



Foreign, Commonwealth
& Development Office

SOUTH ASIA HYDROMET FORUM III

REGIONAL PARTNERSHIPS FOR IMPROVED WEATHER AND CLIMATE SERVICES

Regional Innovations in Europe and Central Asia

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World Bank**

**November 15-18, 2021
Annual Event- Virtual**

CAFEWS: CENTRAL ASIAN FLOOD EARLY WARNING SYSTEM



WEATHER FORMATION IN CENTRAL ASIA



CAFEWS COMPONENTS

- Numerical Weather Prediction (COSMO, WRF, ICON)
- Flash Flood Guidance System enhancements
 - Improved snowmelt routines
 - Riverine routing
 - Landside routines
- Wide Area Network (WAN)
- Forecaster workstations

National and regional centres



ICONIC: ICON-IN-THE-CLOUD

- Partnership with DWD & WMO
- Reduce ICT burden on NMHSs
- Piloting on commercial cloud providers
- Testing for accessibility, useability and cost
- Computing costs depend on domain size, grid spacing, number of layers, forecast range, runs per day, etc.

Initial & boundary data

- 13 km mesh size (R3B7), 70 vertical levels
- daily export from DWD global data
- test period: May 7-12, 2021

3.2 km mesh size (R3B9)

238844 grid cells

center: 68.25, 38.04 deg

half width/height: 11.25, 5.96 deg

LESSONS LEARNED

- Understanding national benefits of international data exchange
- Respect for sovereignty
- Importance of regional champions and hosting countries
- Building relationships (management and technical)
- Regional financing and fairness
- Coordination with partners





SOUTH ASIA

HYDROMET FORUM III

2021

**PROGRAM TO SUPPORT SOUTH ASIA REGIONAL DEVELOPMENT IN
OPERATIONAL FORECASTING AND SERVICE DELIVERY**

SAHF Website: <https://sahf3event.rimes.int/>

YouTube Broadcast:
<https://youtu.be/QAAf326wP00>