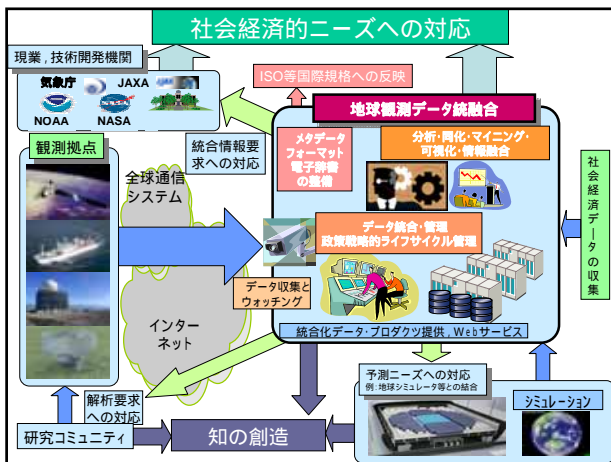
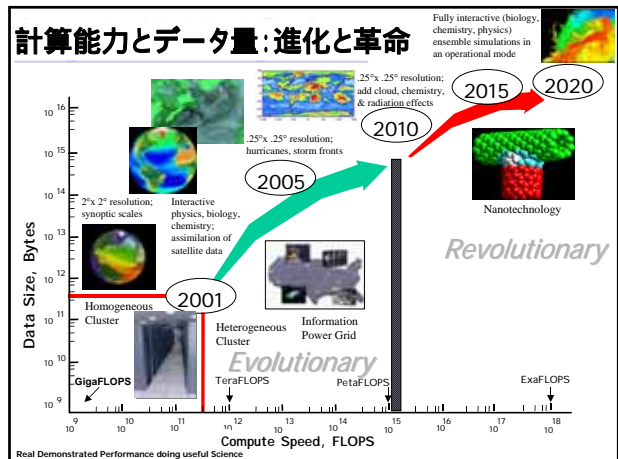


AGRI-COCOON
農学における情報利用研究フォーラムグループ

第1回勉強会
「地球観測サミットから学内連携研究機構(EDITORIA)まで」
小池俊雄 工学系研究科社会基盤学専攻

- 自己紹介
- 「GEOS10年実施計画」と「地球観測の推進戦略」
- GEOS10プロトタイプとしてのCEOP
- 地球観測連携研究機構(EDITORIA)

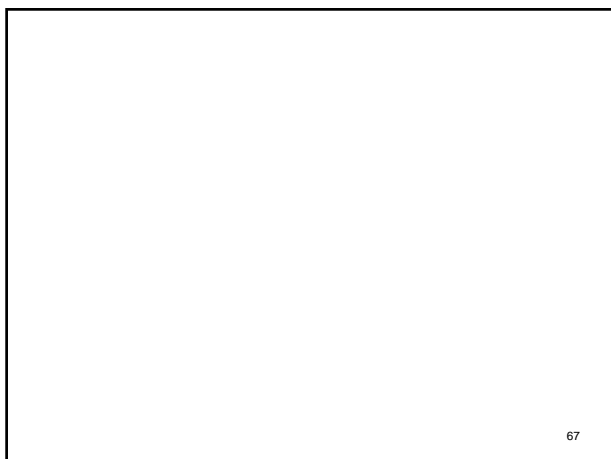



東京大学 地球観測データ統合連携研究機構 (EDITORIA)


Earth observation Data InTegration and fusiOn Research Initiative (EDITORIA)

- 地球観測 + 情報科学技術 + 公共的利益分野
- 地球観測データを効果的、効率的に統合、情報を融合
- 地球環境変動の理解、予測、対応策
- 公共的利益分野への適用、情報の定常的利用


- 統融合コアシステムの先導的開発の開発拠点: 生産技術研究所
- オントロジーレジストリシステムの開発の開発拠点: 空間情報科学研究センター
- 統融合情報の高度適用技術の開発の開発拠点: 工学系研究科, 農学生命科学研究科, 気候システム研究センター, 海洋研究所



Extending the Use of Existing Predictive Methodologies





Examples:



Ensemble Prediction for Climate applied to other Disciplines

Reverse Tracing of Precursors (Pattern Recognition) from Earthquake Prediction applied to Epidemiology

Demonstration projects in the GEO 2006 Work Plan

HEALTH-06-03: ... integrating Earth observations, health and epidemiological as well as socio-economic data. ... use of advanced ... ensemble forecasting methods to ... predictability of major health hazards ...

WATER-06-02: ... points to the added value of hydrological ensemble forecasts in water resource-management.

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Demonstration projects in the GEO 2006 Work Plan

ENERGY-06-05: ... utilizing advanced ensemble forecasting techniques to improve energy management


AGRICULTURE-06-05: ... on the use of advanced weather and climate ensemble forecasting methods integrating Earth observations, agricultural data and socio-economic data, to develop and improve the predictability of food-supply hazards in Africa.

Linking existing methodologies to end-user applications



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EFAS: Pre-operational System for Medium-range River-flood Alerts in Europe



Involves extensive collaboration between

- * ECMWF, DWD (meteorological forecasts)
- * EU Joint Research Centre in Italy (hydrological model)
- * National Hydrological Services in large European basins

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Ensemble Forecasting Systems (e.g. ECMWF) can be Linked to End-User Applications to Produce Probabilistic Forecasts of:

- * Crop yield (Cantelaube & Terres 2005, Marletto et al 2005, Challinor et al 2005)
- * Malaria Incidence (Morse et al 2005)

thus providing guidance on where preventative efforts should be targeted

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