



Regional Integrated Multi-Hazard Early Warning System

2nd Fl. Outreach Bldg., 58 Moo 9 AIT Campus, Klong Nung, Klong Luang, Pathumthani 12120, Thailand
Tel: +662 516 0120 Fax: +662 516 5762 Email: rimes@rimes.int Website: <http://www.rimes.int>

Job Posting

Issue date: 1 June 2026

Position Title: Hydrologist

Open Period: 1 June – 30 June 2026

Background: The Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) is an international and intergovernmental institution, owned and governed by its Member States, for the generation, application, and communication of multi-hazard early warning information. RIMES was formed in the aftermath of the 2004 Indian Ocean tsunami, as a collective response by countries in Africa and Asia to establish a regional early warning system within a multi-hazard framework, to strengthen preparedness and response to trans-boundary hazards.

RIMES was formally established on 30 April 2009 and registered with the United Nations on 1 July 2009. It operates from its regional early warning center located at the Asian Institute of Technology (AIT) campus in Pathumthani, Thailand.

Position Description: The Hydrologist involves developing and operationalizing impact forecasting tools by using advancing scientific methodologies and co-production of services with clients, and supporting capacity building among stakeholders and will provide technical expertise for impact forecasting (IBF) for hydrological extreme events -floods/flash flood and drought. The role involves managing drought and flood -related datasets, developing contingency plans, automating monitoring systems, contributing to Post-Disaster Needs Assessments (PDNA), and applying AI/ML techniques for proactive flood/drought risk reduction. This position requires a strong understanding of meteorological, hydrological, and agricultural drought indicators, and translate data into actionable insights for disaster preparedness and resilience planning. and project-specific assignments. Will support capacity building among stakeholders.

The position will report to the Project Manager and technical leadership, and will coordinate closely with modeling, data science, and system development teams.

Duty station: RIMES Regional Facility, AIT Campus, Pathumthani, Thailand.

Type of Contract: Full time, project based Contract

Minimum Qualifications:

Education:

- Master's or higher degree in Hydrology, Water Resources Engineering, or related field is essential
- Bachelor's degree level certificates / certified training courses in atmospheric science, disaster management, agriculture and other related fields is desirable

Knowledge Skills and Abilities:

- Demonstrated ability to integrate hydro-meteorological forecasts into impact flood and droughts risks.
- Skilled in using GIS and remote sensing data for hydrological risk mapping.
- Demonstrated knowledge of flood hydrodynamic model, flood and drought hazard forecast products and vulnerability data analysis.
- Demonstrated knowledge in Python, R, or similar programming tools used for meteorological analysis, calculation, and visualization (including SPI, SPEI, NDVI, VCI, rainfall deviation, and soil moisture anomalies).
- Experience in working with WMO-compliant forecasting systems and climate service frameworks is highly desirable.
- Excellent communication and stakeholder coordination skills, with prior work in multi-agency or international contexts.
- Demonstrated ability to manage and deliver results under tight timelines.
- Application of ML models (regression, classification, clustering) for drought forecasting is highly desirable.
- Proficiency in technical documentation and user training.

Experience:

- Minimum of 5 years of experience in hydrological modelling and flood forecasting.
- At least 3 years of experience in operational flood forecasting.
- Proven track record in analyzing meteorological and hydrological patterns, designing forecasting systems, and integrating multi-disciplinary datasets.
- Proven experience with operational flood models (e.g., HEC-RAS, MIKE 11, Delft-FEWS, LISFLOOD).
- Experience in multi-stakeholder projects and facilitating capacity-building programs.

Personal Qualities

- Strategic thinker with strong analytical and solution-oriented capabilities in applied climate science.
- Self-driven and capable of working independently while maintaining accountability and initiative.
- Effective collaborator with the ability to work in multicultural, interdisciplinary teams and manage cross-sectoral engagement.
- Detail-oriented and results-focused, with adaptability in dynamic and evolving operational environments.

- Professional, respectful, and proactive in both independent and team-based work settings.

Major Duties and Responsibilities

Impact based forecasting

- Collaborate with meteorologists to ensure seamless coupling between weather and hydrological forecasts of extreme hydrological events -Floods /Droughts.
- Downscale and customize hydrological forecasts to specific locations of interest.
- Analyze and interpret high-resolution hydrological forecast products in probabilistic terms for hazard forecasting.
- Conduct analyses of hydrological patterns and their historical impacts.
- Collaborate with meteorological/climatological AI/ML experts, GIS analysts, and disaster risk professionals for model fusion and automation.
- Integrate hazard (probabilistic) forecast data with geospatial datasets on population, infrastructure, historical damage, and socio-economic vulnerability to assess likely impacts and transform into impact forecast data/impact matrices.
- Produce urban-level risk and vulnerability maps.

Early Warning

Rapid onset hydrological hazards (Flood /Flash floods)

- Integrate remote sensing, ground-based, and model data for comprehensive flood situation monitoring.
- Co-design and implement sector-specific early warning protocols for National/ State disaster management agencies.
- Set up alerts and thresholds for flood /flash flood early warning dissemination using automated systems.
- Generate daily / weekly flood situation reports and dashboards.
- Assist Scenario Based Emergency Response Planning for flood / flash flood events.

Slow onset hydrological hazard (Drought)

- track and assess drought conditions using multiple indicators (SPI, NDVI, rainfall anomalies, reservoir status, soil moisture, etc.).
- Integrate remote sensing, ground-based, and model data for comprehensive drought situation monitoring.
- Generate weekly /monthly drought situation reports and dashboards.
- Set up alerts and thresholds for early warning dissemination using automated systems.
- Assist Scenario Based Emergency Response Planning for flood / flash flood events.

Contingency Planning & Risk Mitigation

- Develop and update district-wise drought/flood contingency plans in collaboration with line departments.
- Identify vulnerable regions, sectors particularly agriculture/ urban /industrial zones , and communities at risk.

- Recommend flood / drought mitigation and adaptation measures based on data trends and risk profiles.
- Preparation of Comprehensive Flood Mitigation Plans with River Basin Approach.

Data Automation & Visualization

- Automate the ingestion and processing of meteorological, hydrological, and agricultural datasets.
- Build region-wise interactive maps and graphs to visualize drought/flood severity and trends.

PDNA and Impact Assessments

- Support Post-Disaster Needs Assessments (PDNA) for drought/flood events.
- Contribute to loss estimation, sectoral damage analysis, and recovery planning.
- Collaborate with field officers to validate ground reports and align with national/international PDNA frameworks.

Capacity Building and Stakeholder Engagement, and Reporting

- Facilitate training programs for user and stakeholders, focusing on RIMES forecasting tools.
- Prepare and implement training programs to enhance team capacity and submit training outcome reports
- Prepare technical reports, progress updates, and outreach materials for stakeholder.
- Maintain comprehensive project documentation, including strategies, milestones, and outcomes.
- Capacity-building workshop materials and training reports.

Other Responsibilities

- Utilize domain knowledge to assist in system implementation plans and decision support system (DSS) development.
- Assist 24/7 operational readiness for client early warning systems, with backup support from RIMES Headquarters.
- Undertake additional tasks as assigned by the Immediate Supervisor or HR Manager based on recommendation from RIMES technical team members and organizational needs.
- The above responsibilities are illustrative and not exhaustive. Undertake any other relevant tasks that could be needed from time to time.

How to Apply:

Interested candidates should send your application letter, resume and 2 referees to rimeshra@rimes.int by midnight of **30 June 2026**, Bangkok time. Please state “**Hydrologist: Your Name**” the Subject line of the email. Only short-listed applicants will be contacted.

Ms. Dusadee Padungkul
 Head of Operations and Programs
 Regional Integrated Multi-Hazard Early Warning System
 AIT Campus, 58 Moo 9 Paholyothin Rd., Klong 1,
 Klong Luang, Pathumthani 12120 Thailand.

RIMES promotes diversity and inclusion in the workplace. Well-qualified applicants particularly women are encouraged to apply.