



## Agenda - Summer School 2025, 30 June – 9 July, Bracciano

### Monday 30 June

am	Welcome	Welcome (Italian Air Force Met Service) Introduction of students and teachers plus discussion on agenda (All)
	Opening Quiz	ALL
	Lecture Lab	Satellites: history, instruments, orbits – <b>Strelec Mahović</b> Introduction to McIDAS-V (case from 6 November 2005) (LAB_McV_intro_instructions)
pm		Daily Weather Briefing
	Lecture Lab	Electromagnetic spectrum and radiative transfer – <b>Bennartz</b> Smoke in Botswana (29 August 2008) (LAB_Smoke_fires_botswana_instructions.pdf - part I)
	Lab	Discussion of results

### Tuesday, 01 July

am	Lecture	RGB Products overview – <b>Smiljanić</b>
	Lab	Wildfires in South Africa (1 September 2008) (LAB_Smoke_fires_botswana_instructions.pdf – part II)
	Lab	Discussion of results
pm	ALL	Daily Weather Briefing
	Lecture	Low-level humidity seen in solar N1R0.91 and IR channels - <b>Smiljanić</b>
	Lab	Moisture boundary cases (16 October 2014, 14 July 2006) (LAB_Moisture_boundaries_instructions.pdf)
	Lab	Discussion of results

### Wednesday, 02 July

am	Lecture	Infrared soundings (multi-spectral and hyperspectral) – <b>Bennartz</b>
	Lab	Investigate a tropical depression with AIRS (LAB_Tropical_depression_airs_instructions.pdf)
	Lab	Discussion of results
pm	ALL	Daily Weather Briefing
	Lecture	Infrared soundings 2 – <b>Bennartz</b>
	Lab	IR hyperspectral (eg IRS profiles) LAB with hyperspectral data.pdf
	Lab	Discussion of results

### Thursday, 03 July

pm	Lecture	Microwave soundings – <b>Bennartz</b>
	Lab	Investigate a tropical depression with MODIS and AMSR in addition to AIRS (LAB_Tropical_depression_modis_instructions.pdf)
	Lab	Discussion of results
pm	ALL	Daily Weather Briefing
	Lecture	Rain retrievals from satellites – <b>Bennartz</b>
	Lab	(LAB_Precipitation_microwave_instructions.pdf)
	Lab	Discussion of results

Social event starting 4:30pm

**Friday, 04 July**

<b>am</b>	Lecture	Aerosols 1 (dust, smoke) – <b>Strelec Mahović</b>
	Lab	Dust / Smoke discrimination (22 October 2007) (LAB_Dust_smoke_discrimination_instructions.pdf)
	Lab	Discussion of results
<b>pm</b>	ALL	Daily Weather Briefing
	Lecture	Aerosols 2 (ash and SO <sub>2</sub> ) – <b>Scoccione / Caracciolo</b>
	Lab	Detection of thin ash and ice clouds (15 April 2010) (LAB_Thin_ash_and_ice_clouds_instructions.pdf)
	Lab	Discussion of results

**Weekend 05 - 06 July** (possible private visit to Rome, no lunches organised by EUMETSAT)

**Monday, 07 July**

<b>am</b>	Lecture	MTG mission introduction - <b>Strelec Mahović</b>
	Lab	Exploring FCI and LI imagery data (Lab_FCI applications)
	Lab	Discussion of results
<b>pm</b>	ALL	Daily Weather Briefing
	Lecture	Cloud Microphysics (Phase, Particle Size) – <b>Strelec Mahović</b>
	Lab	Lab on the use of the NIR2.25 channel (McV lab MTG-I – exploring NIR2.25 cloud phase channel.pdf)
	Lab	Discussion of results

**Tuesday, 08 July**

<b>am</b>	Lecture	FCI solar WV absorption channels - <b>Smiljanić</b>
	Lab	Lab on the new NIR1.38 channel (McV lab MTG-I - exploring NIR1.38 thin cirrus channel.pdf)
	Lab	Discussion of results
<b>pm</b>	ALL	Daily Weather Briefing
	Lecture	Space-borne lightning observations – <b>Smiljanić</b>
	Lab	LI data exploration through ESSL viewer (12-13 July 2023 case analysis)
	Lab	Discussion of results

**Wednesday, 09 July**

<b>am</b>	Lecture/Lab	MTG Fire detection – <b>Smiljanić</b>
	Lab	Monitoring/nowcasting of fire events through FCI data
	Final Quiz	ALL
	Course Evaluation	ALL
	Summary & Concluding Ceremony	(end at 12.30 h)

AM sessions: 9:00 am – 12:30 pm

PM sessions: 2:00 pm – 5:30 pm