A PRIMER ON CHINA HYDROLOGIC MEASUREMENT SYSTEMS: HYDROMETRIC INSTRUMENTATION FOR DATA ACQUISITION AND REAL-TIME TELEMETRY

MA ZHAN^{1, 2}, LU YUNYANG^{1, 2}, YU TING^{1, 2}, ZHANG YONG^{1, 2}

1. NANJING AUTOMATION INSTITUTE OF WATER CONSERVANCY AND HYDROLOGY, NANJING 210012, CHINA

^{2.} NANJING HYDRAULIC RESEARCH INSTITUTE, NANJING 210029, CHINA

ABSTRACT: Hydrometry plays a fundamental role in a number of fields: it is essential for planning a rational and responsible use of water resources, ensuring that they are correctly and adequately managed, controlling flood events and mitigating water risks. In this context, several China Hydrometric instruments present excellent capability for this purpose with advantages and disadvantages in comparison. Several new hydrometric instruments and measurement techniques were developed and manufactured over the last few years. Stream discharge gauging stays on the key points with non-contact radar and PIV technologies.

KEY WORDS: Hydrometric Instruments, advantages and disadvantages, new development, Radar and PIV