5th Joint GSICS / CEOS WGCV Lunar Calibration Workshop

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GSICS Lunar Sub-Group Web Meeting – 07 October 2026



5th GSICS / CEOS WGCV Lunar Calibration Workshop

- LCWS#5 coming soon ➔ 16-20 November 2026
- Organisers: EUMETSAT, USGS
- Duration: 5 days
- Main topics (sessions) :
  - Measurements and Moon Observations
  - Lunar Calibration Systems and Model Development
  - Instrument Monitoring using Lunar Calibration and Inter-Calibration
  - Thermal Infrared and Microwave
  - Alternative Applications of Lunar Observations

Status

- So far:
  - 50 participants registered (25 on-site / 25 online)
  - 13 abstracts submitted ☹☹☹☹ ➔ registered participants are strongly encouraged to present their work
  - Do not hesitate to communicate among your colleagues!

- Please do register even if you attend online
- Submit a small abstract / presentation title to help in organising the agenda…
- Registration + abstract submission closing on 15/10/2026
- Some logistics

  ➔ Monday 16 Nov = ice breaker starting at 18:00 at EUMETSAT with possibility to access the briefing room to see the control rooms

  ➔ Lunch at EUMETSAT canteen (slots are starting at 13:00)

  ➔ As in 2023, room equipped with micros and tables.

Where to find information?

www.eumetsat.int



➔ Out of a search on “lunar calibration workshop” : https://www.eumetsat.int/fifth-gsics-ceos-wgcv-lunar-calibration-workshop

Where to find information?

www.eumetsat.int

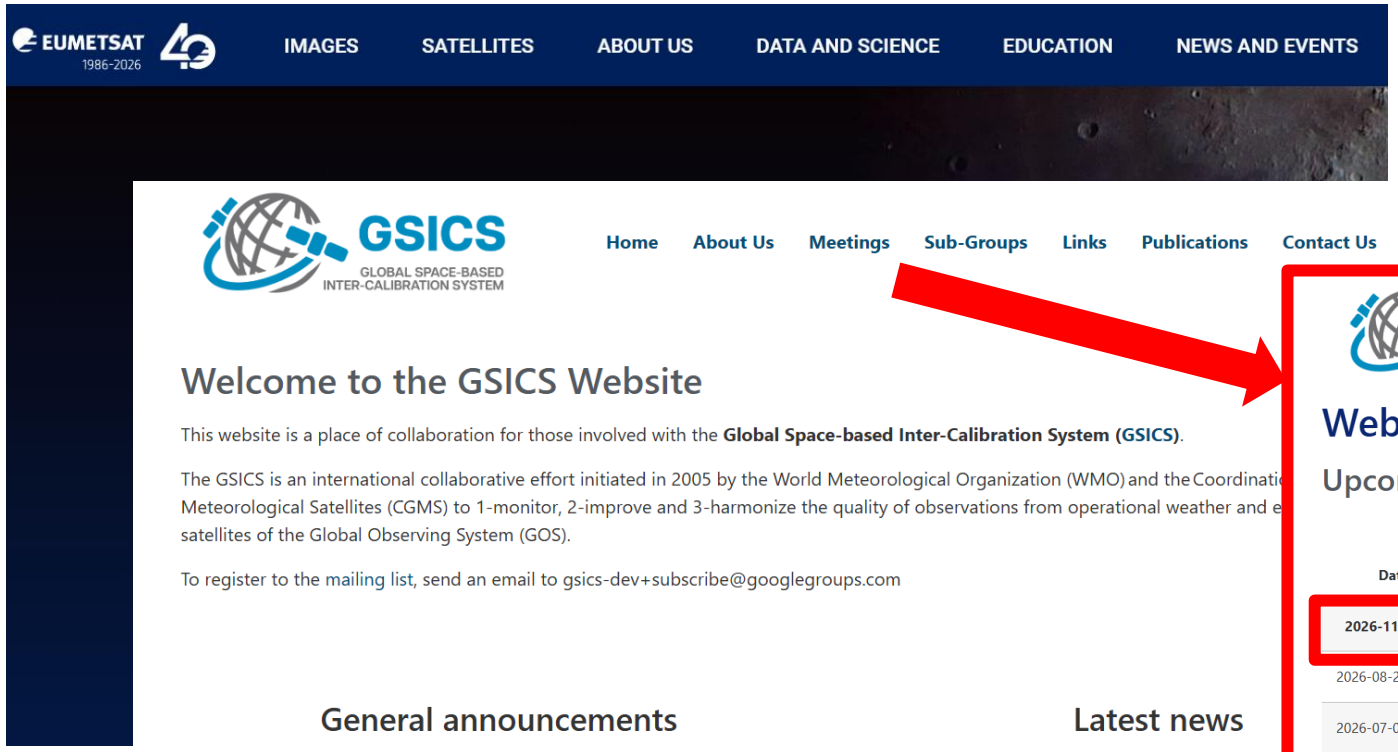


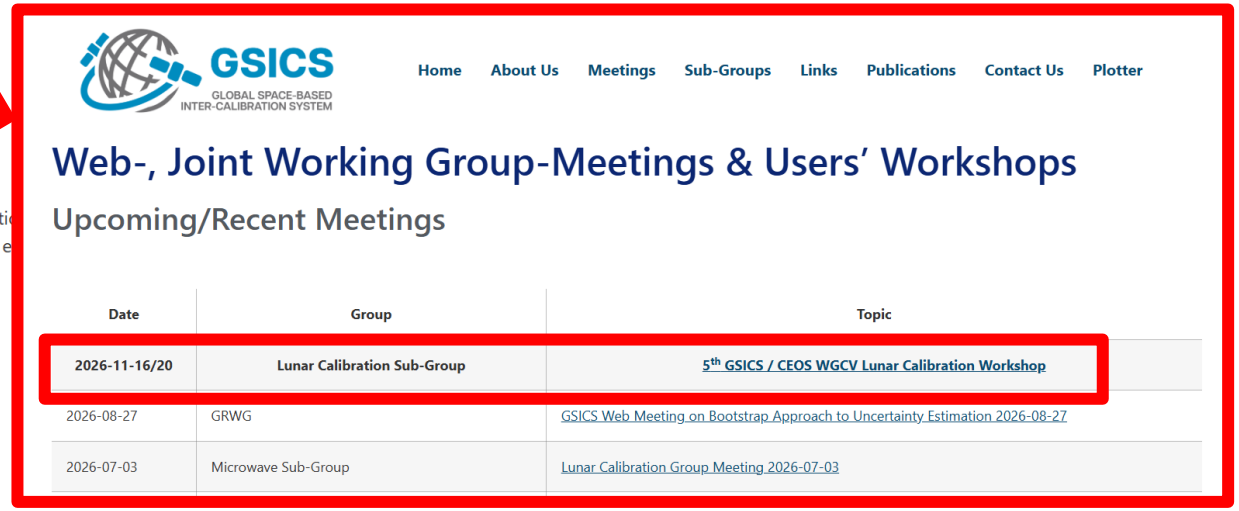
➔ New GSICS website : https://gsicsweb.eumetsat.int/

Information and registration on the meeting page.

Where to find information?

www.eumetsat.int







Registration and communications

- Deadline for registration = 15/10/2026
- For general communication before the registration is closed ➔ Lunar Calibration Mailing List

➔ POC: sebastien.wagner@eumetsat.int

- Once registration is closed ➔ Use of the list of registered attendees (+ contact: events@eumetsat.int) in particular to share the links for remote attendance

Before the lunar calibration workshop…

- Release of LSICS version 1:
  - Distribution of the LSICS I/O document to the participants (via the Lunar Calibration mailing list) ➔ start the implementation of the formats!
- 2nd Lunar models inter-comparison (led by T. Stone - USGS) ➔ exercise to be run before the LCWS; results to be presented at the workshop
- Review of the recommendations / actions / decisions from the last LCWS
- Participants to provide input on topics they would like to see covered by the discussion slots ➔ Email: sebastien.wagner@eumetsat.int

Actions from LCWS#4

From the last workshop in 2023, 17 actions

- 6 actions related to LSICS (specifications / development / license / etc.) ➔ all actions closed by the LSICS development team, or about to be closed (the last one is the release!)
- 1 action on EUMETSAT (S. Wagner) related to the GSICS Lunar Observation Dataset (GLOD) v2 ➔ will be discussed at the LCWS#5
  - Data sharing: contents / policy / current limitations (depending on owners' data policy)
  - Infrastructure: possible solutions to achieve data sharing within the constrains
- 2 actions related to model inter-comparison
  - Model developers to provide a detailed description of how their model is derived and a detailed functional description of their model ☺
  - Tom Stone to coordinate the 2nd model inter-comparison ➔ being closed ☺
- 1 action on Best Practice Guideline on Lunar Calibration
- 7 actions related to interactions between groups and analysis ➔ will be followed up by email to check status if still relevant

Recommendations from LCWS#4

From the last workshop in 2023, 23 recommendations

- 5 recommendations related to LSICS ➔ 4 implemented by the LSICS development team + 1 to be discussed with the team (how to account for solar variability?)
- 4 recommendations on data sharing ➔ will be discussed at the LCWS#5
- 1 recommendation to increase visibility and raise awareness of the usefulness of lunar imagery acquisitions for climate monitoring ➔ to be discussed again (for instance CAL/VAL)
- 4 recommendations on measurements to support model development ➔ to be discussed where we are and how to complement
- 2 recommendations on model development and documentation
- 2 recommendations on the lunar model inter-comparison ➔ 1 implemented + 1 to be discussed
- 2 recommendations on MTF assessment with lunar imagery + best practices for MTF
- 3 recommendations related to interactions between groups and analysis ➔ will be followed up by email to check status if still relevant

Agenda

- Arrival on site between 8:00 and 8:30
- Start : Monday 4th at 8:45 / End : Friday at 13:00
- Group picture : slot to be confirmed
- Agenda will be communicated to all registered participants and will be published on the workshop website + GSICS webserver
- Links for online participation will be provided separately ➔ MS Teams
- Online participants are requested to enter Name + Affiliation when joining the meeting. Please provide a list of attendees + affiliation when more people are joining you ☺
- Online presenters: please provide well on time your presentation by email or dropbox so that we can play it on our end if needed.

Agenda

Monday morning	Tuesday morning	Wednesday morning	Thursday morning	Friday morning
- Start of the meeting with welcome + general announcements	**Lunar calibration systems + model development** - LSICS - Model inter-comparison - Model status (LIME, LESSR, etc.)	**Instrument monitoring** - EUMETSAT missions - PACE/OCI - And many others ☺	**Thermal IR + MW** - Model dev in IR - MW applications	**Conclusion + way forward** - Sessions summary - X-topic discussions - Wrap-up / way forward / timeline
Monday morning **Measurements + Moon Observations**				
Lunch break	**Lunch break**	**Lunch break**	**Lunch break**	**Lunch break**
Monday afternoon **Measurements + Moon Observations** - FY-3G/HAOC - EnMAP - GOME-2 - JESSC	**Tuesday afternoon** **Lunar calibration systems + model development**	**Tuesday afternoon** **Instrument monitoring**	**Thursday afternoon** **Thermal IR + MW**	
			Thursday afternoon **Alternative applications of lunar observations** - Band to band registr. - LOS calibration	
Ice breaker	**Possibility of an unformal evening dinner – TBC (if, when and how)**			

- Session sequence likely to follow this proposal (TBC with online presentation and geographical time difference)
- Session time allocation subject to adjustments upon number of presentations in each session
- Unless a lot more presentations are sent by 15/10, we will start contacting the Lunar Calibration Community to ask for presentations ☺
- One coffee break in morning + afternoon

Agenda

- Discussion ➔ dedicated slots in the agenda (20min before each coffee/lunch break)
  - Identified topics will be added to the agenda in the corresponding discussion slots ➔ Help to focus the discussions
  - Already identified item to discuss (on the top of the discussions related to the presentations):
    - Data sharing: what to share ? How to ensure maximum contribution? What to set to address concerns / constrains
    - Data preservation : how can we make sure that data are preserved and knowledge secured? Documents, references, protocols for data storage, etc.
    - What about repeating + enlarging the JESSC exercise (= lunar acquisitions by multiple instruments in a close time range)? Benefits + lessons learnt from JESSC 1 / sharing observation schedules / sharing datasets / set a common infrastructure where this information would be available to mission scientists and satellite operators
    - CAL/VAL activities + best practices: what kind of lunar acquisitions / manoeuvres / how frequent (consecutive orbits) / tandems / etc.

Agenda

- Discussion ➔ see presentation by T. Stone at the GSICS annual meeting in Ottawa

Focus Areas for Directed Efforts, 5–10 Years

- Addressing GSICS objectives
- Engagement with New Space entities
- Developing the Lunar Spectral Irradiance Calibration System (LSICS)
- Documenting Best Practices for deriving and applying lunar calibration
- Evaluating and propagating uncertainties
- Developing other lunar models
- Exploiting and promoting the capabilities of lunar calibration
- Acquiring new fiducial reference measurements
- Data preservation and access
- Applying machine learning techniques
- Communicating lunar calibration requirements to mission developers
- Promoting a distribution of labor — community-wide contributions

Presentations

- Will be made publicly available (GSICS webserver gsicsweb.eumetsat.int) unless presenters explicitly ask not to. If so, please prepare also a lighter version to share.

- Presentation format = 20min talk + 5min Q&A

- Naming convention:
  - #slotID_ Name_freefield.pptx (or .pdf)
  - Example:

15:30	Sebastien Wagner	EUMETSAT	MSG/SEVIRI radiometric performance monitoring and end-of-life tests using lunar calibration	3o	00:25	GEO

Filename = 3o_Wagner_MSG-SEVIRI_monitoring.pptx

During the meeting

- In session:
  - Minutes takers to be nominated (unless there are some volunteers ☺) for each session
  - A template for minutes will be provided (as in previous GSICS meetings – probably with Google Doc) ➔ allows multiple access and updates

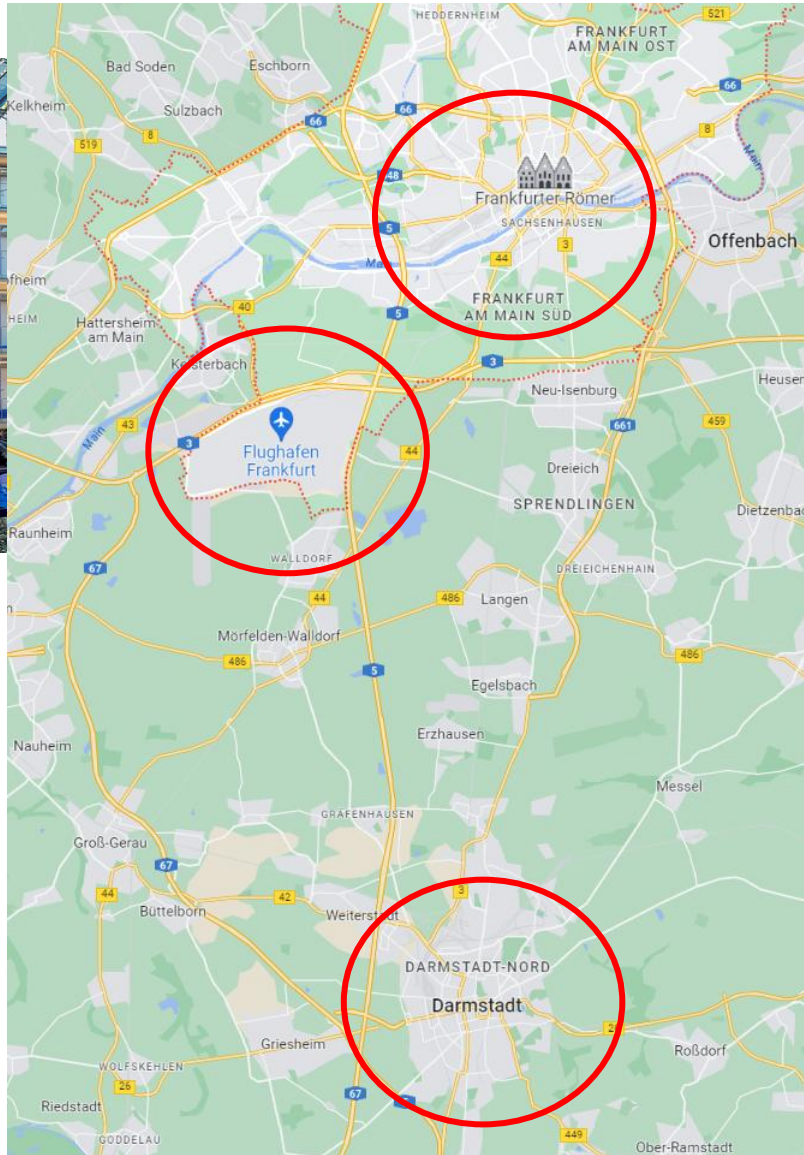
  - Lunch = EUMETSAT canteen – participants need to pay their lunch (no cash - only cards)

Venue

- EUMETSAT headquarters, Darmstadt, Germany

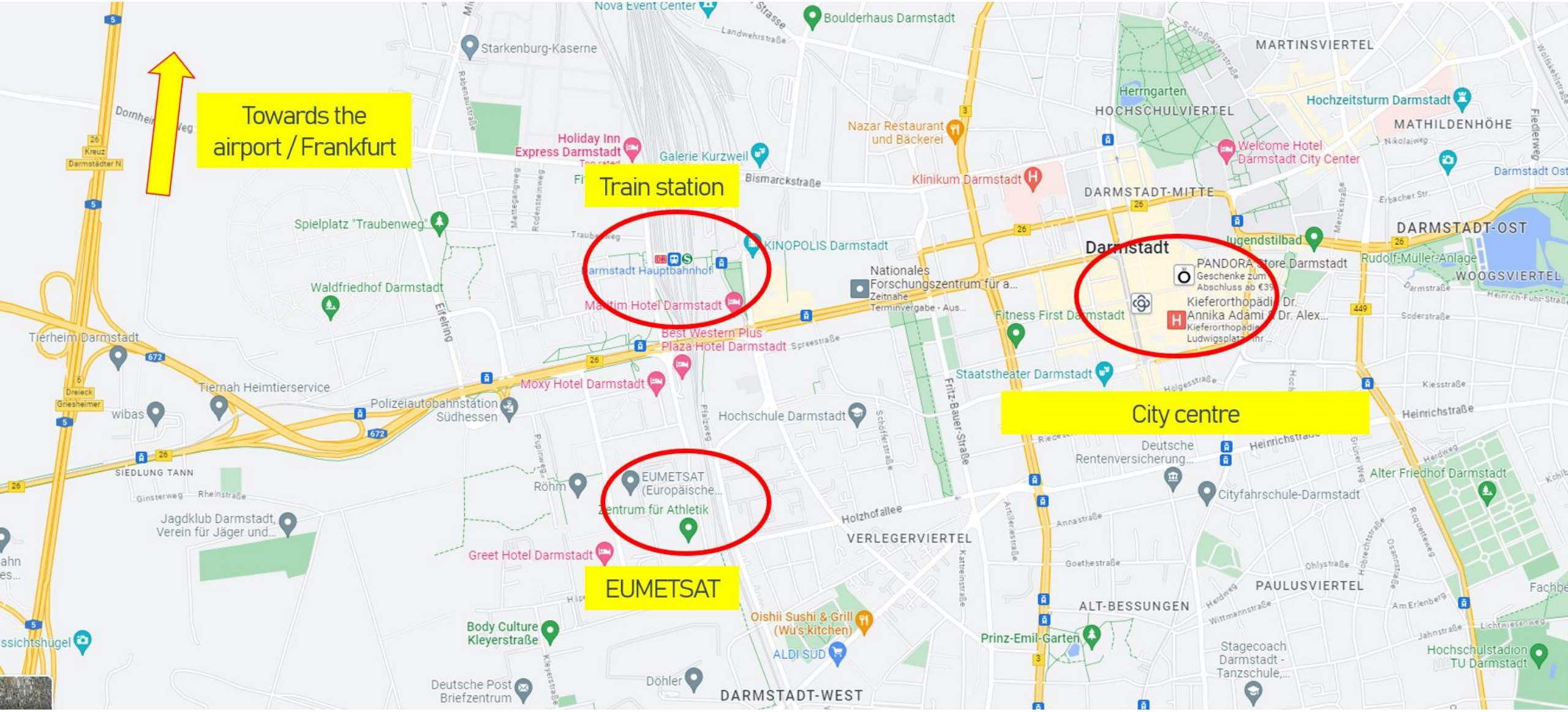








https://www.darmstadt-tourismus.de/en/index.html


Towards the airport / Frankfurt
Train station
EUMETSAT
City centre
Nova Event Center
Boulderhaus Darmstadt
Starkenburg-Kaserne
Holiday Inn Express Darmstadt
Galerie Kurzweil
Nazar Restaurant und Bäckerei
Klinikum Darmstadt
Herrngarten
HOCHSCHULVIERTEL
MARTINSVIERTEL
Hochzeitsturm Darmstadt
MATHILDENHÖHE
Welcome Hotel Darmstadt City Center
DARMSTADT-MITTE
Darmstadt Ost
DARMSTADT-OST
Jugendstilbad
Rudolf-Müller-Anlage
WOOGSVIERTEL
Darmstadt
KINOPOLIS Darmstadt
Spielplatz "Traubenweg"
Waldfriedhof Darmstadt
Darmstadt Hauptbahnhof
Maritim Hotel Darmstadt
Nationales Forschungszentrum für a...
Zeitnahe Terminvergabe - Aus...
Fitness First Darmstadt
PANDORA Store Darmstadt
Geschenke zum Abschluss ab €39
Kieferorthopädie Dr. Annika Adami & Dr. Alex...
Ludwigsplatz
Tierheim Darmstadt
Tiernah Heimtierservice
wibas
Best Western Plus Plaza Hotel Darmstadt
Moxy Hotel Darmstadt
Polizeiautobahnstation Südhessen
Hochschule Darmstadt
Staatstheater Darmstadt
SIEDLUNG TANN
Jagdklub Darmstadt, Verein für Jäger und...
Röhm
EUMETSAT (Europäische... Zentrum für Athletik
Greet Hotel Darmstadt
Holzhofallee
VERLEGERVIERTEL
Deutsche Rentenversicherung...
Cityfahrschule-Darmstadt
Alter Friedhof Darmstadt
Heinrichstraße
Kiesstraße
Fritz-Bauer-Straße
Body Culture Kleyerstraße
Oishii Sushi & Grill (Wu's kitchen)
ALDI SÜD
Prinz-Emil-Garten
ALT-BESSUNGEN
PAULUSVIERTEL
Stagecoach Darmstadt - Tanzschule,...
Hochschulstadion TU Darmstadt
Deutsche Post Briefzentrum
Döhler
DARMSTADT-WEST
Bismarckstraße
Landwehrstraße
Spreestraße
Eifelring
Fritz-Bauer-Straße
Goethestraße
Annastraße
Ohlystraße
Wittmannstraße
Jahnstraße
Am Erlenberg
Soderstraße
Darmstraße
Erbacher Str.
Nikolaiweg
Merckstraße
Fiedlerweg
Schloßgartenstraße
Ginsterweg
Rheinstraße
Dornheimer Weg
Darmstädter N
Kreuz
Dreieck
Griesheimer
Ssichtshügel


RMV Liniennetzplan Stadt Darmstadt
DADINA
Erzhausen 4089
Wixhausen 4035
Arheilgen 4035
Kranichstein 4035
Messel 4080
Weiterstadt 4060
Griesheim 4055
Nordbahnhof
Arheilgen Bahnhof
Kranichstein Bahnhof
Wixhausen Bf
Martinsviertel
Eberstadt 4045
Eberstadt Bahnhof
Pfungstadt 4050
Südbahnhof
Heimstättensiedlung
Bessungen 4001
Paulusviertel
TU-Lichtwiese Bahnhof
Roßdorf 4076
Mühltal 4065
Seeheim-Jugenheim 3901
Alsbach Am Hinkelstein
Griesheim Platz Bar-le-Duc
Information
Zeichenerklärung
More info available on 5th LCWS website



Thank you!

Questions are welcome.