



# UAW2026: Summary of session „Challenges in the new ITRF operational updates“

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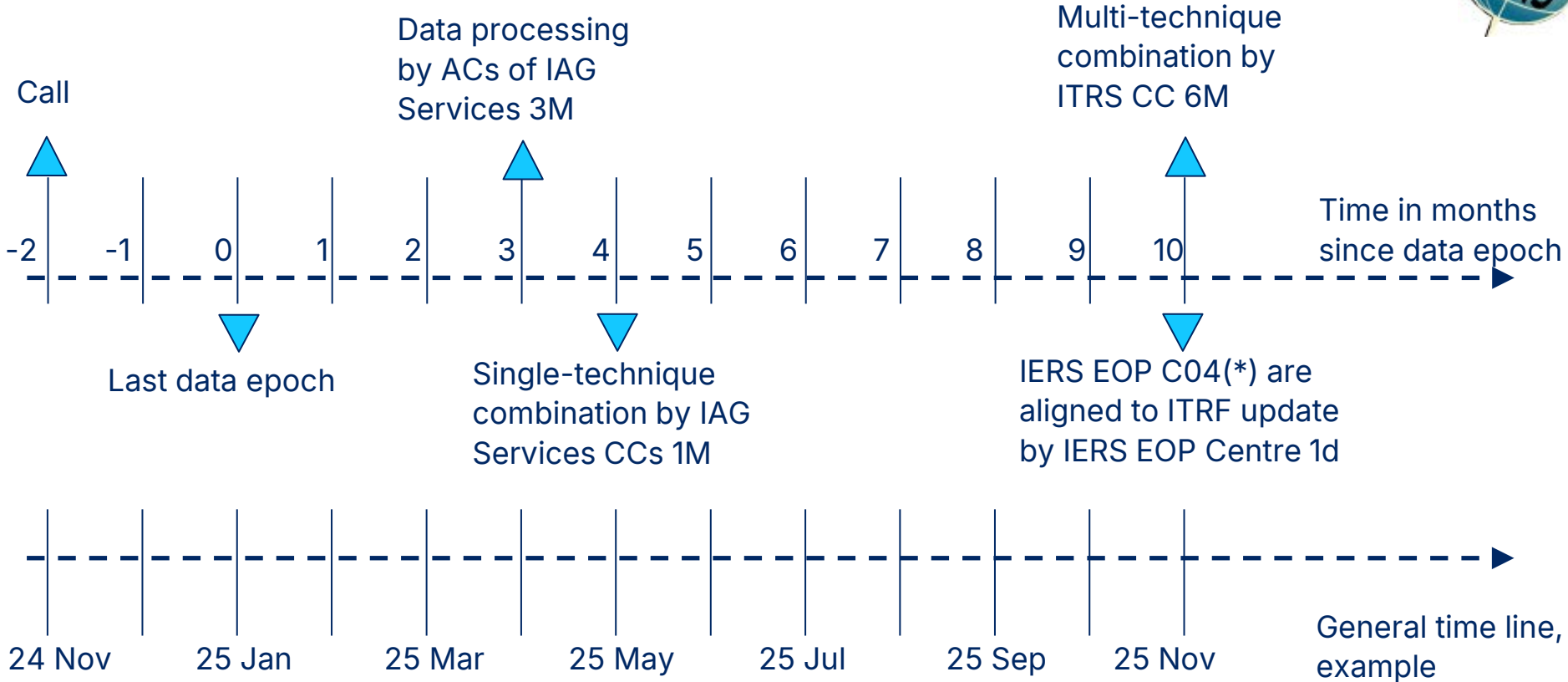
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# Overview and scope

- After the first three annual updates u2023, u2024, u2025 of ITRF2000 took/take place, the intention of the session was to discuss difficulties, dependencies and generally the time line of the processing chain involved in ITRF annual updates.
- One question to answer is whether annual updates work well and whether they are worth the effort of all participants (balance).
- There are two kinds of ITRF updates that cause very different amount of work:
  - Full re-processing
  - Annual updates (focus of this session)

# Draft time-line for annual ITRF update



# General concerns and requests



- Communicate the motivation for the annual updates better with the IAG Services.
- Demonstrate the improvements due to annual updates.
- Balance improvements and work load.
- It is requested to release ITRF and EOP C04 updates at the same time by various parties.
- Repro and operational solutions should adhere to the same standards and contain the same ACs.
- Full reprocessing might be needed relative often. Many changes ongoing... How often will we need to do a full reprocessing?



# Consistency concerns

- Consistency of ITRF, EOP and ICRF (IVS) → recommendation#2
- Consistency of final, rapid, ultra rapid products (IGS) → recommendation#3
- Consistency of operational and re-processed series (IDS, IGS, ILRS, IVS) → recommendation#3



# Dependencies

- DORIS processing depends on availability of
  - Atmosphere/Ocean de-aliasing product
  - Geomagnetic indices and solar flux as input for atmosphere density models
- xTRF processing depends on
  - Availability of local tie vectors and data about seismic events
  - Non-tidal loading data provided by GGFC (atm., hydr., oceanic)



# Recommendations

- **Recommendation#1**

- Establishment of an IERS WG** with the objectives

- Outline/Organize the ITRF update+EOP update transition procedure in a more professional way.
    - Find a good update cycle that considers rapid turnaround, consistency and work load balance for all stakeholders.
    - Develop a standardized communication procedure among stakeholders.
    - Develop a standardized internal evaluation methodology to which stakeholders adhere. (Distribution of quality checking. What is the expectation from previous stateholder?)



# Recommendations (cont.)

- **Recommendation#2**

Assess consistency of EOP- and ITRF-updates with other EOP and ICRF (IVS)

- **Recommendation#3**

Assess consistency of operational and re-processing series (IDS, ILRS, IVS)

Assess consistency of rapid, ultra rapid and final IGS products

(whos mandate is it? To be clarified.)



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