

CONTENTS

I . Groundwater in Yellow River Delta

- Investigation of fresh and salt water distribution by resistivity method
in Yellow River Delta
Ishitobi Tomotoshi (RIHN)1
- Estimation of nutrient discharge with groundwater flow to the ocean
in the Yellow river delta
Shin-ichi Onodera (Hiroshima University)7
- Results of Groundwater Group in Yellow River delta
Taniguchi Makoto (RIHN)9

II . Bohai Sea

- Observations in Laizhou Bay and tidal lands of Yellow River delta in summer of 2007
Guo Xinyu (Ehime University)16
- Year-to-year variation in chlorophyll-*a* concentration in the Bohai Sea
Yanagi Tetsuo (Kyushu University)20

III . Social economics and water demand in Yellow River basin

- Some Thoughts on Development in the Yellow River Basin by Water Rights Transfers,
and Possible Japanese Approaches to Help Address Key Concerns
Higashi Osamu (Nagoya University)24
- Water Rights Transfers and Regional Development in China
Shi Feng (Nagoya University)32
- Sustainable agriculture production and agricultural water use in the Yellow River basin,
China -Evaluation by index of agricultural WUE (Water Use Efficiency) -
Onishi Akio (RIHN)44

IV .Irrigated agriculture and Water control

- Water balances in large scale irrigation districts in the Yellow River basin
Hoshikawa Keisuke (Kyoto university)52
- Cognitive Background to Flood Control Work
Kinoshita Tetsuya (RIHN)56

V . Observed results of Atmospheric Boundary Layer

Synoptic-scale intraseasonal variation and its effect on interannual variation in precipitation over the middle-lower reaches of the Yellow River basin.

Fujinami Hatsuki (Nagoya University)63

Vertical transport of water vapor and the atmospheric water budget over the Loess Plateau in China – Comparison of the cases in 2005 and 2006 –

Takahashi Atsuhiko (RIHN)67

Seasonal changes in the conditions of atmospheric boundary layer, land surface, and synoptic field over the Loess Plateau in China

Nishikawa Masanori (Nagoya University)71

Impact of change in land surface condition on the development of the atmospheric boundary layer and cumulus clouds over the Loess Plateau in China

– Numerical experiment – Takahashi Atsuhiko (RIHN)77

Numerical simulations on local circulation and cumulus generation over the Loess Plateau in China

Nishikawa Masanori (Nagoya University)81

Research Activities of the ABL Team

Hiyama Tetsuya (Nagoya University)86

VI . Land use change and long term water budget

Relation of in situ Hyper-Spectral Radiometer Data with Phenomena Observed by Other Variables – Comparison of *in situ* data with MODIS images –

Higuchi Atsushi (Chiba University)91

Land Cover Change Analysis over Yellow River Basin by Remote Sensing

Matsuoka Masayuki (Kochi University)93

The Climate Change of Yellow River Basin in recent years

Xu Jiangqing (FRCGC)95

Impact of Hetao Irrigation District on the Formation of Clouds in the Vicinity of the Yellow River in Summer

Kawase Hiroaki (FRCGC)98

Analysis of long-term water balance of the Yellow River basin

-Mechanisms of the drying-up-

Sato Yoshinobu (RIHN)103