

23 Apr. 2012

Department of Civil Engineering
2012 Summer Semester
Oliver C. Saavedra V. (guest lecture), Yoshimura Chihiro

Aquatic Environmental Science

Outline #3: Watershed hydrology

1. Global hydrological cycle and major processes
 - Historical and social background of hydrology
 - Reynolds transport theorem
 - Continuity
 - Canopy interception
 - Evapotranspiration
 - Infiltration
 - Overland flow
 - Groundwater flow
 - Hydrograph
 2. Hydrological models
 - Major types of hydrological models
 - Distributed hydrological model
 - Models for detailed hydrological processes
 - River flow routing
 - Satellite-based observation of precipitation
 - Recent applications of hydrological models
 3. Exercise
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