



The CWB Seasonal Forecast System

Climate Forecast System Development Team

Research and Development Center

Central Weather Bureau

Presented by

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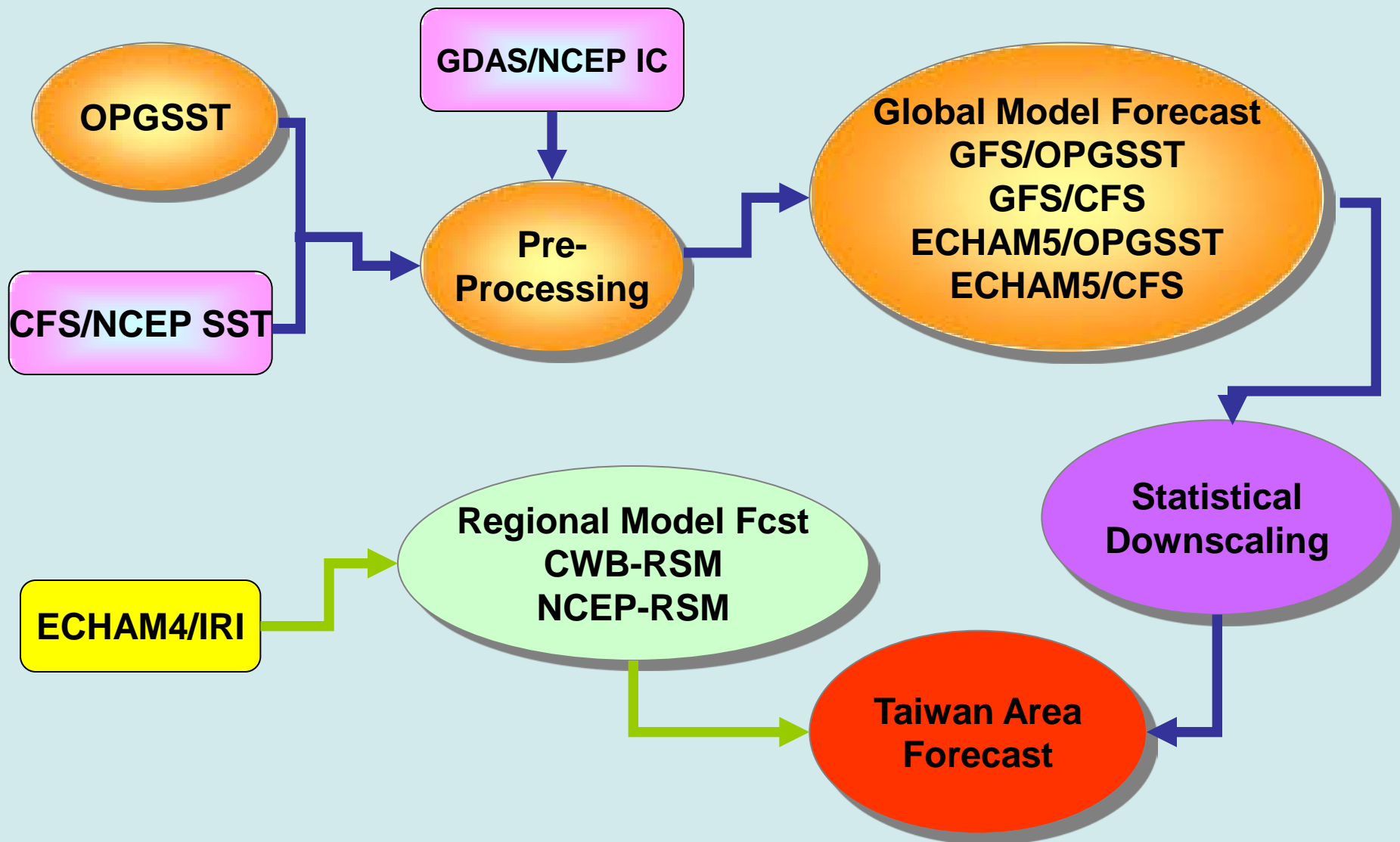


Components

- Optimized Global Sea Surface Temperature (OPGSST) Forecast System
- Pre-processing System for Atmosphere Models
- Two-tier Dynamical Forecast System
- Statistical Downscaling System
- Dynamical Downscaling System

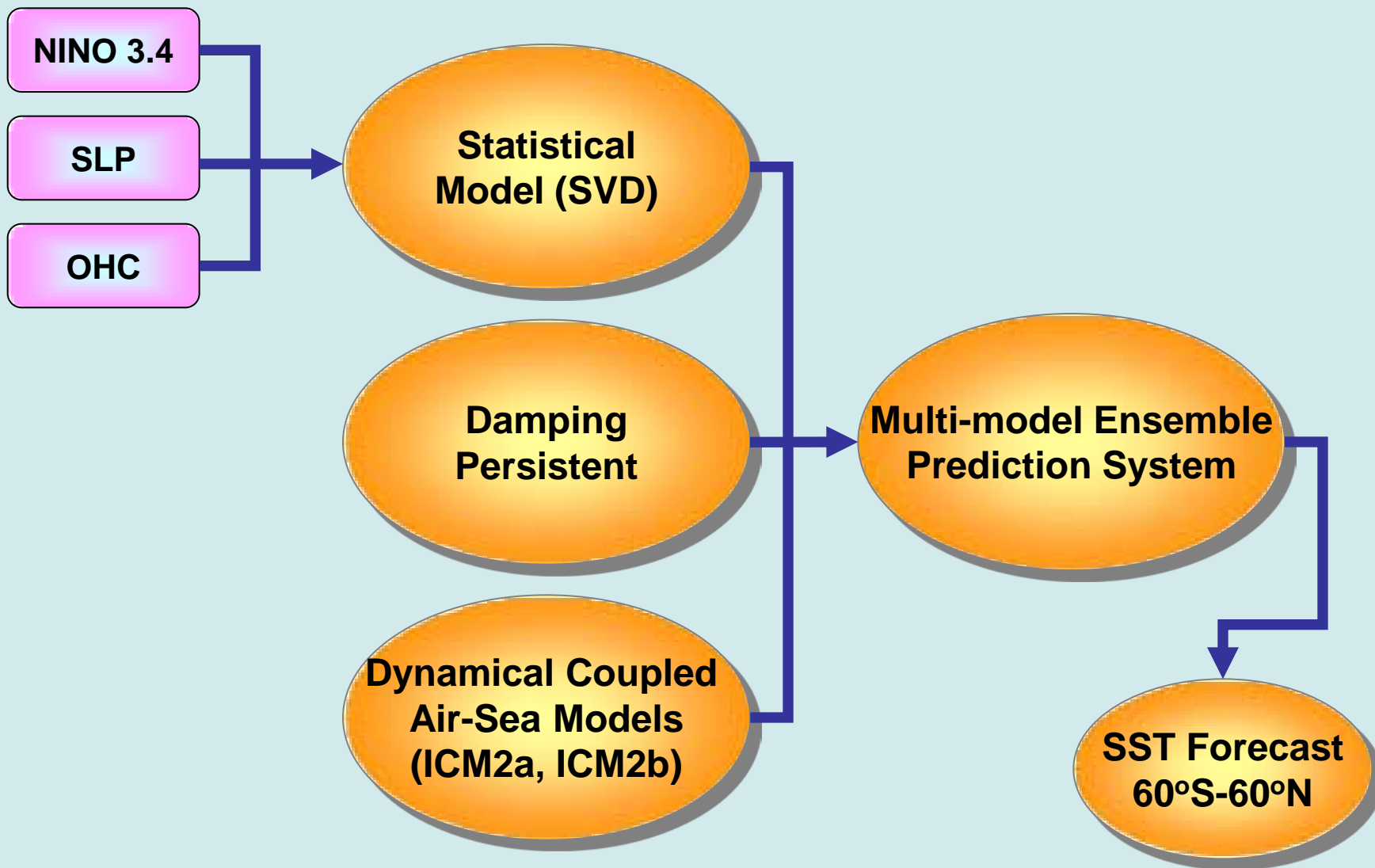


Seasonal Forecast System



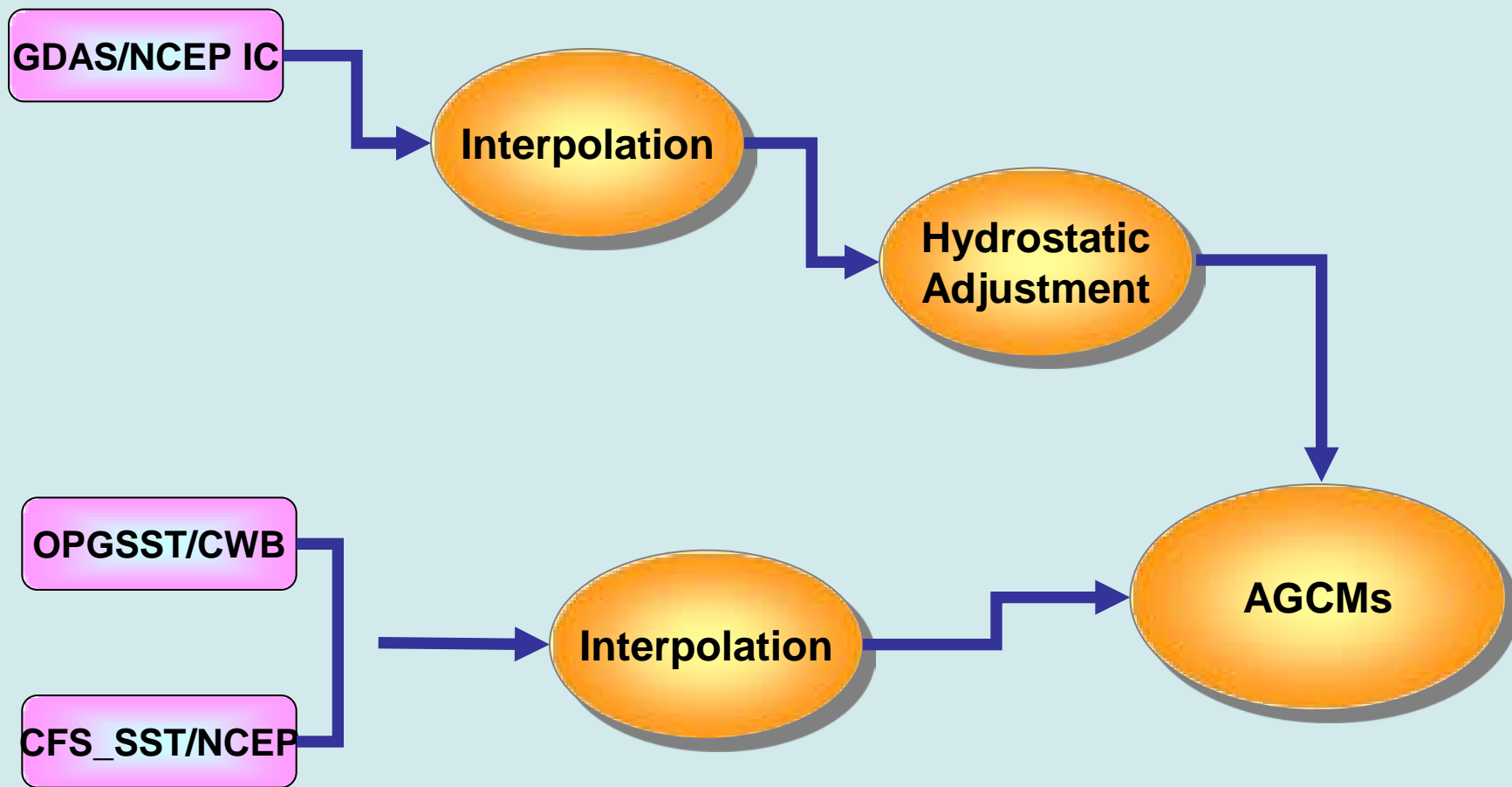


OPGSST



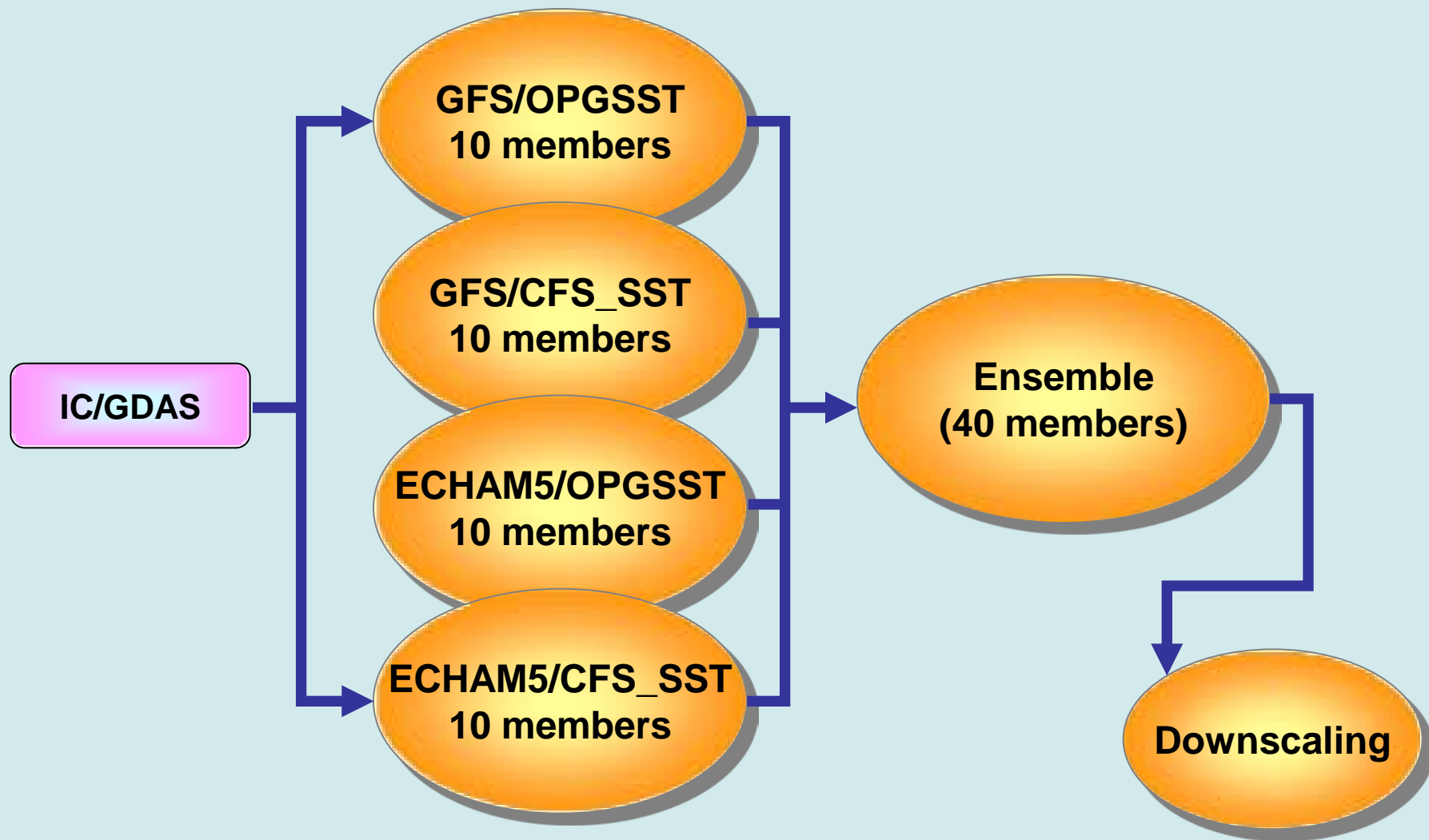


Pre-processing





Two-tier Dynamical Forecast





SDS (1): Predictors and domain Selection

P : S850 、 X850 、 UVQ 、 UV850
T : Tsfc 、 T2m 、 Z500 、 UV850

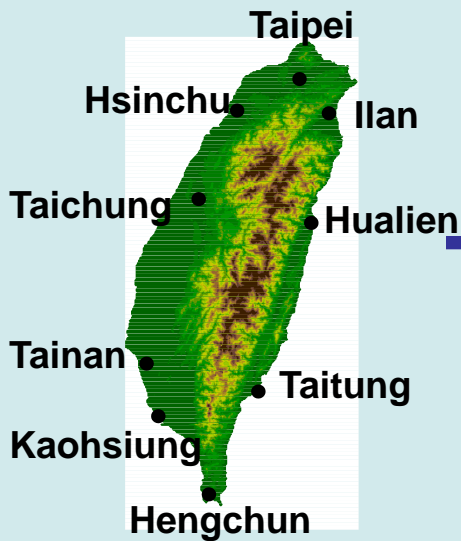
Large-scale Predictors

correlation coefficient

predictor domain selection

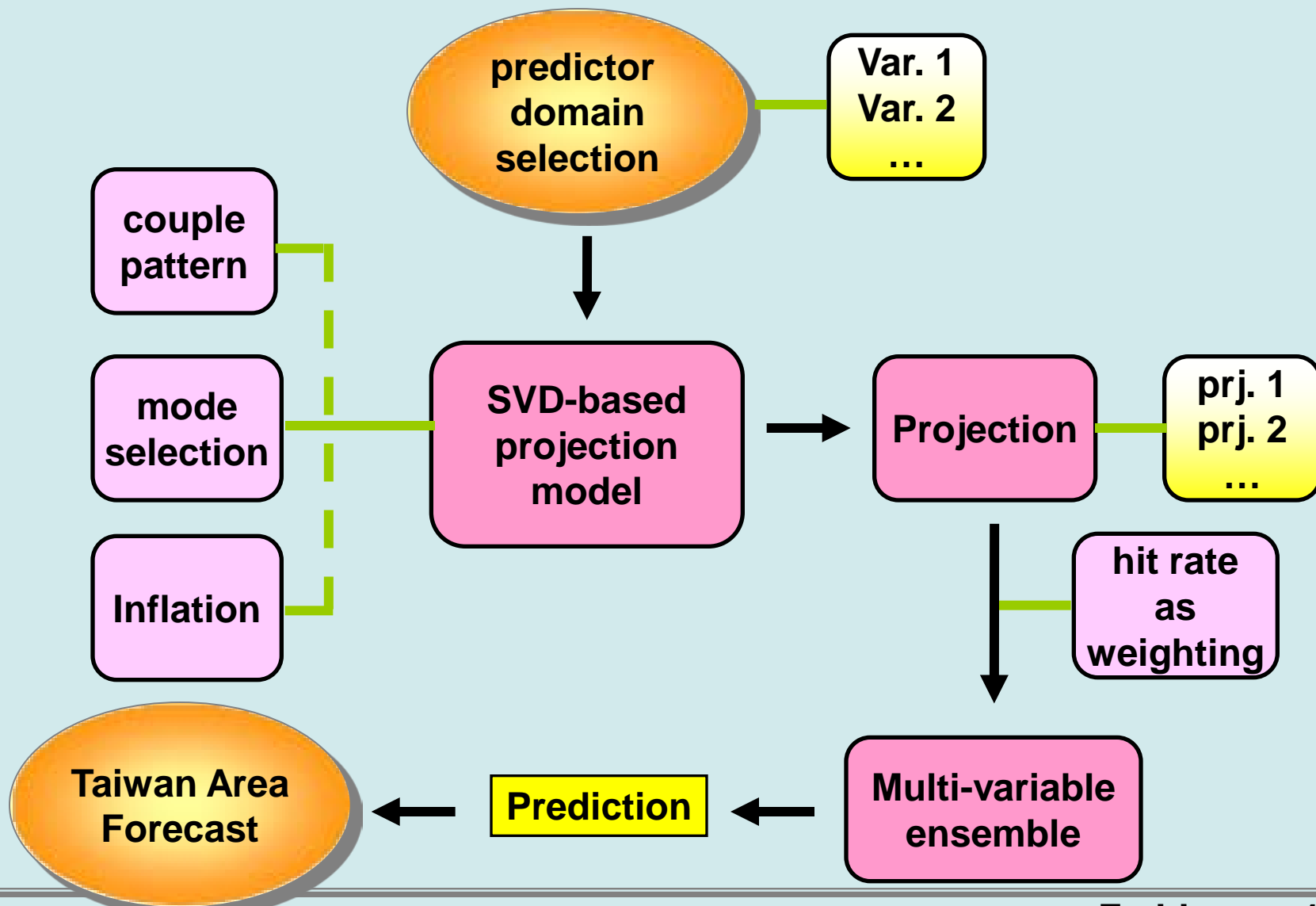
P : S850, X850, UVQ, UV850, Tsfc, T2m, SLP, Z500, XQ
T : Tsfc , T2m , Z500, UV850, SLP, S850, UVQ, XQ

Statistical Model



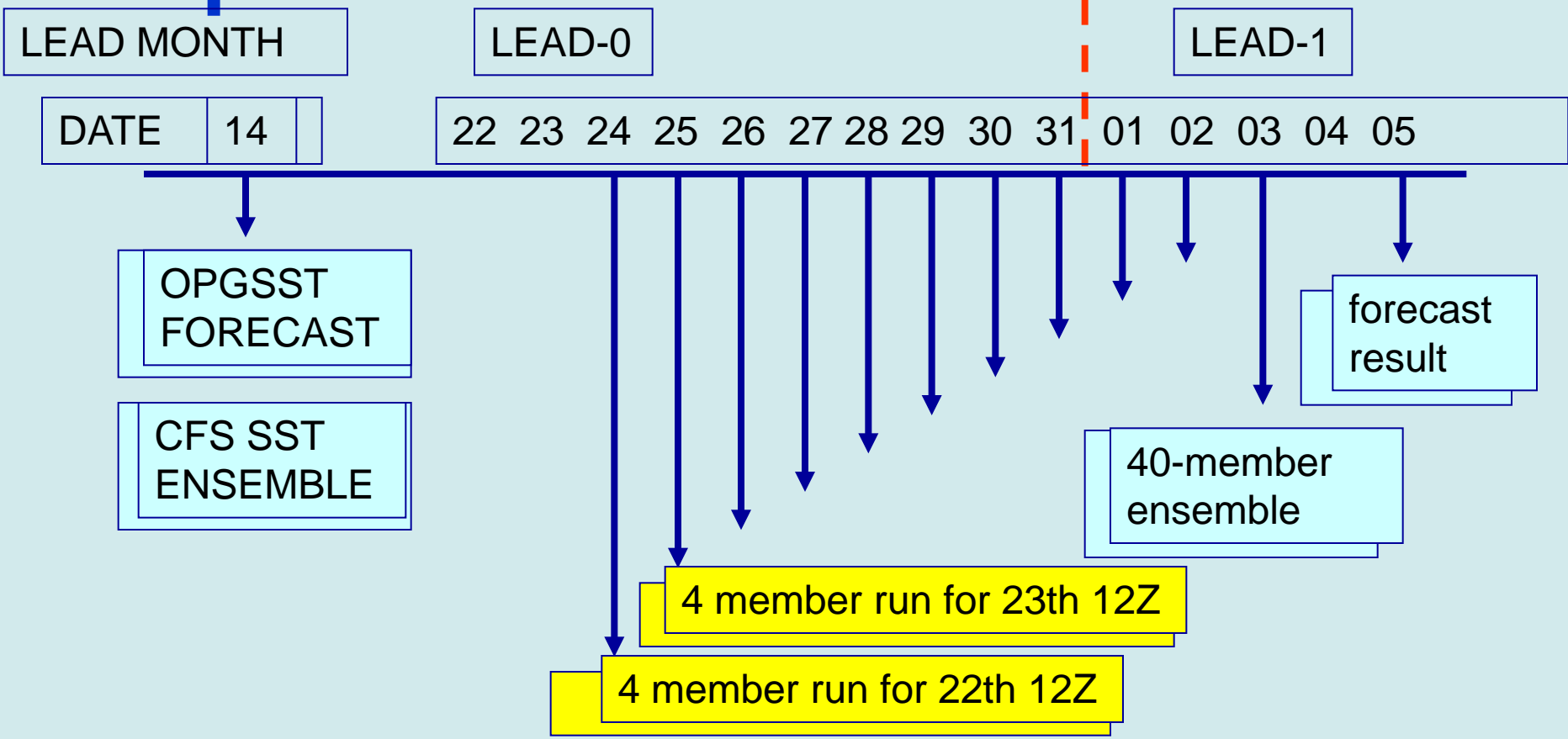


SDS (2): SVD Projection Model





Operational Forecast Schedule



- IC: last 10 days of lead0 from NCEP/GDAS.
- 4 members run in all IC+2 days (GFS/OPGSST, GFS/CFS, ECHAM/OPGSST, ECHAM/CFS) with 7 months forecasting.
- Each member need about 40 minutes for model running and another 30 minutes for post process.



THANK YOU !