PERSONAL INFORMATION

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Current position: Associate Professor (since 2014) – SSD ICAR/06 Topografia e Cartografia
Previous positions: Researcher (since 2004) at the Technical University of Bari, Italy.

AUTHOR IDENTIFIERS

Researcher ID: L-2937-2015
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Scopus metric overview (updated to June. 20, 2024): 56 documents by author; 1699 citations by 1582 documents; h-index: 19)

EDUCATION in brief

January 2000 - PhD in Surveying and Mapping (University of Bologna, Italy)
December 1994 - MSc in Marine Environmental Sciences (University of Bologna, Italy)

RECENT ASSIGNMENTS, MEMBERSHIPS

Head of the Laboratory of Engineering Geomatics at the University of Modena and Reggio Emilia
President of the Master's Degree in Civil and Environmental Engineering
Associate editor of Applied Geomatics Journal (ranked official journal of the Italian Society of Photogrammetry and Topography (SIFET), Springer)
Board member of the PhD in Civil, Environmental and Materials Engineering (University of Modena and Reggio Emilia)
Board member of the national PhD on Earth Observation (University of Rome Sapienza)

International Meeting Committee
2020 D-SITE Drones - Systems of Information on culTural hEritage - International Research experiences for the development of documentation and analysis systems conducted through the use of drones
2021 D-SITE Drones - Systems of Information on culTural hEritage - International Research experiences for the development of documentation and analysis systems conducted through the use of drones

MAIN SCIENTIFIC INTERESTS AND SKILLS

Since 1998, he was involved in the application of space geodesy and remote sensing to the environmental monitoring and glaciology in Antarctica. Took part to five Antarctic Expedition, spanning from 1998 to 2005, in the frame of the Italian National Programme for Antarctic Research, in the field of geodesy for crustal deformation, geodynamics and ice sheet monitoring using precise global navigation satellite systems (GNSS) and InSAR methodologies.
Since 2002 researches were focused on application of satellite high resolution imagery and multispectral data for environmental monitoring (under risk conditions), land use, landslide risk/susceptibility assessment and integrated use of survey methodologies. Precise GNSS and topographic surveys were also managed during several and repeated archaeological expeditions on archaeological sites (Perù, Sultanate of Oman, India, Turkmenistan; Argentina), including data processing and final maps editing.
Development of methodologies devoted to the use of Unmanned Aerial Vehicles (UAV) for coastal monitoring and risk assessment. Other researches focused on the topics of use of GIS (Geographical Information System) in urban planning, development of survey technologies for environmental/risks monitoring, hazards monitoring/analysis and risk assessment to ground deformation phenomena and slope failures, geodetic surveying by traditional and novel techniques.

More recent research activities related to the present project
In the last years, he focused on the design and validation of surveying methodologies for monitoring applications in the field of civil and environmental engineering with related processing strategies and data management. More recent research activities related to the present project have been faced and published on topics related to the impact of innovative and emerging technologies on the surveying/monitoring activities. In particular, monitoring technologies applied to civil engineering have been focused on 3D reconstruction of structures using terrestrial laser scanner and aerial/terrestrial

photogrammetry with investigation about performance metrics. Dynamic monitoring and assessment were also investigated during joint experiments using terrestrial radar interferometer and accelerometers. More recently, the laboratory of geomatics adopted a workflow to process Sentinel-1 satellite data for ground deformation monitoring.

TEACHING

From 2006 to 2014 lecturer in "Topography and survey technology" and "Geographical Information Systems" at the Technical University of Bari, Italy, Department of Civil Engineering. Since 2014 lecturer in "Geomatics Engineering" and "G.I.S." at the University of Modena and Reggio Emilia, Italy, Department of Engineering. Since 2015 lecturer in "Geomatics" at the University of Bologna, Italy, Department of History Culture Civilization.

Recent visiting periods

October 2017 visiting University of Buenos Aires and Italian Institute of Culture with lecture on "The modern photogrammetry in the fields of archaeology and cultural heritage"
October 2018 visiting University of Buenos Aires and Italian Institute of Culture with lecture on "The modern photogrammetry in the fields of archaeology and cultural heritage"

Recent PhD Thesis tutored and PhD committees

Author name: Paolo Rossi
Title: 3D reconstruction from images with Structure from Motion algorithms. Assessment on metric accuracy of generated models and considerations on their use in monitoring applications.
Lecture date: 20th March 2017
University: University of Modena and Reggio Emilia
Name of the tutors: Prof. Alessandro Capra, prof. Francesco Mancini

Author name: Francesca Grassi
Title: Integration of SAR interferometry and geodetic observations for environmental investigations
Lecture date: in progress
University: University of Modena and Reggio Emilia
Name of the tutors: Prof. Francesco Mancini

Author name: Benedetta Brunelli
Title: Use of satellite radar data for soil moisture assessment
Lecture date: in progress
University: University of Rome Sapienza – National PhD school in Earth Observation
Name of the tutors: Prof. Francesco Mancini

2015. Member of the PhD committee at Universidade Federal do Rio Grande do Sul (Rio Grande do Sul, Brazil), Ph. D. joint degree in Land Management and conservation.
2015. Member of the PhD committee at Universidad de Cádiz (Spain, Spain)- Departamento de Biología Facultad de Ciencias del Mar y Ambientales, Ph.D. in Marine and Coastal Management (MACOMA).
2019. Member of the PhD committee at University of Ferrara, PhD in Scienze dell'Ingegneria.

ROLES IN COMPETITIVE NATIONAL/INTERNATIONAL PROJECTS

- Participation to project "Algerian Coast Management through Intergration and Sustainability (AMIS) – SmapIII Project (CE contract MED/2005/110-661)", Centro Interdipartimentale di Ricerca per le Scienze Ambientali (CIRSA), University of Bologna, [2006]
- Research unit scientific coordination of the Progetto Strategico (PS_119) Valutazione del rischio da frana per la pianificazione di centri urbani minori in zone di catena: il caso della Daunia. Attività: raccolta dati, progetto di un database geografico per l'area di studio e realizzazione di reti topografiche per il controllo delle deformazioni tramite rilevamento GNSS per tre siti campione [2007-2010]
- Co-director in international NATO project "Science for Peace and Security Section (SPS) [ESP.EAP.SFP 983305)" Development of a monitoring system to counter manage the risk of subsidence deformation on the population of Tuzla (Bosnia) [2009-2011]
- Key-expert in the CIRCLE international project "Water Management in Coastal Drainage Basins: challenges and adaptation strategies within the framework of climate change" (Working Package 1 "GIS and Relational database development") [2008-2009]
- Participation in the research unit of the PRIN call 2010/11, Area 08 n. 11 (Technical University of Bari) "Tecniche geomatiche innovative ed emergenti di rilievo, telerilevamento (da aereo, satellite, UAV) e WebGIS per la mappatura del rischio in tempo reale e la prevenzione del danno ambientale" [2013-2016]

- Coordinator of the project “Nuovi algoritmi per l’integrazione di dati provenienti da tecniche aeree e satellitari per il monitoraggio del dissesto e sviluppo di applicativi in ambiente open source”, Università degli Studi di Modena e Reggio Emilia, call FAR 2016 [2016-2018]
- Participation in the research unit CRICT-UNIMORE (Centro Interdipartimentale di Ricerca e per i servizi nel settore delle Costruzioni e del Territorio) within the POR-FESR Emilia-Romagna call - ASSE1 – Ricerca e innovazione - “InSPiRE ”Manutenzione predittiva, preventive e programmata per la conservazione, il recupero e il restauro” [2019-2021]
- Participation in the research project “Caratterizzazione basata su rilievi lidar aerei a elevatissima risoluzione della geometria idraulica, della vegetazione riparia e delle arginature in terra degli alvei fluviali vallivi nella modellazione idraulica della capacità di smaltimento degli eventi di piena (LSP, Lidar per lo Smaltimento delle Piene; LFC, Lidar for Flood Conveyance), [PI: Stefano Orlandini, 15/01/2021-15/07/2022]
- Principal Investigator of the project “Metodi radar satellitari per il monitoraggio strutturale e la mappatura di fenomeni deformativi nel territorio Modenese” (SM4SM, Satellite Methods for Structural Monitoring), [PI: Francesco Mancini, 01/12/2021-31/05/2023]
- Reserach unit coordinator of the project “CRICT-UNIMORE (Centro Interdipartimentale di Ricerca e per i servizi nel settore delle Costruzioni e del Territorio) nel progetto PR-FESR Emilia-Romagna - 2021-2027, Priorità 1 - Azione 1.1.2 - “INspiring City InformaTion modEling for urban resilience (INCITE)” [PI: Prof. Andrea Zerbi, Università di Parma, 05/10/2023-04/09/2025]
- Reserach unit coordinator of the project PRIN2022 “Damage Analysis and Monitoring of Ancient structures interacting with Geotechnical Excavations (DAMAGE)” [Coordinatore del Progetto: Prof. Angelo Amorosi, La Sapienza Roma, 01/10/2023-30/09/2025]

VOLUMES, SPECIAL ISSUES AND BOOKS EDITED

2018. Guest Editor [Mancini F., Piras M., Vacca G., Lingua A.] della special issue “Applications of photogrammetry for environmental research” - ISPRS International Journal of Geo-Information (ISSN 2220-9964)

2018. Guest Editor [Mancini F., Salvini R] della special issue “The Impact of Innovative and Emerging Technologies on the Surveying activities" – Applied Geomatics (ISSN: 1866-9298: Print; 1866-928X: Online)

2020. Guest Editor [Mancini F., Pirotti F.] della special issue “Innovations in Photogrammetry and Remote Sensing: Modern Sensors, New Processing Strategies and Frontiers in Applications” – Sensors ((ISSN 1424-8220)

MAIN REFERENCES IN THE LAST 10 YEARS

1) Sijerčić I., Dervišević R., Čeliković R., Mancini F., Stecchi F. (**2011**) - Ground surface deformation of the urban area in complex engineering-geological conditions in the sinking town of Tuzla (Bosnia and Herzegovina). Proceedings of the 11th *International Multidisciplinary Scientific GeoConference, SGEM2011*, Sofia, Bulgaria, June 19-25, 2011, Vol. 1, 481-488. ISSN 1314-2704. ISBN 9549181812. doi: 10.5593/SGEM2011/S02.121.

2) Loconte P., Ceppi C., Lubisco G., Mancini F., Piscitelli C., Selicato F. (**2012**) - Climate alteration in the metropolitan area of Bari: temperatures and relationship with characters of urban context. *Lecture Notes in Computer Science*, 7334 (part II), 517-531. In B. Murgante et al Eds. Proceedings of the “International Conference on Computational Science and Its Applications, ICCSA”, June 18-21, Salvador de Bahia, Brazil. Doi: 10.1007/978-3-642-31075-1_39. ISBN 978-364231074-4. ISSN 0302-9743. Springer-Verlag, Berlin Heidelberg New York.

3) Stecchi F., Mancini F., Ceppi C., Gabbianelli G. (**2012**) - Vulnerability to ground deformation phenomena in the city of Tuzla (BiH): a GIS and multicriteria approach. *Natural Hazards*. 64, 2153-2165. ISSN: 0921-030X, doi: 10.1007/s11069-012-0225-2.

4) Mancini F., Dubbini M., Stecchi F. (2012) – Attività solare, effetti ionosferici e servizi NRTK: quali connessioni? *Geomedia*, 16(2), 12-16. ISSN: 2283-5687.

5) Mancini F., Galeandro A. (**2013**) - Disturbi indotti da attività ionosferica eccezionale sulle soluzioni GNSS. *Atti 17ª Conferenza Nazionale ASITA*, 5 – 7 Novembre 2013, Riva del Garda (TR), 737-743. ISBN 978-88-903132-8-8.

6) Dubbini M., Fabbri S., Gattelli M., Mancini F., Stecchi F. (**2013**) - La descrizione tridimensionale mediante dati acquisiti da UAV per lo studio geomorfologico dei sistemi dunosi costieri. *Atti del 7° Workshop Tematico “Il telerilevamento per il monitoraggio e la gestione del territorio”* a cura di E. Candigliota, F. Immordino. San Martino in Pensilis (CB), 13-14 Giugno 2013, ENEA, 75-76.

7) Mancini F., Dubbini M., Gattelli M., Stecchi F., Fabbri S., Gabbianelli G. (**2013**) - Using Unmanned Aerial Vehicles (UAV) for High-Resolution Reconstruction of Topography: The Structure from Motion

Approach on Coastal Environments. *Remote Sensing*. 5(12), 6880-6898. doi:10.3390/rs5126880. EISSN 2072-4292.

8) Caprioli M., Mancini F., Ritrovato G. (**2013**) - Utilizzo di DEM in ambiente GIS per la creazione di modelli idrologici superficiali: applicazioni disponibili. *Bollettino della SIFET*, 3, 9-24. ISSN 1721-971X.

9) Sekovski I., Stecchi F., Mancini F. Del Rio L. (**2014**) - Image classification methods applied to shoreline extraction on very high resolution multispectral imagery. *International Journal of Remote Sensing*, 35(10), 3556-3578 ISSN 0143-1161 (Print), 1366-5901 (Online).

10) Sekovski I., Stecchi F., Mancini F. Gabbianelli G. (**2014**) - Estrazione di linee di riva mediante classificazione multispettrale di immagini satellitari ad alta risoluzione. In Benincasa, F. (ed), Proceedings of Fifth International Symposium "Monitoring of Mediterranean coastal areas: problems and measurement techniques*"*, Livorno 17-19 Giugno 2014, 750-758. ISBN 978-88-95597-19-5.

11) Ceppi C., Galeandro A., Mancini F., Tarantino E. (**2014**) - Assessing ionospheric activity from GNSS measurements as a possible precursor of high magnitude earthquakes. 1° WORKSHOP on the State of the art and Challenges Of Research Efforts @POLIBA, Technical University Bari, 3-5 Decembrer, 243-247. Gangemi editore. ISBN 978-88-492-2966-0.

12) Figorito B., Mancini F., Novelli A., Tarantino E. (**2014**) - Monitoring land cover changes at watershed scale using LANDSAT imagery. 1° WORKSHOP on the State of the art and Challenges Of Research Efforts @POLIBA, Technical University Bari, 3-5 Decembrer, XX-XX. Gangemi editore. ISBN 978-88-492-2966-0.

13) Caprioli M., Mancini F., Scarano A., Trizzino R. (**2014**) - Individuazione del confine in alcune controversie giudiziarie. Bollettino della SIFET, 3, 1-6, sezione professione. ISSN 1721-971X.

14) Mancini F., Galeandro A., De Giglio M., Barbarella M. (**2015**) - Ionospheric activity and possible connection with seismicity: Contribution from the analysis of long time series of GNSS signals. *Physics and Chemistry of the Earth, Parts A/B/C*. doi:10.1016/j.pce.2014.10.005.

15) Sekovski I., Armaroli C., Calabrese L., Mancini F., Stecchi F., Perini L. (**2015**) - Coupling scenarios of urban growth and flood hazard along the Emilia-Romagna coast (Italy). *Natural Hazard and Earth System Sciences*, 15, 2331–2346. ISSN 15618633.

16) Capra A., Dubbini M., Bertacchini E., Castagnetti C., Mancini F. (**2015**) – 3D reconstruction of an underwater archaelogical site: comparison between low cost cameras. In Menna F., Del Pizzo S., Bruno F., Nocerino E., Remondino F. (eds) Proceedings of the ISPRS meeting "Underwater 3D Recording and Modeling", *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XL-5/W5. 16–17 April 2015, Piano di Sorrento, Italy. ISSN: 16821750. doi:10.5194/isprsarchives-XL-5-W5-67-2015.

17) Mancini F., Capra A., Castagnetti C., Ceppi C., Bertacchini E., Rivola R. (**2015**) - Contribution of Geomatics Engineering and VGI Within the Landslide Risk Assessment Procedures. *Lecture Notes in Computer Science*, 9156 (part II), 635-647. In O. Gervasi et al Eds. Proceedings of the 15th "International Conference on Computational Science and Its Applications, ICCSA", June 22-25, Banff, AB, Canada. Doi: 10.1007/978-3-319-21407-8_45. Print ISBN 978-3-319-21406-1. Online ISBN 978-3-319-21407-8. ISSN 0302-9743. Springer International Publishing, Switzerland.

18) Sekovski I., Mancini F., Stecchi F. (**2015**) - Application of SLEUTH Model to Predict Urbanization Along the Emilia-Romagna Coast (Italy): Considerations and Lessons Learned. *Lecture Notes in Computer Science*, 9157 (part III), 426-439. In O. Gervasi et al Eds. Proceedings of the 15th "International Conference on Computational Science and Its Applications, ICCSA", June 22-25, Banff, AB, Canada. Doi: 10.1007/978-3-319-21470-2_31. Print ISBN 978-3-319-21469-6. Online ISBN 978-3-319-21470-2. ISSN 0302-9743. Springer International Publishing, Switzerland.

19) Caprioli M., Mancini F., Mazzone F., Scarano M., Trizzino R. (**2015**) - UAV Surveys for Representing and Document the Cultural Heritage. Atti del XIII Forum Internazionale di Studi *Le Vie dei Mercanti - HERITAGE and TECHNOLOGY, Mind Knowledge Experience*, 475-482, Aversa-Capri, 11-13 Giugno 2015. La scuola di Pitagora s.r.l. ISBN 978-88-6542-416-2.

20) Mancini F. (**2016**) - Rapporto sulla sessione "benchmark" - uso di immagini UAV per la ricostruzione 3D: esperienze condivise tra utenti. *Bollettino della Sifet*, 1-3, Sezione Vita. ISSN 1721-971X.

21) Mancini F., Castagnetti C., Rossi P., A.A. (**2016**) - Achievement of the "benchmark" session - on the use of UAV images for 3D reconstruction: a joint experience among users (held during the 61th SIFET meeting, Lecce, Italy, June 8-10, 2016). *Bollettino della SIFET*, 3, 1-9. ISSN 1721-971X.

22) Castagnetti C., Mancini F., Rivola R., Rossi P., Oppici S., Albano V., Formentini M. (**2016**) - Potenzialità dei nuovi sistemi indossabili per la scansione 3D: una sperimentazione presso l'accademia militare di Modena. *Archeomatica*, 4, 34-37.

23) Rossi P., Mancini F., Dubbini M., Mazzone F., Capra A. (**2017**) - Combining nadir and oblique UAV imagery to reconstruct quarry topography: methodology and feasibility analysis. *European Journal of Remote Sensing*, 50, 1, 211-221, 1313097.

24) Scarano M., Mancini F. (**2017**) - Assessing the relationship between sky view factor and land surface temperature to the spatial resolution. *International Journal of Remote Sensing,* 38(23), 6910-6929. doi: 10.1080/01431161.2017.1368099.

25) Zanutta A., Negusini M., Vittuari L., Cianfarra P., Salvini F., Mancini F., Sterzai P., Dubbini M., Galeandro A., Capra A. (**2017**). Monitoring geodynamic activity in the Victoria Land, East Antarctica: evidence from GNSS measurements. *Journal of Geodynamics*, 110(C), 31-42.

26) Mancini F., Castagnetti C., Rossi P., Dubbini M., Fazio N.L., Perrotti, M., Lollino P. (**2017**) - An Integrated Procedure to Assess the Stability of Coastal Rocky Cliffs: From UAV Close-Range Photogrammetry to Geomechanical Finite Element Modeling. *Remote Sensing*, 9(12), 1235. EISSN 2072-4292.

27) Capra A., Castagnetti C., Dubbini M., Gruen A., Guo T., Mancini F., Neyer F., Rossi P., Troyer M. (**2017**) - High accuracy underwater photogrammetric surveying. 3rd IMEKO international conference on metrology for archaelogy and cultural heritage - MetroArchaeo 2017, Lecce, 23-25 October, 696-701.

28) Zanutta A., Negusini M., Vittuari L., Martelli L., Cianfarra P., Salvini F., Mancini F., Sterzai P., Dubbini M., Capra A. (**2018**) – New Geodetic and Gravimetric Maps to Infer Geodynamics of Antarctica with Insights on Victoria Land. *Remote Sensing*, 10(10), 1608. EISSN 2072-4292.

29) Carvajal-Ramírez F., Navarro-Ortega A.D., Agüera-Vega F., Martínez-Carricondo P., Mancini, F., (**2019**) - Virtual reconstruction of damaged archaeological sites based on Unmanned Aerial Vehicle Photogrammetry and 3D modelling. Study case of a southeastern Iberia production area in the Bronze Age. Measurement, 136, 225-236.

30) Castagnetti C., Bassoli E., Vincenzi L., Mancini F. (**2019**) - Dynamic Assessment of Masonry Towers Based on Terrestrial Radar Interferometer and Accelerometers. *Sensors*, 19(6), 1319.

31) Rossi P., Castagnetti C., Capra A., Brooks A. J. Mancini, F. (**2019**). Detecting change in coral reef 3D structure using underwater photogrammetry: critical issues and performance metrics. *Applied Geomatics*, 1-15.

32) Fazio N.L., Perotti M., Andriani G.F., Mancini F., Rossi P., Castagnetti C., Lollino P. (**2019**) - A new methodological approach to assess the stability of discontinuous rocky cliffs using in-situ surveys supported by UAV-based techniques and 3-D finite element model: a case study. *Engineering Geology*, 260, 105205.

33) Grassi F., Mancini F. (**2019**) - Sentinel-1 data for ground deformation monitoring: the SNAP-StaMPS workflow. Proceedings del 12° Workshop Tematico di Telerilevamento: Il ruolo dei dati Copernicus Sentinel nei processi di conoscenza e gestione del territorio: stato dell'arte del trasferimento tecnologico al comparto operativo. Bologna, 25-26 Giugno 2019.

34) Vincenzi L., Bassoli E., Ponsi F., Castagnetti C., Mancini F. (**2019**) - Dynamic monitoring and evaluation of bell ringing effects for the structural assessment of a masonry bell tower. *Journal of Civil Structural Health Monitoring*, 9(4), 439-458.

35) Bassoli E., Ponsi F., Castagnetti C., Mancini F., Vincenzi L. (**2019**) - Monitoraggio di strutture storiche mediante interferometria radar terrestre. Proceedings del XVIII convegno ANIDIS "L'Ingegneria Sismica in Italia", Ascoli Piceno, 15-19 Settembre 2019.

36) Mancini F., Salvini R. (**2019**) - Applications of Photogrammetry for Environmental Research (Editorial). ISPRS Int. J. Geo-Inf, 8, 542.

37) Rossi P., Castagnetti C., Capra A., Brooks A.J.; Mancini F. (2019) - Potenzialità e problematiche nell'utilizzo della fotogrammetria subacquea per la misura dell'accrescimento di colonie coralligene [evaluation of underwater photogrammetry performances in the assessment of coral reef 3D changes]. Bollettino della Società Italiana di Fotogrammetria e Topografia, 2, 1-11.

38) Mancini F., Piras M., Ruotsalainen L., Vacca G., Lingua A. (**2020**) - The impact of innovative and emerging technologies on the surveying activities. Applied Geomatics, 12(1), 1–2.

39) Aguera-Vega F., Aguera-Puntas M., Martinez-Carricondo P., Mancini F., Carvajal F. (**2020**) - Effects of point cloud density, interpolation method and grid size on derived Digital Terrain Model accuracy at micro topography level. *International Journal of Remote Sensing*, 1-19. DOI:10.1080/01431161.2020.1771788.

40) Mancini F., Dubbini M. (**2020**) - Unmanned Aerial System Applications to Coastal Environments. In David R. Green, Billy J. Gregory, Alex Karachok eds. *Unmanned Aerial Remote Sensing - UAS for Environmental Applications*, 87-109. CRC Press, Taylor and Francis Group, Boca Raton, Florida, U.S.A.

41) Capra A., Castagnetti C., Mancini F., Rossi P. (2020). Underwater Photogrammetry for Change Detection. pp.1-6. In Proceedings of FIG Working Week 2020 - ISBN:978-87-92853-93-6

42) Zanutta A., Negusini M., Vittuari L., Martelli L., Cianfarra P., Salvini F., Mancini F., Sterzai P., Creati N., Dubbini M., Capra A. (2021) - Victoria land, antarctica: An improved geodynamic interpretation based on the strain rate field of the current crustal motion and moho depth model. Remote Sensing, 13(1). ISSN:2072-4292.

43) Rossi et al. (2021) - Needs and gaps in optical underwater technologies and methods for the investigation of marine animal forest 3D-structural complexity. Frontiers in Marine Science, 8, 1-9.

44) Mancini F., Pirotti F. (2021) - Innovations in photogrammetry and remote sensing: Modern sensors, new processing strategies and frontiers in applications (Editorial). Sensors, 21(7),1-2. ISSN:1424-8220 vol. 21 (7).

45) Mancini F., Grassi F., Cenni N. (2021) - A workflow based on snap–stamps open-source tools and GNSS data for psi-based ground deformation using dual-orbit sentinel-1 data: Accuracy assessment with error propagation analysis. Remote Sensing, 13(4), 1-23.

46) Rossi P., Giannini M., Mancini F. (2021) - UAV photogrammetry, a feasible methodology for the documentation of shallow water geoarchaeosites. Carmine Gambardella (edited by). World Heritage and Design for Health. Proceedings of the XIX International Forum 'Le Vie dei Mercanti', Naples and Capri, 15/17 June 2021, Rome, Gangemi Editor International Publishing, 965-972. ISBN13: 9788849240887. ISBN10: 9788849240887

47) Parente L., Falvo E., Castagnetti C., Grassi F., Mancini F., Rossi P., Capra A. (2022) - Image-Based Monitoring of Cracks: Effectiveness Analysis of an Open-Source Machine Learning-Assisted Procedure. Journal of Imaging, 8(2), 22.

48) Orsini C., Benozzi E., Williams V., Rossi P., Mancini F. (2022). UAV Photogrammetry and GIS Interpretations of Extended Archaeological Contexts: The Case of Tacuil in the Calchaquí Area (Argentina). Drones, 6(2), 31.

49) Agüera-Vega F., Ferrer-González E., Carvajal-Ramírez F., Martínez-Carricondo P., Rossi P., Mancini F. (**2022**). Influence of AGL flight and off-nadir images on UAV-SfM accuracy in complex morphology terrains. *Geocarto International*, in press. DOI: 10.1080/10106049.2022.2074147.

50) Mancini F., Pirotti F. (**2022**) - Innovations in photogrammetry and remote sensing: Modern sensors, new processing strategies and frontiers in applications (Curatela). *Sensors*. MDPI Basel, Switzerland. ISBN:978-3-0365-3932-4 (Hbk), ISBN:978-3-0365-3931-7 (PDF).

51) Parenti C., Rossi P., Soldati M., Grassi F., & Mancini F. (**2022**) - Integrated Geomatics Surveying and Data Management in the Investigation of Slope and Fluvial Dynamics. Geosciences, 12(8), 293.

52) Grassi, F., Mancini, F., Bassoli, E., Vincenzi, L. (**2022**). Contribution of anthropogenic consolidation processes to subsidence phenomena from multi-temporal DInSAR: a GIS-based approach. GIScience & Remote Sensing, 59(1), 1901-1917.

53) Rossi P., Righi S., Parente L., Castagnetti C., Cattini S., Di Loro G., Falvo E., Grassi F., Mancini F., Rovati L., Simonini R., Capra A. (**2022**) - Photogrammetric and Fluorescence Solutions for Monitoring of Habitat Forming Organisms. *The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences*, 43, 877-883.

54) Bassoli E., Vincenzi L., Grassi F., Mancini F. (**2023**) - A multi-temporal DInSAR-based method for the assessment of the 3D rigid motion of buildings and corresponding uncertainties. *Journal of Building Engineering*, 106738.

55) Parente L., Castagnetti C., Falvo E., Rossi P., Grassi F., Mancini F., Capra A. (**2023**) - Towards an automated machine learning and image processing supported procedure for crack monitoring. In 5th Joint International Symposium on Deformation Monitoring (JISDM 2022) (pp. 237-242). Editorial Universitat Politècnica de València.

56) Bassoli E., Grassi F., Varzaneh G.E., Ponsi F., Mancini F., Vincenzi L. (**2023**) - A simplified procedure to assess uncertainties in the estimation of the rigid motion of isolated buildings based on InSAR monitoring. *Procedia Structural Integrity*, 44, 1554-1561.

57) Parenti C., Rossi P., Mancini F., Scorpio V., Grassi F., Ciccarese G., Lugli F., Soldati, M. (**2023**) - Multitemporal Analysis of Slow-Moving Landslides and Channel Dynamics through Integrated Remote Sensing and In Situ Techniques. Remote Sensing, 15(14), 3563.

58) Brunelli B., Festa D., Mancini F., Wagner W. (**2024**) - Comparative analysis of SAOCOM and Sentinel-1 data for surface soil moisture retrieval using a change detection method in a semiarid region (Douro River's basin, Spain). *International Journal of Applied Earth Observation and Geoinformation*, 129, 103874.

Modena, 20-06-2024

Dr. Francesco Mancini