

Sub-Commission SC 1.3

Regional Reference Frames

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Terms of Reference

Sub-Commission 1.3 deals with the definitions and realizations of regional reference frames and their connection to the global International Terrestrial Reference Frame (ITRF).

It offers a home for service-like activities addressing theoretical and technical key common issues of interest to regional organisations.

Objectives

- *Develop specifications for the definition and realization of regional reference frames, including the vertical component with special consideration of gravity data and other data.*
- *Coordinate activities of the regional sub-commissions focusing on exchange and share of competences and results.*
- *Develop and promote operation of GNSS permanent stations, in connection with IGS whenever appropriate, to be the basis for the long-term maintenance of regional reference frames.*
- *Promote the actions for the densification of regional velocity fields.*
- *Encourage and stimulate the development of the AFREF project in close cooperation with IGS and other interested organizations.*
- *Encourage and assist, within each regional sub-commission, countries to re-define and modernize their national geodetic systems, compatible with the ITRF.*

Structure

- *Regional Sub-commissions*
 - ✓ **SC1.3a Europe (EUREF)**
Chair: Johannes Ihde (Germany)
 - ✓ **SC1.3b South and Central America (SIRGAS)**
Chair: Claudio Brunini (Argentina)
 - ✓ **SC1.3c North America (NAREF)**
Co-Chairs: Richard Snay (USA), Michael Craymer (Canada)
 - ✓ **SC1.3d Africa (AFREF)**
Chair: Richard Wonnacott (South Africa)
 - ✓ **SC1.3e South-East Asia and Pacific**
Chair: Shigeru Matsuzaka (Japan)
 - ✓ **SC1.3f Antarctica (SCAR)**
Chair: Reinhard Dietrich (Germany)
- **Working Group SC1.3-WG1: Regional Dense Velocity Fields**
Chair: Carine Bruyninx (Belgium)

Programme of Activities

- *Organize inter-regional workshops addressing activities, results and key issues of common interest to the regional sub-commissions.*
- *Develop analysis strategies and compare methods for the implementation of the regional reference frames and their expression in the ITRF, with full interaction with the IGS.*
- *Consider establishing regional dense velocity fields for, primarily, the long-term maintenance of the regional reference frames.*
- *Contribute at regional levels to the realization and improvement of local surveys in the collocation sites, with full cooperation with the Sub-commission 1.2 Global Reference Frames.*

SC1.3-WG1

The main task of this WG is to develop harmonized and possibly common specifications for the densification of the regional velocity fields.