



Sunday 28th August, 8:30 am to 5:30 pm.

.Venue: Palacinema, Locarno, Switzerland

.Course title: Open radar – open-source software tool for radar data processing

.Learning objectives:

1. Present an overview of the latest available open-source software packages for radar data processing.
2. Learn to use some of these tools with guided exercises in a hands-on approach.
3. Provide guidelines to collaborate in an existing project or start a new project.

.Course description: The course will discuss the principles of open science and provide an overview of the most mature and exciting open-source software packages available for radar data processing. Additionally it will provide guidelines to collaborate in or start a new open project. It will have a hands-on approach and the students will be able to use the software packages themselves. Anyone with interest in using or developing open source software tools is welcomed.

.Teachers: Daniel Wolfensberger, MeteoSwiss; Jordi Figueras I Ventura, MeteoFrance; Scott Collis, Argonne National Laboratory; Mike Dixon, National Center for Atmospheric Research; Maxwell Grover, Argonne National Laboratory; Robert Jackson, Argonne National Laboratory; Daniel Michelson, Environment and Climate Change Canada; Kai Mühlbauer, University of Bonn; Velibor Pejčić, University of Bonn

.Program:

Time	Content	Speaker/Chair	Duration
<i>08:30</i>	Course registration		<i>30 mins</i>
<i>09:00</i>	Welcome and getting started Setup of the cloud, troubleshooting	All	<i>15 min</i>
<i>09:15</i>	Open Science	Maxwell Grover, Daniel Michelson	<i>30 min</i>
<i>09:45</i>	Overview of the open source radar processing software packages Brief overview of each package, philosophy and highlights	Daniel Wolfensberger Jordi Figueras I Ventura	<i>45 Min</i>
<i>10:30</i>	Coffee break		<i>30 min</i>
<i>11:00</i>	Hands on Py-ART	Scott Collis, Bobby Jackson, Daniel Wolfensberger, Jordi Figueras I Ventura, Maxwell Grover	<i>45 min</i>
<i>11:45</i>	Hands on wradlib	Michael Dixon	<i>45 min</i>
<i>12:30</i>	Lunch break		<i>1h</i>
<i>13:30</i>	Hands on BALTRAD	Daniel Michelson	<i>45 min</i>
<i>14:15</i>	Hands of LROSE	Kai Mühlbauer, Velibor Pejčić	<i>45 min</i>

15:00	Coffee break		30 min
15:30	Combining multiple packages	Maxwell Grover, Daniel Michelson	30 min
16:00	Becoming a developer in a open project, best practices	Kai Mühlbauer, Velibor Pejčić	30 min
16:30	Open slot, discussion, evaluation	All	30 min
17:00	Closing time.		

.Preparation by participants: Basic programming skills in Python and/or C/C++ and an understanding of radar data processing are advised. Students should bring their own laptops