MIKE21 模拟塔里木河洪水中的输入资料设置

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摘要：塔里木河流域治理对于实现新疆经济和社会可持续发展，恢复南疆绿色走廊的生机，具有十分重要的意义。进行洪水二维水动力学模拟是了解塔河洪水演进过程的有效途径，可为制定沿途用水策略提供依据。与内地其他河流相比，1）夏季河水会漫出常规河道，在两侧堤防内漫流而下；2）河流蜿蜒曲折而沿途测站稀少。因此，模型所需的地形和初始水位需要进行专门处理获得。对于地形资料，研究了以实测河道横断面插值为二维地形，并与河滩 DEM 镶嵌的方法。对于初始水位问题，由于提供边界条件的测站相距过远和河道弯曲严重，研究了基于河流跟踪的自动水位设置方法。

关键词：MIKE21，地形，初始水位

The input data management in flood evolution simulation of Tarim river

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Abstract: the Tarim river basin treatment is very important for the sustainable development of society and economy of the Xinjiang Uygur Autonomous Region and ecology recovery. Two dimension hydrodynamic simulation is the best way to understand the flood evolution process and can provide reference for water usage arrangement. Comparing with other river in China, 1) the water of the Tarim river will overflow the whole region between dike not only the regular channel; 2) The river wanders so long with few hydrological stations. For these reasons, the bathymetry and initial water level should be dealt with specially. For the bathymetry, a method enchasing DEM in floodplain with bathymetry in river channel obtained by interpolating measured cross section data was adopted. For the hydrological stations providing boundary conditions have a long distance and the river wanders severely, the initial water level was automatically set with a based on the current tracing.

Keyword: MIKE21, bathymetry, initial waterlevel