Pinna nobilis mapping in Posidonia oceanica meadows by videophotographic techniques in the Gulf of Oristano, (Sardinia)

Rende Sante Francesco^{1*}, Penna Marina¹, Trabucco Benedetta¹, Bacci Tiziano¹, Coppa Stefania², De Lucia G. Andrea², Camedda Andrea², Massaro Giorgio², Marra Stefano², Perilli Angelo², Cicero Anna Maria¹

- ¹ ISPRA, Institute for Environmental Protection and Research, Roma, Italy
- ² Consiglio Nazionale delle Ricerche, Istituto per l'Ambiente Marino Costiero (IAMC-CNR), Torregrande, Oristano, Italy
- * francesco.rende@isprambiente.it

Pinna nobilis spatial distribution have been analysed through a video – photographic approach in a *Posidonia oceanica* meadow in the Gulf of Oristano (Sardinia, Italy). In situ visual censuses and 2D/3D georeferenced vertical photographic survey were conducted by SCUBA diving in different sampling transects. The experimental procedure was carried out in the summer of 2014. Data have been processed using the photogrammetric techniques, in particular, in this work we presented the procedure and processing techniques to realize the orthographic planar micro cartography mosaics from photo sequences. Results of this study, although preliminary, showed the time-cost effectiveness of this approach to map the distribution of benthic species.