

## Adriaradnet: Installed the mini weather radar in Albania

In March 2015 was concluded the Albanian radar installation. This radar is a MMR-50 produced by the Slovak company MicroStep-MIS, a portable X-band that provides real time monitoring of weather situation over a large area. The instrument is placed in a military area at Bisht Palle, at the coast near Durres and provides real time monitoring of precipitation from the Italian coast to the Albanian lowlands. This site was the best choice among proposed radar site alternatives. Indeed, this location guarantees a good visibility in all directions because there are no obstacles in the neighbourhood such as trees, buildings or towers, neither high mountains or hills. The area is uninhabited, so the installation had no impediments due to a possible environmental impact. The site is also easily accessible by a vehicle and even with a crane, so there was no need to make a costly road to reach it. The radar has been deployed on the top of a new tower, there was no necessity to realize a new power radar because the electricity supply was taken by the near naval base.



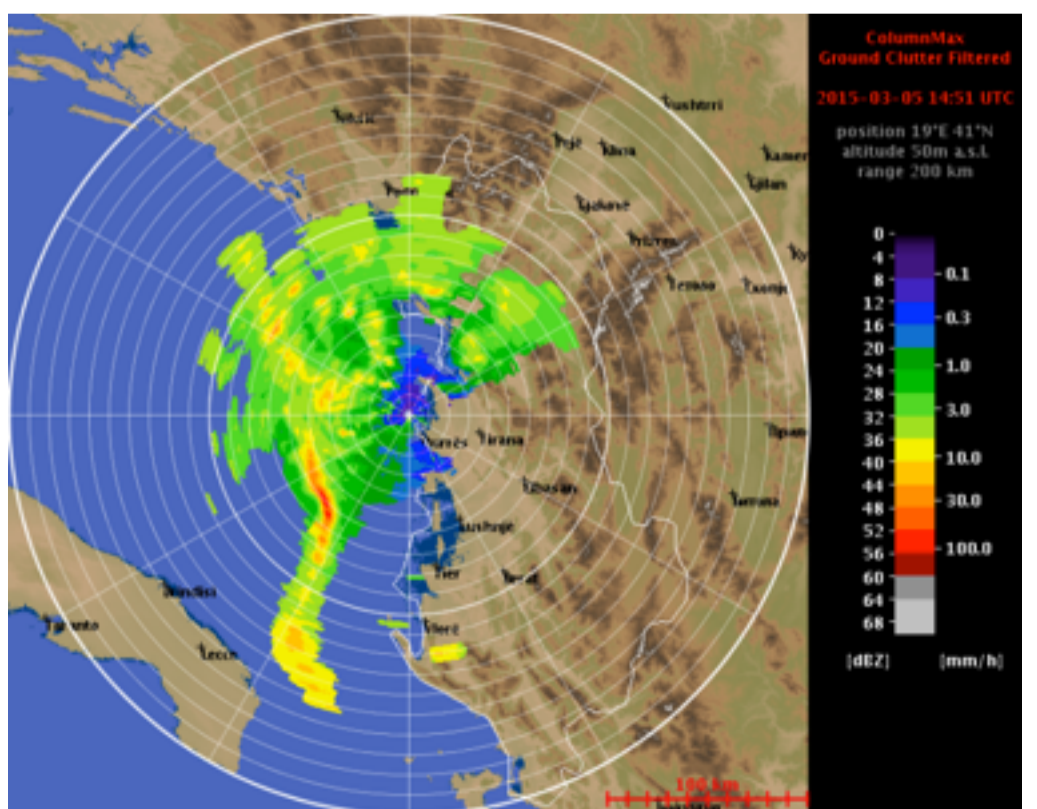
I) Infrastructure works in the radar tower



II) The radar tower after the realization tower



III) Bisht Palle radar after the installation



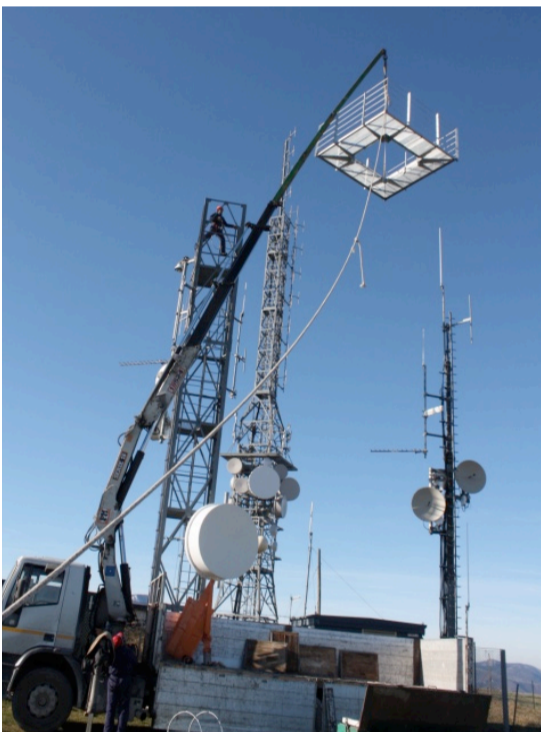
IV) Rainy image taken on March 5, 2015

## Marche Region: installed the mini radar and two disdrometers

The Marche radar system was installed in the 2nd week of September 2014 at the Cingoli site, near Macerata. The radar has been deployed on the top of an existing tower, duly arranged with some infrastructure works, belonging to the regional radio framework. The site is secured and fenced and has a good radar visibility. Also the Radar Control Centre (located in Ancona at Marche Region premises) has been duly arranged by means a Linux Workstation where radar data are routinely sent and stored for processing, visualization and successive analysis.

For operational purpose the radar was left in continuous operational mode with 10 minute repetition scan by using seven different elevation angles.

Also two disdrometers OTT-Parsivel were installed close to a rain gauge sensor in Macerata Montalbano and Cupramontana, at a distance of about 20 km and 12 km away from the radar location, respectively. These instruments are laser-based optical systems for complete and reliable measurement of all types of precipitation and are able to measure simultaneously the drop size distribution and velocity of falling hydrometeors. The size range of measurable liquid precipitation particles is from 0.2 to 5 mm, for solid precipitation particles from 0.2 to 25 mm. Instruments will be used to calibrate and validate radar products.



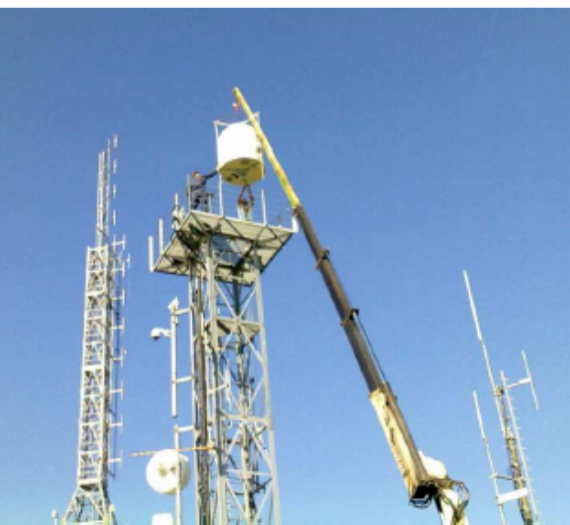
**I) Infrastructure works in the radar tower**



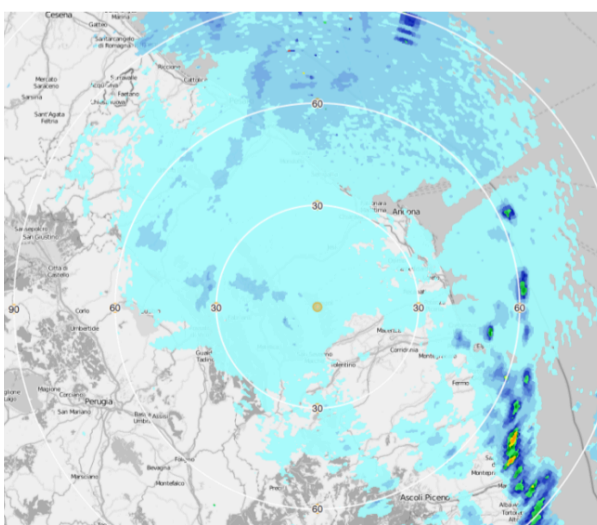
**II) Technicians at work during the setup phase**



**III) Cupramontana site after the installation**



**IV) Assembly of the radome on the top of the tower**



**V) Rainy image taken on October 23, 2014**



**VI) Macerata M. disdrometer labelled with a sticker in which IPA and project logos are well highlighted**



The project is co-funded by the European Union, Instrument for Pre-Accession Assistance

IPA Adriatic 2007-2013, the cross-border Cooperation Programme is the result of the joint programming performed by the concerned participating countries and it is part of the process of cooperation in the Adriatic.

Several factors make this cooperation important from a political and economic point of view: factors related to the political stability of the area and factors related to geographical and cultural proximity which make possible the intensification of multilateral relations between the Adriatic coastal regions to support local processes of harmonious growth sustainable development and unity among peoples. ■

**[www.adriaticipacbc.org](http://www.adriaticipacbc.org)**

## ADRIARadNet

It is a project conceived and coordinated by CETEMPS and Abruzzo region and cofunded by the European Union, Instrument for PreAccession Assistance

## PARTNER

CETEMPS University of L'Aquila (Italy)  
 Civil Protection of Abruzzo Region (Italy)  
 Civil Protection of Marche Region (Italy)  
 Branch of CIMA Research Found. (Albania)  
 Institute of Geosciences IGewe (Albania)  
 Ministry of Interior, Civil Emergence (Albania)  
 Dubrovnik Neretva County (Croatia)  
 Beep Innovation Srl (Italy)

## DETAILS

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 Partners: 8  
 Lead Partner: CETEMPS  
 Budget: 2.668.183,00 €  
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**THE FINAL MEETING OF ADRIARADNET PROJECT  
 WILL BE HELD IN L'AQUILA ON 23-24 JULY, 2015**

*<http://cetemps.aquila.infn.it/adriaradnet/>*