PROGRAM

13 October 2005 (Thu.)

09:45 - Registration

10:45 - Opening address

11:00 - 12:30
(Chairman: Dr. H. Muraoka)

Perspective of “Satellite Ecology” in the 21st Century COE program at Gifu University
H. Koizumi and H. Muraoka

Ecosystem studies in Takayama area by remote sensing
-Preliminary study on spatiotemporal changes of vegetation and phenology-
T. Akiyama, T. Kojima and M. Maki

Modeling analysis and assessment group
I. Tamagawa, T. Yasuda, J. Yoshino and T. M. Saitoh

12:30 - Lunch

14:00 - 15:40
(Chairman: Dr. T. Akiyama)

Integration of remote sensing data with terrestrialecosystem model for global NPP estimation
Y. Yasuoka, T. Endo, P. J. Baruah, T. Sakai, T. Yamaji and W. Takeuchi

Precise correction of satellite images over rugged terrain using digital elevation mode
Y. Iikura

Forest ecosystem structure, function, and fitness: Integration of remote sensing and modelling
C. Trotter, J. Guo, S. McNeill, J. Dymond and J. Shepherd

15:40 - Break

16:10 - 17:20
(Chairman: Dr. T. Kojima)

Remote sensing and 3D structure measurement for photosynthetic functions monitoring in tropical rainforest
M. Yoshimura, M. Yamashita and T. Ichie

Applications of biophysical models and satellite remote sensing to monitor terrestrial water and carbon fluxes
S. Kang, D. Lee, E. Kim, Y. Kim, Y. Kim and Y. Ryu

18:30 - Welcome reception

14 October 2005 (Fri.)

9:30 - 10:50
(Chairman: Dr. I. Tamagawa)

Including complexity, heterogeneity and vegetation response characteristics into carbon and water balance assessments at landscape to continental scales: Establishing links to stakeholder interests, management and ecosystem services
J. Tenhunen, R. Geyer, Q. Wang and M. Reichstein

Linking the seasonal variation of vegetation indices to tower flux measurements: A look at an Oak-Savanna ecosystem in California and the FLUXNET network
M. Falk, S. Ma, F. A. Heintsch and D. D. Baldocchi

10:50 - 12:00 Poster session

12:30 - 14:00 Lunch

14:00 - 16:00
(Chairman: Dr. M-S. Lee)

The state of development of forest information database and examples of forest inventory using satellite remotely sensed data in Gifu prefecture, Japan
H. Watanabe, H. Oshima and K. Hishijima

Influence of stems and branches on the reflectance and ecophysiological process of forest canopy
K. Nishida

Inter-annual variability of carbon budget components in two AsiaFlux forest sites estimated by long-term flux measurements
N. Saigusa, S. Yamamoto and Y. Fujinuma

Development of a forest carbon cycle model including the seasonal change in leaf properties: Synergistic study between modeling and observation
A. Ito, H. Muraoka, M. Inatomi, H. Koizumi, N. Saigusa, S. Murayama and S. Yamamoto

16:00 - 17:00 Discussion announcement

15 October 2005 (Sat.)

12:00 - 15:00 Symposium for citizens

19:00 - Reception for participants of field excursion

16 October 2005 (Sun.)

09:00 - 14:00 Field excursion (Takayama AsiaFlux Research site)

Poster session (14 October 2005 (Fri.) 10:50-12:30)

P01 Soil CO_2 efflux in a Japanese cedar forest ecosystem under the monsoon climate in central Japan: Implication of long-term and continuous measurements for soil CO_2 efflux
M-S. Lee, J-S. Lee and H. Koizumi

P02 Soil organic carbon stock change in Japanese paddy from 1979 to 1998 due to land use change
M. Yokozawa, Y. Shirato, S. Yonemura and T. Sakamoto

P03 Soil CO_2 concentrations at some ecosystem sites in Japan
S. Yonemura, M. Yokozawa, Y. Shirato, S. Sekikawa and I. Nouchi

P04 Process level carbon flux measurements and inter-annual variation of net ecosystem production (NEP) in an AsiaFlux forest site
T. Ohtsuka, W. Mo and H. Koizumi

P05 Change of interception loss and transpiration during the succession from Japanese red pine to evergreen oak
S. Iida, T. Tanaka and M. Sugita

P06 Seasonal change of leaf photosynthetic properties of canopy and shrub trees in a cool-temperate deciduous broadleaved forest at Takayama AsiaFlux site
H. Muraoka and H. Koizumi

P07 Long-term measurements of atmospheric CO_2 concentration and its carbon and oxygen isotopic ratios in a cool-temperate deciduous forest in central Japan
*S. Murayama, N. Saigusa, S. Yamamoto, C. Takamura, S. Morimoto, H. Kondo, T. Nakazawa, S. Aoki and T. Usam*i

P08 Carbon, water vapor, and heat fluxes monitoring on a steep slope over a plantation evergreen coniferous forest
*T. M. Saitoh, I. Tamagawa and M. Maki*4

P09 High-resolution estimation of CO_2, H_2O and heat fluxes in the Takayama area using a coupled atmosphere-land-vegetation regional climate model
J. Yoshino, T. Kano, S. Ito and T. Yasuda

P10 Assessing of seasonal variation of net ecosystem productivity in a cool-temperate deciduous forest using meteorological data
T. Sakai, N. Saigusa, T. Akiyama and Y. Yasuoka

P11 Estimation of net ecosystem productivity in MODIS data with visible, near infrared and thermal infrared bands at Takayama flux site
T. Yamaji, T. Sakai, W. Takeuchi, T. Akiyama, N. Saigusa

P12 A terrestrial biosphere model incorporating nitrogen cycles (BEAMS-N)
T. Tamura, T. Sasai, K. Okamoto and Y. Yamaguchi

P13 Studies on carbon fixation patterns in mangrove ecosystems, a challenge to unify allometric relationships of trees
A. Komiyama, P. Sasitorn and S. Kato

P14 Development of the technique to estimate forest structure by Helicopter mounted LIDAR
T. Takeda, H. Oguma, Y. Yone and Y. Fujinuma

P15 Comparison of crown density measured with airborne laser profiler and fisheye photograph
T. Kojima, M. Maki and T. Akiyama

P16 The relationship between NDVI and LAI at the Takayama AsiaFlux Site
M. Maki, K. Nishida, N. Saigusa and T. Akiyama

P17 Study on the vegetation activity in the tropical rainforest
S. Nagai, K. Ichii and H. Morimoto

P18 Utility of photochemical reflectance index for estimation of photosynthetic light use efficiency of Japanese larch needles
T. Nakaji, Y. Fujinuma and H. Oguma

P19 PHENOLOGICAL EYES NETWORK
Ground-based Measurement for Remote Sensing Studies
K. Iwao, S. Tsuchida, K. Nishida, H. Oguma, A. Iwasaki and W. Kawato