

# **ITRF REGIONAL DENSIFICATIONS**

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# OUTLINE

## SEPARATION OF DISCUSSION ITEMS

- **ITRF2005 DENSIFICATION**

*LIMITED UP TO GPSWEEK 1355 (1400)*

- **FOLLOW ON CUMULATIVE SOLUTIONS**

*UP TO GPSWEEK 1600*

- **ITRF2005 vs ITRF2008**

*SIMILARITIES TO EPN\_Cwww*

- **FUTURE OF THE DENSIFICATIONS**

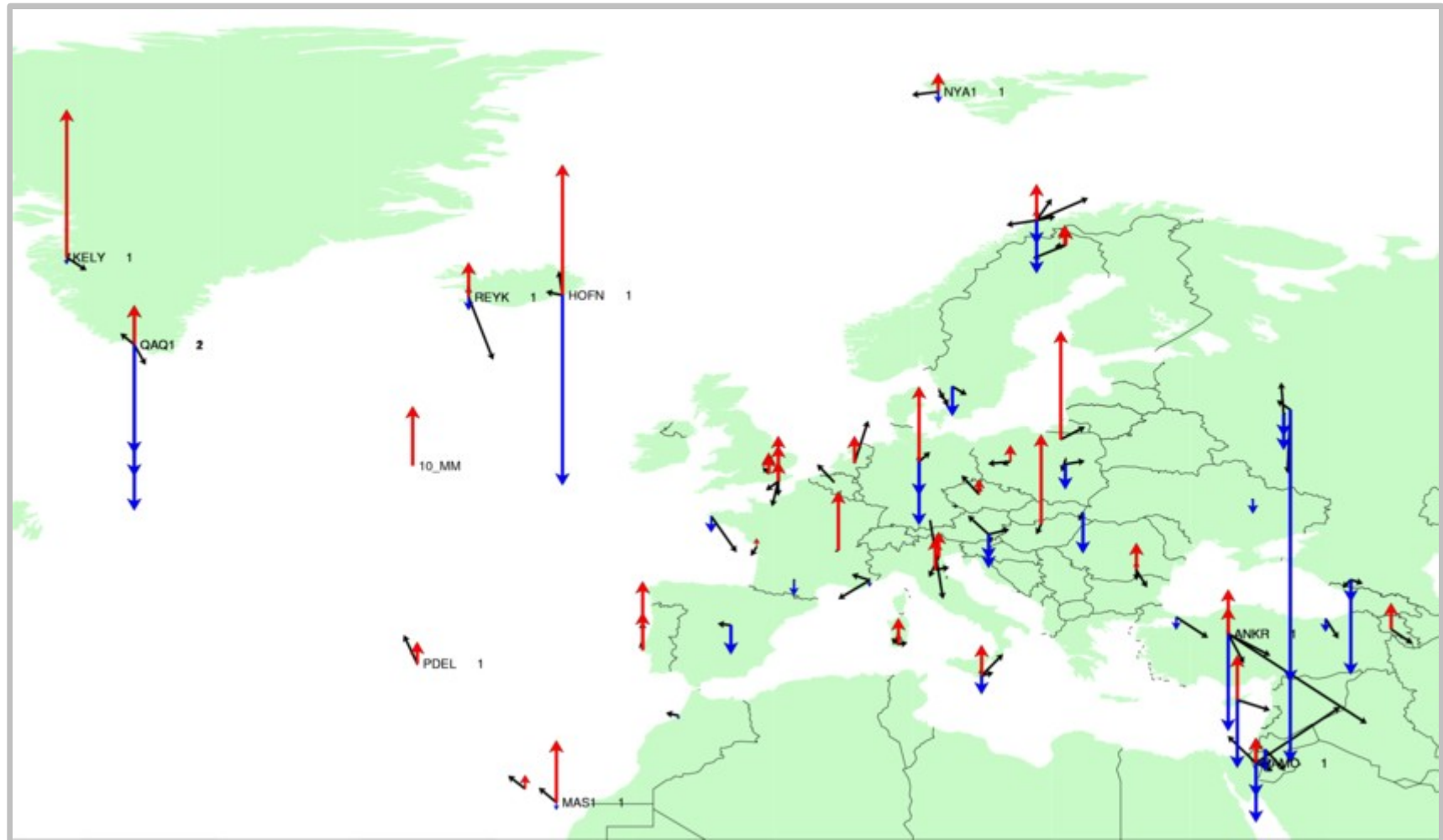
*REGIONAL vs GLOBAL APPROACH*

# ITRF2005 DENSIFICATION

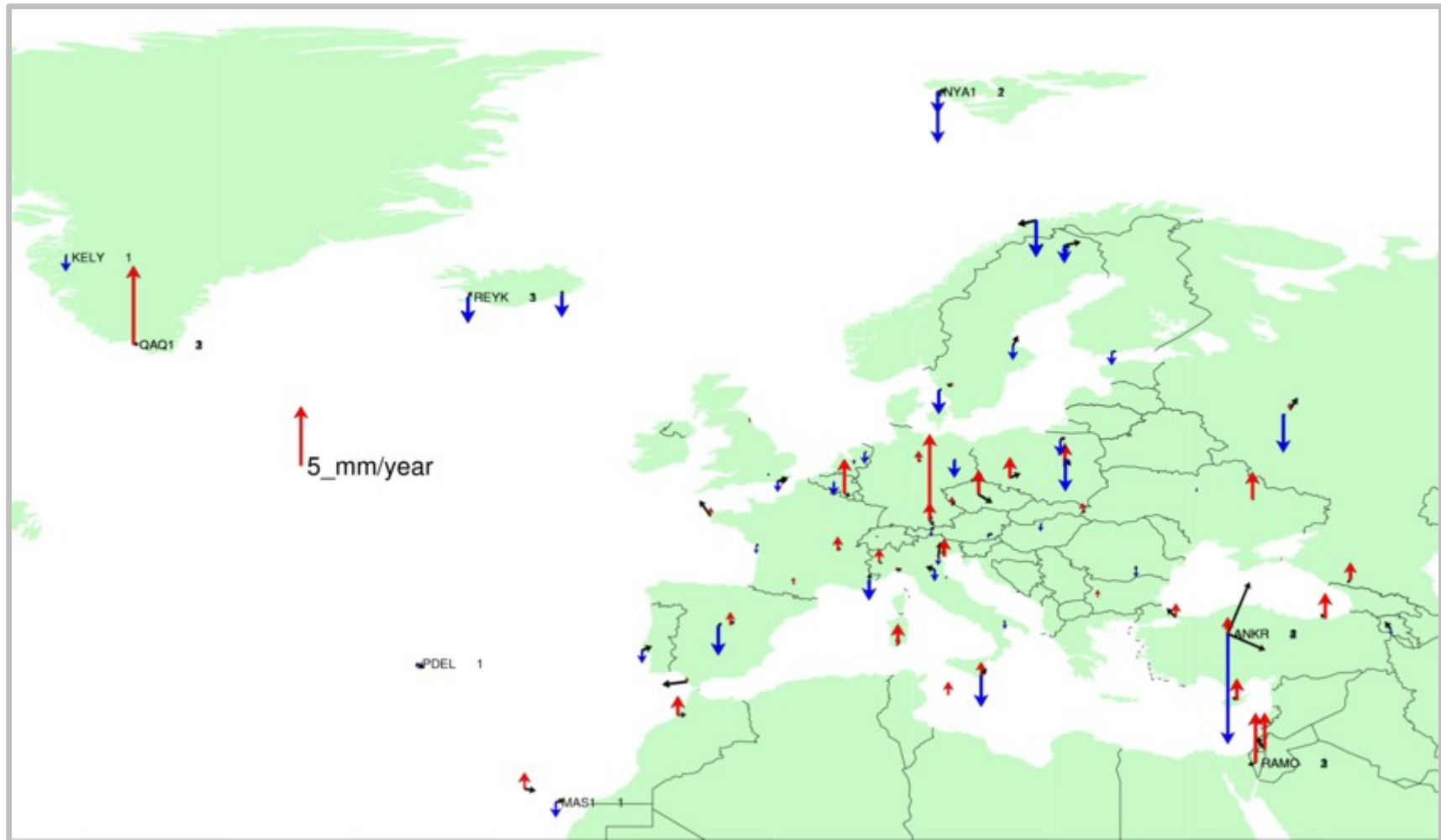
## ISSUES RE-OPENED

- *SUSPECTED TILT OF EPN\_Cwwww\_ITRF.SNX*
- *DATUM SITE SELECTION - THE ROLE OF QAQ1*
- ***NON-ZERO VELOCITY HELMERT PARAMETERS BETWEEN DATUM AND PRODUCT SINEX***
- *TRS vs T ONLY MC (DISCUSSION WITH HISTORY ... )*
- *POSSIBLE CONSEQUENCES ON THE CUMULATIVE PRODUCT*

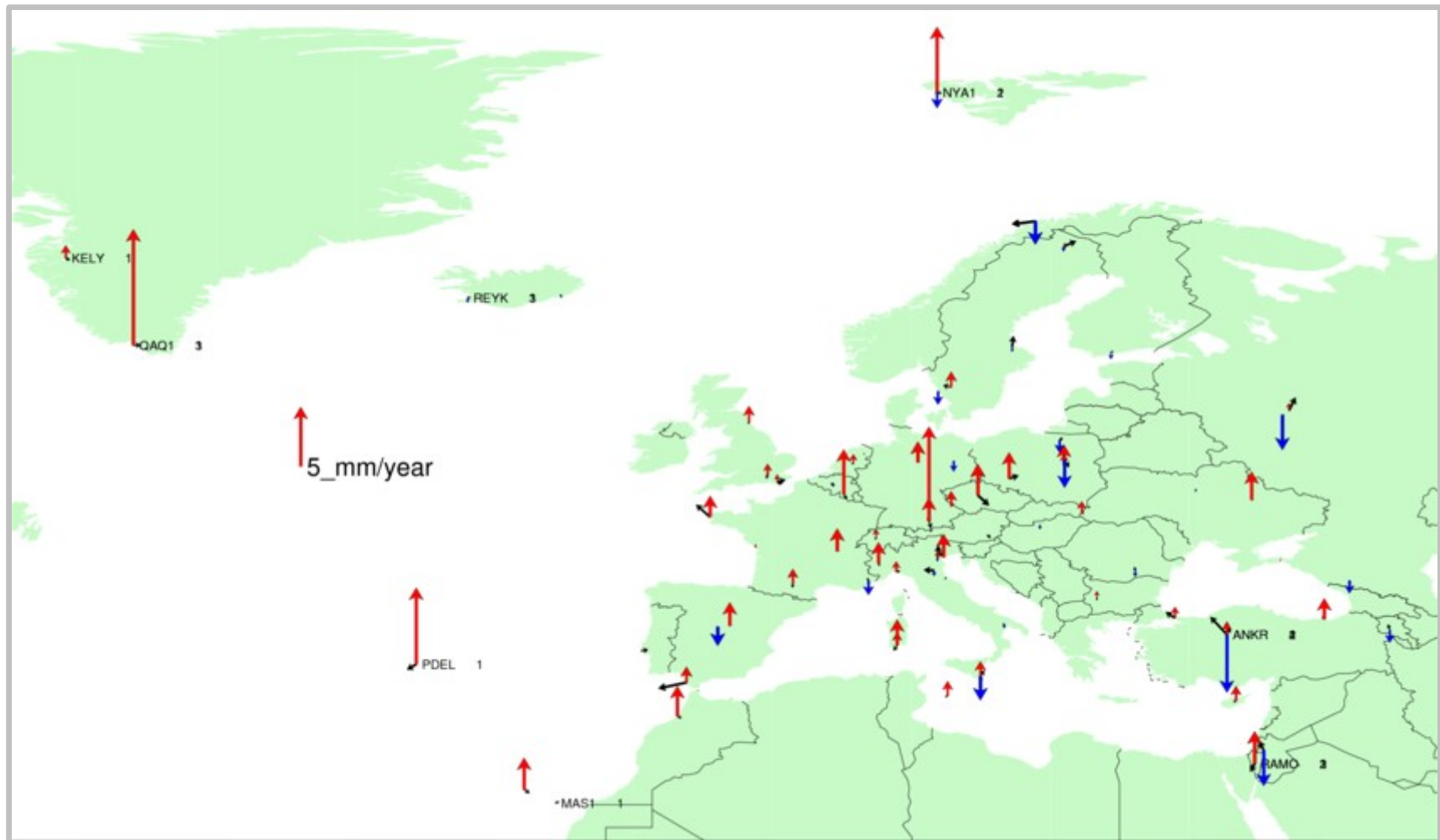
# ITRF2005 vs EPN\_C1355 – CRD epoch 2000.0



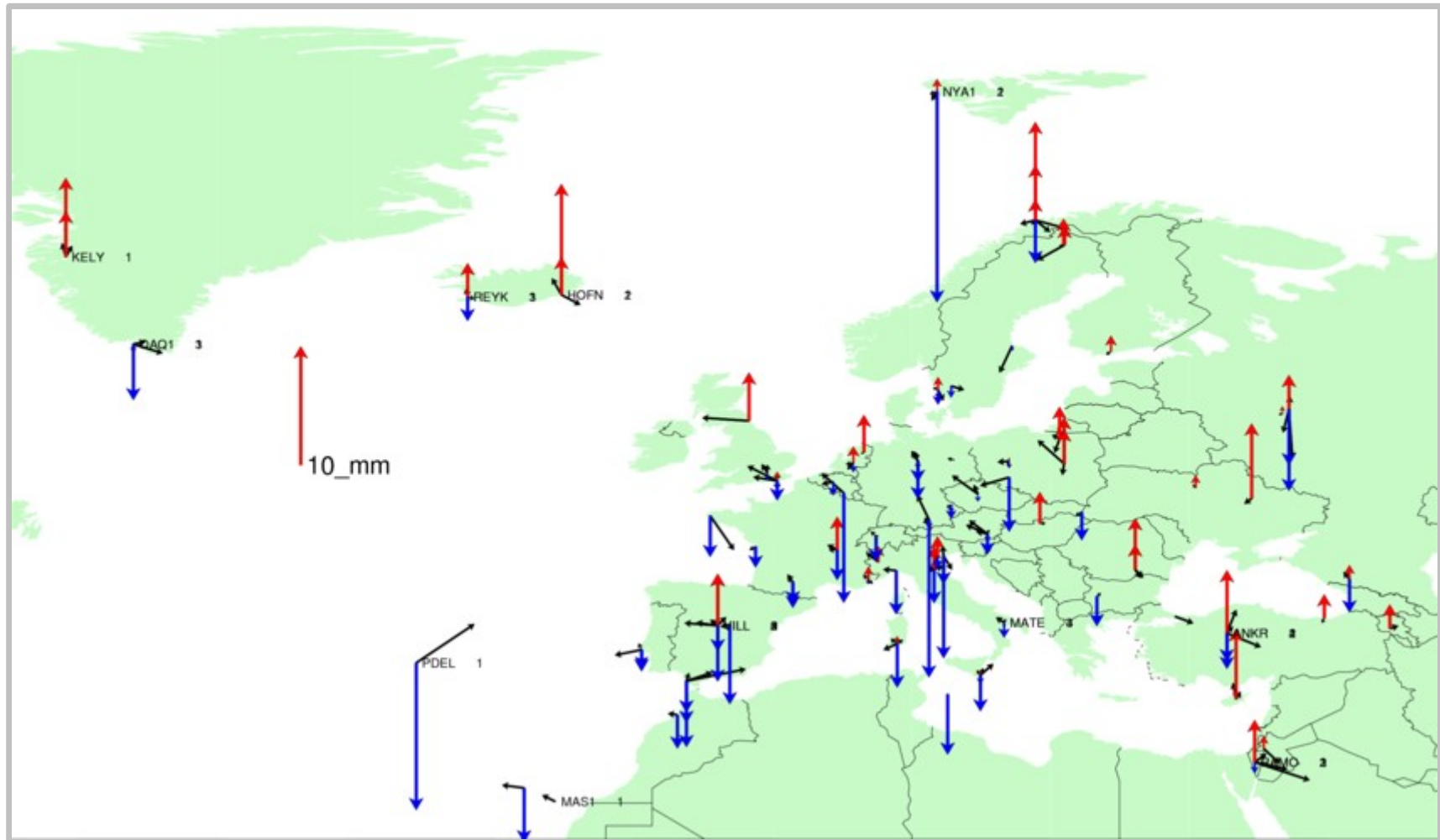
# ITRF2005 vs EPN\_C1355 – VEL



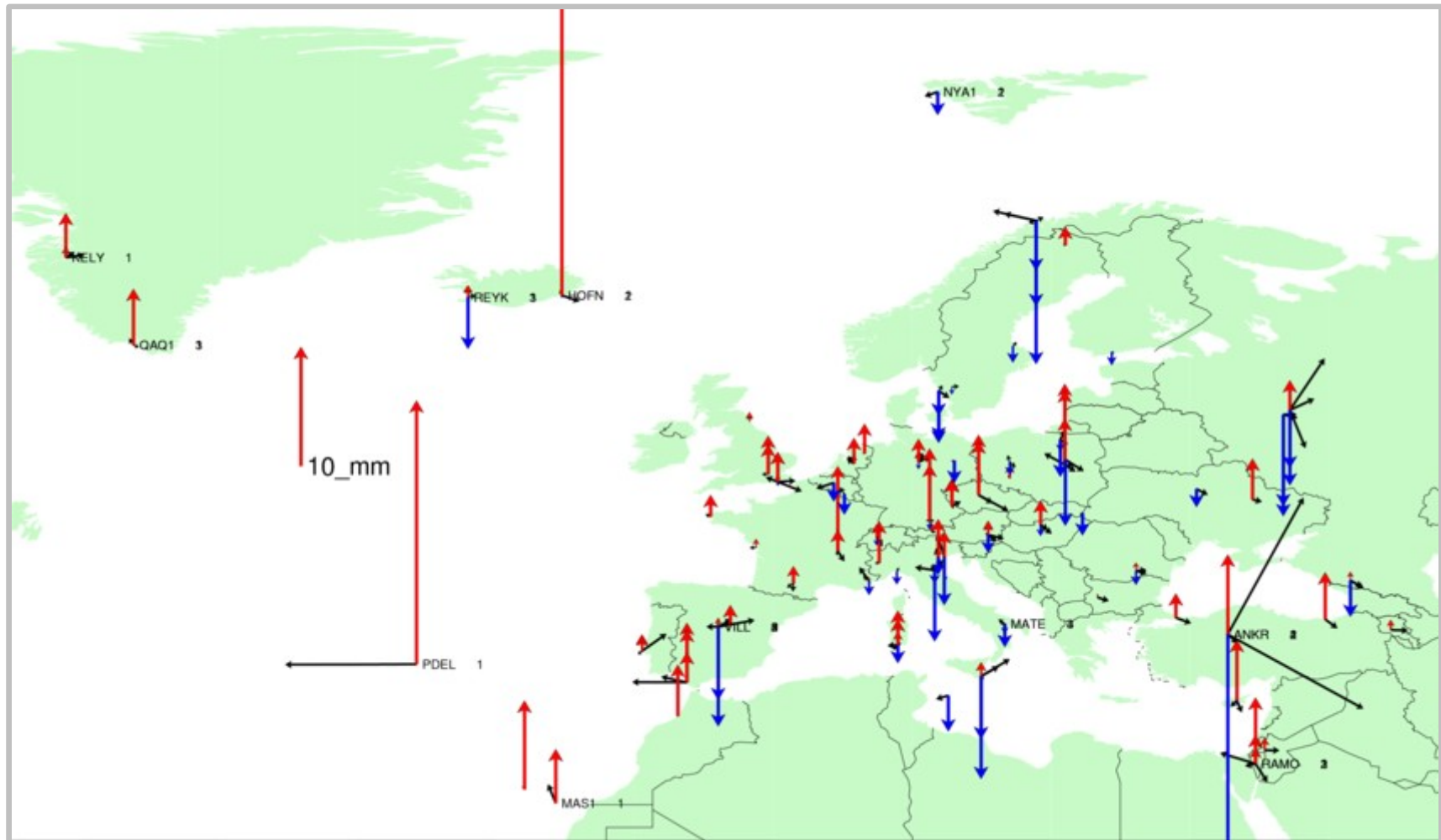
# ITRF2005 vs **EPN\_Z1355** – VEL



# ITRF2005 vs EPN\_C1600 – CRD epoch 2000.0

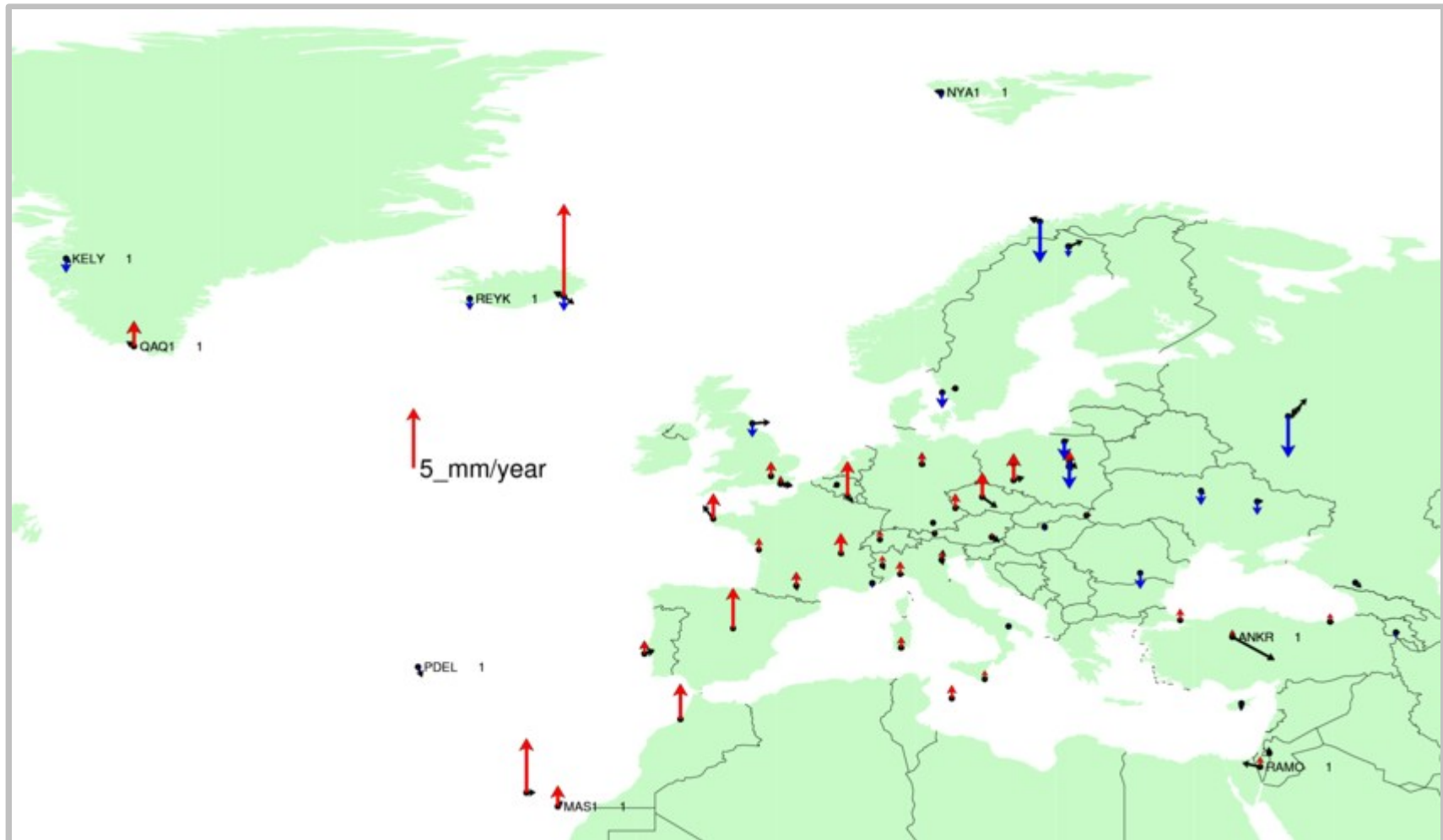


# ITRF2005 vs EPN\_C1600 – CRD epoch 2005.0

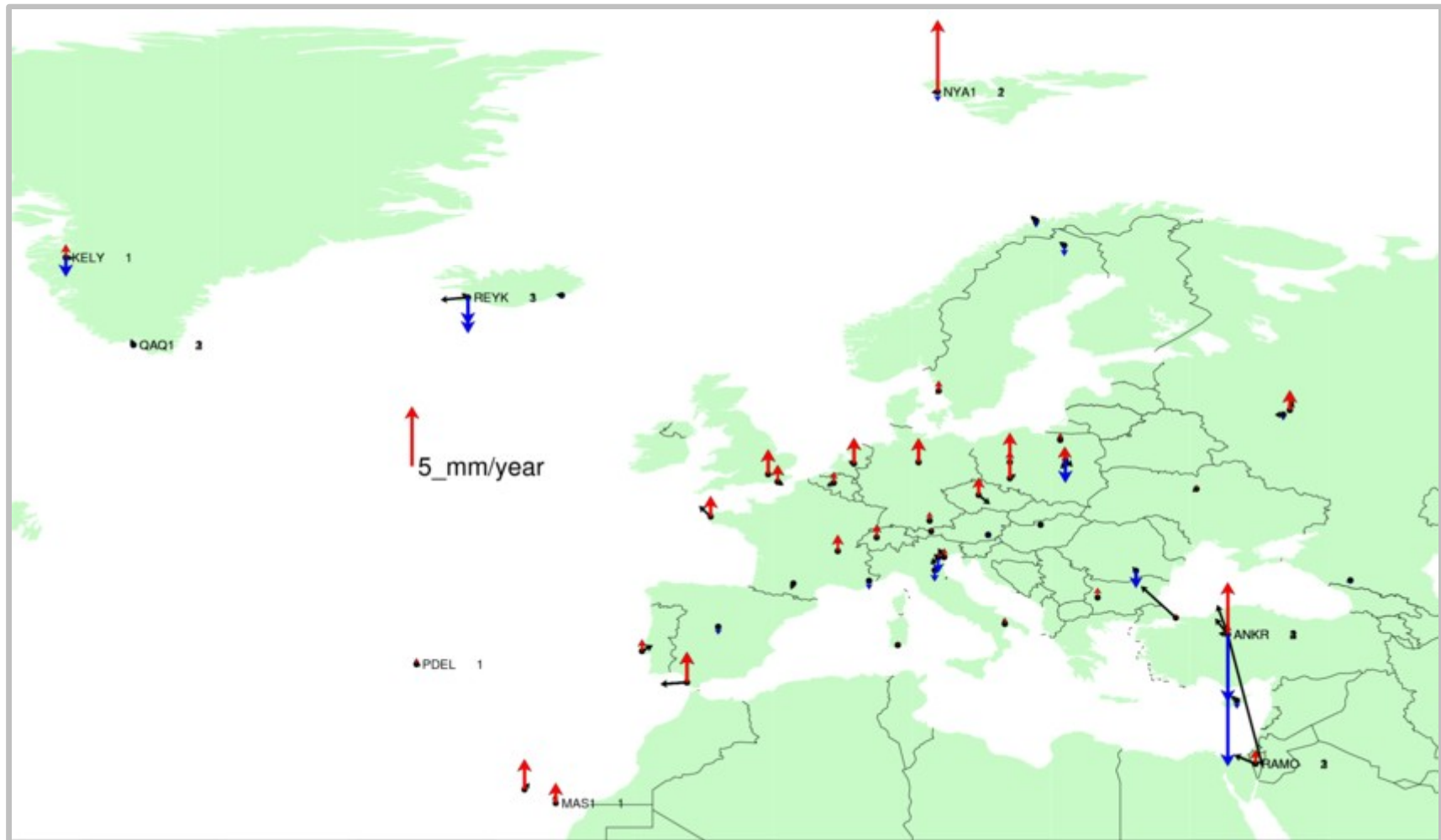




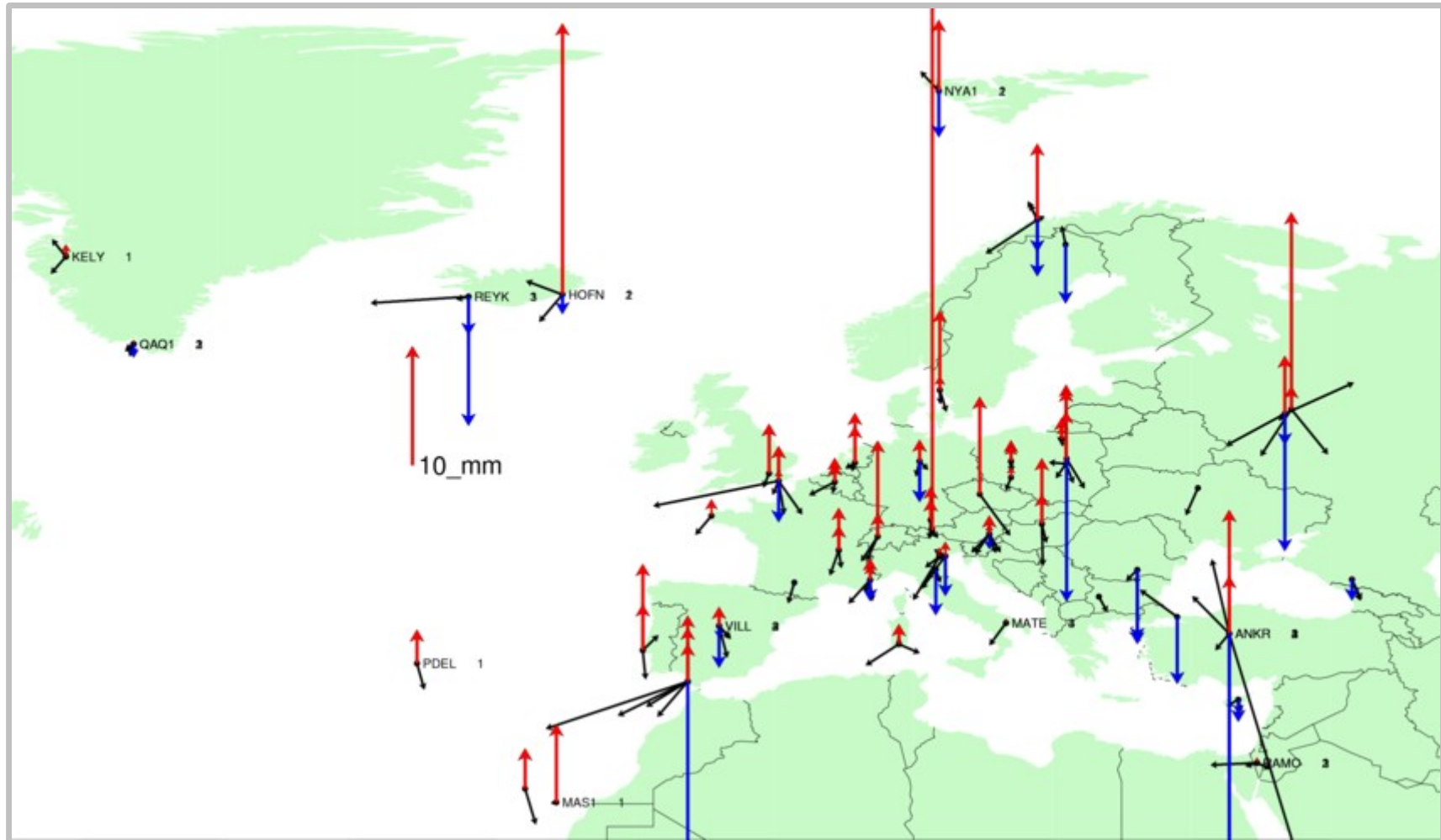
# ITRF2005 vs EPN\_C1600 - VEL



# ITRF2005 vs ITRF2008 - VEL



# ITRF2005 vs ITRF2008 - CRD



# ITRF2005 vs ITRF2008 vs EPN\_C

- **REGIONAL PATTERNS ARE IN AGREEMENT**

*WHAT YOU OBSERVE NOW IT IS TRANSITION TO ITRF2008*

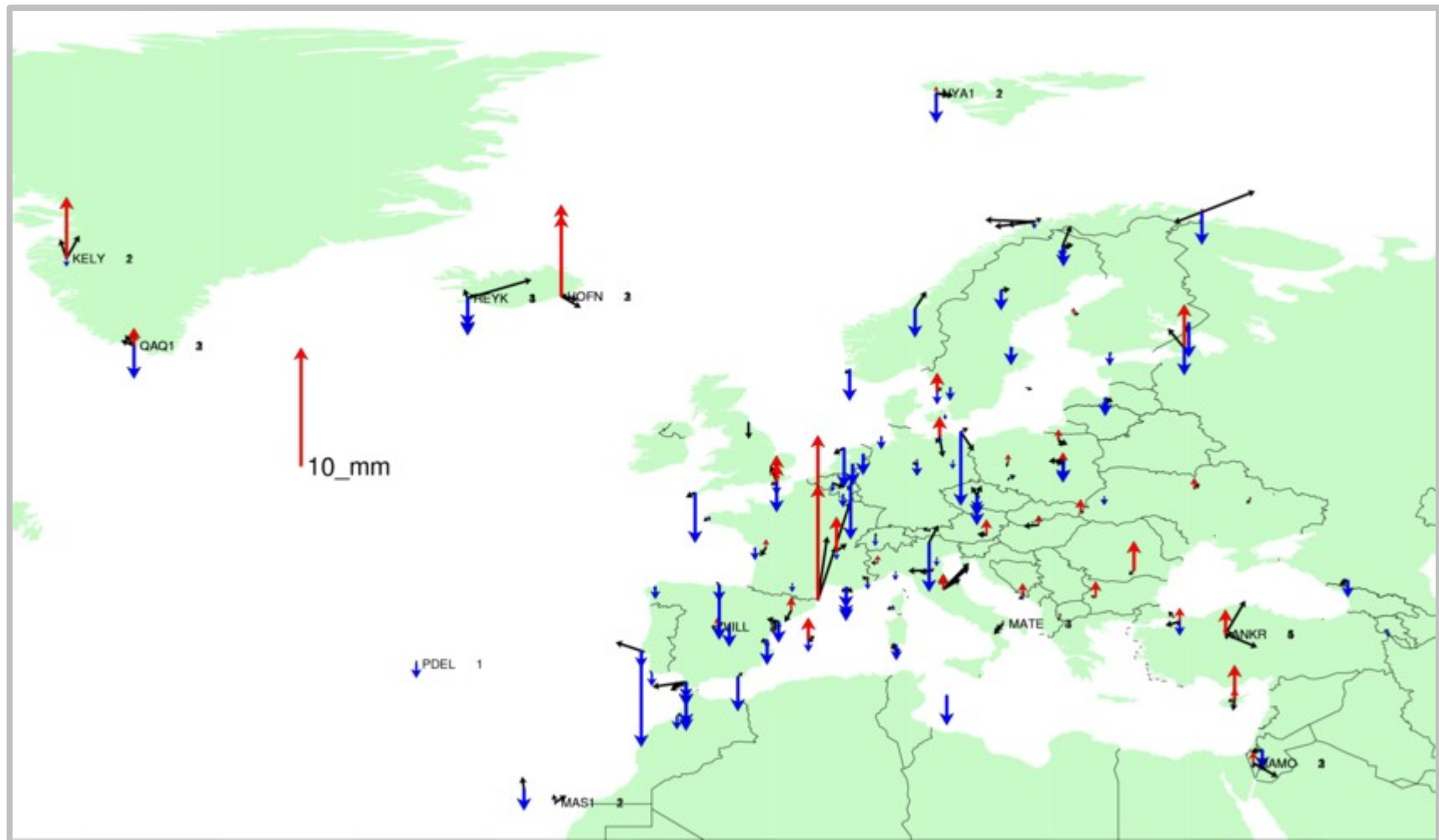
*SURPRISINGLY GOOD AGREEMENT WITH ITRF2008 COORDINATES*

- **EXISTING REGIONALITY, BUT THIS ONLY REFLECTS THE CHANGE IN DATA CONTENT**

- **SMOOTH TRANSITION EXPECTED WHEN WE CHANGE FROM ITRF2000 TO ITRF2008**

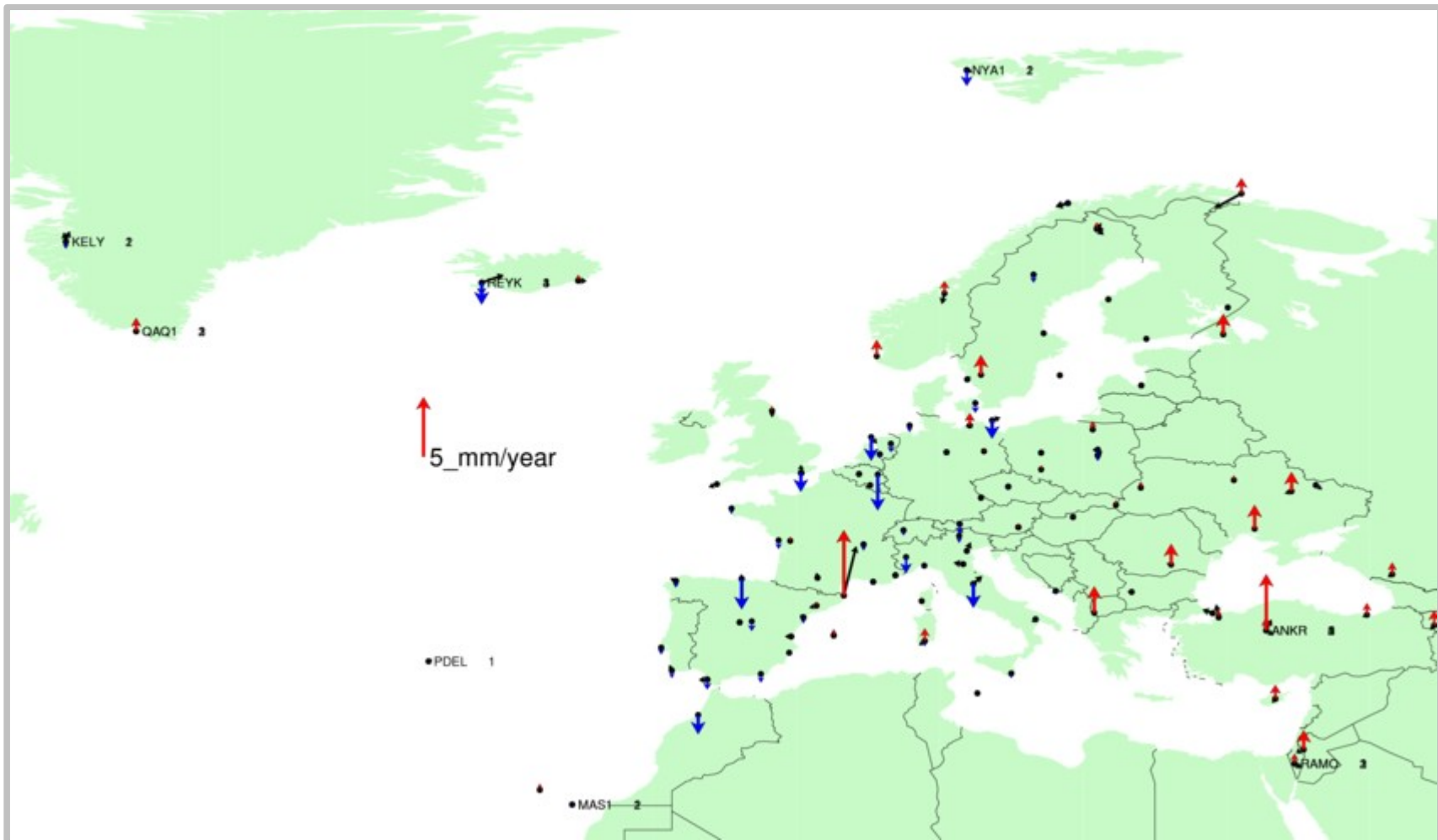
# ITRF2008 DENSIFICATION #0: JOB C1355 REVISITED

INPUT: MUT RE-PROCESSED  
SAME DATUM SELECTION



# ITRF2008 DENSIFICATION #0: JOB C1355 REVISITED

INPUT: MUT RE-PROCESSED  
SAME DATUM SELECTION



# FUTURE ITRF DENSIFICATIONS: GLOBAL vs REGIONAL APPROACH

- **REGIONAL**

*DATUM SELECTION ISSUES (DECREASED, BUT ... !)*

*EXPECTED BIASES IN CRD/VEL AND SEASONAL SIGNAL*

- **GLOBAL**

*CHOICES: DO THE JOB ON THE OBSERVATION OR SINEX LEVEL*

*PRESENTATION ON THE NEXT TWG MEETING*

*...*