

Study on water quality and water flow of Dongjiang River in the Pearl River Delta

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Seventeen water samples were collected from different point of Dongjiang River in the Pearl River Delta. The concentration of major ion and stable isotopes were measured. The water type of all samples is $\text{HCO}_3+\text{Ca}+\text{Mg}$ type. The NO_3 and NH_4 concentrations are lower than 10mg/l and 0.5mg/l and this water quality is good, so there not are practically pollutions. The oxygen-18 and deuterium values at the all area ranged from -5.69 to -6.3 and -39.8 to -48.9. The river water of Dongjiang River is recharged by precipitation and is affected by nature geographical condition. River water is recharged by precipitation and groundwater of the upper from 0km of Dongyuan to 200km-240km. River water is recharged by Groundwater of the North from 200km-240km to 300km.