

## 愛媛県西条平野沿岸域における地表水と地下水の交流動態

### Dynamics of surface water and groundwater interaction at a coastal zone in Saijo plain, Ehime prefecture, western Japan

辻村 真貴<sup>1\*</sup>, Pankaj Kumar<sup>1</sup>, 中野 孝教<sup>2</sup>, 徳増 実<sup>3</sup>

TSUJIMURA, Maki<sup>1\*</sup>, Pankaj Kumar<sup>1</sup>, NAKANO, Takanori<sup>2</sup>, Minoru Tokumasu<sup>3</sup>

<sup>1</sup> 筑波大学, <sup>2</sup> 総合地球環境学研究所, <sup>3</sup> 愛媛県西条市役所

<sup>1</sup>University of Tsukuba, <sup>2</sup>Research Institute of Humanity and Nature, <sup>3</sup>Saijo City Office, Ehime Prefecture

An interaction process of surface water and groundwater was investigated using a multi-tracer approach at a coastal zone of Saijo plain, Ehime prefecture, Shikoku island, Japan. The surface water and the groundwater were sampled in an alluvial fan and a coastal area, and the inorganic constituents concentrations, CFCs concentrations, stable isotopes of hydrogen and oxygen, strontium isotopes were determined for those samples. The three groundwater wells at the coastal region were especially monitored according with tidal fluctuations of the ocean. The diurnal variation of the tracing elements of the groundwater was explained by the hydrological processes and the geochemical processes under the effect of the tidal fluctuation.

キーワード: 塩水進入, 扇状地, 沿岸域, 地下水

Keywords: sea water intrusion, alluvial fan, coastal region, groundwater