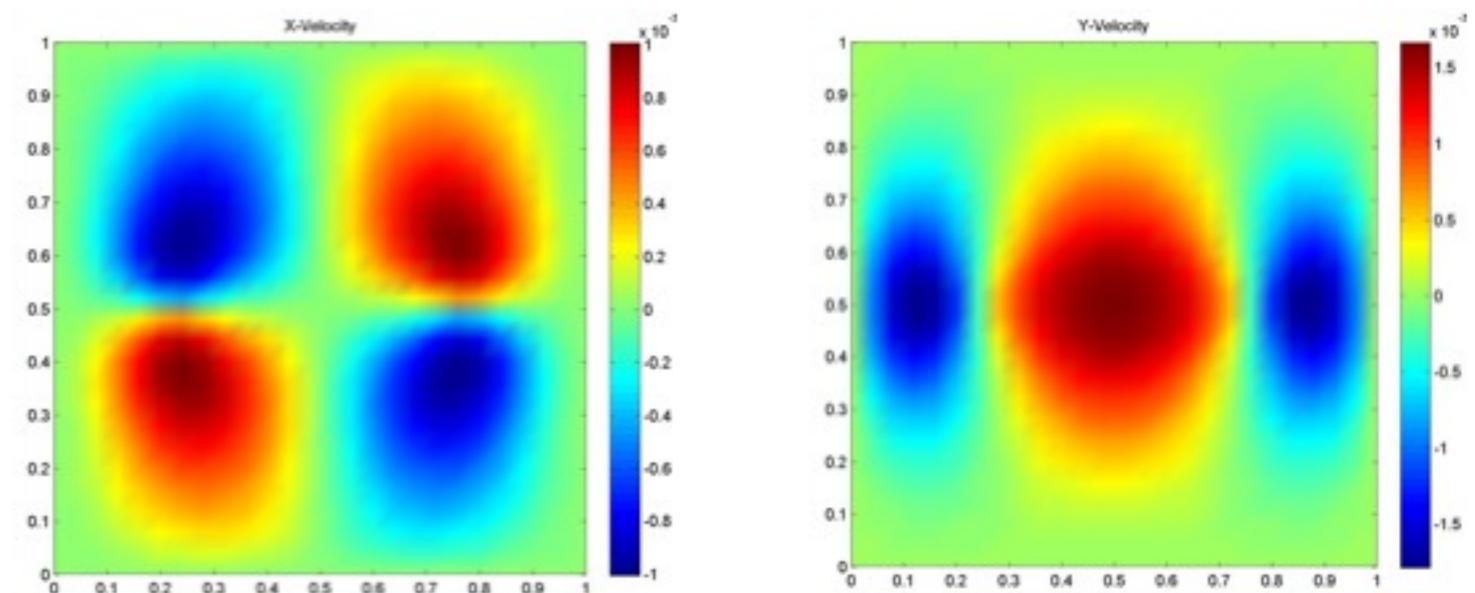


Q1Q1stab :: Incompressibility

30x30
Q1Q1stab



25x25
Q2Pm1



Q1Q1stab :: Incompressibility

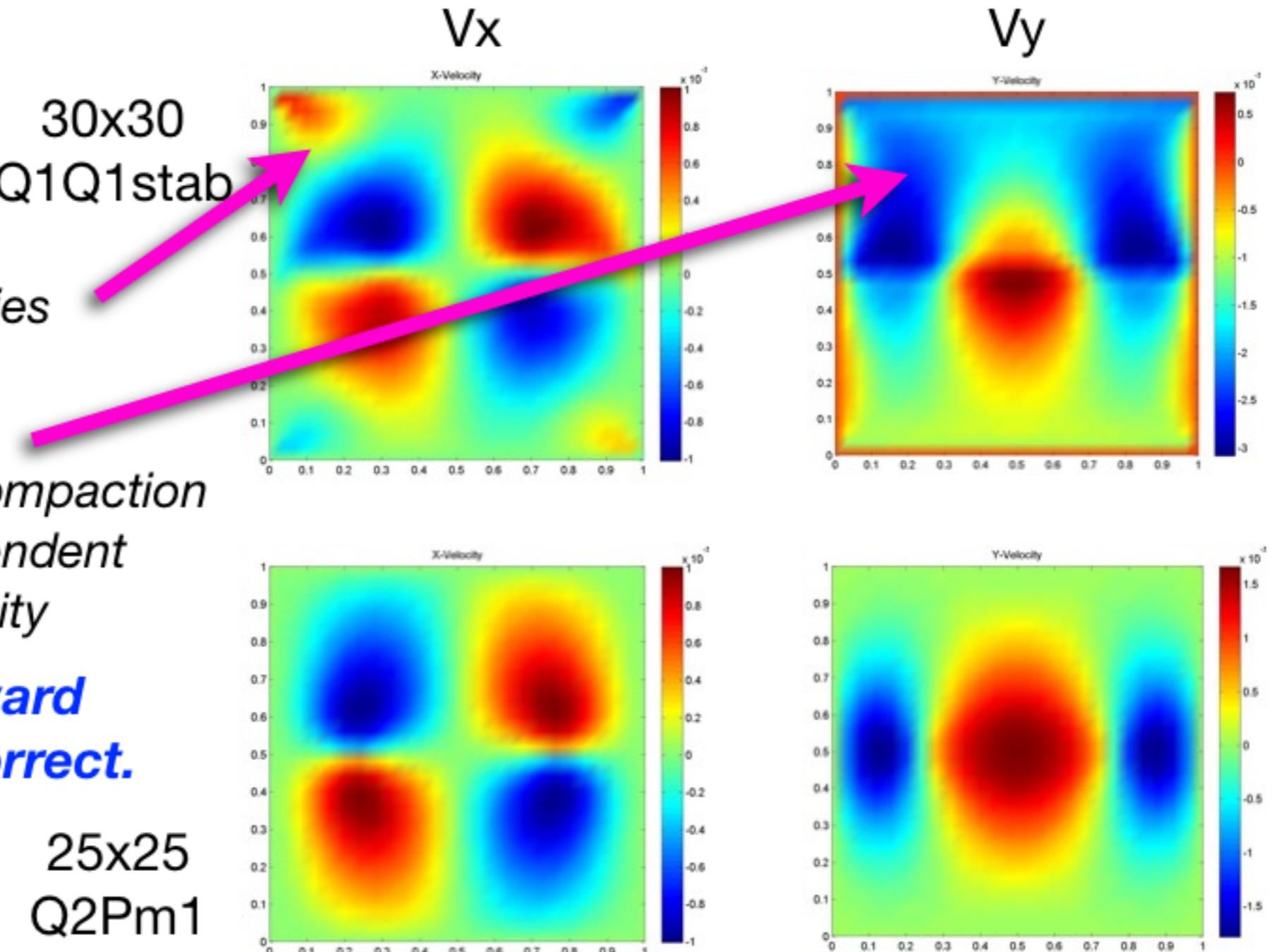
30x30
Q1Q1stab

1. Corner anomalies

2. Signs of artificial compaction
due to mesh dependent
incompressibility

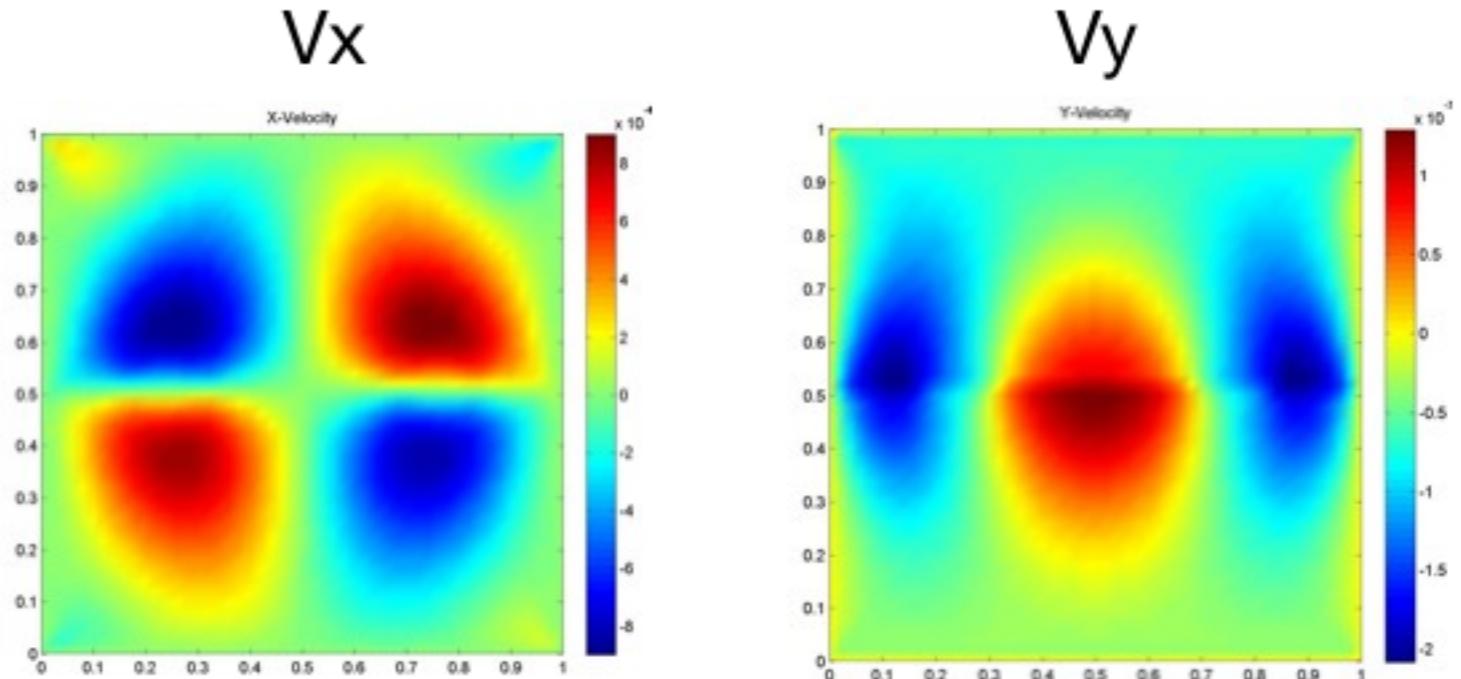
**Result of forward
evolution is incorrect.**

25x25
Q2Pm1

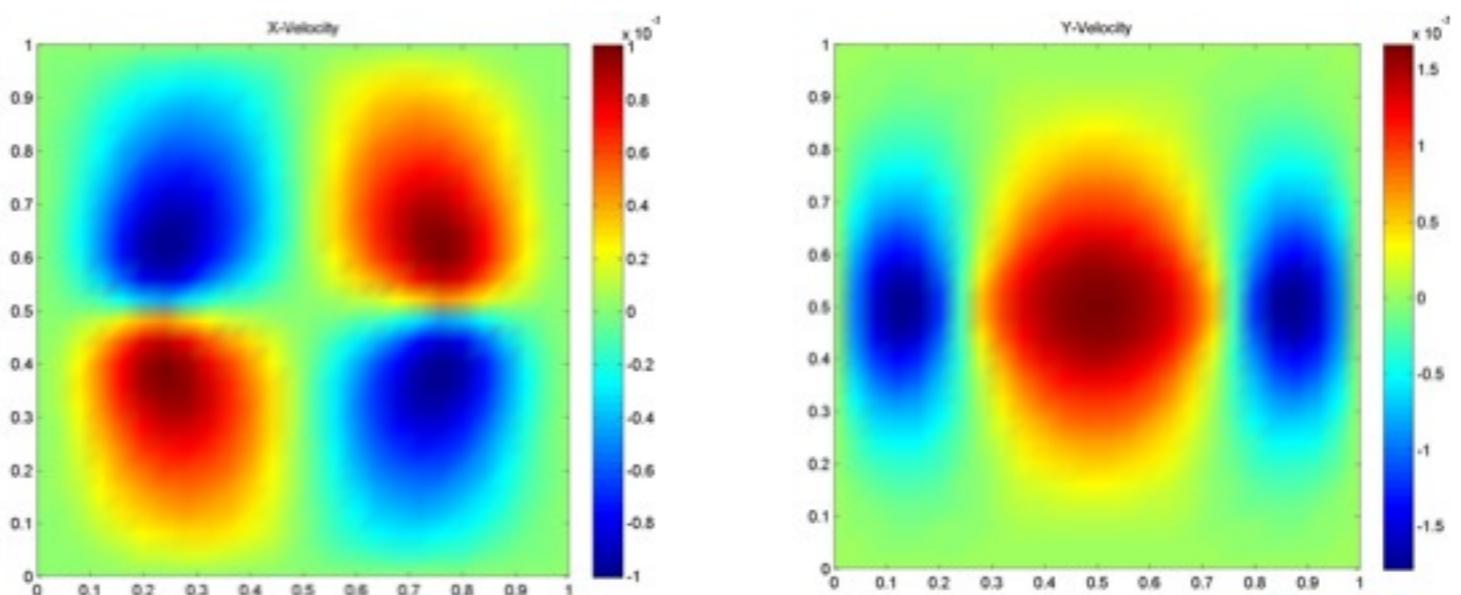


Q1Q1stab :: Incompressibility

50x50
Q1Q1stab



25x25
Q2Pm1



Q1Q1stab :: Incompressibility

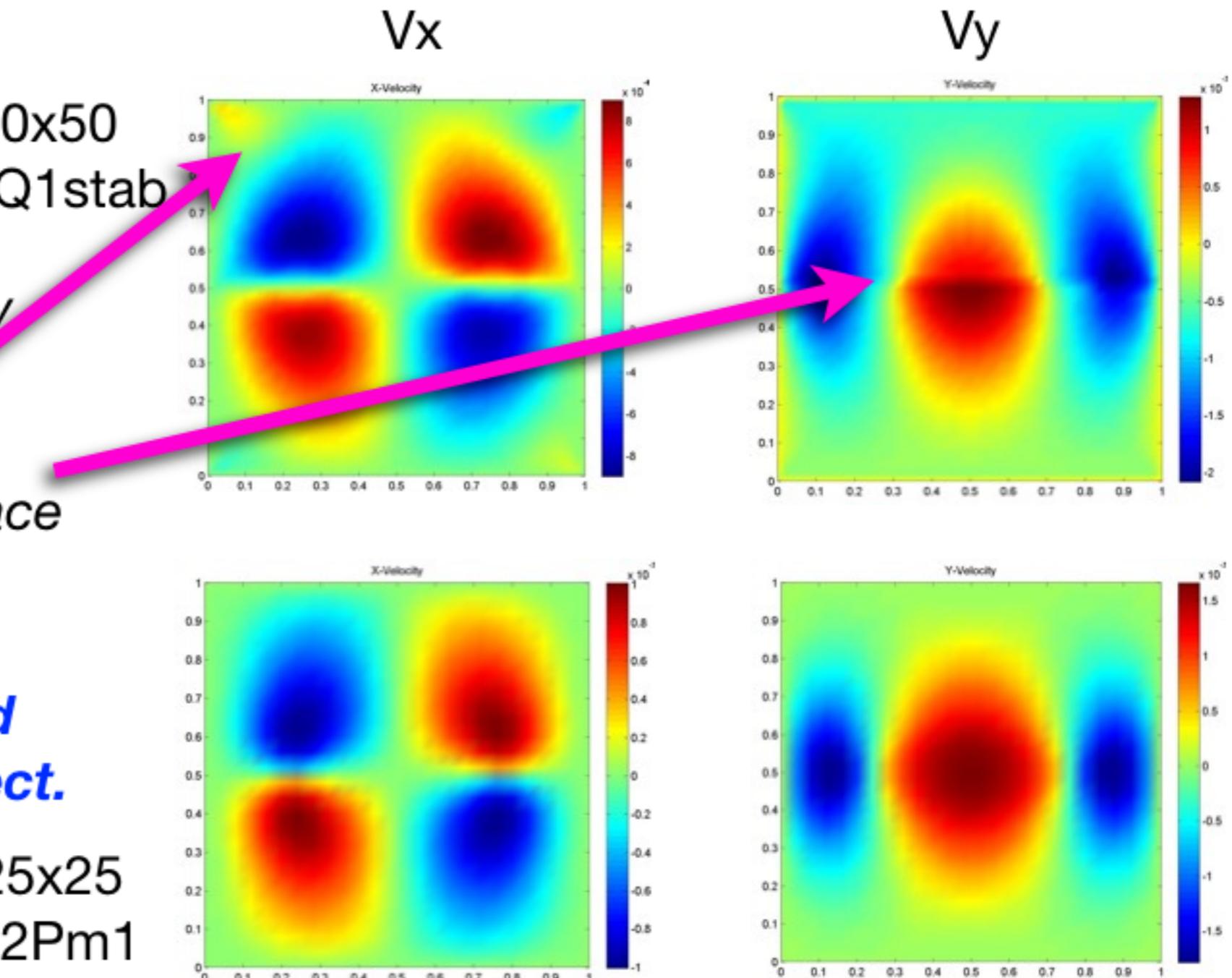
50x50
Q1Q1stab

1. Corner anomaly reduced

2. Artifacts at interface still present

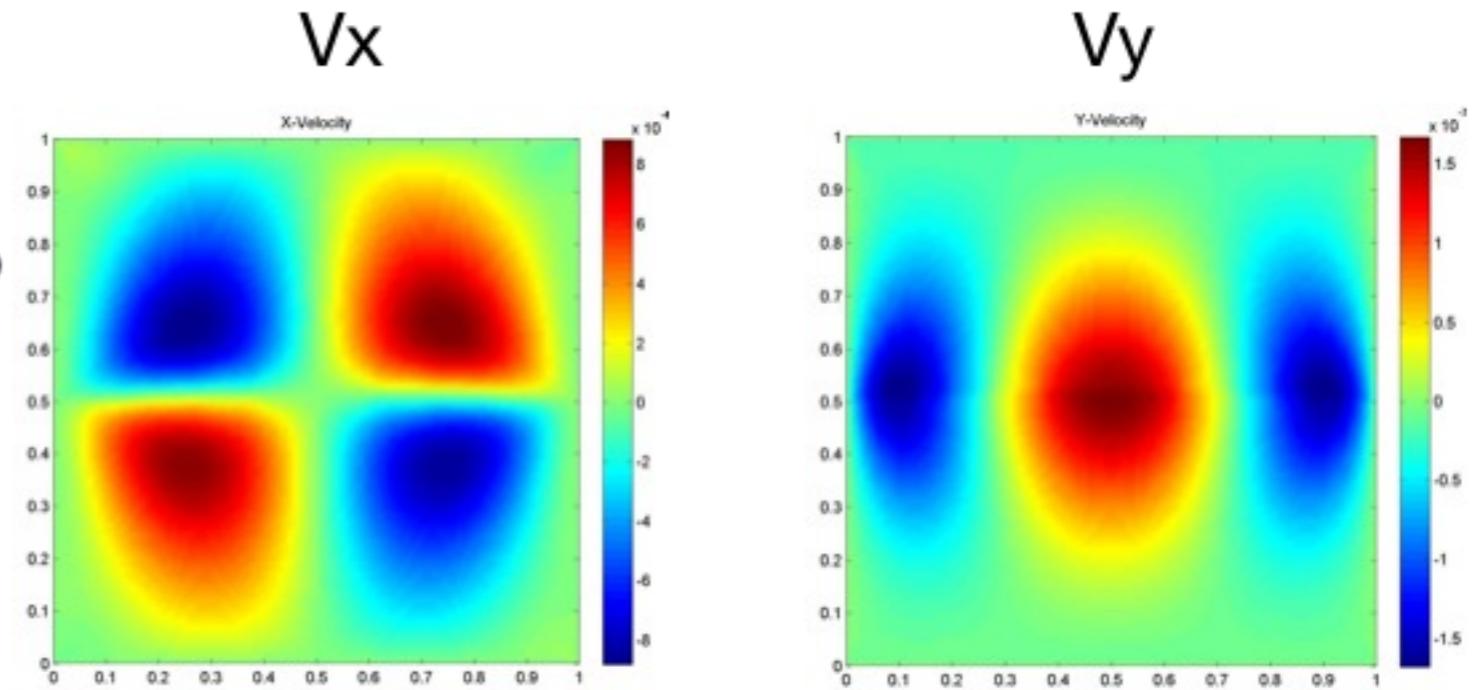
Result of forward evolution is incorrect.

25x25
Q2Pm1

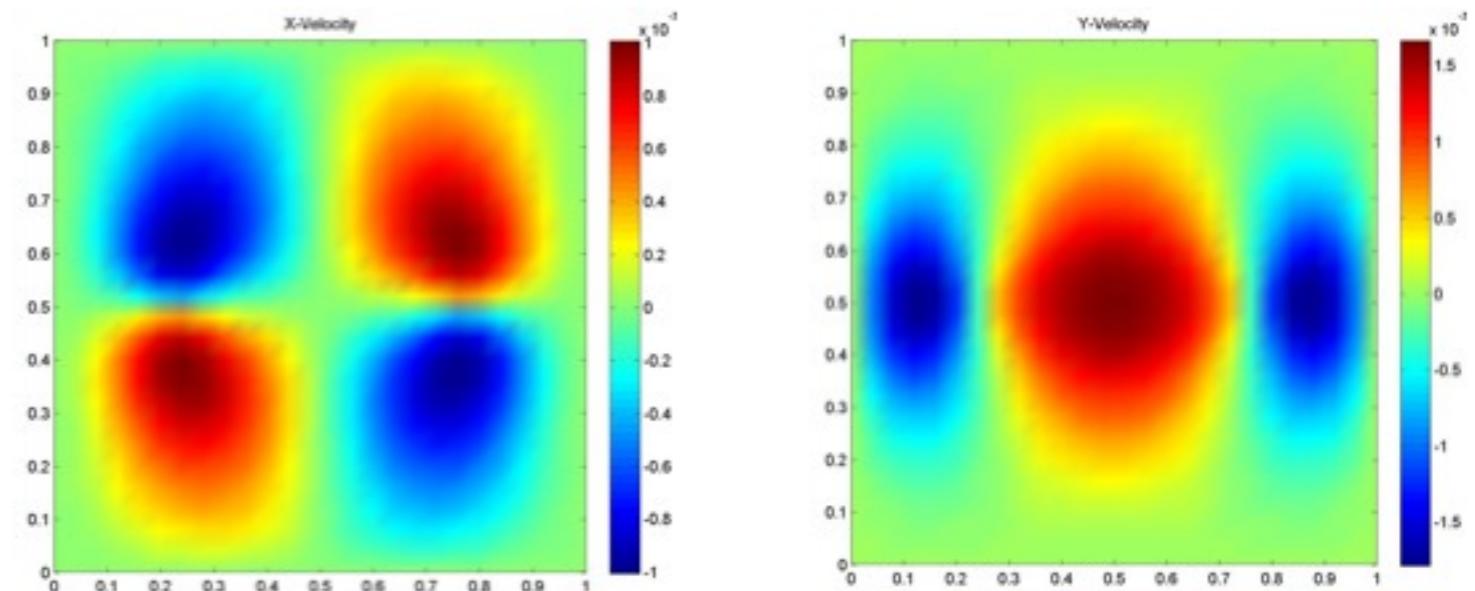


Q1Q1stab :: Incompressibility

100x100
Q1Q1stab



25x25
Q2Pm1



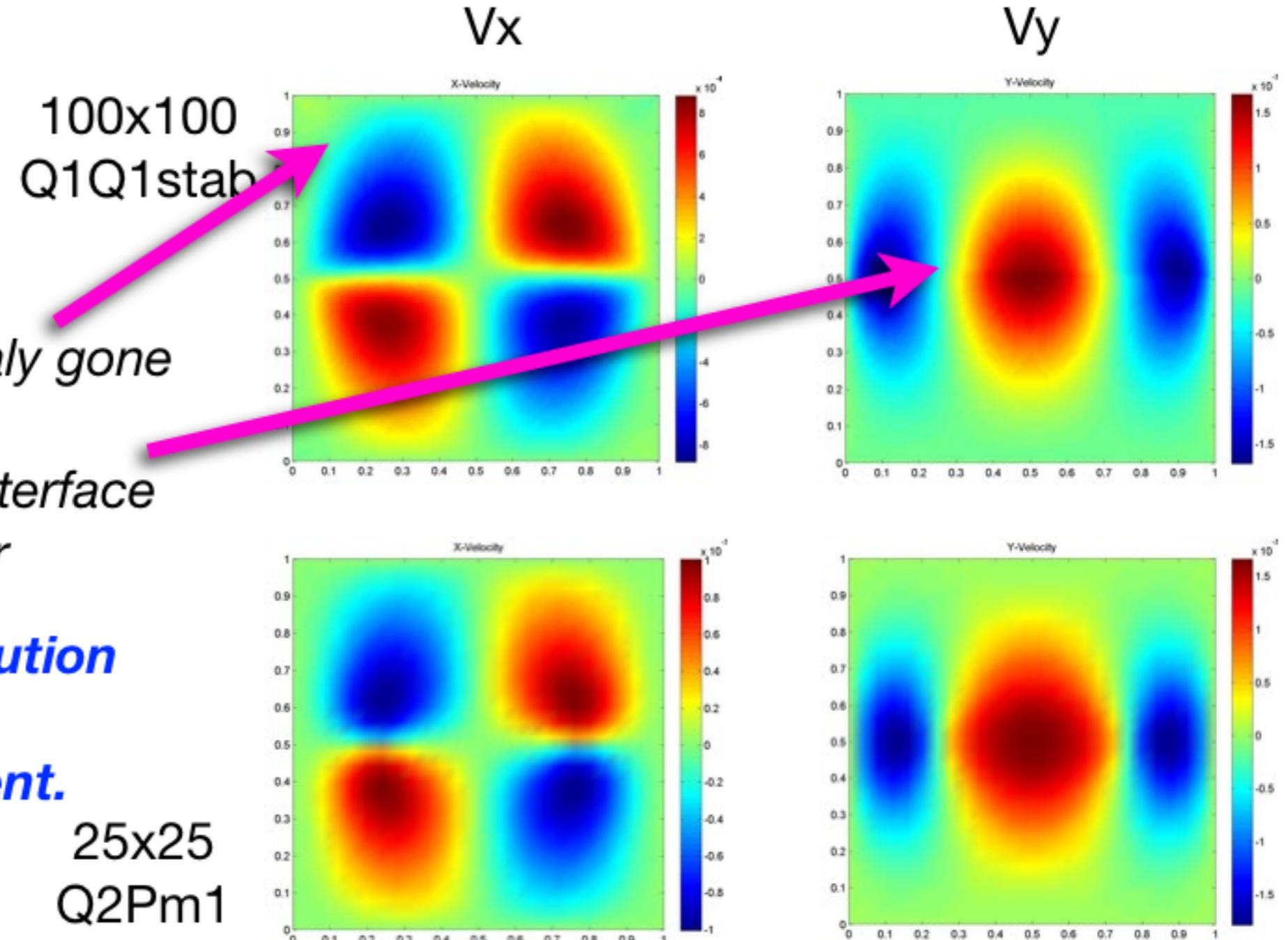
Q1Q1stab :: Incompressibility

100x100
Q1Q1stab

1. Corner anomaly gone
2. Artifacts at interface are milder

Forward evolution starts to be consistent.

25x25
Q2Pm1



storage(Q1Q1 - 100x100) \approx 2 x storage(Q2Pm1 - 25x25)

Yury Mishin