

## **PIXGRO**



## Modeling – Remote Sensing – Field experiment



## **Results and Discussion**



Two types of output are obtained from PIXGRO model. The first type of output is daily information on land surface processes mapped over Heaen basin. The daily output is illustrated in Fig.7, where daily radiation input, GPP, ET and LAI development in the crophand are mapped for a clear day on August 1.

The second type of output is illustrated in Fig.8, that is hourly information on response at "Test Pixel" site. The "Test Pixel" for 30 by 30 m rice paddy is located in the center of the Haean basin. The simulated gas exchange is compared with observations obtained via eddy covariance methodology at the Mase Asia-Flux site in Japan (Fig. 8, open circles). Meteorological data for the simulations is not the same as observed at Mase. Allocation and senescence parameters in PIXGRO were set to extend the growing season into October (hypothesis). Also Fig. 8 shows the seasonal accumulation of biomass into green aboveground plant material, into roots (decreasing due to senescence in late season), and into roots decreasing due to senescence in late season), and into rice grain. In general, the simulated development of the crop and the coupling of CO2 gain, allocation and yield are plausible. For rice and for root crops, as well as forest, and later for additional crops, the model output is being compared to process observations carried out in the field. Thus, the role of the test pixels is to provide us with and opportunity to test the model in terms of observations as they are made in ecophysiological and agricultural studies

## References

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