

# 2024/1 ILRS Analysis Standing Committee meeting

**Mathis Bloßfeld<sup>(1)</sup> and Cinzia Luceri<sup>(2)</sup>**

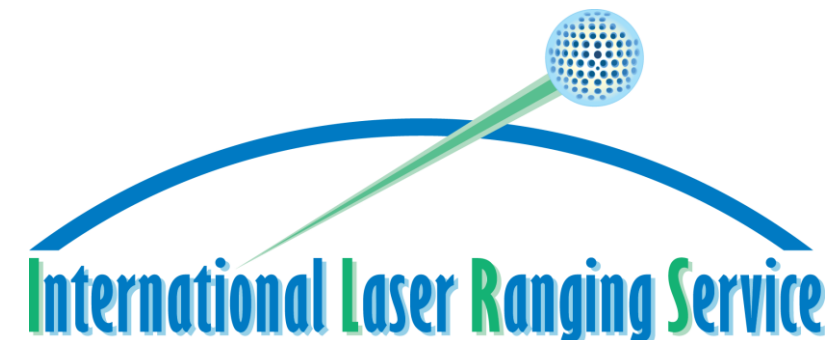
(Conveners)

(1) DGFI-TUM

(2) ASI/e-geos

Monday, January 22nd, 2024, Zoom, 2 to 4 PM (UTC)

ILRS ASC meeting – 2024-01-22



# Today's agenda



0) Last meeting + open Action Items (AIs)	(MB, CL)	10 minutes
1) ITRF2020 update (status reprocessing, DHF update needed?, etc.)	(CL)	40 minutes
2) Bias handling in operational products	(MB)	15 minutes
3) Orbit reprocessing consistent to v85?	(MB, CL)	5 minutes
4) ASC recommendations for SINEX format updates	(MB)	10 minutes
5) Survey on satellite-/station-weighting strategies at ACs	(MB)	20 minutes
6) DSC files at ILRS website	(MB)	10 minutes
7) Any other business and next ASC meeting	(all, MB)	10 minutes

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# Open AIs from the last meeting



NEW ACTIONS		
# AI	Description	AC/person
1_oct2023	Review of weighting model of observations/stations/satellites in the analysis	M. Bloßfeld
2_oct2023	Benchmark tests of CNES AC	ASI CC
3_oct2023	Update DSC files at ILRS website	M. Bloßfeld
4_oct2023	Discontinuation of v170, v70 and v230 products and operational submission of v180, v80, v280 and v320 products	All ACs

- (partly) done; cf. 5)
- done
- discussion/decision needed; cf. 6)
- done

OLD OPEN ACTIONS		
# AI	Description	AC
1_apr2023	Large scatter of LOD w.r.t. USNO	GFZ
3_apr2023	Publication on ILRS contribution to ITRF2020	Erricos Pavlis
5_apr2023	New strategy for the processing of arcs before 1993	Cinzia Luceri, Mathis Bloßfeld
6_apr2023	Differences in the WRMS time series between the CCs for BKG, DGFI and GFZ	ASI/JCET/DGFI
1_nov2022	Daily&Weekly products from 07-08/2022 to be investigated (3D wrms too high)	DGFI/BKG/GFZ
4_nov2022	daily&weekly Scale from 09/2022 to be investigated	NGSF
9_nov2022	Complete Re-Analysis 1993-2022 (SLRF2020, new DHF & IERSEOPC04 20), v85 series	ALL ACs

- status?
- ongoing
- pending
- ongoing; cf. 5)
- ongoing; cf. 5)
- status?
- (partly) done; cf. 1)

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# *ASI AC&CC report*



**A. Basoni , D. Sarrocco, V. Luceri**  
e-GEOS S.p.A., ASI/CGS - Matera



**G. Bianco**  
Agenzia Spaziale Italiana, CGS - Matera

# ITRF2020 product status

	v180	v80	v80 - orb	v280	v320	V85	V85 delivery status
ASI	✓	✓	✓	✓	✓	✓	930102 - 231125
BKG	✓	✓	✓	✓	●	✗	
DGFI	✓	✓	✓	✓	✓	✓	930109 - 231021
ESA	✓	✓	✓	✓	✓	✗	
GFZ	✓	✓	✓	✓	●	✓	930130 - 221331
JCET	✓	✓	✓	✓	✗	✓	930109 - 231202
NSGF	✓	✓	✓	✓	✗	✓	930109 - 231104

✓ : Submitted, no issues.

✗ : No file. ESA will deliver 1993-2020 v85 solutions in the next week (feedback via e-mail provided).

● some solutions (two files from BKG)

CNES	ready	ready	requested for evaluation	under evaluation	ready	not requested
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## Regarding v85:

- 2020-2023 processing may be requested after the updated DH file release (January 2024).
- To be considered whether to request a contribution for the 1993-2020 period as well.

## Operational *Data Handling file (DHF)* and *ITRF2020* update

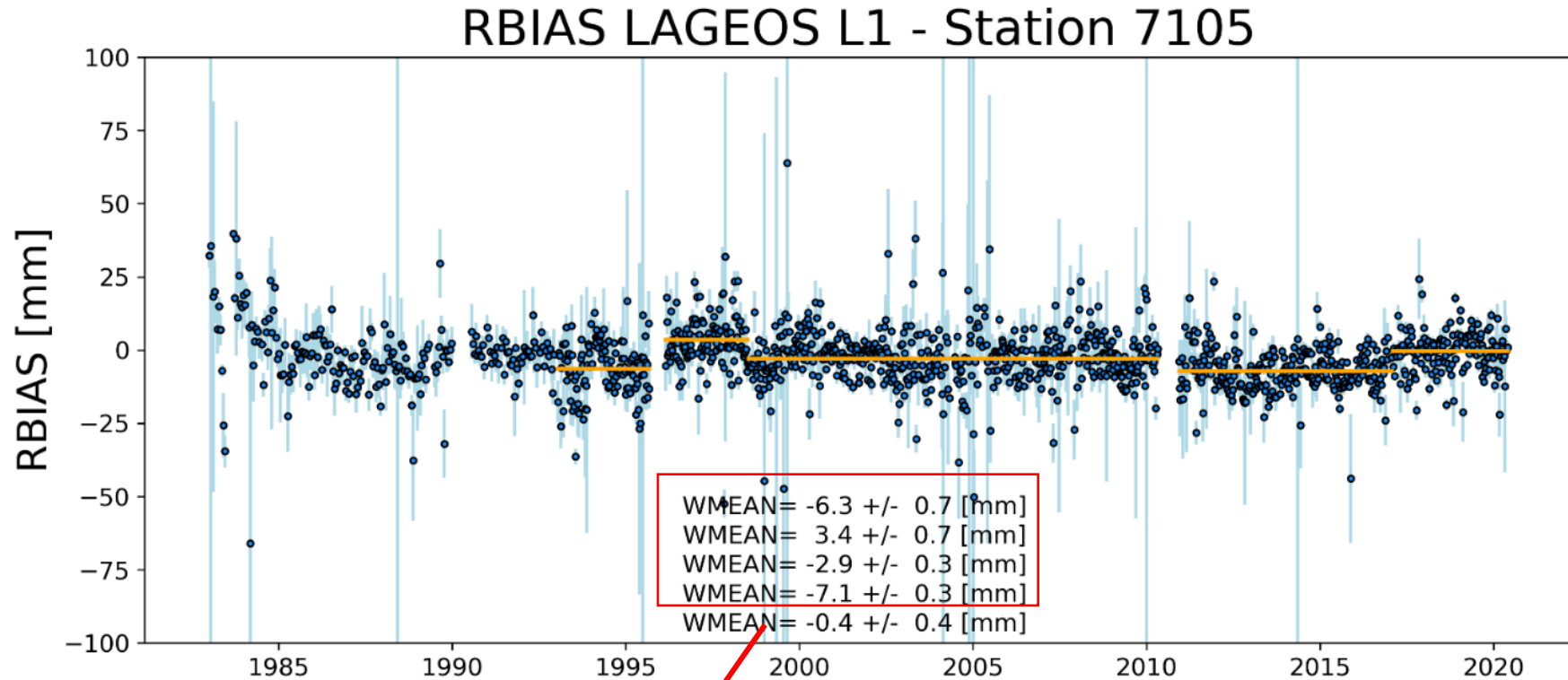
- DHF **210416** used for ITRF2020 based on data covering 01/1993 to 12/2020.
- DHF **230328** extended to 12/2022 as a result of the SSEM-X project.
- DHF **230621** added a paragraph for general POD users of SLR data (**no data extension**).
- In mid 2023 a weekly production chain of SSEM-like SINEXs file to routinely extend the RB time series (v230) was set to check if any update of the DH file is needed.

### Next steps:

- DHF extended to 12/2023 to be released (January 2024).
- all ACs should reprocess 2020-2023 v85 product (DHF 01/2024 and same settings of the operational weekly v80).



# A case study of DH file update - 7105 (Greenbelt, Maryland)



+MODEL/RANGE\_BIAS

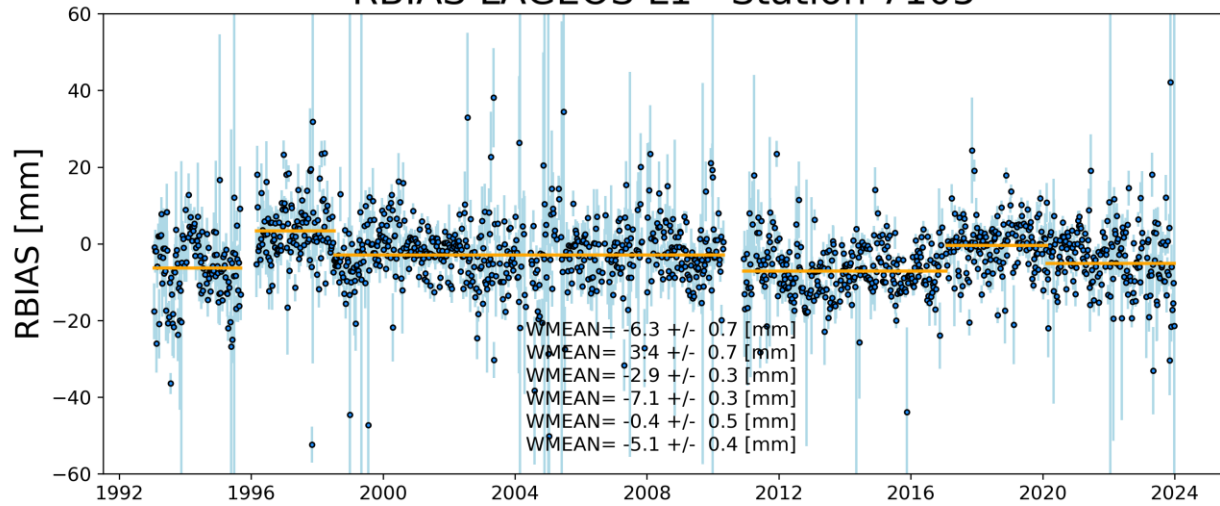
\*CODE PT SOLN T START\_DATE\_\_ END\_DATE\_\_ M \_\_E-VALUE\_\_ STD\_DEV \_\_E-RATE\_\_ UNIT CMNTS

.....

7105	51	501	A	93:017:00000	95:253:00000	R	-6.3	0.7	mm
7105	51	501	A	96:056:00000	98:193:00000	R	3.4	0.7	mm
7105	51	501	A	98:193:00000	10:122:00000	R	-2.9	0.3	mm
7105	51	501	A	10:339:00000	17:029:00000	R	-7.1	0.3	mm

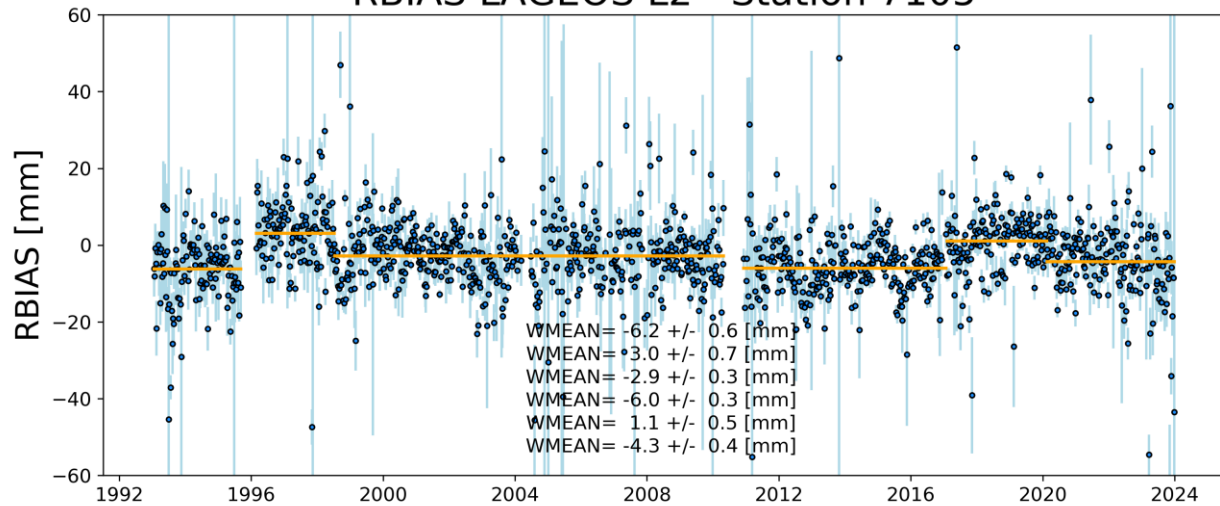
.....

### RBIAS LAGEOS L1 - Station 7105

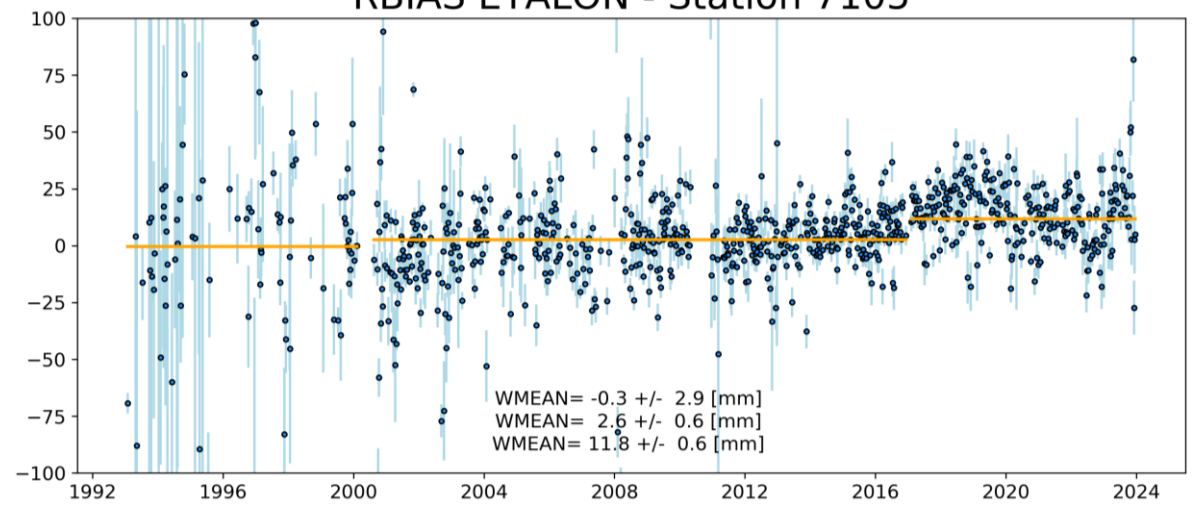


7105 51	501 A	10:339:00000	17:029:00000	R	-7.1	0.3	mm	
7105 51	501 A	20:047:00000	00:000:00000	R	-5.1	0.4	mm	<b>(additional)</b>
7105 52	501 A	10:339:00000	17:029:00000	R	-6.0	0.3	mm	
7105 52	501 A	20:047:00000	00:000:00000	R	-4.3	0.4	mm	<b>(additional)</b>

### RBIAS LAGEOS L2 - Station 7105

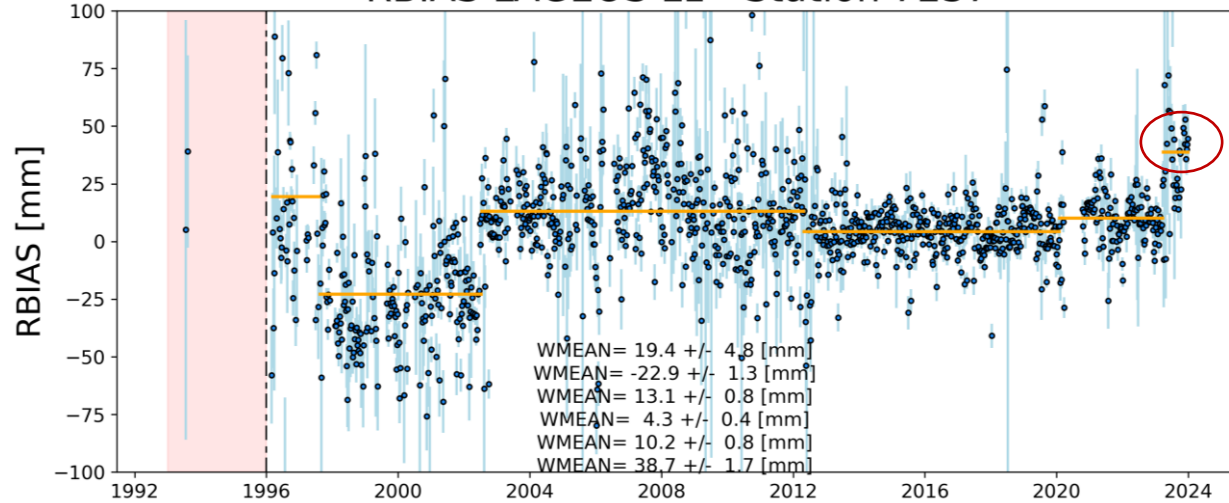


### RBIAS ETALON - Station 7105



# A case study of DH file update – 7237 (Changchun, China)

## RBIAS LAGEOS L1 - Station 7237



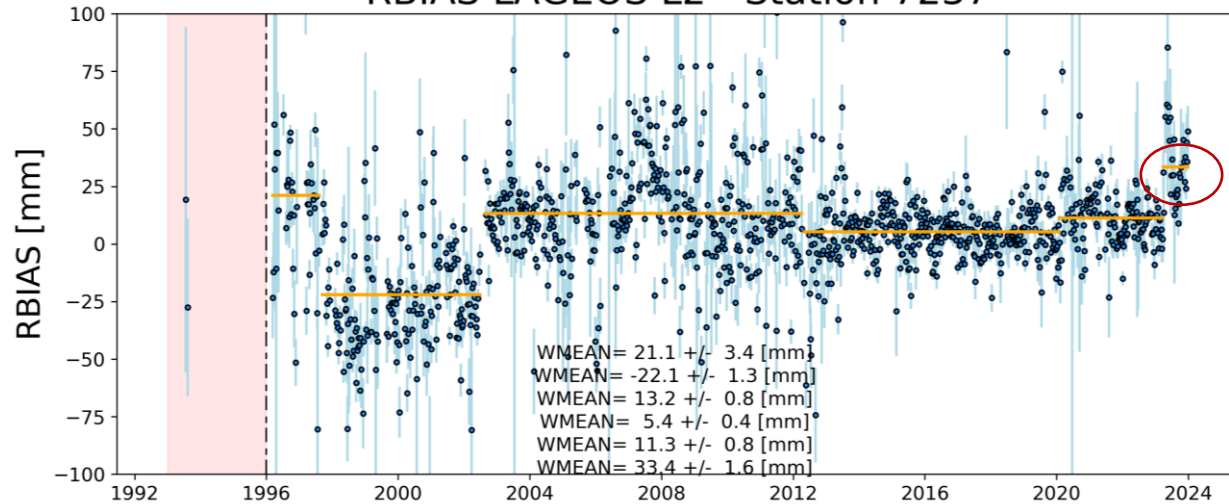
7237 51	501 A	20:033:00000	00:000:00000	R	10.2	0.8	mm (old)
7237 52	501 A	20:033:00000	00:000:00000	R	11.5	0.8	mm (old)

7237 51	501 A	20:033:00000	<b>23:085:00000</b>	R	10.2	0.8	mm
7237 52	501 A	20:033:00000	<b>23:085:00000</b>	R	11.5	0.8	mm

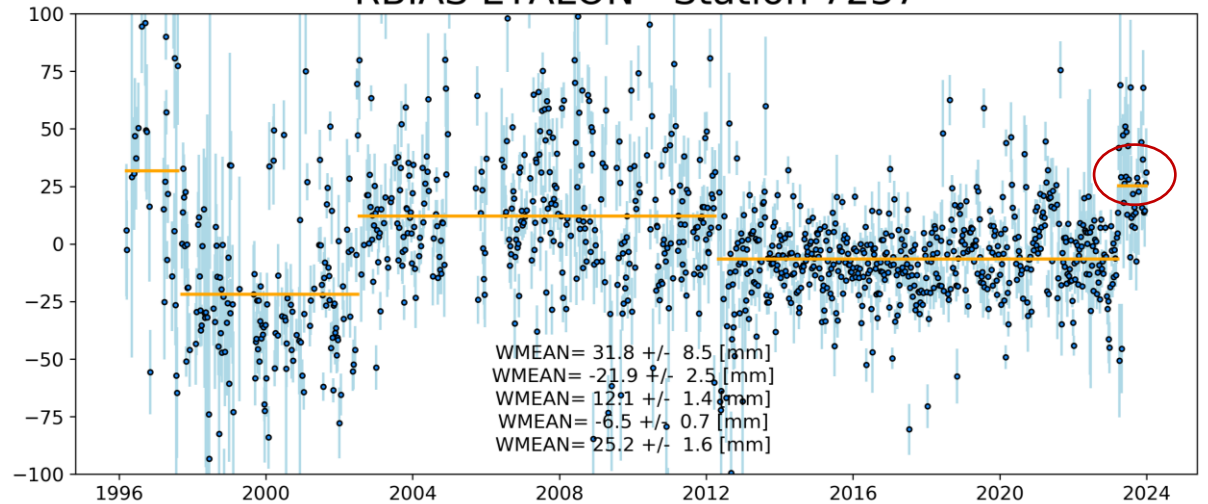
7237 51	501 A	23:085:00000	00:000:00000	E			(new)
7237 52	501 A	23:085:00000	00:000:00000	E			(new)

Confirmed in EC series

## RBIAS LAGEOS L2 - Station 7237



## RBIAS ETALON - Station 7237

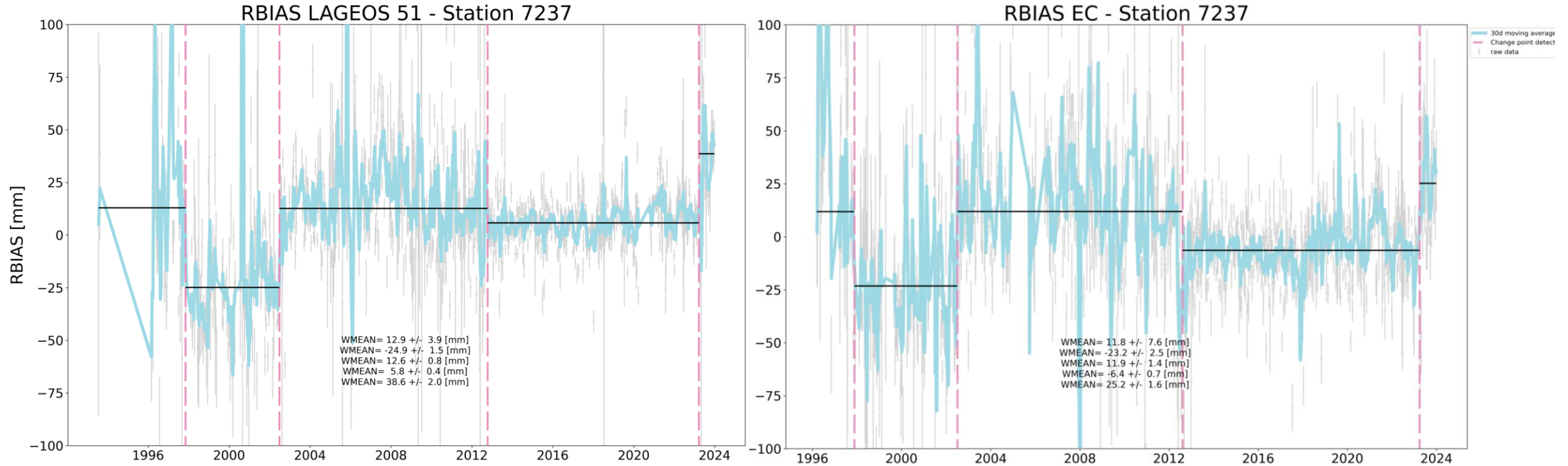


No useful information from station log:

72371901 2023 289 00:00 2 05 Station shut down for maintenance: Laser chamber replacement.

72371901 2021 349 06:40 2 10.01 Updated NP generating software. NP bin kurtosis algorithm now has 3.0 subtracted.

# Change-point automatic detection - 7237 (Changchun, China)



7237 CP at **23:085**

To be monitored within v280

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# Current AC handling of range biases

- Review of **new operational v180 products** (e.g., \*.pos+eop.231210.v180.snx)

AC	type of range biases	bias epoch
ASI	combined biases (51, 52, <b>EC</b> )	mid-arc epoch
BKG/ AIUB	separate biases ( <b>L1, L2, E1, E2</b> )	<b>mid epoch of station observation interval</b>
CNES	---	---
DGFI	combined biases (51, 52, EC)	mid-arc epoch
ESA	combined biases (51, 52, EC)	<b>mid epoch of station observation interval</b>
GFZ	separate biases (51, 52, <b>53, 54</b> )	<b>mid epoch of station observation interval</b>
GRGS	---	---
JCET	combined biases (51, 52, EC)	mid-arc epoch
NSGF	combined biases (51, 52, EC)	<b>mid epoch of station observation interval</b>
<b>ILRSA/B</b>	<b>combined biases (51, 52, EC)?</b>	<b>mid-arc epoch?</b>

- Different types of **Etalon biases** can be handled at CCs
  - **bias names** not crucial if SINEX interfaces at CCs can handle them
  - **bias epoch** not crucial since bias is arc-wise constant parameter → simple epoch transformation possible for both CCs!
  - **type of biases** must be changed at CCs before combination; procedure at CCs: individual AC: E1/2 → individual AC: EC → combined NEQ/SOL: EC → reduction of EC



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# Orbit reprocessing consistent to v85 necessary?



- CDDIS sends us a request if the orbit reprocessing consistent to 85 and backwards in time is worthwhile to be computed?
- Justine wrote:

“I wanted to reach out to you about a question from a user. The orbit files the CDDIS receives from the analysts, are stored in <https://cddis.nasa.gov/archive/slr/products/orbits/>. Within the archive, there's some data dating back to 2012 but according to the landing page, the products are created with data going back to 1976 [https://cddis.nasa.gov/Data\\_and\\_Derived\\_Products/SLR/slr\\_ilsorbit.html](https://cddis.nasa.gov/Data_and_Derived_Products/SLR/slr_ilsorbit.html). I wanted to check to see if the landing page should be updated or if the products are available under another directory.”
- If OK, I will answer that this orbit product
  - started in 2016 and is continued
  - is of operational character, i.e., no reprocessing will be done

<b>Product holdings</b>	<b>Data Center Citation</b>
Reference frame	Noll, Carey E., The Crustal Dynamics Data Information System: A resource to support scientific analysis using space geodesy, <i>Advances in Space Research</i> , Volume 45, Issue 12, 15 June 2010, Pages 1421-1440, ISSN 0273-1177, <a href="http://dx.doi.org/10.1016/j.asr.2010.01.018">http://dx.doi.org/10.1016/j.asr.2010.01.018</a> .
ITRF2020	
SLRF2020	
Precise orbits	<b>Data Citation</b>
Predicted orbits	International Laser Ranging Service (ILRS), SLR Combination Center (CC) Orbit Product, Greenbelt, MD, USA: NASA Crustal Dynamics Data Information System (CDDIS), Accessed [[enter user data access date]] at doi: 10.5067/SLR/SLR_ILRSORB_001.
Reports	Other standard citation formats may be used for this data set and can be found at the <a href="#">DOI Citation Formatter website</a> .
Related links	More information about CDDIS <a href="#">data citations and acknowledgments</a> is available.
VLBI ▶	<b>Summary</b>
DORIS ▶	<ul style="list-style-type: none"><li>• <b>Name:</b> SLR Combination Center (CC) Orbit Product</li><li>• <b>Format:</b> <a href="#">SP3c format</a></li><li>• <b>Spatial Coverage:</b> 90.0 to -90.0, 180.0 to -180.0</li><li>• <b>Temporal Coverage:</b> 2016-02-20 to present</li><li>• <b>Temporal Resolution:</b> weekly</li><li>• <b>File Size:</b> 30kb</li><li>• <b>Platforms:</b> etalon1, etalon2, lageos1, lageos2</li></ul>
Other products ▶	<b>Description</b>
Archive search information	ILRS Analysis Centers provide weekly satellite orbit solutions for LAGEOS-1 and -2 and Etalon-1 and -2 to the CDDIS using pre-determined schedules. The orbits are computed using SLR data collected over the previous seven days; their reference frame is the Earth Centered-Earth Fixed (ECEF) realized by the latest SLR reference frame and the IERS Bulletin A EOP series (USNO).
Archive access information	The ILRS Combination Centers (CC) retrieve these solutions to produce the ILRS-A and ILRS-B combined product, which are also archived at the CDDIS. These combination solutions are considered the official ILRS orbital products.
Reports	The final ILRS combined orbit solutions consist of weekly orbit files, generated on a weekly basis approximately 10 days after the end of the solution week. All orbit solution files utilize the <a href="#">Extended Standard Product - 3 (SP3c) format</a> .
	The ILRS combined orbit products are archived in subdirectories by satellite and date; the date is the end of the 7-day interval spanned by the orbit. Each subdirectory contains the individual AC input solutions used for the combination and the two Combination Center solutions along with the corresponding summary files.



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# ASC recommendations for SINEX format updates



- During the IERS DB meeting in November 2023, Daniela asked the Services to provide feedback on SINEX format updates they want to see?
- Up to now, the ASC uses three additional (non-official) blocks for its operational products:
  - **MODEL/TARGET\_SIGNATURE\_GEOMETRY**
  - **MODEL/RANGE\_BIAS**
  - **MODEL/TIME\_BIAS**

} Should they replace the current BIAS/EPOCHS block?
- Within the ASC, we identified two new blocks with potential beneficial impact for the user:
  - **NUMBER\_OF\_OBSERVATIONS/SATELLITE**
  - **NUMBER\_OF\_OBSERVATIONS/SITE**
- Really necessary?
  - Maybe its enough to extend the existing SATELLITE/ID and SOLUTION/EPOCHS block?

```

+-----+
+ SATELLITE/ID
+-----+
*Sat PR Cospar_ID T Data_start_ Data_end_ antenna_type_
L051 51 1976-039A L 24:015:00000 24:022:00000
L052 52 1992-070B L 24:015:00000 24:022:00000
L053 53 1989-001C L 24:015:00000 24:022:00000
L054 54 1989-039C L 24:015:00000 24:022:00000
+-----+
- SATELLITE/ID
+-----+
+ SITE/ECCENTRICITY
+-----+
*Code PT SOLN T Data_Start_ Data_End_ typ Apr → Benchmark (m)
1824 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
1873 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
1884 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
1893 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7090 A 1 L 72:229:00000 49:365:00000 XYZ -1.2073 2.5034 -1.5509
7105 A 1 L 72:229:00000 49:365:00000 XYZ 0.5250 -2.3865 1.9689
7110 A 1 L 72:229:00000 49:365:00000 XYZ -1.2109 -2.4036 1.7117
7119 A 1 L 72:229:00000 49:365:00000 XYZ -2.2500 -0.9932 0.9328
7124 A 1 L 72:229:00000 49:365:00000 XYZ -2.5739 -1.5213 -0.9628
7237 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7249 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7811 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7819 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7821 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7825 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7838 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7839 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7840 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7841 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7845 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
7941 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
8834 A 1 L 72:229:00000 49:365:00000 XYZ 0.0000 0.0000 0.0000
+-----+
- SITE/ECCENTRICITY
+-----+
+ SOLUTION/EPOCHS
+-----+
*Code PT SOLN T Data_start_ Data_end_ Mean_epoch_
1824 A 1 L 24:016:63450 24:017:14760 24:016:82305
1873 A 1 L 24:016:63827 24:020:01569 24:018:32698
1884 A 1 L 24:018:64061 24:019:20500 24:018:85480
1893 A 1 L 24:016:63476 24:017:72816 24:017:24946
7090 A 1 L 24:015:09244 24:021:61699 24:018:35472
7105 A 1 L 24:017:86202 24:018:24836 24:018:12319
7110 A 1 L 24:015:52713 24:020:17631 24:017:78372
7119 A 1 L 24:015:65431 24:020:18678 24:017:85254
7124 A 1 L 24:015:63669 24:019:70051 24:017:66860
7237 A 1 L 24:015:43459 24:018:79480 24:017:18269
7249 A 1 L 24:015:42143 24:021:75604 24:018:58874
7811 A 1 L 24:015:68193 24:021:64775 24:018:66484
7819 A 1 L 24:015:41347 24:021:57803 24:018:49575
7821 A 1 L 24:015:05908 24:017:46993 24:016:26451
7825 A 1 L 24:016:39178 24:018:34780 24:017:36979
7838 A 1 L 24:015:06430 24:017:57078 24:016:31754
7839 A 1 L 24:015:26881 24:020:71921 24:018:06201
    
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# Survey on satellite-/station-weighting strategies at ACs



- Motivation of the survey: DGFI-TUM and other ACs have significant higher WRMS values when comparing HT residuals for ILRS (core) network
  - potential causes: different station/observation weighting strategy or different satellite weighting strategy?

# Survey on satellite-/station-weighting strategies at ACs



- Motivation of the survey: DGFI-TUM and other ACs have significant higher WRMS values when comparing HT residuals for ILRS (core) network
  - potential causes: **different station/observation weighting strategy** or different satellite weighting strategy?

ASI	BKG/AIUB	CNES	DGFI	ESA	GFZ	GRGS	JCET	NSGF
For all stations: 1 meter with the following exceptions:  2 meters: 7821/7838/7810/7405  4 meters: 7110/1864//1884/7249/7308/7237/7821/1873/1879/1893/1824  Rest: 50 meters	equal weighting for all stations but different for each satellite: LAGEOS-1/2: 1.0cm, Etalon-1/2: 3.0cm, LARES: 1.5cm, LARES-2: 1.0cm	---	1 cm for any station to any satellite	4 levels of observation weighting and editing: - First level (best/core stations): 2 cm $\sigma$ and 2 cm editing $\sigma$ - Second level (good stations): 5 cm $\sigma$ and 5 cm editing $\sigma$ - Third level (OK stations): 20 cm $\sigma$ and 10 cm editing $\sigma$ - Last (rest) level (unknown, new, or bad stations): 50 cm $\sigma$ and 20 cm editing $\sigma$	1 cm for any station to any satellite	---	?	Group 1: 06 mm (7941, 7090, 7840, 7810, 7839, 7501, 7845, 7825, 7105) Group 2: 11 mm (7119, 7110, 7080, 7838, 7841, 7406, 8834) Group 3: 16 mm (1888, 7124, 7405, 7237, 7403) Group 4: 22 mm (7821, 1889, 1890, 7249, 7811) Group 5: 33 mm (1887, 1868, 1879, 7824, 1893) Group 6: 66 mm (1873, 1824, 1886) Default: 22 mm (all the rest)

# Survey on satellite-/station-weighting strategies at ACs



- Motivation of the survey: DGFI-TUM and other ACs have significant higher WRMS values when comparing HT residuals for ILRS (core) network
  - potential causes: different station/observation weighting strategy or **different satellite weighting strategy?**

ASI	BKG/AIUB	CNES	DGFI	ESA	GFZ	GRGS	JCET	NSGF
equal weighting	LAGEOS-1/2: 1.0, Etalon-1/2: 0.11, LARES: 0.44, LARES 2: 1.0	---	iterative VCE-based weights	LAGEOS-1/2: 1.0, Etalon-1/2: 1.0	equal weighting	---	?	LG1: 0.60 LG2: 0.70 ET1: 0.30 ET2: 0.30 LAS: 0.35 LA2: 0.70

# Survey on satellite-/station-weighting strategies at ACs



- Motivation of the survey: DGFI-TUM and other ACs have significant higher WRMS values when comparing HT residuals for ILRS (core) network
  - potential causes: different station/observation weighting strategy or different satellite weighting strategy?
  - strategy to quantify impact on DGFI-TUM solution: providing 4 different solutions to ASI CC to check ;-)

	station/observation weighting	satellite weighting
v180 (operational)	1 cm constant	VCE
v180 (special_1)	ESA-scheme applied	VCE
v180 (special_2)	1 cm constant	equal weights
v180 (special_3)	ESA-scheme applied	equal weights

- Investigations are running; I've sent test solutions to ASI CC today morning....

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3) Orbit reprocessing consistent to v85?	(MB, CL)	5 minutes
4) ASC recommendations for SINEX format updates	(MB)	10 minutes
5) Survey on satellite-/station-weighting strategies at ACs	(MB)	20 minutes
<b>6) DSC files at ILRS website</b>	(MB)	10 minutes
7) Any other business and next ASC meeting	(all, MB)	10 minutes



# DSC files at ILRS website



- Current situation:
- In the future: change AC-specific DSC files to product-specific DSC files + keep COMMENTS section in AC SINEX files as up-to-date as possible

```
dgfi.dsc - Editor
Datei Bearbeiten Format Ansicht Hilfe
-----
INTERNATIONAL LASER RANGING SERVICE
Deutsches Geodaetisches Forschungsinstitut (DGFI)
Analysis Strategy Summary
-----
ANALYSIS CENTRE | Deutsches Geodaetisches Forschungsinstitut (DGFI)
                  | Munich, Germany
-----
CONTACT PERSONS | H. Mueller (mueller@dgfi.badw.de; tel +4989230311277)
                  | D. Angermann (angerman@dgfi.badw.de; tel +4989230311217)
-----
SOFTWARE USED   | DOGS-OC 5.2 DOGS-CS 4.9
-----
ILRS PRODUCTS  | weekly solution for coordinates of global SLR stations
                  | and daily Earth Orientation Parameters (x,y-pole,
                  | LOD, UT1-UTC) (SINEX format) daily resoluuion
                  | weekly orbits for Lageos1/2 and Etalon1/2 (sp3c format)
-----
PREPARATION DATE | effective since June 1, 2003
-----
-----
MEASUREMENT MODELS
-----
Satellites used | LAGEOS-1, LAGEOS-2, ETALON-1, ETALON-2
-----
```

Parent Directory			
archive			
aas.dsc	2015:01:12 14:44:48	13.11KB	
asi.dsc	2014:04:08 17:20:10	13.43KB	
bkg.dsc	2014:11:06 12:34:33	13.54KB	
blank.dsc	2006:10:25 14:36:15	8.67KB	
code_qc.txt	2008:08:18 12:31:23	1.37KB	
csr.dsc	2013:11:05 15:52:28	13.66KB	
dgfi.dsc	2013:08:28 12:58:34	12.78KB	
dgfi_qc.txt	2017:10:17 12:55:46	13.09KB	
esa.dsc	2015:04:16 13:00:01	19.75KB	
ga.dsc	2007:11:27 04:57:25	12.9KB	
gfz.dsc	2017:11:13 15:11:32	12.19KB	
gld.dsc	2022:03:10 17:51:34	13.89KB	
grgs.dsc	2013:10:01 12:44:22	9.45KB	
hitu_qc.txt	2008:08:18 12:31:17	12.26KB	
infn.dsc	2014:12:02 17:11:44	9.53KB	
jcet.dsc	2012:10:19 20:38:29	13.36KB	
jcet_qc.txt	2008:08:18 12:31:10	14.69KB	
kasi.dsc	2014:09:25 11:46:30	14.65KB	
larase.dsc	2014:10:08 17:30:51	10.63KB	
mcc_qc.txt	2014:02:28 14:54:02	11.63KB	
nsgf.dsc	2007:11:14 15:04:13	13.05KB	
pul.dsc	2010:04:28 13:11:43	10.4KB	
shao.dsc	2017:11:07 20:07:14	13.11KB	
shao_qc.txt	2017:11:07 20:07:14	12.98KB	

# Today's agenda



0) Last meeting + open Action Items (AIs)	(MB, CL)	10 minutes
1) ITRF2020 update (status reprocessing, DHF update needed?, etc.)	(CL)	40 minutes
2) Bias handling in operational products	(MB)	15 minutes
3) Orbit reprocessing consistent to v85?	(MB, CL)	5 minutes
4) ASC recommendations for SINEX format updates	(MB)	10 minutes
5) Survey on satellite-/station-weighting strategies at ACs	(MB)	20 minutes
6) DSC files at ILRS website	(MB)	10 minutes
<b>7) Any other business and next ASC meeting</b>	(all, MB)	10 minutes

# Any other business and next ASC meeting



- Any other business?
- Next ILRS ASC meeting
  - planned to be in **parallel (and in person) to EGU GA 2024 at TU Vienna (15.-19.04.2024)**
  - currently waiting for EGU program committee to schedule sessions... afterwards, slot can be decided via poll