

Rolul RPAS în studiul zonelor umede

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TRADITIO ET EXCELLENTIA

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Este important să cuantificăm și să înțelegem trendurile în focalizarea atenției științifice pentru a evita, printre altele inovări ineficiente, sindromul “reinventării roții” ([Pan R. K. et. al. 2018](#)).



Elemente de originalitate teoretică și/sau metodologică, cu grad mare de validitate, reprezintă sursa progresului științific ([Shibayama, S. et. al. 2020](#))



Capacitățile RPAS sunt în măsură să revoluționeze managementul resurselor naturale, remote sensing și numeroase alte domenii ca și apariția GIS acum trei decenii. ([Watts A. et. al. 2012](#))





UAV (Unmanned Aerial/Aircraft/Airborne Vehicle etc.)
- cel mai prezent acronim pe internet și pe WebofScience

Drone - French Directorate for Civil Aviation (DGAC)

UAS (Unmanned Aerial/Aircraft/Airborne System)

- spațiul anglo-saxon Civil Aviation Authority (CAA – United Kingdom); Federal Aviation Administration (FAA – United States); European Aviation Safety Agency (EASA)

RPAS (Remotely Piloted Aircraft System)

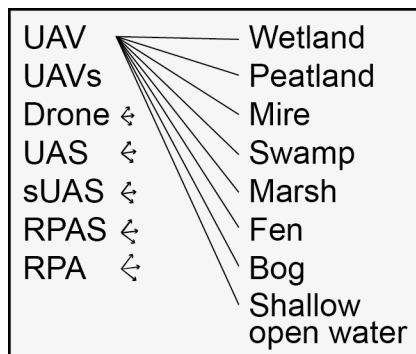
- international aviation-related agencies International Civil Aviation Organization (ICAO), Eurocontrol, the European Aviation Safety Agency (EASA), the Civil Aviation Safety Authority (CASA – Australia), Civil Aviation Authority (CAA – New Zealand), BeUAS ([a](#))

RPAS - flying certain types of UAVs require a lot more skill (think years of training) than anything you could buy in a store.

- taking control of an RPA requires more than simple handheld controls. You can't eat a sandwich and control one of these at the same time! ([b](#))



“Internetul nu doar că a fărâmițat piața ideilor, dar a făcut țândări un număr incalculabil de creiere” (*Mircea Mihăieș, 2022*).



324 articole din WOS (engleză)

46 articole eliminate pentru irelevanță conform rezumatului

278 articole relevante pentru Wetland and RPAS

x articole neincluse după full-text review

x articole relevante pentru Peatland and RPAS

Fluxul de lucru în selecția articolelor

Baze de date



Softuri / instrumente bibliometrice



Predatory /fake journals (PFJs) – au ajuns o amenințare la adresa științei ([Grudniewicz A. et. al. 2019](#))



Unde și cum cauți face diferența între un rezultat bun și unul mediocru!

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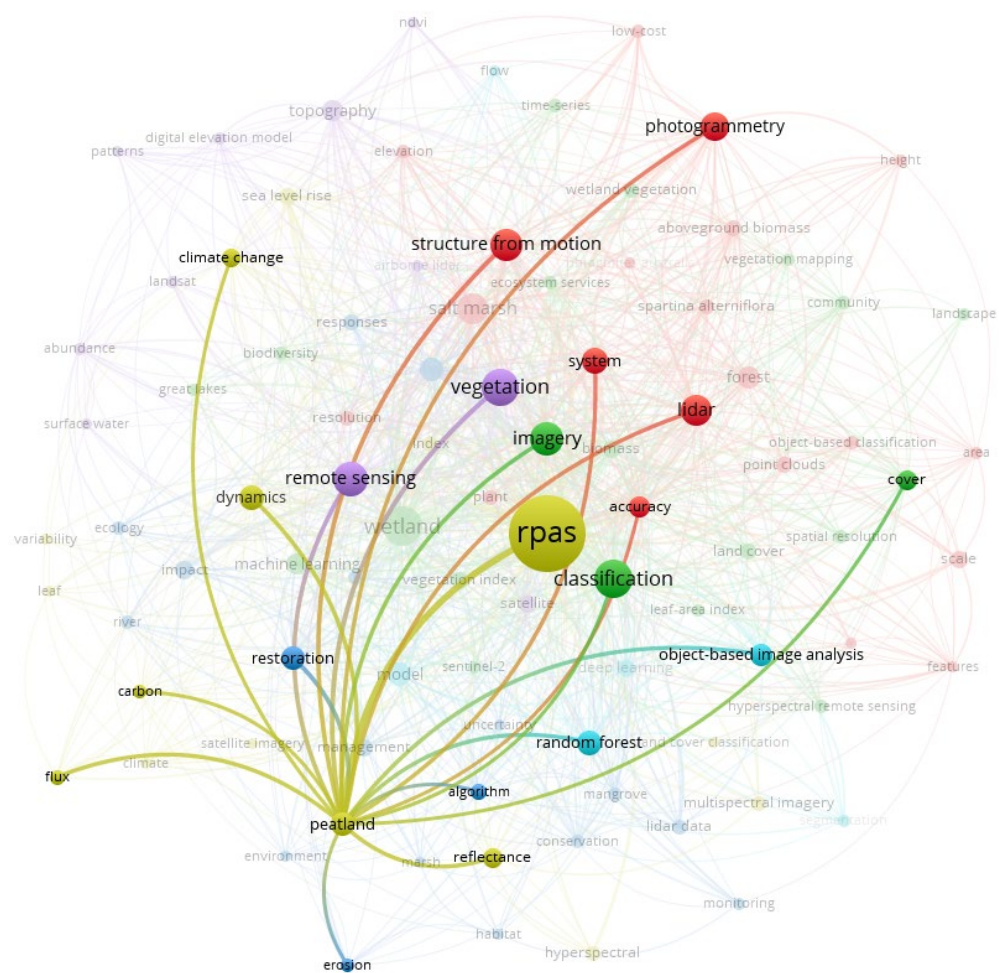
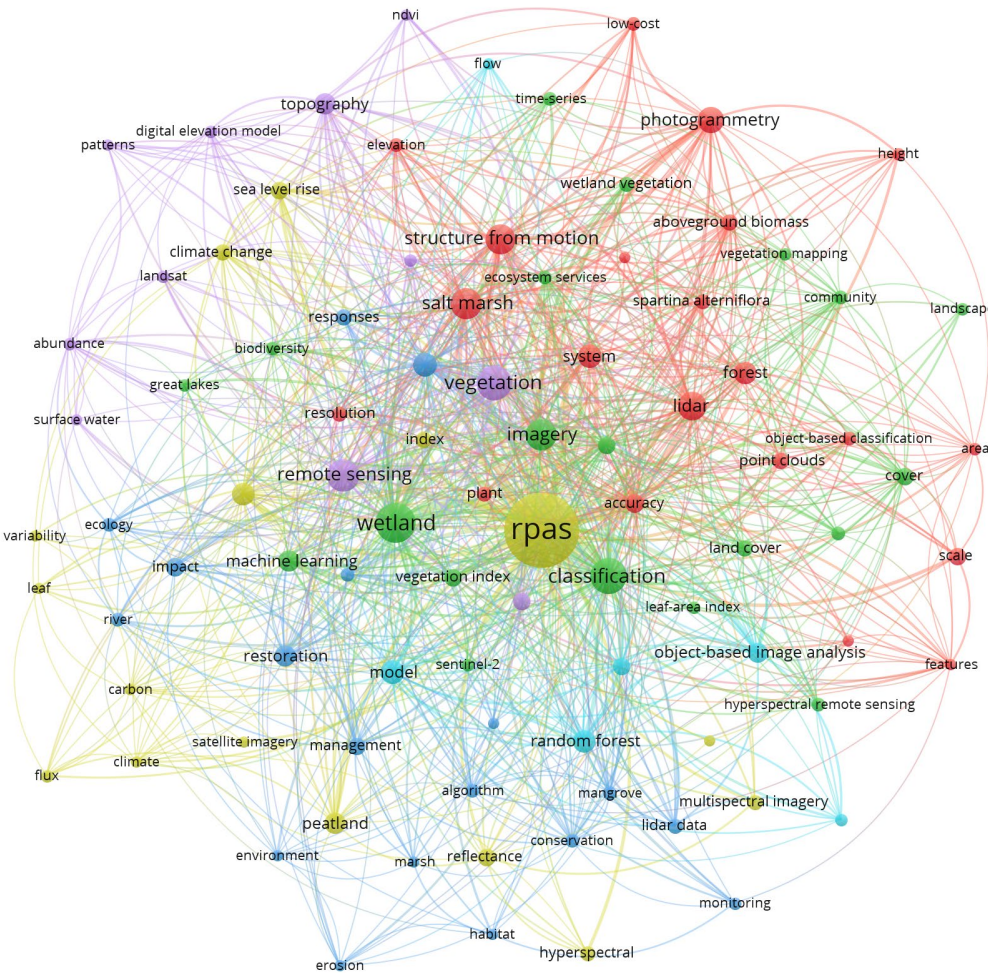
Booleans : AND, OR, NOT [Examples](#)

Field Tags :

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|---|--|--|
| <ul style="list-style-type: none">○ TS=Topic○ TI=Title○ AB=Abstract○ AU=[Author]○ AI=Author Identifiers○ AK=Author Keywords○ GP=[Group Author]○ ED=Editor○ KP=Keyword Plus[®]○ SO=[Publication Titles]○ DO=DOI | <ul style="list-style-type: none">○ PY=Year Published○ CF=Conference○ AD=Address○ OG=[Affiliation]○ OO=Organization○ SG=Suborganization○ SA=Street Address○ CI=City○ PS=Province/State○ CU=Country/Region○ ZP=Zip/Postal Code○ FO=Funding Agency○ FG=Grant Number○ FD=Funding Details | <ul style="list-style-type: none">○ FT=Funding Text○ SU=Research Area○ WC=Web of Science Categories○ IS= ISSN/ISBN○ UT=Accession Number○ PMID=PubMed ID○ DOP=Publication Date○ PUBL=Publisher○ ALL=All Fields○ FPY=Final publication year |
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Cluster 4: carbon, climate, climate-change, dynamics, flux, hyperspectral, index, land cover classification, leaf, multispectral imagery, peatland, reflectance, RPAS, satellite imagery, sea level rise, variability

RPAS a înlocuit toate mențiunile care făceau referire la acest tip de infrastructură (ex. UAV, drone, UAS);
 În cazul "dublărilor de plural" de tipul (ex. system/systems) , s-a păstrat forma de singular.
 În cazul "dublărilor de ortografie" de tipul (phragmites australis/phragmites-australis), s-a preferat varianta fără cratimă.

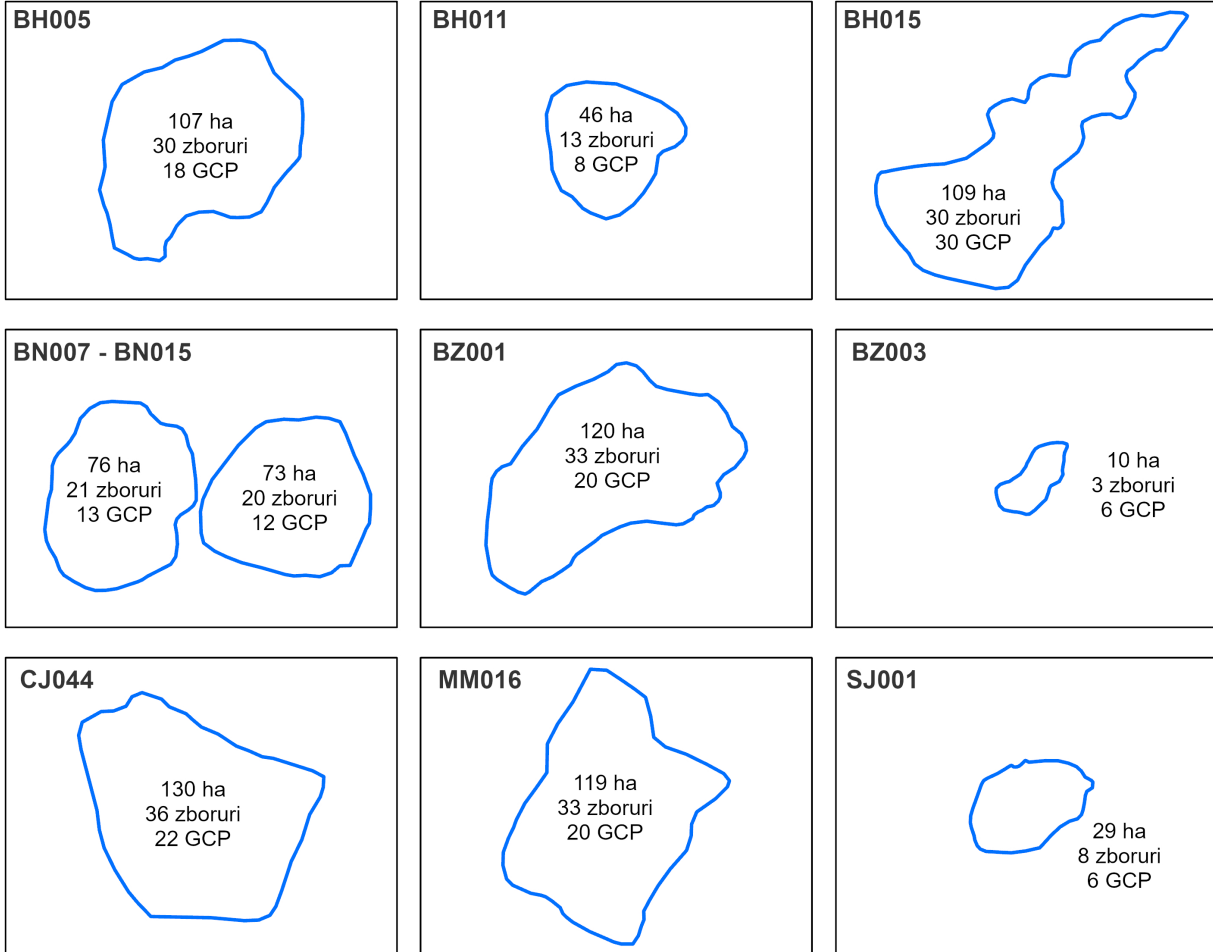


Nr.	Reviste	Articole	Citări	Medie citări
1	Remote Sensing	59	726	12.3
2	Drones	13	108	8.3
3	Remote Sensing of Environment	9	195	21.7
4	International Journal of Remote Sensing	7	117	16.7
5	Wetlands	6	76	12.7
6	GIScience & Remote Sensing*	5	153	30.6
7	ISPRS Journal of Photogrammetry and Remote Sensing*	5	122	24.4
8	Journal of Unmanned Vehicle Systems	5	27	5.4
9	Sensors	5	125	25
10	Estuaries and Coasts	4	2	0.5
11	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*	4	4	1
12	Remote Sensing in Ecology and Conservation	4	19	4.8
13	Ecological Engineering	3	23	7.7
14	European Journal of Remote Sensing	3	61	20.3
15	Frontiers in Marine Science	3	35	11.7
16	International Conference on Unmanned Aerial Vehicles in Geomatics	3	38	12.7

Quartila în domeniul în care revista este cel mai bine cotate conform scorului nenu de influenta (AIS)

**Reviste care se află și în domeniul Geografie fizică*

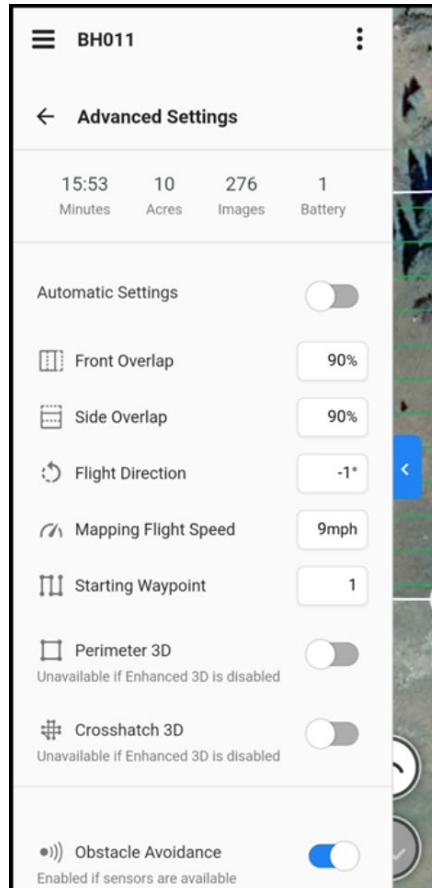
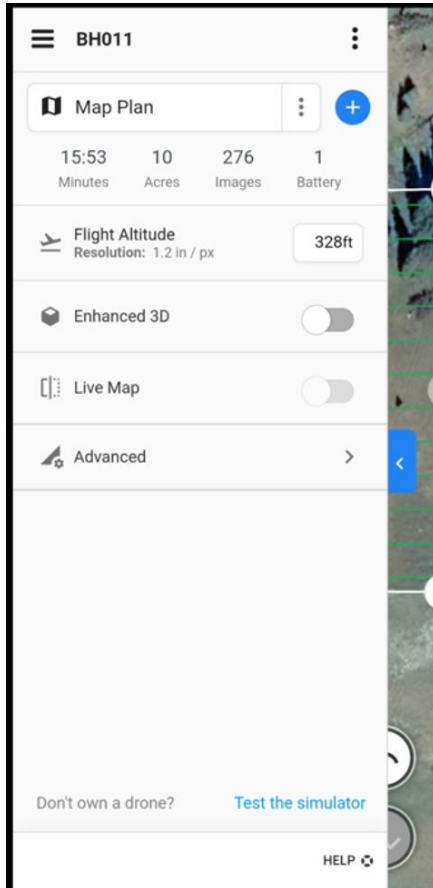




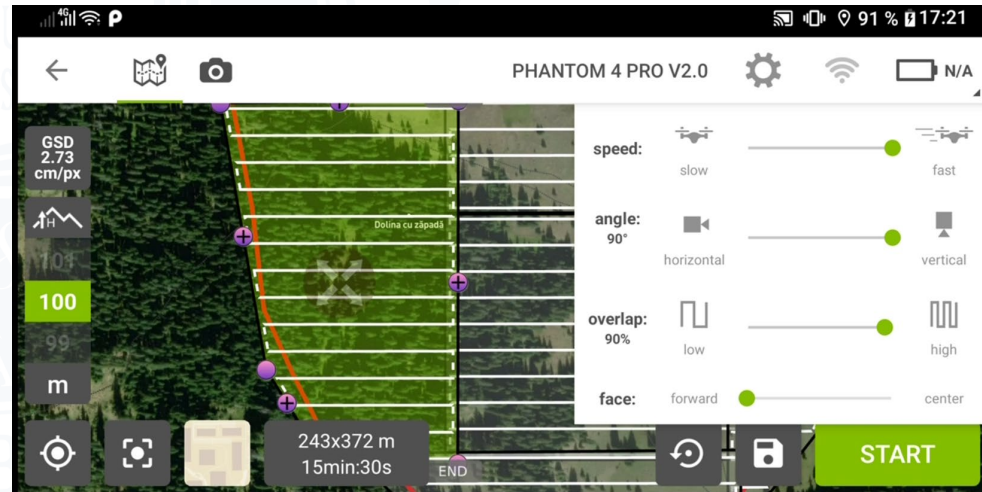
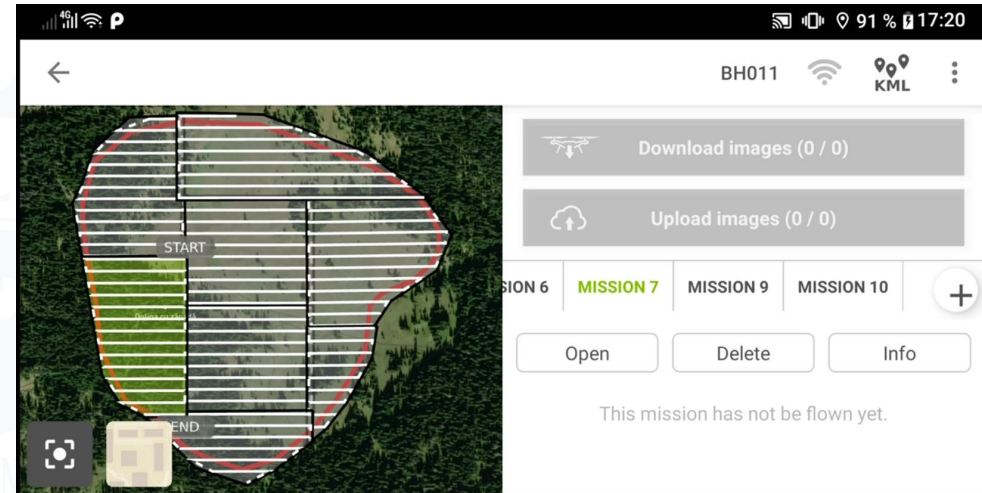
2x DJI Phantom 4 Pro v2, 13 x acumulatori, 3 x stații de încărcare (infrastructura aparține Centrului de Geografie Regională, UBB)

Survolarea inițială a arealelor de monitorizare asociate turbărilor se va face la **100 m altitudine, 90% Side Overlap, 90% Front Overlap**



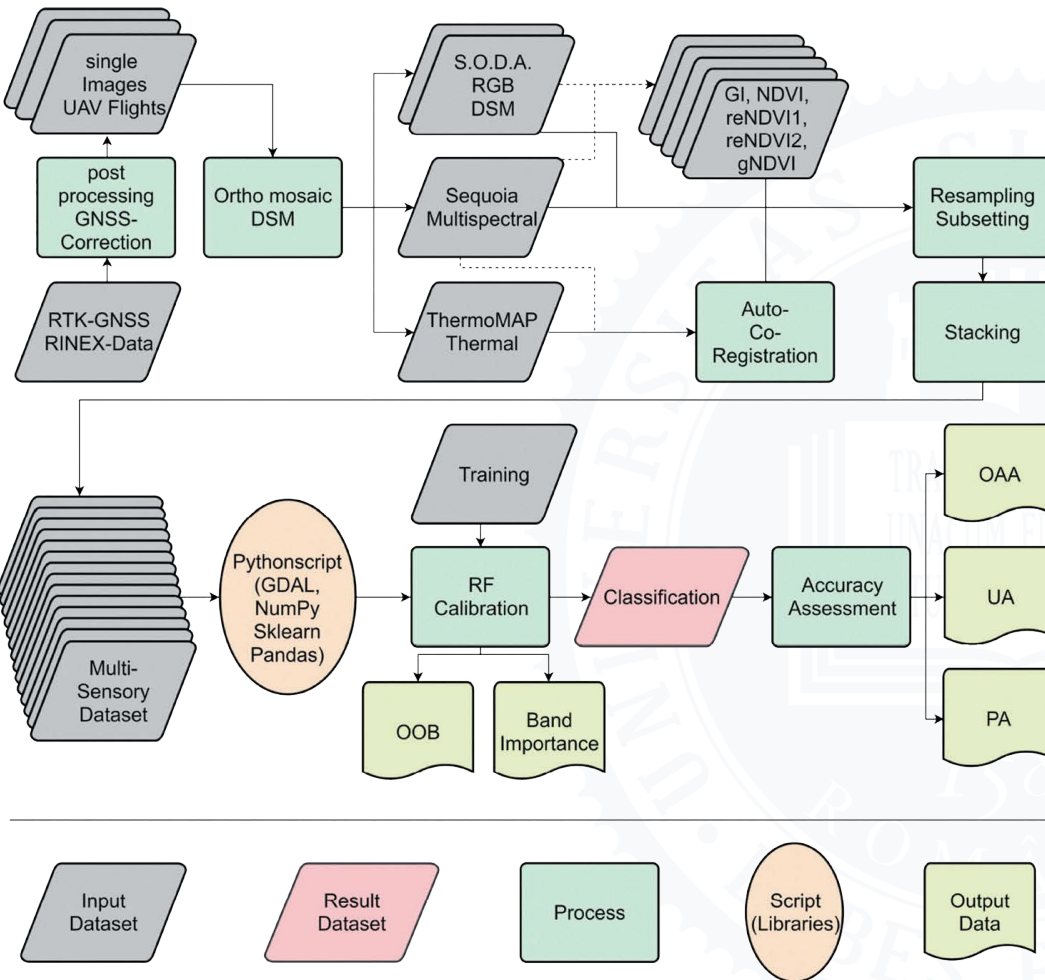


Posibilităţile oferite de **DroneDeploy** în vederea creării misiunilor de zbor



Posibilităţile oferite de **Pix4D Capture** în vederea creării misiunilor de zbor





a) Fixed-Wings SeenseFly eBee x; b) senseFly Duest T (rugged dual RGB/thermal camera; c) Parrot Sequoia+ (multispectral camera:green, red, red edge, near-infrared)

Metodologia aplicată de **Beyer F. et. al. 2019**, care au identificat până la 9 clase de vegetație în arealul unor turbării valorifind senzori RGB, multispectral și infraroșu.



Acharya, B. S., Bhandari, M., Bandini, F., Pizarro, A., Perks, M., et al. (2021). Unmanned aerial vehicles in hydrology and water management: Applications, challenges, and perspectives. *Water Resources Research*, 57, e2021WR029925.

<https://doi.org/10.1029/2021WR029925>

Beyer F., Jurasinski G., J Couwenberg J. & Grenzdörffer G. (2019): Multisensor data to derive peatland vegetation communities using a fixed-wing unmanned aerial vehicle, *International Journal of Remote Sensing*, 40, 9103-9125,

<https://doi.org/10.1080/01431161.2019.1580825>

Pan, R., K., Petersen, A., M., Pammolli, F., Fortunato, S. (2018). The memory of science: Inflation, myopia, and the knowledge network. *Journal of Informetrics*, 12(3), 656- 678,

<https://doi.org/10.1016/j.joi.2018.06.005>

Shibayama, S., Wang, J. Measuring originality in science. *Scientometrics* 122, 409–427 (2020). <https://doi.org/10.1007/s11192-019-03263-0>

Watts, A.C., Ambrosia, V., G., Hinkley, E., A. 2012. Unmanned aircraft systems in remote sensing and scientific research: classification and considerations of use. *Remote Sensing* 4 (6), 1671–1692. <https://doi.org/10.3390/rs4061671>



Fly with us over the peatlands!

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