

# Road Map for the next ITRF

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# Roadmap for the next ITRF solution: 2019 or 2020?

- Consultation was sent to the technique ACCs and GGFC on January 24, 2018
- An inventory (list) of all effects and model updates to be considered by all techniques in the reprocessing effort
- Questions:
  - Review the list of effects & models
  - Indicate the time needed for Software update
  - Indicate the time needed to accomplish the reprocessing of the full history of observations?

# Feedbacks so far (1/5)

- **IVS: Response from John Gipson:**
  - General agreement, except:
  - HF-EOP model to be recommended by the WG
  - Loading model (Atmospheric?) will be applied
  - Include the “removable” model corrections in SINEX
  - High priority to updating software to apply gravitational deformation.
- **IVS time line for reprocessing:**
  - No major obstacle. Discussion with ACs at IVS GM in June 2018

# Feedbacks so far (2/5)

- **ILRS: Complete :**
  - Mostly agree on ITRS proposal
  - Different opinions on some topics, mainly the gravity field model(s)
  - HF EOP: awaiting for a “consensus” model
  - Will **not** include a loading model
  - No model for 3D thermal effects
- **ILRS time line for reprocessing:**
  - the next ITRF solution could be ITRF2019, but probably wait until early 2020 to have all 2019 data included

# Feedbacks so far (3/5)

- **IDS: Complete:**
  - Mostly agree on ITRS proposal
  - **HF EOP: awaiting for a “consensus” model**
  - **Waiting IERS recommendation to apply or not a non-tidal loading model**
  - **3D thermal effects: no opinion**
  - **A number of DORIS-specific effects will be addressed**
- **IDS time line for reprocessing:**
  - **ITRF2020 is more realistic**

# Feedbacks so far (4/5)

- **IGS: response from Michael Moore**
  - Mostly agree on ITRS proposal
  - Adopt post EGM2008 model: Not all ACs are convinced this has a significant impact on GNSS
  - HF EOP: awaiting for a “consensus” model
  - Most ACs **not** in favor of applying a loading model
  - 3D thermal effects: little impact on GNSS????
- **IGS time line for reprocessing:**
  - Most ACs not ready for reprocessing before end 2019!!
  - Go for ITRF2020!

# Feedbacks so far (5/5)

- **GGFC: response from JP Boy:**

**“GGFC is ready to provide the atmospheric, oceanic & hydrology loading in both CF & CM reference frame, and the corresponding geocenter time series.”**

**==> Well noted!**

# Summary and Conclusion

- General agreement of all techniques regarding proposed effects and model updates to be considered for the reprocessing
- Most techniques (esp. IGS & IDS) favor ITRF2020
- Will go for ITRF2020, but the ITRS Center will
  - Issue a CfP by end of 2018 with all specifications, in close consultations with all players
  - **Request specific solutions for testing purposes, e.g.**
    - SLR range biases estimated
    - New HF-EOP model applied
    - Others TBD
- Follow up by all ACCs of the effects and model updates, with regular report to ITRS and IERS DB