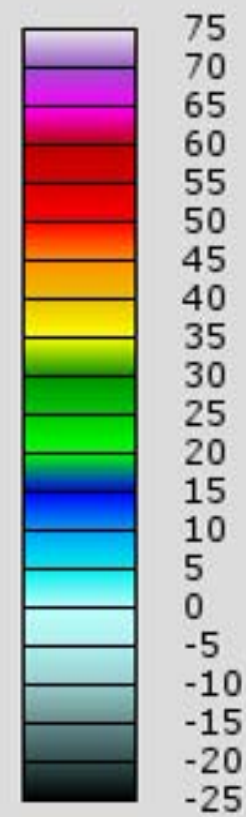


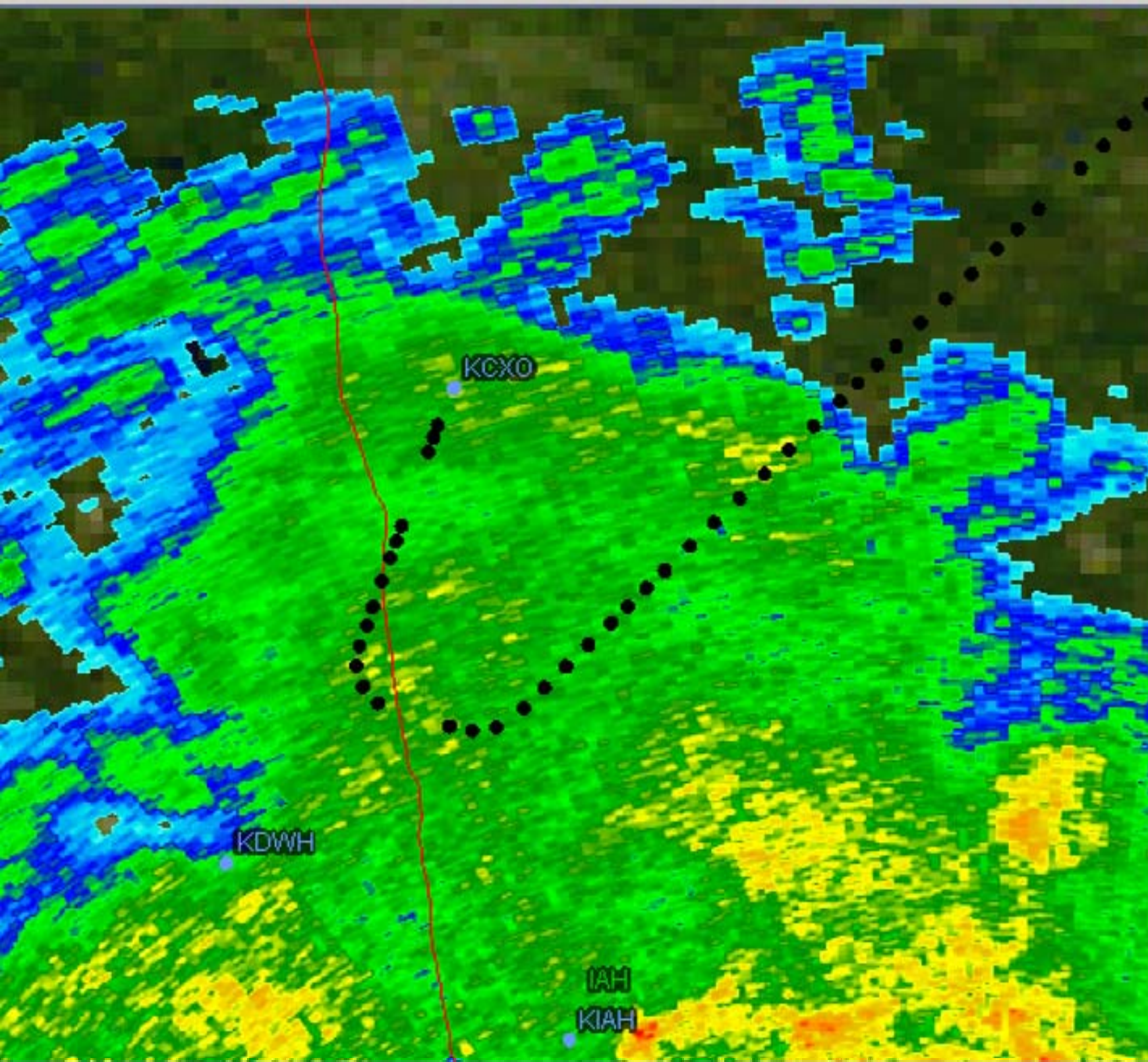
NEXRAD LEVEL-3
KHGX - HOUSTON
09/19/2014 13:4
LAT: 29/28/19 N
LON: 95/04/44 W
ELEV: 18 FT
VCP: 212

REFLECTIVITY
ELEV ANGLE: 0.5

Legend: dBZ

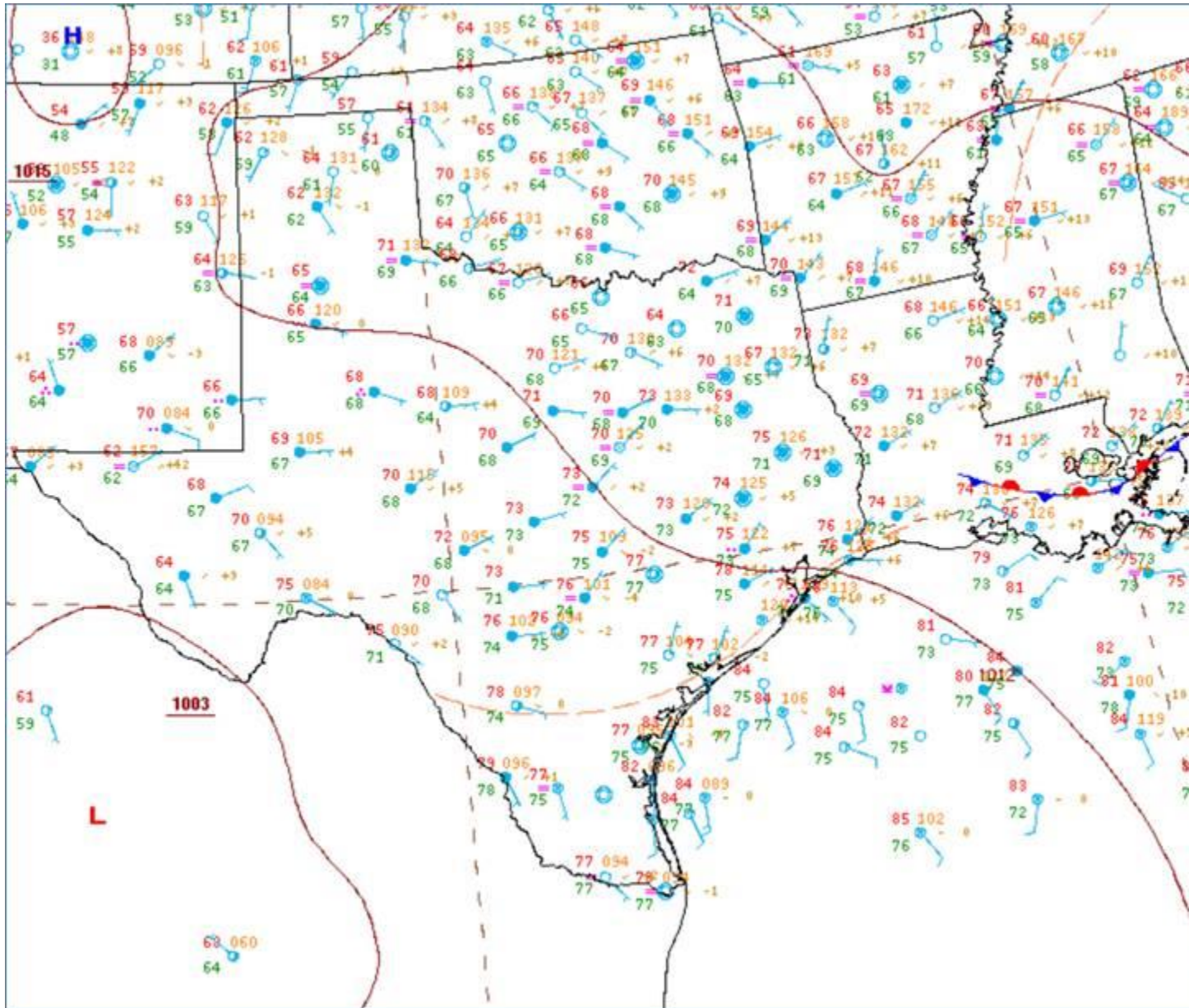


RF

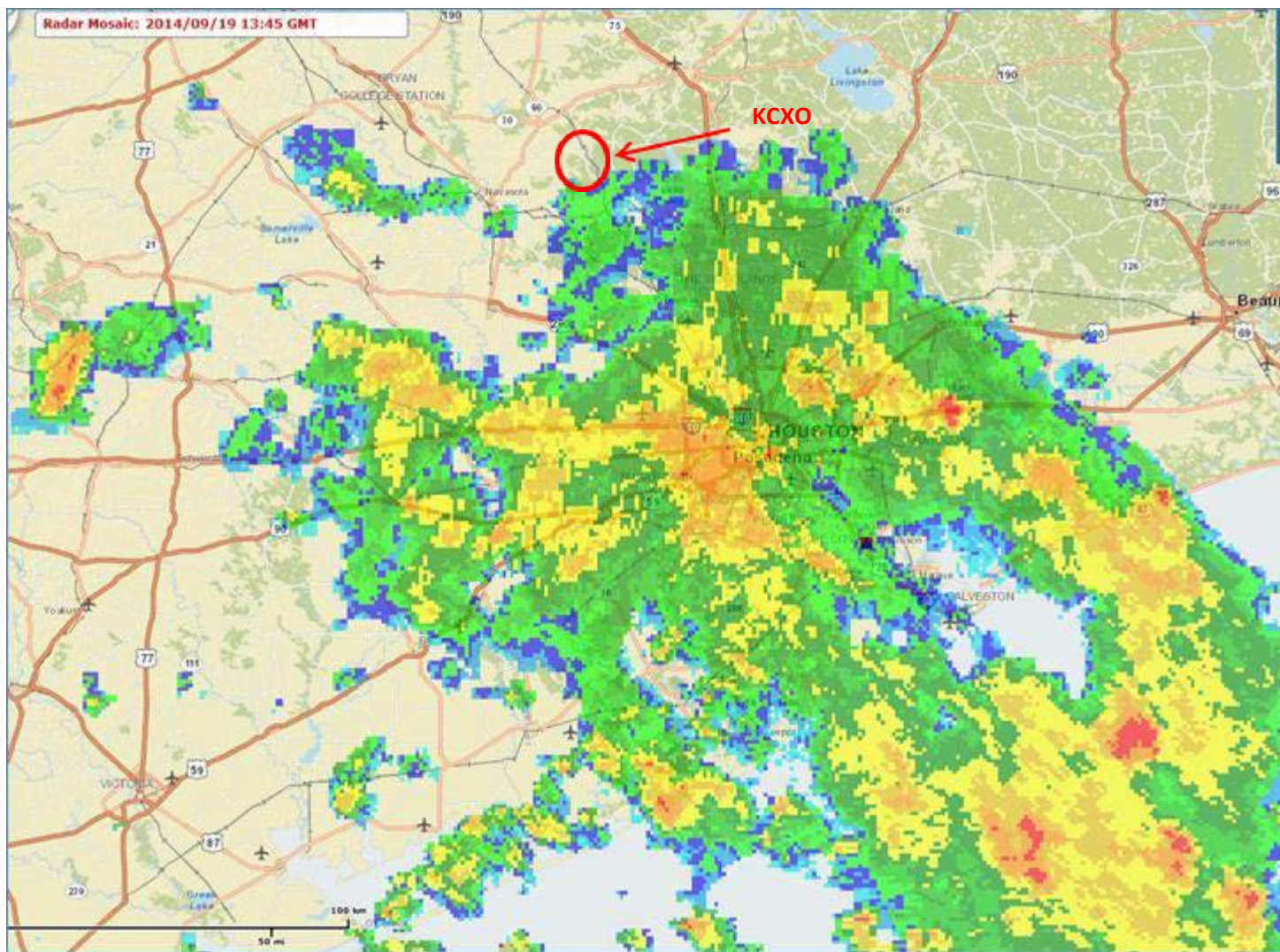


Weather conditions on September 19, 2014

Synoptic conditions – the National Weather Service (NWS) Surface Analysis Chart for 0700 CDT (1200Z) on September 19, 2014 depicted a stationary front immediately east over the Gulf coastal waters. The station models over southeastern Texas depicted calm to light easterly winds of 5 knots or less, overcast clouds, with several stations reporting light to moderate rain.



A review of the NWS national radar mosaic for the period indicated a large band of echoes over the Houston area, which extended over the Lone Star Executive Airport (KCXO) which is enclosed in a red circle below. The area of echoes were moving eastward and dissipating with time at the time of the incident at 1347 CDT.



Observations – the Lone Star Executive Airport (KCXO), is located approximately 37 miles north of downtown Houston, Texas, has an Automated Surface Observation System (ASOS) installed and was augmented by NWS certified weather observer. The airport lists an elevation of 245 feet and a magnetic variation of 5° E. Runway 1/19 is listed in the airport facility directory to be 5,000 feet by 100 feet wide, concrete in good condition, with the threshold elevation 230 feet with a 0.2% grade. The runway has medium intensity runway edge lights, and nonprecision runway marking. The runway also has a 2-light PAPI light system. The following condition was reported prior to the incident:

Lone Star Executive Airport weather at 0841 CDT (1341Z), wind calm, visibility 2 miles in heavy rain and mist, a few clouds at 500 feet agl, ceiling broken at 8,000 feet, overcast at 10,000 feet, temperature 23° C, dew point temperature 22° C, and altimeter 29.93 inches of mercury. Remarks; automated observation system, hourly precipitation 0.21 inches, temperature 22.8° C, dew point 22.2° C.

The raw observations during the period were as follows:

Rain began at 0944Z

SPECI KCXO 191225Z 00000KT 6SM -RA BR OVC004 23/22 A2993 RMK AO2 P0004 T02280222 \$

METAR KCXO 191253Z 00000KT 2 1/2SM RA BR OVC004 23/22 A2992 RMK AO2 SLP130 P0007 T02280222
 SPECI KCXO 191316Z 03003KT 1 3/4SM +RA BR BKN005 BKN036 OVC075 23/22 A2993 RMK AO2 P0010 T02280222
 \$
 SPECI KCXO 191332Z 00000KT 2SM RA BR SCT007 BKN024 OVC080 23/22 A2993 RMK AO2 P0017 T02280222 \$
 SPECI KCXO 191341Z 00000KT 2SM +RA BR FEW005 BKN080 OVC100 23/22 A2993 RMK AO2 P0021 T02280222
 Accident 1347Z
 METAR KCXO 191353Z 00000KT 2 1/2SM RA BR FEW004 BKN055 OVC090 23/22 A2994 RMK AO2 SLP134 P0025
 T02280222
 SPECI KCXO 191359Z 00000KT 3SM RA BR SCT004 BKN021 OVC090 23/22 A2994 RMK AO2 P0002 T02280222
 SPECI KCXO 191407Z 00000KT 3SM RA BR BKN004 BKN050 OVC090 23/22 A2994 RMK AO2 P0003 T02280222
 METAR KCXO 191453Z 10004KT 8SM OVC004 23/23 A2995 RMK AO2 RAE53 CIG 003V007 SLP140 P0004 60036
 T02330228 53012=

Rain ended at 1629Z with a total precipitation of 0.50 inches reported during the period (0944-1629Z).
Total precipitation from 0944Z to 1347Z or the time of the overrun was 0.45 inches.

Forecast – the official NWS Terminal Aerodrome Forecast (TAF) issued during the period were as follows:

TAF AMD KCXO 190902Z **1909/2006 00000KT P6SM VCSH BKN004 BKN015**
TEMPO 1909/1913 2SM -RA BR OVC002
 FM191400 09006KT P6SM VCSH SCT015 SCT035 BKN120
 FM192200 12005KT P6SM SCT025 BKN250=

TAF KCXO 191126Z **1912/2012 VRB03KT 4SM -RA BR BKN005 BKN060**
TEMPO 1912/1914 SCT005 BKN060
 FM191400 09006KT P6SM VCSH BKN015 BKN060 BKN250
 FM192200 12005KT P6SM VCTS SCT025CB BKN060 BKN250
 FM200000 10004KT P6SM SCT020
 FM200600 08004KT P6SM BKN020=

TAF AMD KCXO 191302Z **1913/2012 VRB03KT 3SM -RA BR BKN005 BKN060**
TEMPO 1913/1914 SCT005 BKN060
 FM191400 09006KT P6SM VCSH BKN015 BKN060 BKN250
 FM192200 12005KT P6SM VCTS SCT025CB BKN060 BKN250
 FM200000 10004KT P6SM SCT020
 FM200600 08004KT P6SM BKN020=

TAF AMD KCXO 191343Z **1914/2012 09006KT P6SM VCSH SCT015 BKN060 BKN250**
TEMPO 1914/1915 2SM +RA BKN025
 FM192200 12005KT P6SM VCTS SCT025CB BKN060 BKN250
 FM200000 10004KT P6SM SCT020
 FM200600 08004KT P6SM BKN020=