



# #3: Retrospective 13 km 10-d Forecasts with GFS physics



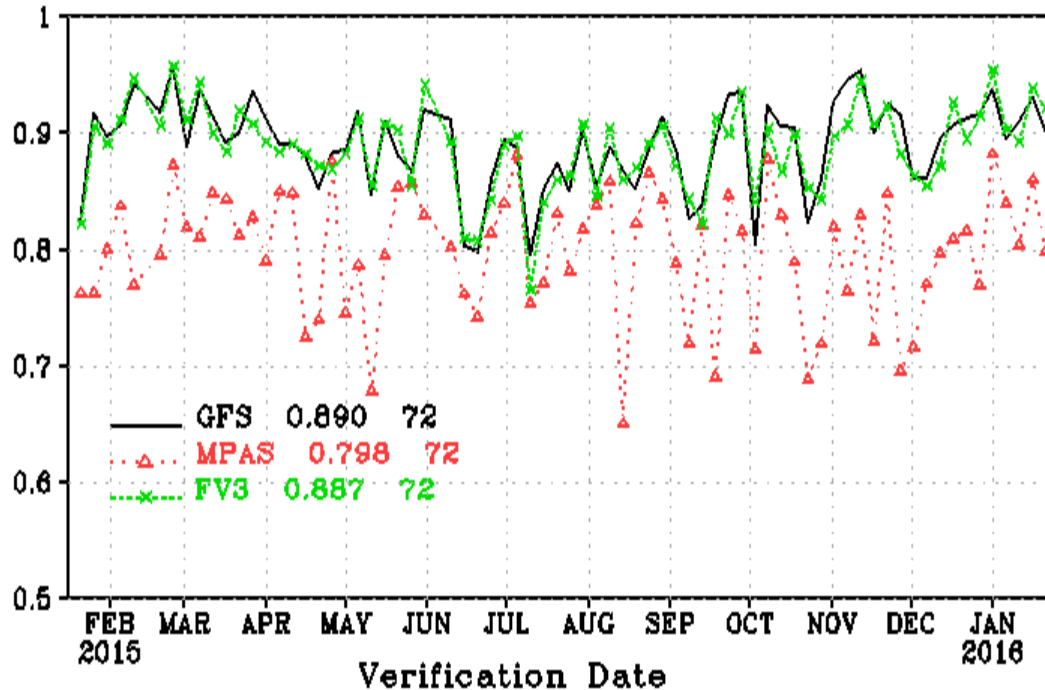
- GFS physics package (provided by EMC) implemented in both models by FV3 and MPAS development teams
- 74 retrospective 10-d forecasts run at 13 km resolution with 64 vertical levels, initialized from GFS analyses every 5<sup>th</sup> day for calendar year 2015
- Validated using NCEP verification suite, compared to operational GFS forecasts
- Goals:
  - Assess ‘robustness’ over a wide-range of atmospheric flow conditions
  - Assess work required to replace spectral dycore in operational GFS



# #3: Retrospective 13 km Forecast Skill



Anomaly Correl: HGT P500 G2/NHX 00Z, fh120



FV3 forecast skill matches the GFS using GFS ICs and GFS Physics

AC: HGT P500 G2/NHX 00Z, 20160116-20160125

