

Using the newest geospatial technologies to deliver innovative solutions

www.rss-hydro.lu

info@rss-hydro.lu

drones@rss-hydro.lu



RSS-Drones
Operated under RSS-Hydro



RSS-Hydro

We are a dynamic R&D company which operates across fields in environmental remote sensing. We constantly strive to achieve inspiring and tailor-made solutions that make a genuine difference to our public & private customers, as well as society as a whole.

Innovate to thrive

R&D in environmental applications & water risks



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www.linkedin.com/company/rss-hydro/about
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Our Mission

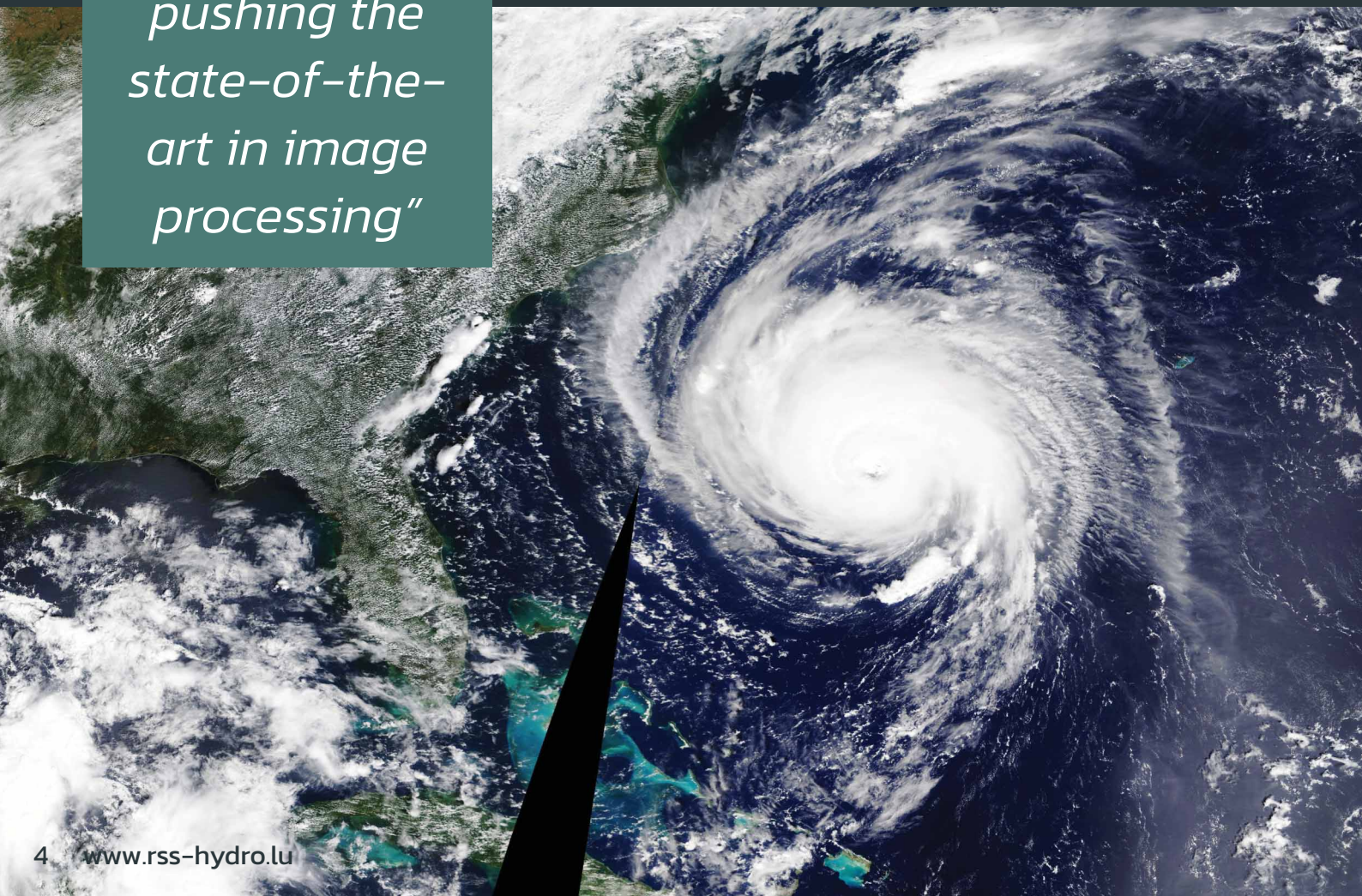
- We are building on scientific advances in remote sensing and computer models to provide the best possible solutions to mitigate water-related risks
- Science-based products & services in the areas of environmental remote sensing & model predictions
- Leading cutting-edge research
- Delivering scientific expert consulting
- Building on strong public and private partnerships to address the challenges of our times

Scientific innovation leads to better decision making

*"We assist flood
disaster
response efforts
at global level
whilst also
pushing the
state-of-the-
art in image
processing"*

Our team of scientists and geospatial analysts use the best available scientific data and methods to help our clients and society mitigate hydro-meteorological risks now and in the future. We assist flood disaster response efforts at global level whilst also pushing the state-of-the-art in image processing.

We employ traditional methods and machine learning models to extract the highest level of information from geospatial datasets and unlock the full potential of remote sensing for smarter flood hazard interpretation.



Elevate to the next level with the newest geospatial technologies

"Flooding accounts for some 40% of all loss-related natural catastrophes since 1980"

Munich Re

RSS-Hydro uses advanced computer models to accurately simulate water risks at impact-level scales and employs the best available remote sensing technologies to develop tailored solutions.

Offering drone-powered solutions

Drone usage is increasing greatly in sectors like infrastructure, agriculture, transport, security, insurance, and research. Drones are a key-enabling non-contact technology that is also environmentally friendly.

Our department RSS-Drones offers best-in-class technical solutions to address the problems of our times, from environmental and climate change-related issues to flood mapping and ecosystem health monitoring. We use high-end drones with newest sensor technologies to respond to every need.

*“It is possible
to fly
unmanned but
not unskilled”*

The benefit of choosing RSS-Drones' services

- Versatile, science-based products
- Environment friendly technology
- Complete workflow, from flight to final product
- Highly-skilled staff & trained pilots

Our services & products

- High-precision terrain mapping
- Infrastructure mapping
- Precision viti- and agri-culture
- River and flood risk mapping



Luxembourg National
Research Fund



LUXEMBOURG
INSTITUTE OF SCIENCE
AND TECHNOLOGY



Showing leadership in research

*"We stand for open-data & publish our
research in peer-reviewed scientific journals"*

RSS-Hydro works on cutting-edge research projects in partnership with national and international universities and research institutes.

Leading R&D projects funded by governments, the European Commission, and the European Space Agency, in collaboration with the Luxembourg Space Agency.

PhD & postdoctoral training

RSS-Hydro's government-accredited Research & Education Department

- We host and train PhD students and postdoctoral researchers
- Our scientists participate in various research initiatives and offer mentorship in several programmes
- Our team participates in the Frontier Development Lab (FDL), which is a public-private partnership with NASA and ESA. It brings together experts from space science, AI, and the commercial sector to solve the greatest challenges that humanity faces



Building strategic partnerships

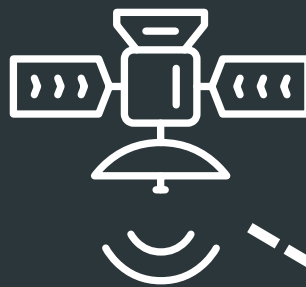
RSS-Hydro has joined forces with the Luxembourg Institute of Science and Technology and Italian-based company Fadeout Software to create a joint venture called WASDI, with support from ESA and the Luxembourg Space Agency. WASDI is an operating platform where experts can develop and deploy EO on-line applications without any specific IT/Cloud skills, and end-users can run those EO apps from a user-friendly interface.

"Scalable, cloud-based analytical EO capabilities are still rare as most of the existing EO cloud solutions focus on access to either data or compute resources"

Paolo Campanella, Fadeout Software



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WASDI workflow diagram

Professional networking through memberships

RSS-Hydro is a proud member of:

The Luxembourg Space Cluster, which brings together organisations with space activities, covering space telecom, GNSS, Earth observation, maritime security and safety, and space related technologies.

EARSC coordinates and promotes the activities of European companies engaged in delivering EO-derived geo-information services, covering the full EO value chain.

A worldwide community improving access to geospatial information, connecting people, communities, and technology. OGC creates free, publicly available geospatial standards that enable new technologies.



**LUXEMBOURG
SPACE
CLUSTER**

EARSC

European Association
of Remote Sensing
Companies



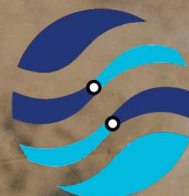
OGC®

Making location count.



Dr Guy Schumann
Founder and CEO
RSS-Hydro

info@rss-hydro.lu ; drones@rss-hydro.lu
www.linkedin.com/company/rss-hydro/about
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