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Flood Monitoring and Forecast in Pripjat River Basin

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Another effort in this field has involved researchers from Slovakia, Ukraine and Belarus. Beginning in November 2009, these scientists have cooperated to enhance the flood monitoring in the Pripjat River Basin, to implement the contemporary modeling tools for flood forecasting and to predict the radionuclide transport in the Pripjat river basin for the different scenarios of the natural hazards and technological impacts. A major achievement through this project is the procurement and ongoing installation of three automatic hydrometeorological stations, two in the Ukraine (Lutsk and Hrenniki) and one in Belarus (Lopatino). Modeling of rainfall-runoff processes based on historical records of flow and corresponding meteorological conditions and calculated hydrographs has been completed and for the same meteorological scenario the calculations of 2 nuclear emergency scenarios had been performed to assess radionuclide transport to simulate consequences of the potential accident on Rivne Nuclear Power Plant (NPP) for the contamination of Styr River. In the coming months the flood forecast model for the part of the Styr basin will be finalized and the remaining automatic hydrometeorological stations will be installed. The end users of the project are Brest Regional Hydrometeorological centre, Belarus and Volyn Oblast State Hydrometeorological center, Ukraine. They are both actively involved in the implementation of the project results: namely development of flood forecasting models and activities related to installation of automatic gauging stations as well as trainings for young scientists

Project Co-Directors:

- Dr. Boris Minarik, Slovak Hydrometeorological Institute (SHMU), Bratislava, Slovakia (NPD)
- Dr. Alexei Iarochévitch, UCEWP, Kyiv, Ukraine (PPD)
- Dr. Iurii Nabyvanets, Ukrainian Hydrometeorological Institute (UHMI), Kyiv, Ukraine
- Mr. Vladimir Korneev, Ctrl Res. Inst. For Complex Use of Water Resources, Minsk, Republic of Belarus

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