COST-G

Combination Service for Time-variable Gravity Models

Consolidated and validated monthly gravity field combinations of the GRACE, Swarm and GRACE-FO satellite missions

Ulrich Meyer[1], Martin Lasser[1], Adrian Jäggi[1], Frank Flechtner[2], Christoph Dahle[2], Eva Boergens[2], Christoph Förste[2], Torsten Mayer-Gürr[3], Andreas Kvas[3], Saniya Behzadpour[3], Jean-Michel Lemoine[4], Stéphane Bourgogne[5], Igor Koch[6], Jakob Flury[6], Andreas Groh[7], Annette Eicker[8], Benoit Meyssignac[9], Ingo Sasgen[10], João de Teixeira da Encarnação[11,12]

[1]University of Bern, Astronomical Institute, Switzerland
[2]German Research Centre for Geosciences, Germany
[3]Graz University of Technology, Austria
[4]Centre National d'Etudes Spatiales, France
[5]Stellar Space Studies, France
[6]Leibniz University Hannover, Germany
[7]Technical University of Dresden, German
[8]HafenCity University Hamburg, Germany
[9]Laboratoire d'Etudes en Geophysique et Oceanographie Spatiales, France
[10]Alfred-Wegener-Institute, Bremerhaven, Germany
[11]Delft University of Technology, the Netherlands
[12]Center for Space Research, University of Texas at Austin, USA

G3P

ICCC WS21

Session 01 – Hydrology and data processing

UNIVERSITÄT BERN

GFZ Helmholtz Centre Potsdam

TU Graz Graz University of Technology

cnes

Leibniz Universität Hannover

TECHNISCHE UNIVERSITÄT DRESDEN

STELLAR SPACE STUDIES

HCU HafenCity Universität Hamburg

LEGOS

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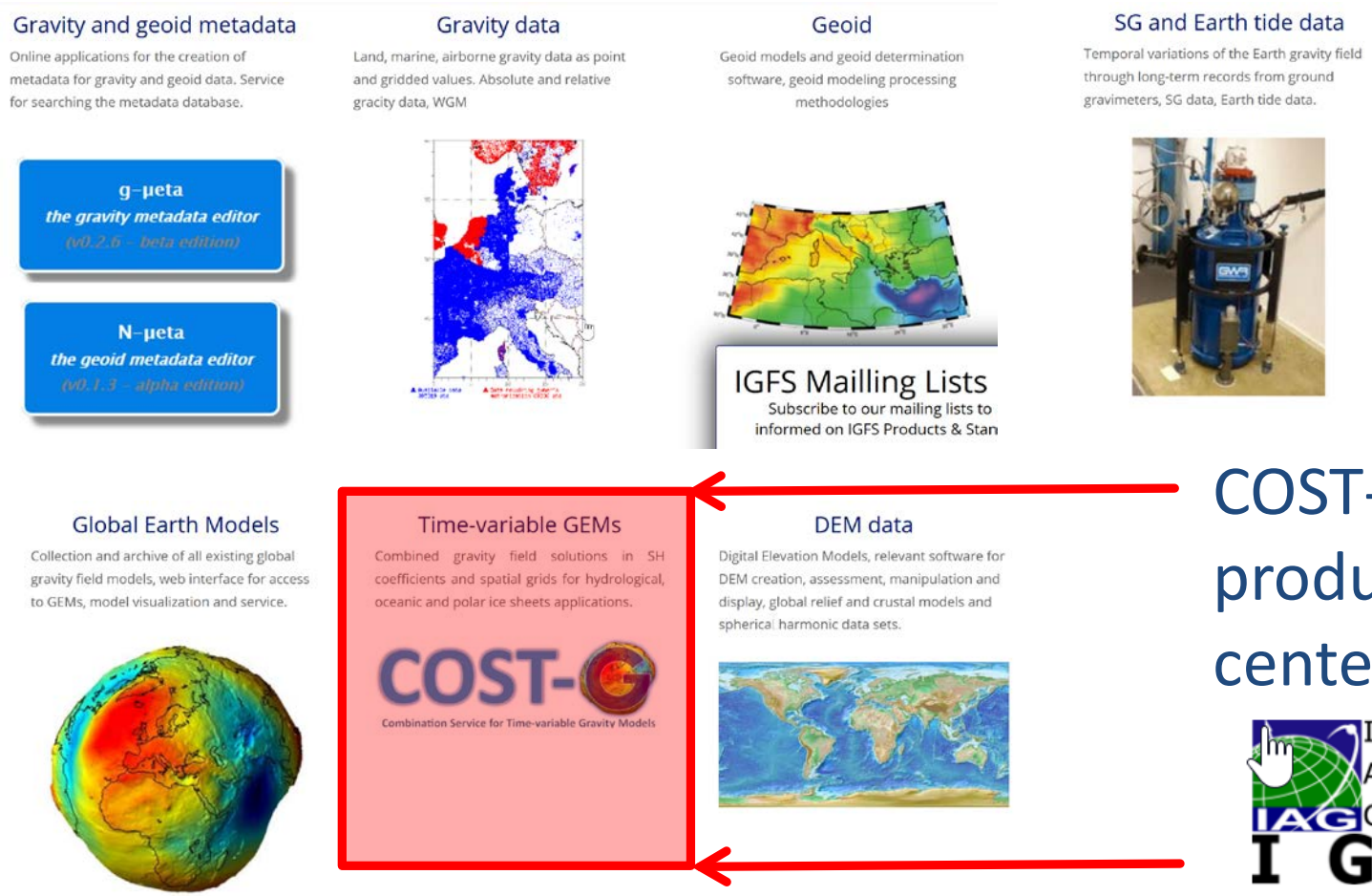
COST-G: product center of the IGFS



COST-G is a product center of the

International Association of Geodesy
IAG
I G F S

http://igfs.topo.auth.gr/

COST-G: Website

Welcome to COST-G

The International Combination Service for Time-variable Gravity Fields (**COST-G**) is a product center of the International Gravity Field Service (IGFS) and is dedicated to the combination of monthly global gravity field models. COST-G stems from the activities of the former H2020 project European Gravity Service for Improved Emergency Management (EGSIEM).

Please use the top menu to visit the various parts of our website!

The service started its work in 2019 and the website is still under construction. More features will be available soon! We apologize for any inconvenience. For any questions, please contact us.

Best regards,
Your COST-G Team.

https://cost-g.org/

Latest News

January 11th 2021

COST-G is having its annual start of the year meeting from 11th to 15th of January!

November 23rd 2020

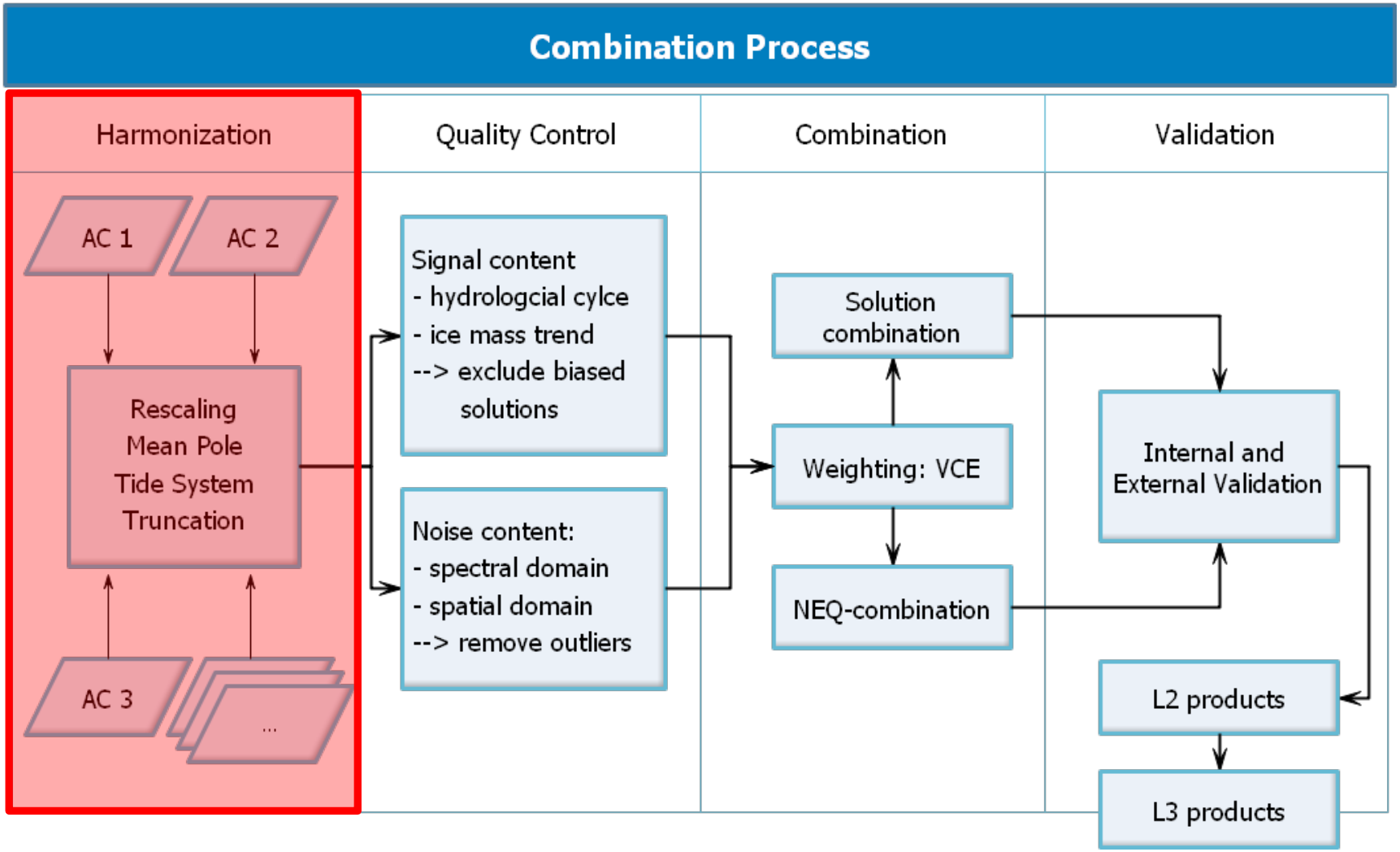
COST-G GRACE-FO monthly models are now available!

COST-G: Permanent Components

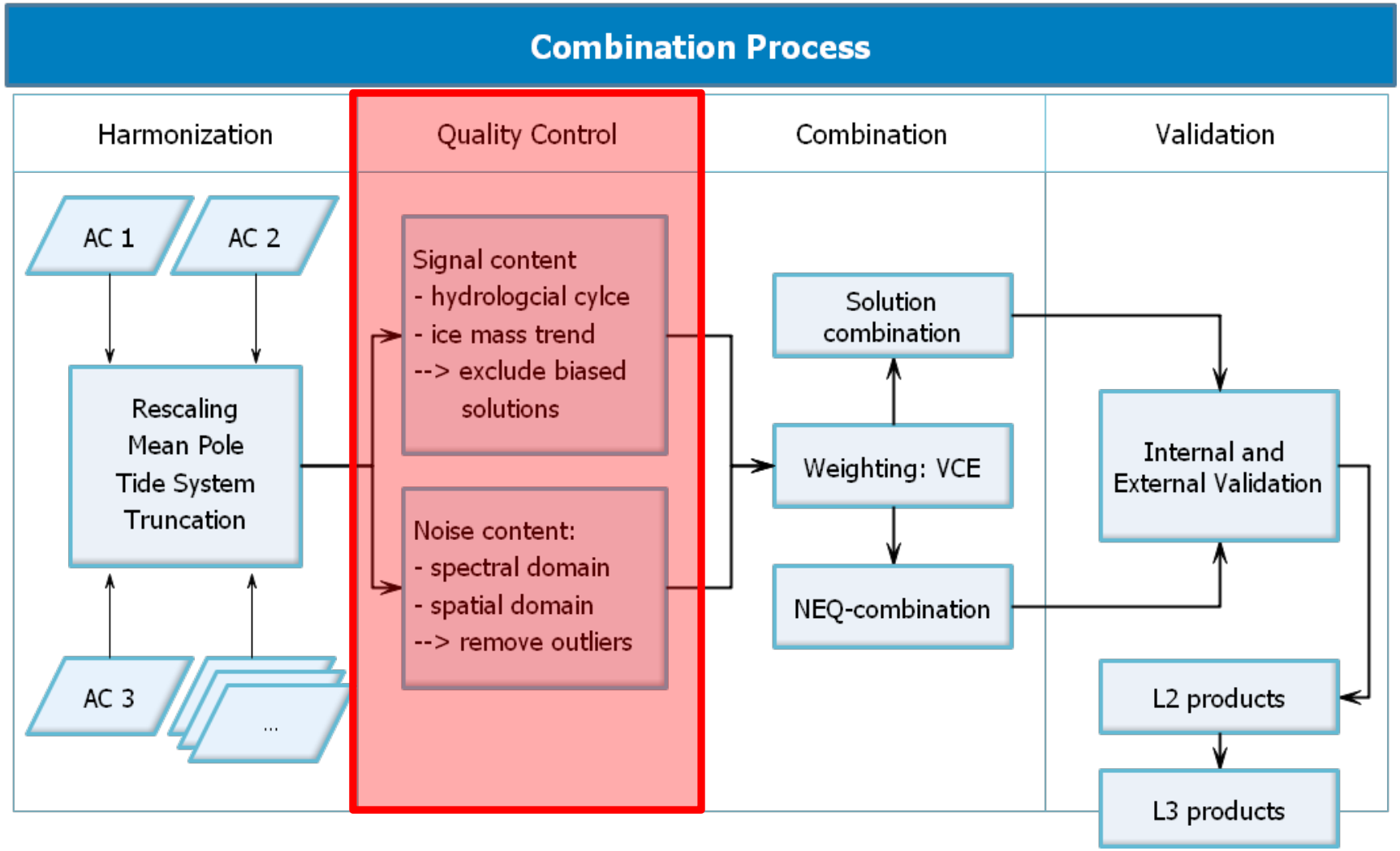
COST-G accomplishes its objectives through the following permanent components and roles:

- **Central Bureau (CB) & Analysis Center Coordinator (ACC)**
  - AIUB
- **Analysis Centers (ACs)**
  - AIUB, CNES, GFZ, LUH, TUG
- **Level-3 Center (L3C)**
  - GFZ
- **Validation Centers (VCs)**
  - GRGS, GFZ
- **Product Evaluation Group (PEG)**
  - A. Eicker, A. Groh, B. Meyssignac
- **Partner ACs:** CSR, JPL
- **Candidate ACs:** Chinese ACs

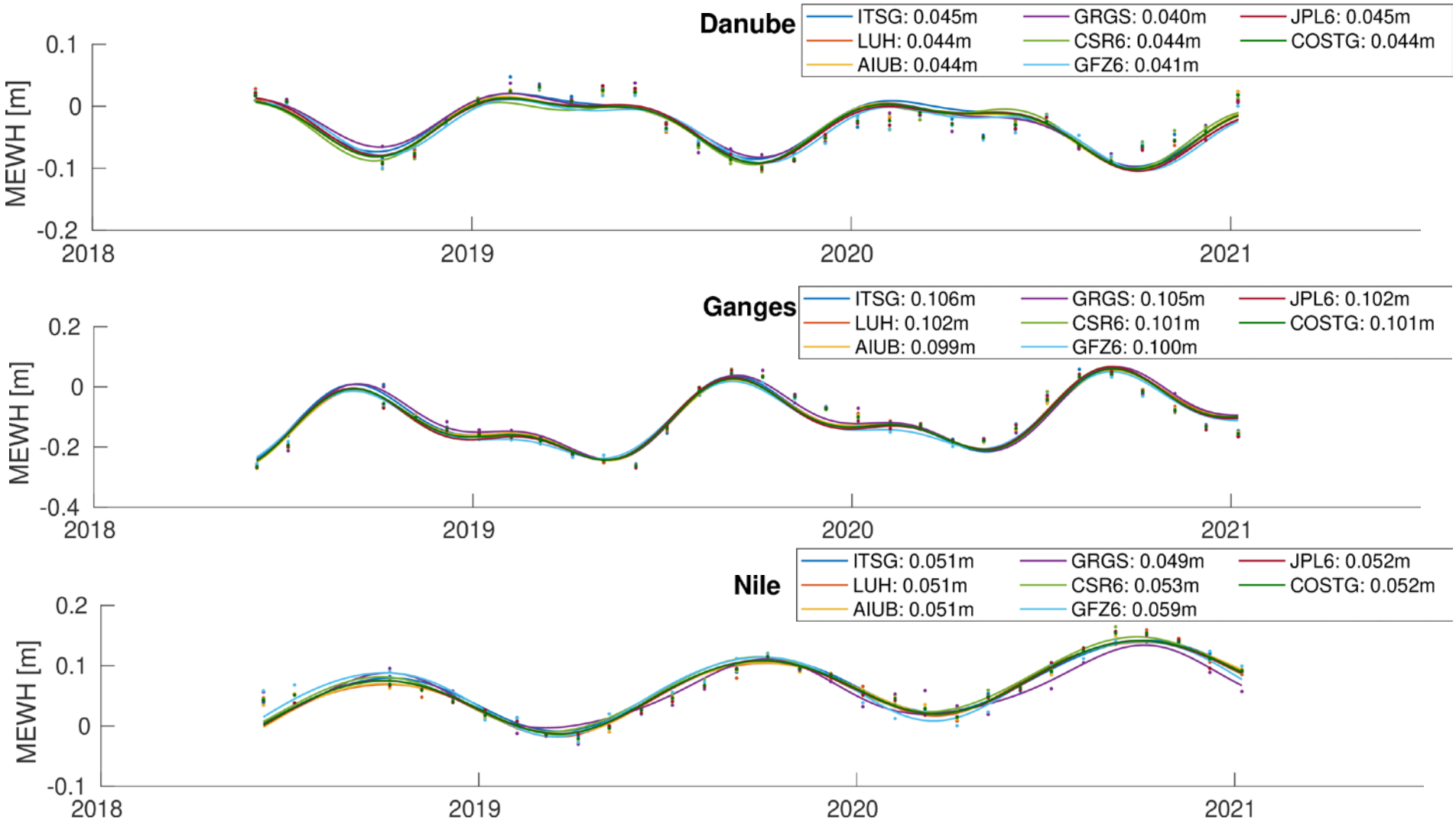
COST-G operations: Harmonization



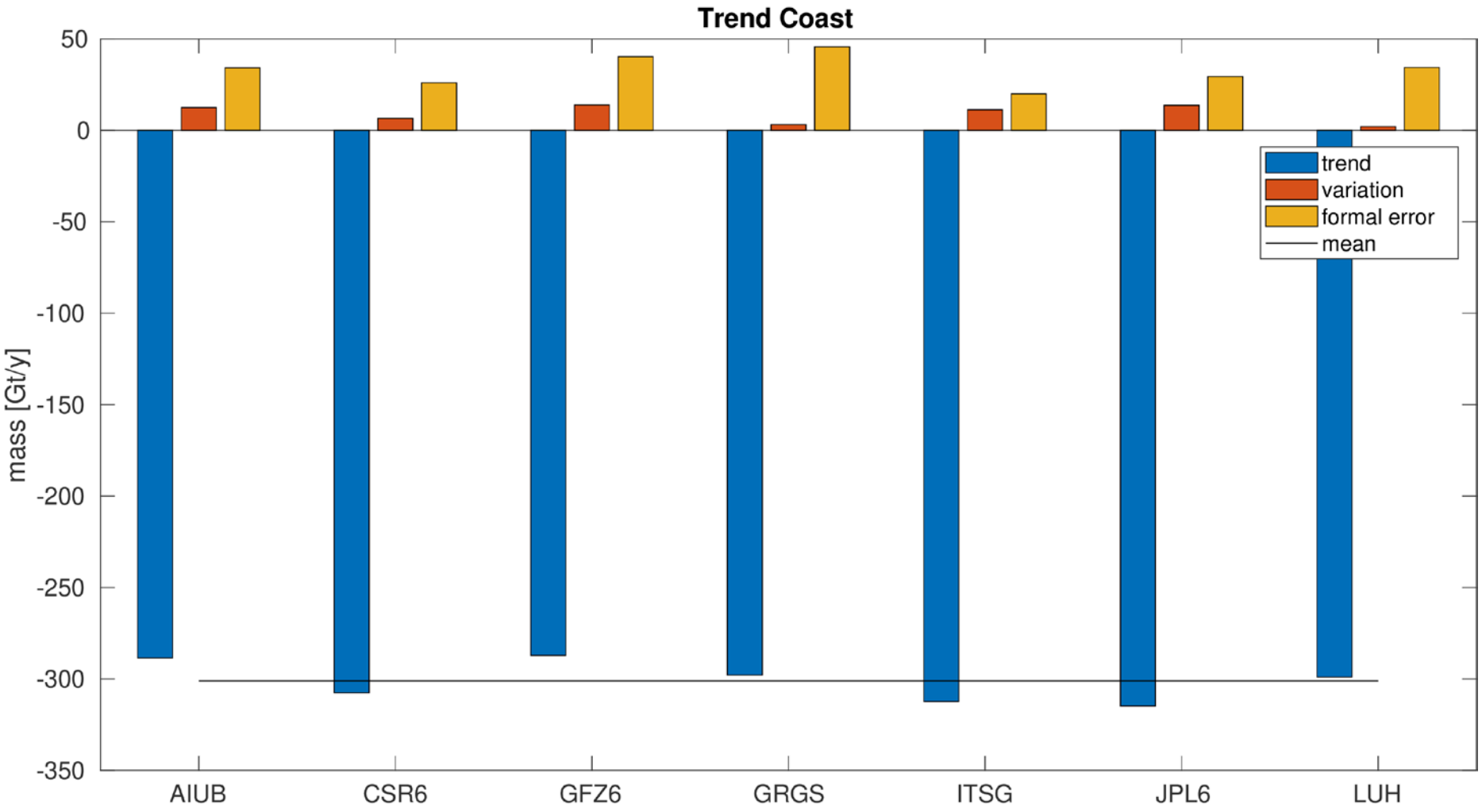
COST-G operations: Quality Control



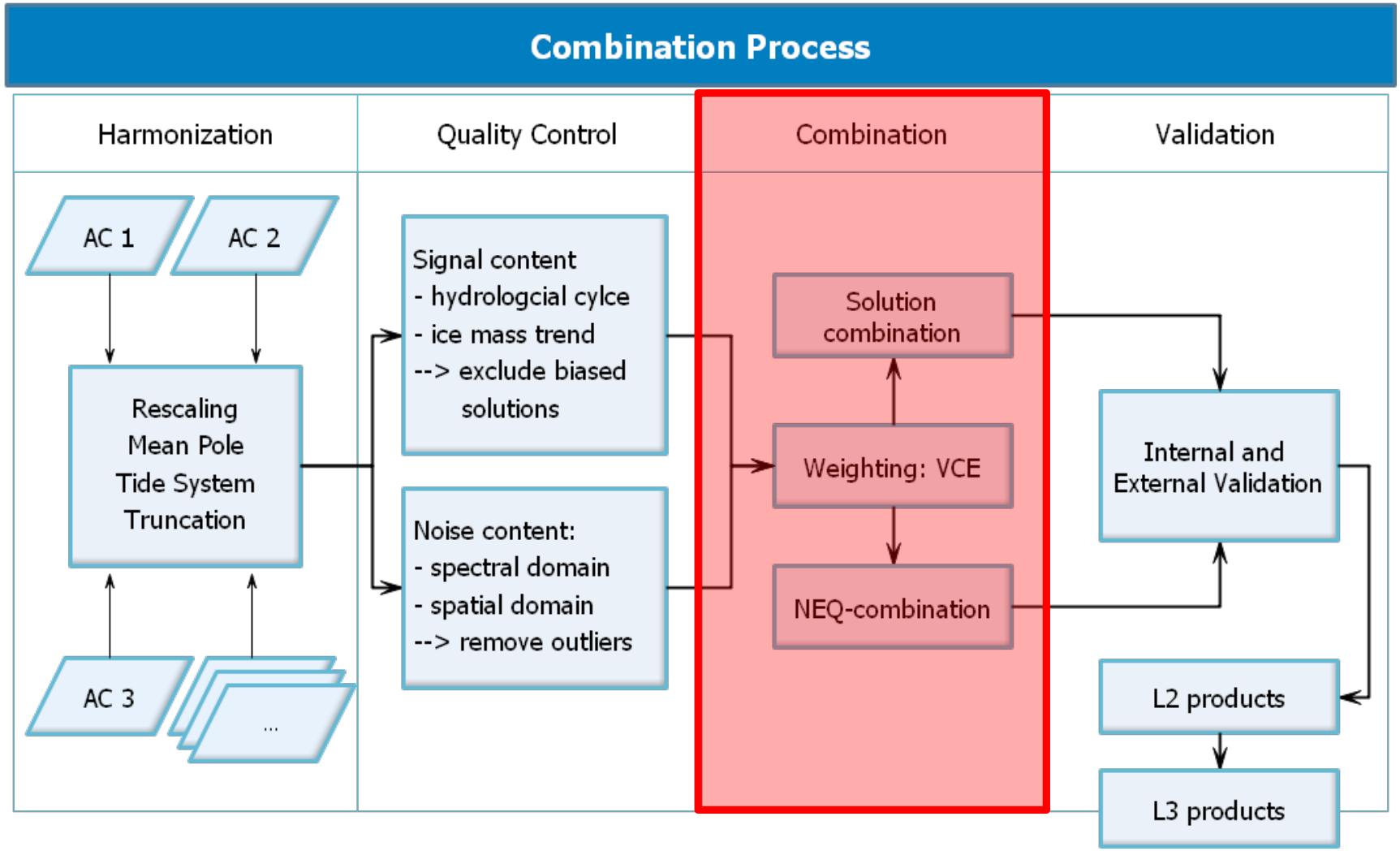
Quality control: Hydrological signal content (GRACE-FO)



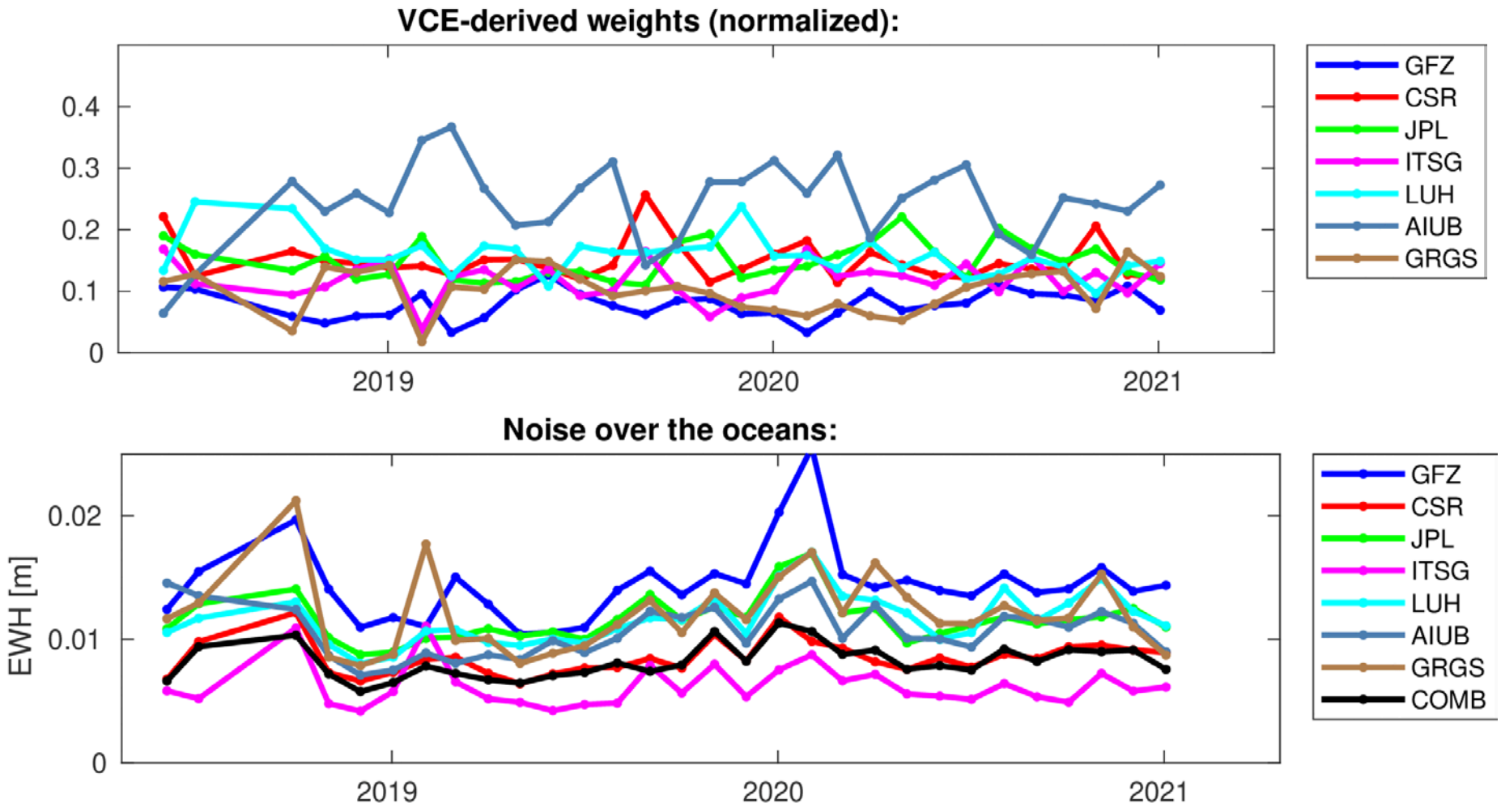
Quality control: Ice mass change in Greenland (GRACE-FO)



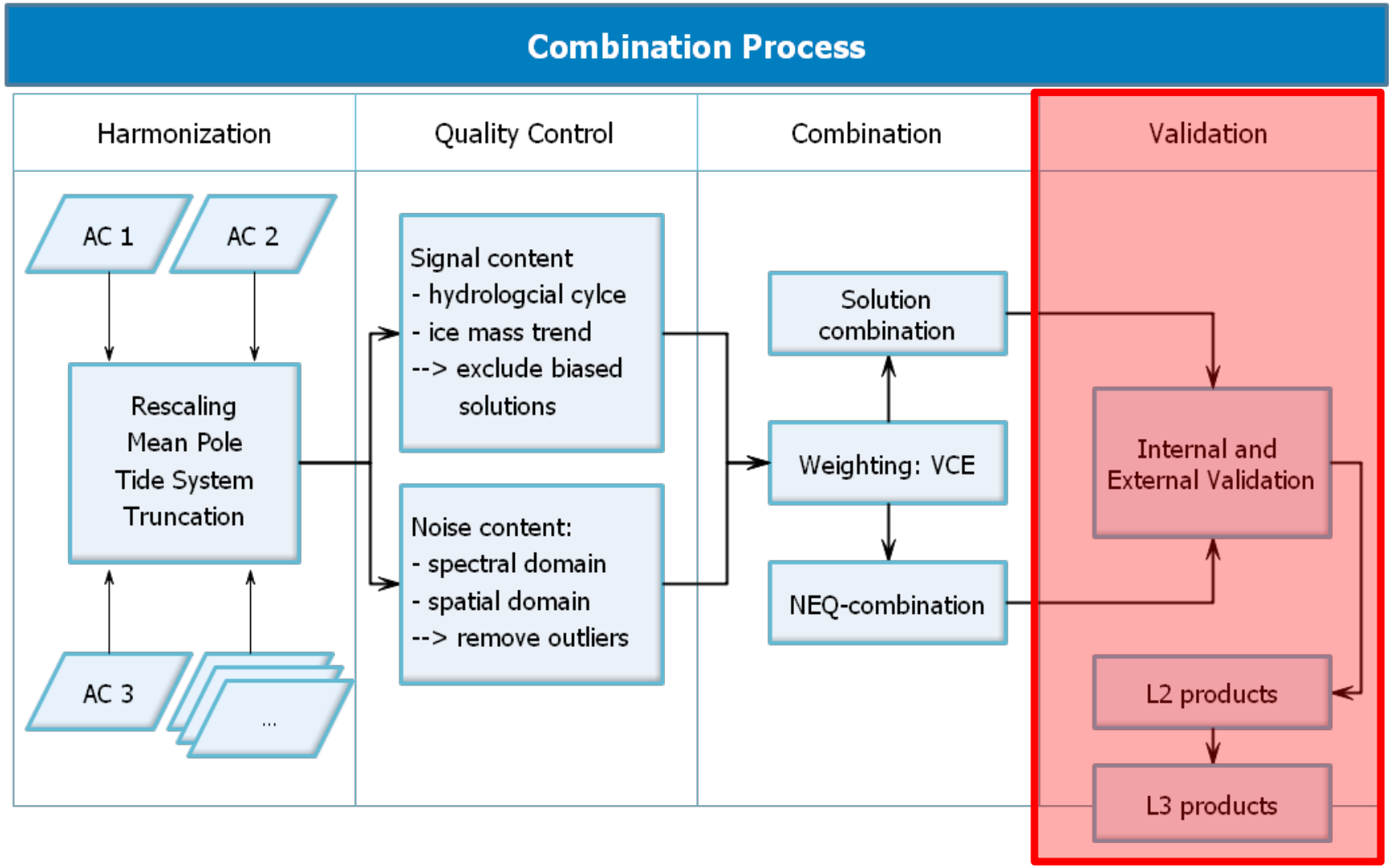
COST-G operations: Combination



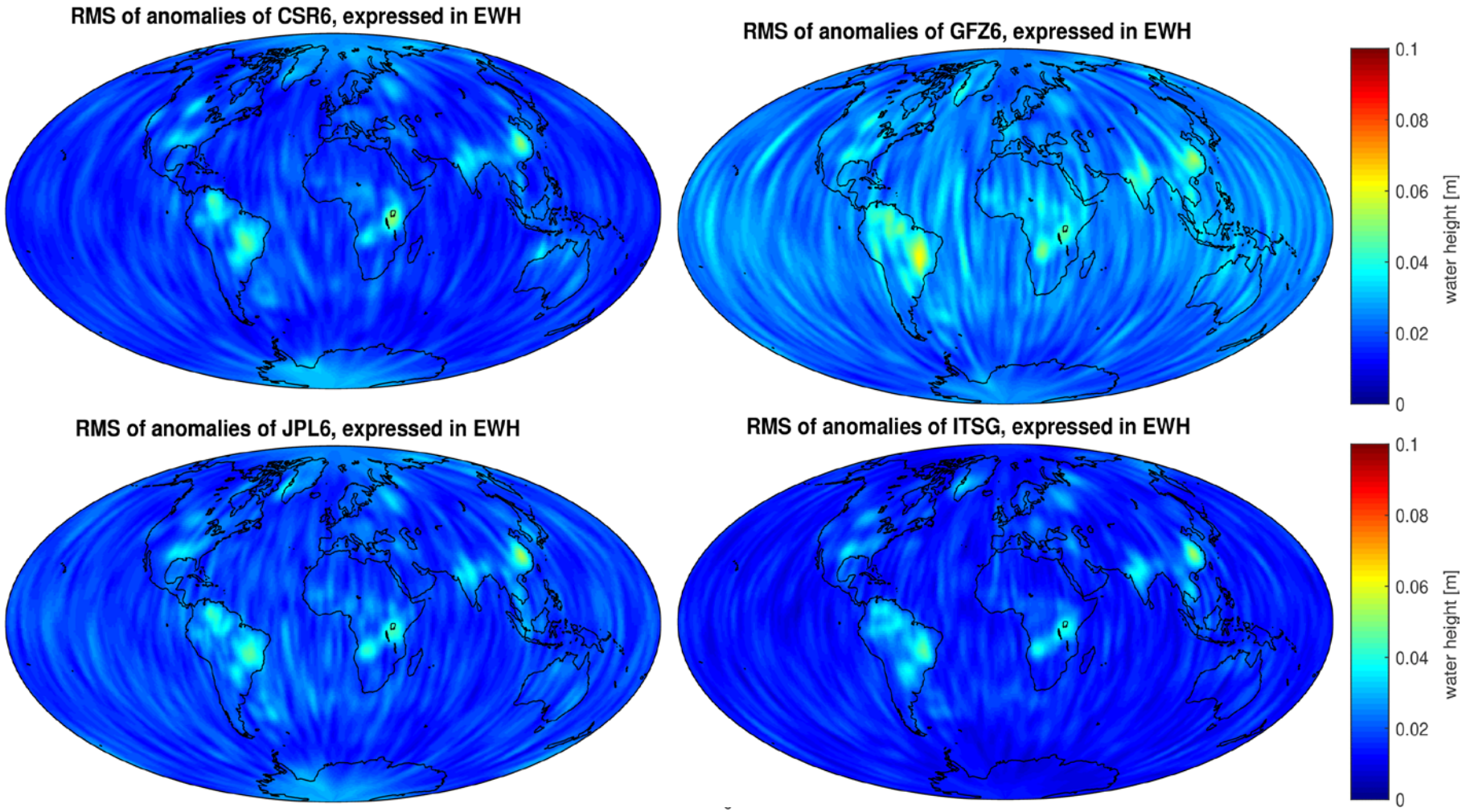
Relative weights by Variance Component Estimation



COST-G operations: Validation



Validation: Noise Levels (spatial domain)



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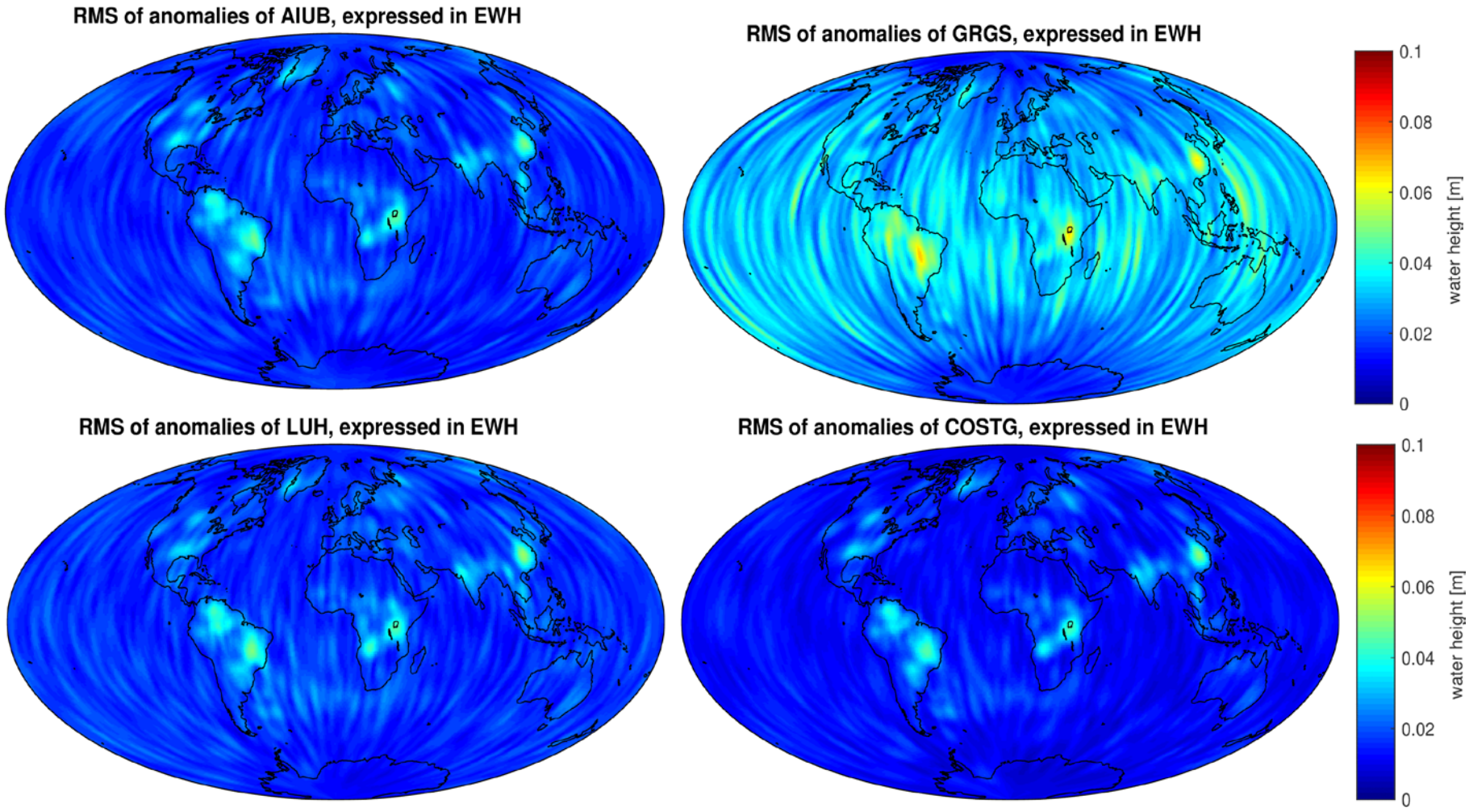
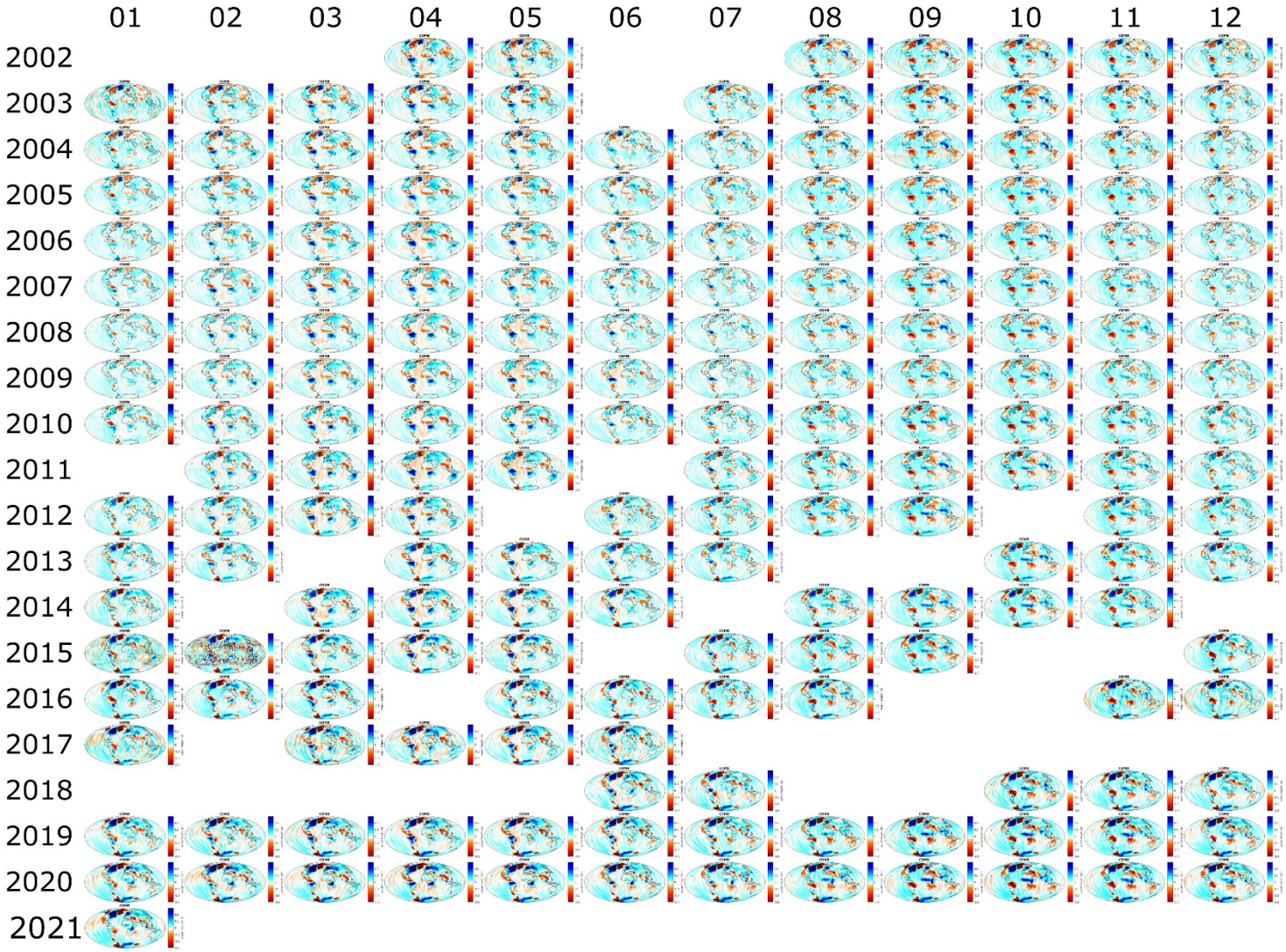
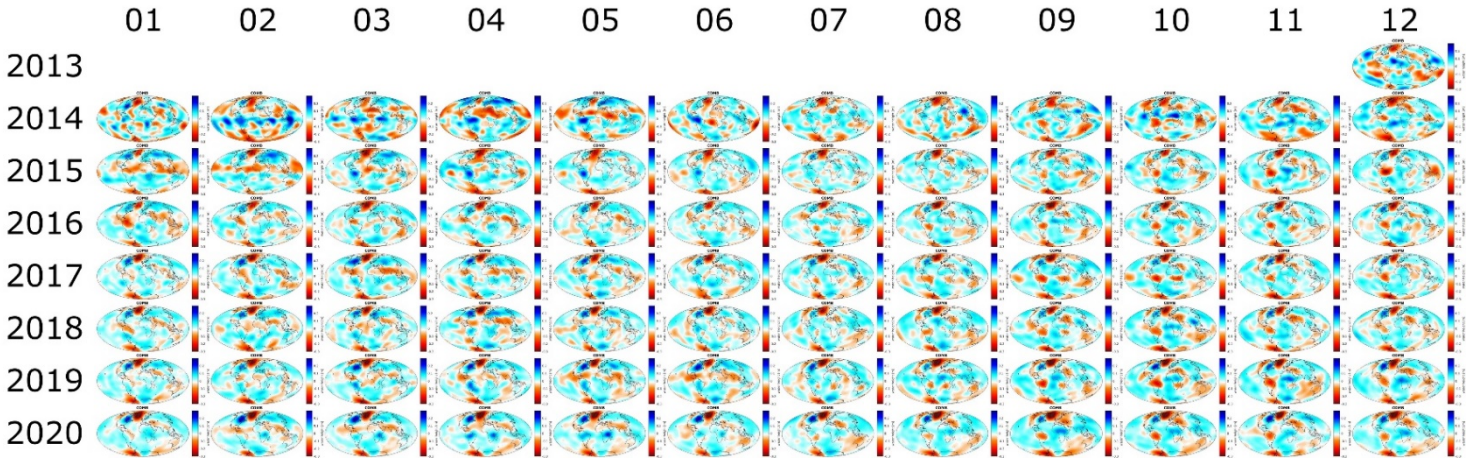


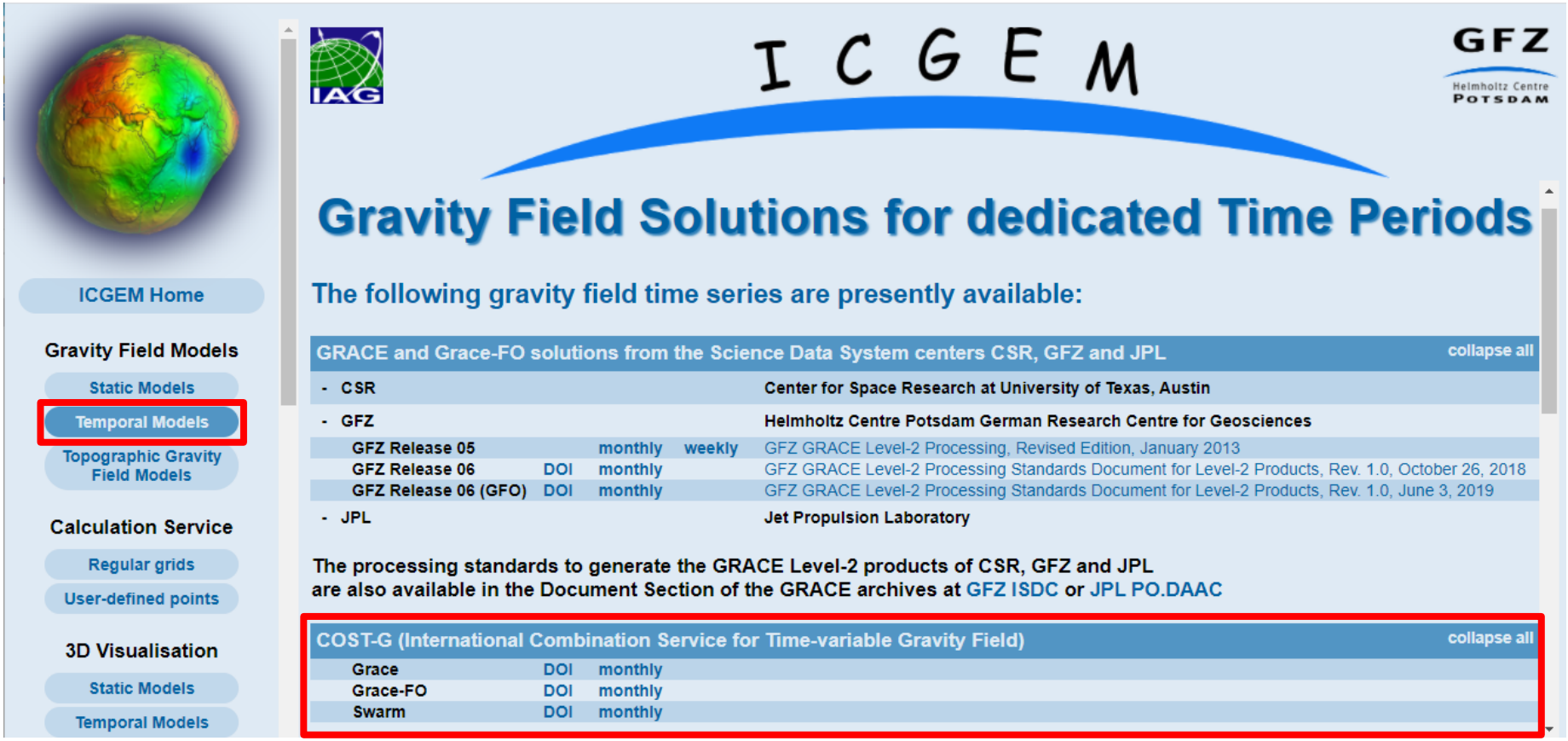
COST-G: products (GRACE/GRACE-FO)



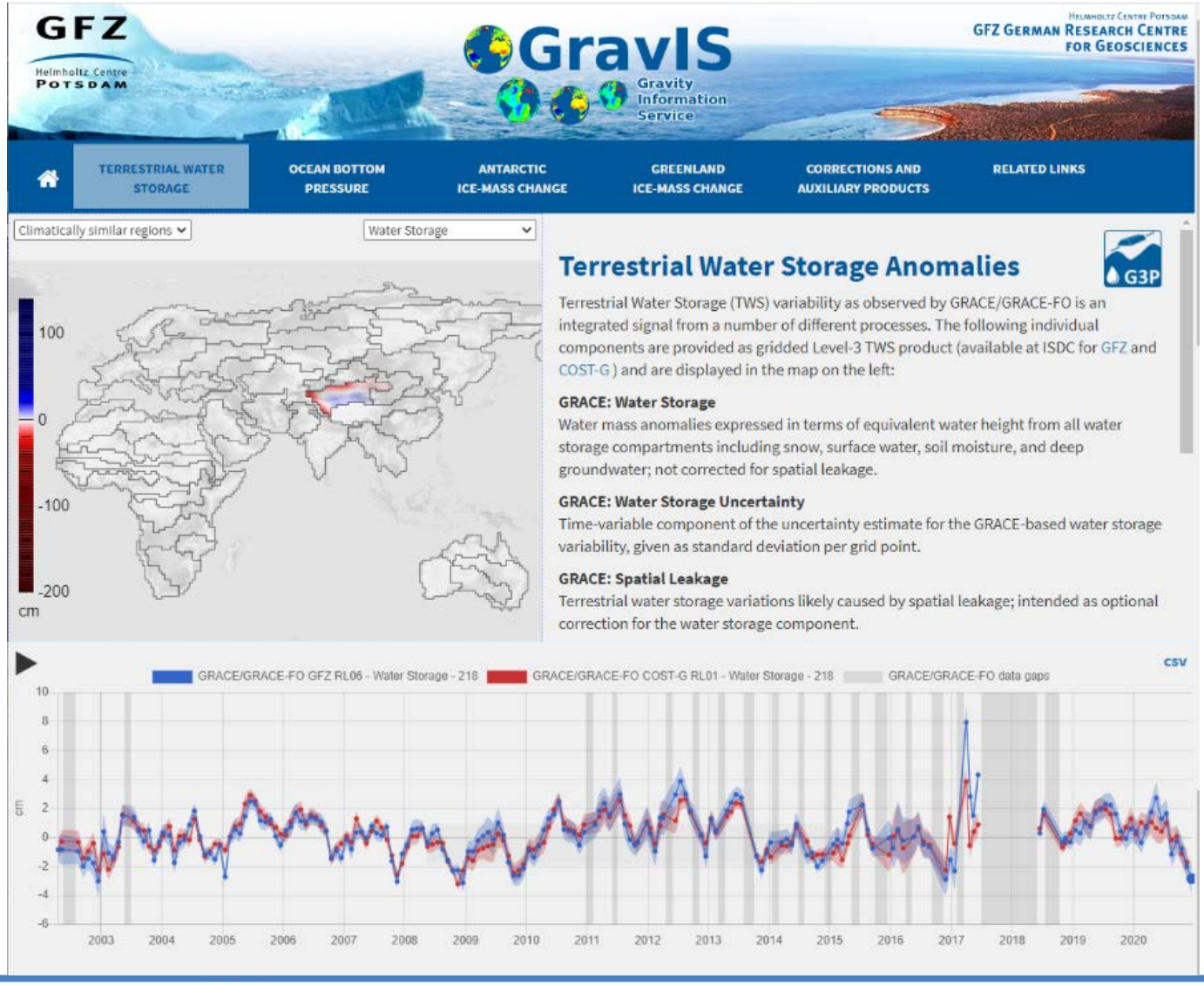
COST-G: products (Swarm)



COST-G products: Level-2 (spherical harmonic)



COST-G products: Level-3 (post-processed grids/time-series)



Summary and Outlook

- **COST-G combined Level-2 products for GRACE (repro), Swarm (operational), and GRACE-FO are available from ICGEM (http://icgem.gfz-potsdam.de/series).**
- **COST-G Level-3 products for GRACE and GRACE-FO are available via GFZ's GravIS portal (http://gravis.gfz-potsdam.de).**
- **Inclusion of further candidate Analysis Centers (Chinese ACs) is planned for 2021 (benchmark testing and quality control are being performed).**