Integration of historical aerial and satellite photos, recent satellite images and geophysical surveys for the knowledge of the ancient Dyrrachium (Durres, Albania)

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The paper presents the preliminary results of an integrated multidisciplinary research project concerning the urban area of the modern Durres (ancient Dyrrachium). Here a joint Italian and Albanian researcher are starting preliminary investigations on the place of an ancient roman villa placed in the urban centre of the modern town. In a initial phase are offering interesting results the use of a rich multitemporal remote sensing data-set, historical aerial photos of 1920s and 1930s, photos of USA spy satellites of 1960s and 1970s (Corona KH-4A and KH-4B), and very high resolution satellite imagery.

The historical aerial documentation is very rich and includes aerial photogrammetrich flights of two Italian Institutions: the private company SARA - Società Anonima Rilevamenti Aerofotogrammetrici in Rome (1928) and the IGM – Istituto Geografico Militare (1936, 1937 e 1941), which flew on Durres for purposes of cartographic production and military. These photos offer an image of the city before the urban expansion after the Second World War and in recent decades, progressively documented by satellite images of the 1960s-1970s and recent years. They enable a reconstruction of the ancient topography of the urban area, even with the possibility of detailed analysis, as in the case of the the Roman villa, nowadays buried under a modern garden, but also investigated with a GPR survey, in order to rebuild its plan and contextualize the villa in relation to the urban area of the ancient Dyrrachium.