

Possible Partnership CERN EUREF on the theme of Densification

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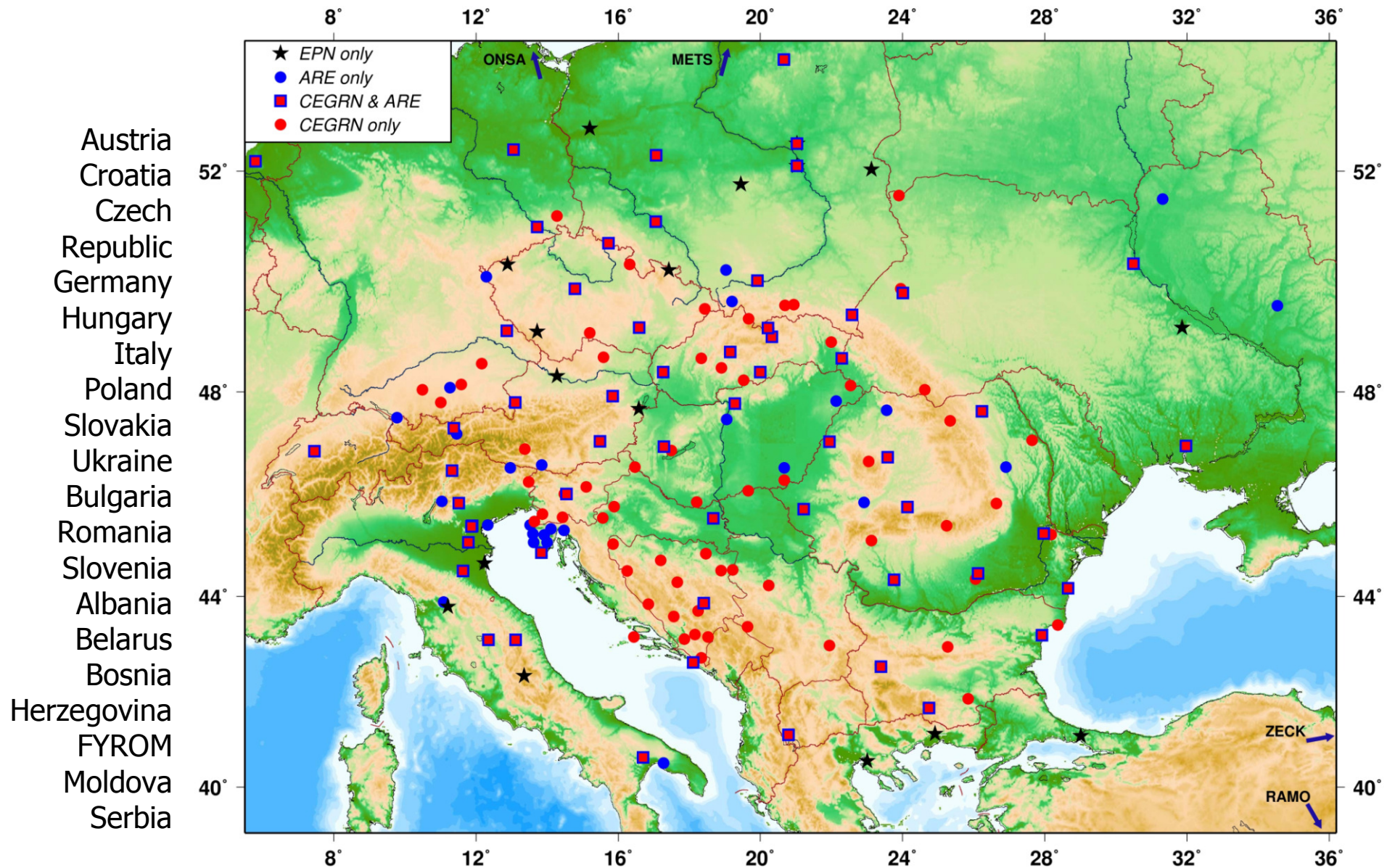
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Outline / Scope

- Presentation of CEGRN
 - CEGRN network and Campaigns
 - Data available
- Objectives of Partnership
 - Network densification for reference frame and geokinematical applications
- Expected Results of the Partnership
 - Combined network SINEX file with densified position and velocities in ETRF2000
 - Support to the IAG Dense Velocity Field Project

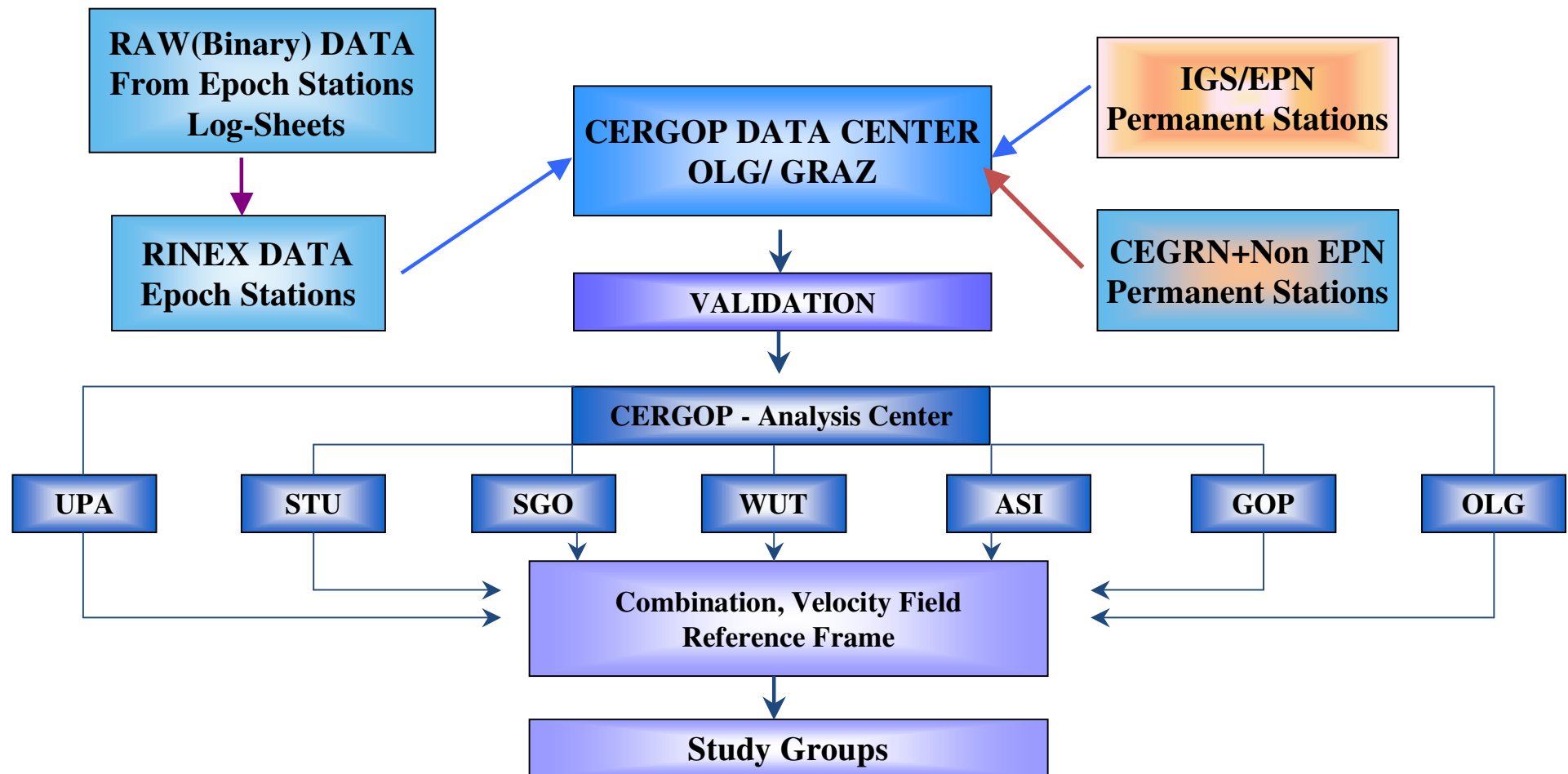
CEGRN 1 /2: network and members



CEGRN 2/2: Campaigns

Campaigns	Period	Country	Sites
CEGRN'94	2-6 May 1994	10	30
CEGRN'95	29 May-3 June 1995	11	36+5
CEGRN'96	10-15 June 1996	11	35+6
CEGRN'97	4-10 June 1997	12	35+10
CEGRN'99	14-19 June 1999	13 (extended network)	57 (19P+38E)
CEGRN'01	18-23 June 2001	13 (extended network)	51 (28P+23E)
CEGRN'03	16-21 June 2003	13 (extended network)	51 (28P+23E)
CEGRN'05	20-25 June 2005	14 (extended network)	97
CEGRN'06	12-18 June 2006	Only CGPS	47
CEGRN'07	18-23 June 2007	19 (extended network)	81
CEGRN'09	22-27 June 2009	19 (extended network)	85

CEGRN Data Flow



EPN Guidelines implemented + reprocessing

->campaign solutions should be fully compatible with EPN weekly SINEX's

Possible work plan

- Validation of individual CEGRN campaigns as EPOCH realizations of the ETRF2000
- Combination of the 9 CEGRN campaign SINEX with corresponding EPN weekly SINEX (reprocessed). Time span: 1996 - 2011
- Stacking of the combined SINEX using MC on POS+VEL(?)
- add to the stack EPN_A_ITRF2005.SNX as a datum
- Test different sw: CATREF, BERNESSE
- Include OLG's ARE Sinex files, after reprocessing
- Deliver result to IAG SP 'Dense Velocity Field'

New aspects

- Test and optimize guidelines for approval of networks with position and velocities
- Test consistency and mutual improvements of offset treatment in time series
- Involve more nations into the 'ETRS89' standards -> good for INSPIRE
- Provide better and more consistent data for geokinematics
- Stimulate reprocessing of old EPN data (perfect timing for CEGRN 2011 and foreseen completion of the reprocessing of the EPN)