

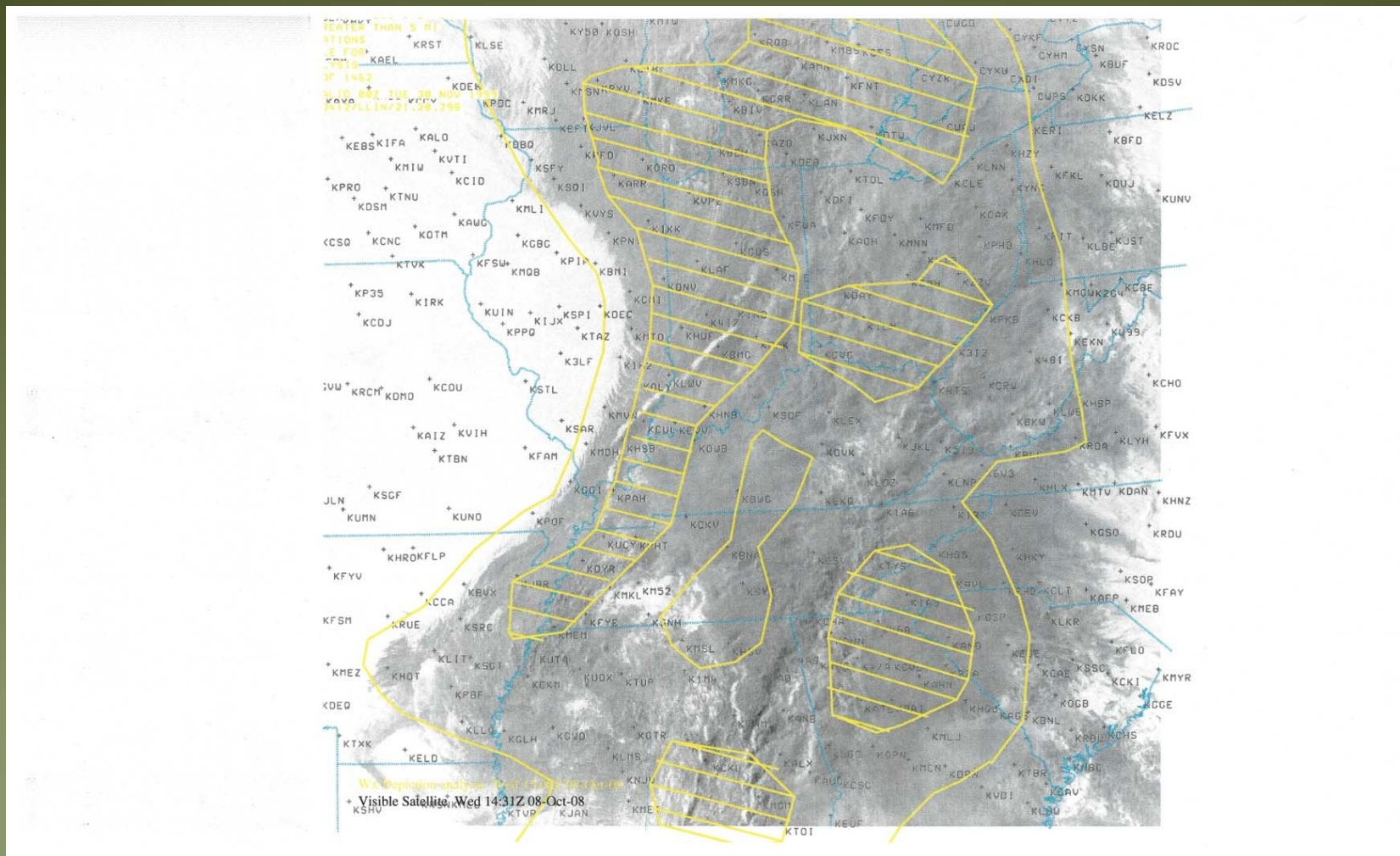
IFR Study

Oct. 9 2008



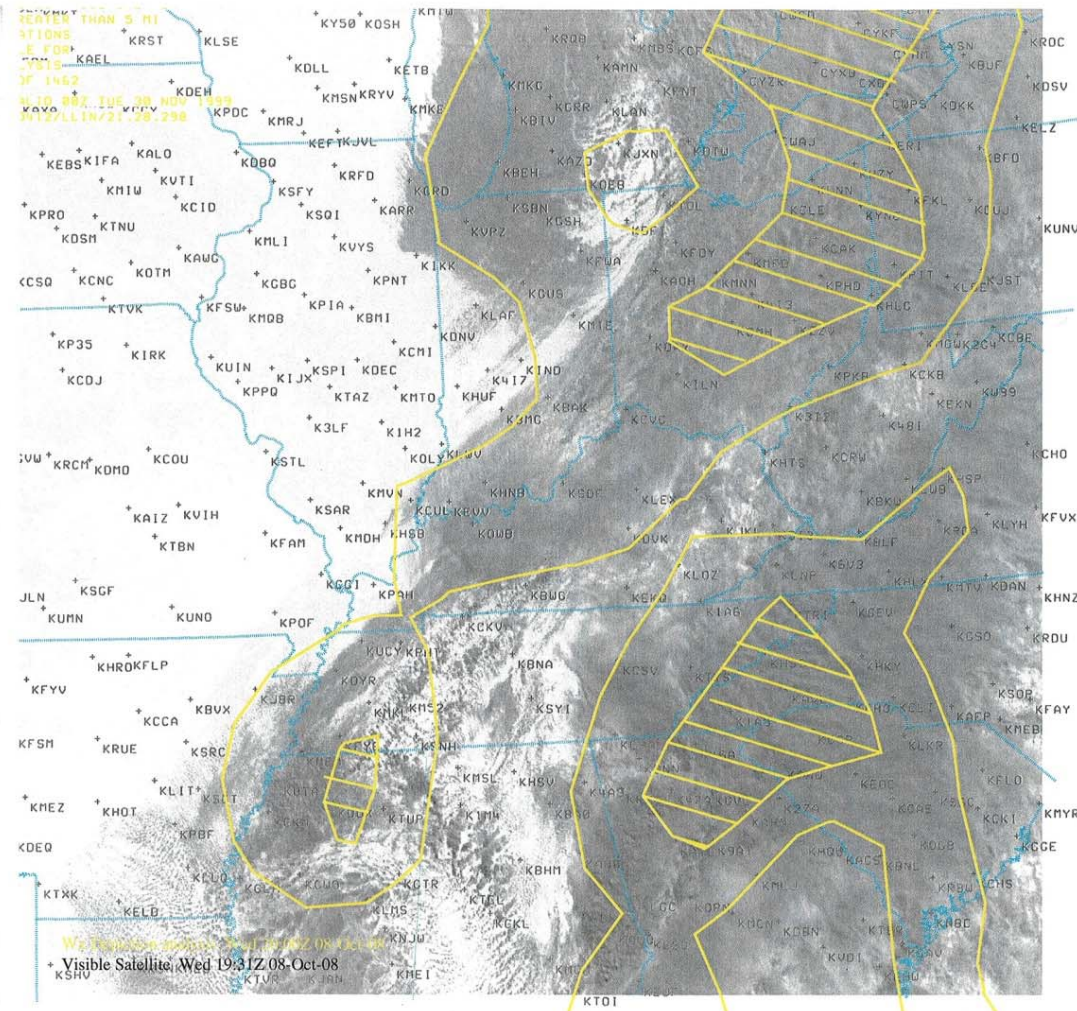
Synoptic Pattern

14Z Oct. 8



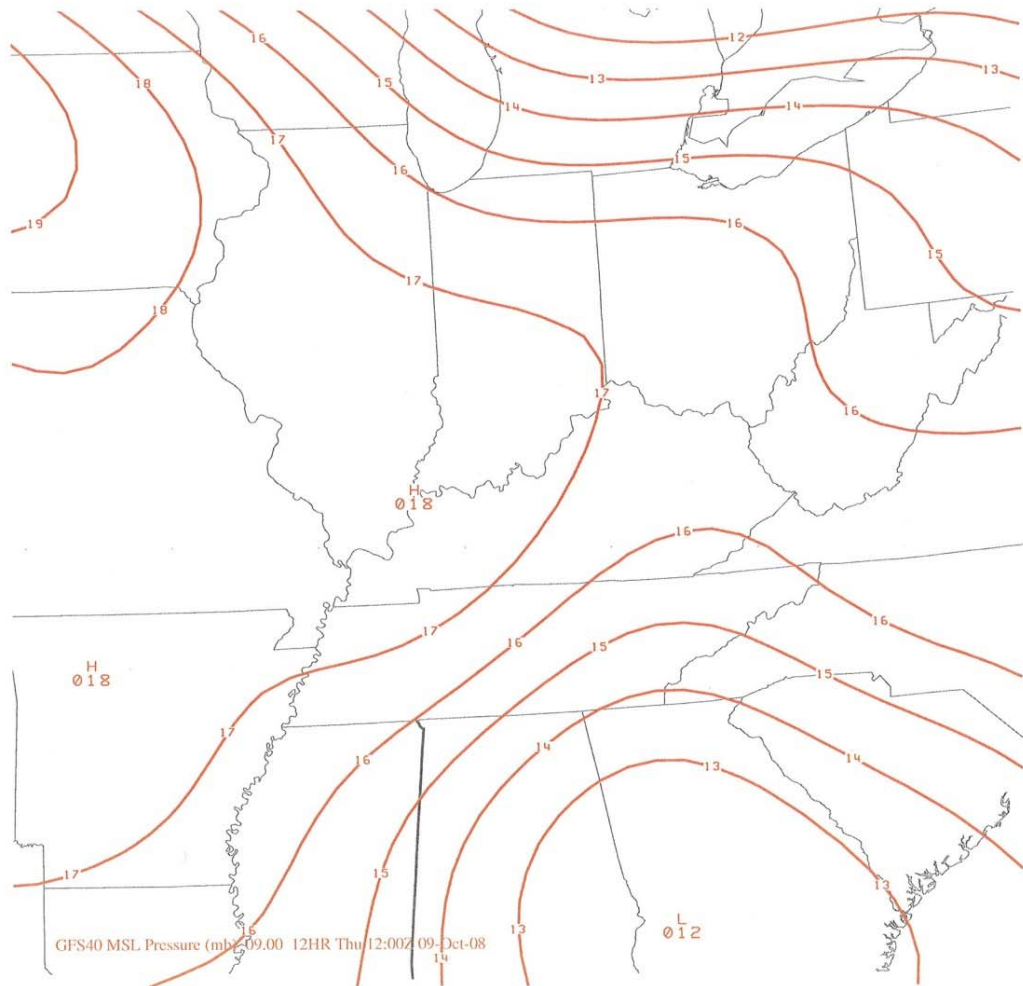
Synoptic Pattern

19Z Oct. 8



Synoptic Pattern

Early Morning Oct. 9



What Happened On That Fateful Night?

KHUF 090600Z-091200Z

TAF → KHUF 090522Z 090606 25003KT P6SM SKC
FM1300 29008KT P6SM SKC

GFS MOS → CIG Category 8 VSBY Category 7

Actual Obs → 57 min/6 hrs IFR (16%)

Lowest Condition → 1/2SM FG CLR



What Happened On That Fateful Night?

KBMG 090600Z-091200Z

TAF → KBMG 090522Z 090606 00000KT 4SM BR SKC
TEMPO 0912 1SM BR
FM1300 28008KT P6SM SKC
AMD LTD TO CLD VIS AND WIND TIL 13Z=

GFS MOS → CIG Category 8 VSBY Category 2

Actual Obs → 76 min/6 hrs IFR (21%)

Lowest Condition → 1 1/2SM BR CLR



What Happened On That Fateful Night?

KLAF 090600Z-091200Z

TAF → KLAF 090522Z 090606 24004KT 1 1/2SM BR SKC
TEMPO 0610 1/2SM FG VV002
FM1300 28008KT P6SM SKC
AMD LTD TO CLD VIS AND WIND TIL 13Z=

GFS MOS → CIG Category 8 VSBY Category 7

Actual Obs → 143 min/6 hrs IFR (40%)

Lowest Condition → 1/2SM FG CLR



What Happened On That Fateful Night?

KIND 090600Z-091200Z

TAF → KIND 090522Z 090606 24005KT P6SM SKC
FM1300 29008KT P6SM SKC

GFS MOS → CIG Category 8 VSBY Category 6

Actual Obs → 0 min/6 hrs IFR (0%)

Lowest Condition → P6SM CLR



In Conclusion...

GFS MOS generally too optimistic

TAFS caught some IFR conditions, missed others



Timing Of Clearing Line

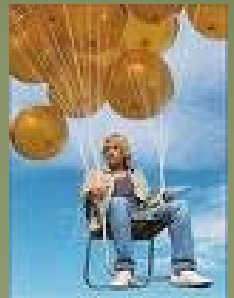
Sunset 714 PM EDT

CMI → 1200 PM EDT (~ 7 hrs sunshine)
LVW → 100 PM EDT (~ 6 hrs sunshine)
DNV → 200 PM EDT (~ 5 hrs sunshine)
HUF → 200 PM EDT (~ 5 hrs sunshine)
LAF → 500 PM EDT (~ 2 hrs sunshine)
BMG → 300 PM EDT (~ 4 hrs sunshine)
GEZ → 400 PM EDT (~ 3 hrs sunshine)
MIE → 630 PM EDT (~ <1 hr sunshine)



Hours Of Afternoon Sun Vs. % IFR Following Night

CMI → 7 hrs sunshine (0% IFR)
LVW → 6 hrs sunshine (0% IFR)
DNV → 5 hrs sunshine (0% IFR)
HUF → 5 hrs sunshine (16% IFR)
LAF → 2 hrs sunshine (40% IFR)
BMG → 4 hrs sunshine (21% IFR)
GEZ → 3 hrs sunshine (63% IFR)
MIE → <1 hr sunshine (48% IFR)



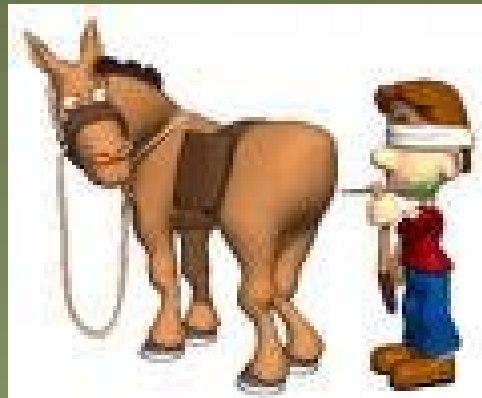
The Skowronek Theory

Synoptic situations where low clouds clearing out during the day
Synoptic pattern favorable for fog development at night

- 5 hrs sunshine → Little chance IFR fog
- 4-5 hrs sunshine → IFR fog possible
- 3 hrs or < sunshine → IFR fog likely



The End?



**Thank You for Your
Time & Attention!**