ISST Conference Call Summary
August 30, 2006

Team members present (P) and not present (NP):

(P) Greg Mann (team leader)
(P) Jim Nelson (backup team leader)
(NP) Karl Jungbluth
(P) Tom Salem
(NP) Dan St. Jean
(P) Mike Staudenmaier
(P) Jeffrey Medlin
(P) Ken Falk
(P) Bill Ward
(NP) Reid Hawkins
(NP) Lee Anderson (facilitator)

RTMA (from Geoff DiMego)

EMC implemented an updated version of the RUC downscaling subroutine to address the issue of overly smoothed background surface pressure as noted by J. Horel. The need to meet the requirement on delivery time played an important role in NCEP director's decision not to sign off for the RTMA implementation. One suggestion was to use the prepbufr files from the RUC dumps, which are generated 22 minutes past the hour. This would allow for the timely delivery of the RTMA products at 35 minutes past the hour. We can try this approach. However, EMC would still have to use the current RTMA 30 minute dumps for the 00Z and 12Z analysis, since the RUC dumps for these times are only available at 1:05Z and 13:05Z, respectively.

MADIS's data latency is still problematic. To asses the impact of the "missing" mesonet data, it might be useful to set up a parallel run that uses the RUC dumps and compare the results with the NCO analysis.

Divergent wind features seen in the analysis are usually already present in the background field. While these patterns seem to typify meteorologically correct thermally driven circulations, the wind intensity is often too high. Further tuning of the downscaling algorithm may be needed. Alternatively, one could change the analyzed wind intensity by fine-tuning the spatially varying background error variances in the geographical areas where these divergent features tend to occur.

Park found the results of cross-validation to depend on the choice of test set, i.e., the set of data that is withheld from the 3d-Var procedure and used to verify the analysis.

It might be useful to repeat the cross-validation experiments but with test sets derived exclusively from the more reliable METAR data.

Testing has started with the use of Hilbert curves to generate geographically representative test sets of observations for cross-validation. In order to obtain statistically significant cross-validation scores, one could build several test sets and compute global statistics of the analysis verification over all those sets. Parrish will work with Park and look into all possible ways of tuning the parameters of the variational QC.

Gridded MOS

Gridded MOS beta training will be during team call slot on Wednesday September 6. Bill Bua will forward the training information before the training session. It will be done in VisitView.

Round Robin

The team asked about how they accommodate the new SBN load once surface fields from EMC hit the street. In addition, the team asked how they should get the best possible first guess fields from EMC or HPC? Gridded MOS will be in OB7.1

Long discussion on CONOPS and DFP philosophy occurred.

Next call: September 6 at 130 pm EDT about Gridded MOS training.