The geological-geomorphological-gis analysis has been strongly implemented compared to the paper presented at the 1st International Conference Metrology for Archaelogy (Benevento, Italy, October 22-23, 2015).

Moreover, in the conference paper we presented a *“Lithological Map”* of the Isernia historical centre. In this new paper we have re-analyzed the lithological data and we have integrated them with field data, borehole data and chronostratigraphical published data in order to derive a *“Geological Map”*. Geological mapped units have been then interpreted trying to recognize whether rock-type exhibits a relevant role in the areal distribution of the recognized archaeological finds. In addition, we have created four geological cross-sections in order to describe the subsurface distribution of the geological units and we have reported the intercepted either walls of terracing or walls of the Latin colony on the geological cross-sections, enhancing the rock type-archaeological finds correlation.

We have also strongly implemented the Gis analysis. In fact, in the conference paper we presented a 5m Dtm of the Isernia area. This Dtm has been strongly detailed in the historical centre area. Here we have reconstructed the areal distribution of 0.5m spaced contour lines, and we have also carried out a detailed Gps survey of this area addressed at constraining the reconstructed contour lines with fixed elevations. The combination of the 0.5m contour lines and the Gps survey allowed us to derive a 0.5m Dtm of the historical centre of Isernia. This new Dtm clearly enhances the terraced shape of the area which, on the opposite, looked almost flat with the previous 5m Dtm. We have then analyzed this 0.5m Dtm in order to derive the slope and the curvature maps of the area, which played a relevant role in our analysis helping the identification of possible buried walls and the identification of areas with possible concentration of buried archaeological finds respectively.

The archaeological procedure for the census of finds was better explained thought the production of a specific schedule. The archaeological visibility and concentration maps were updated.

The description of the geophysical methods of measurement applied in the research of archaeological buried structures was implemented and the choice of each surveyed area was better justified.