

The ESA Dragon 6 PREDICTOR Project: Achievements and ongoing works

Antonio Pepe¹, Qing Zhao², Pietro Mastro¹

1. Istituto per il Rilevamento Elettromagnetico dell'Ambiente, CNR, via Diocleziano, 328, 80124, Napoli, Italy;

2. East China Normal University, Shanghai

E-mail: {pepe.a@irea.cnr.it, qzhao@geo.ecnu.edu.cn, mastro.p@irea.cnr.it}.

全球气候驱动的危害性事件日益频繁、强度不断加剧，对能够及时、持续、可扩展地提供多种灾害风险管理证据的业务化地球观测（EO）工具的需求也随之增强。在此背景下，ESA PREDICTOR项目（通过人工智能、传统与新型合成孔径雷达技术感知自然与人为灾害状况并评估沿海地区风险；ESA Dragon 6，项目编号95316）旨在通过应用传统SAR方法并开发人工智能驱动的方法论，解决多时相SAR变化检测与土地利用/土地覆盖（LULC）制图领域的这一挑战。项目所利用的数据集包括ESA哥白尼Sentinel-1数据 [1-3]。

本次在都柏林ESA Dragon研讨会上的报告，将主要聚焦于展示和讨论PREDICTOR项目作者近期发表的最新论文（例如 [4]），并就当前正在开展的研究活动提供相关见解。意中两国科研机构之间的合作作用也将得到重点阐述。

总体而言，ESA PREDICTOR框架在当前单基SAR多时相处理与未来分布式SAR传感之间构建了方法桥梁，将物理驱动的SAR指数与机器学习融合相结合，为灾害监测提供稳健、可扩展的变化检测支撑 [5-6]。该项目由CNR-IREA在ESA Dragon 6合作框架内（2024–2028年）开展，并致力于推进Dragon项目促进欧中地球观测研究共同体科学与技术合作的目标。

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