

Springtime Breezy Conditions

(Breezy Can Be Deadly)

April 6-7 and April 10-11, 2003

The months of March and April are especially noted for occasional periods of breezy weather that might not be handled perfectly by the models. This is due in part to the strong land/sea temperature contrast that occurs this time of the year, which enhances the sea breeze and results in stronger winds (especially along the coast).

On Sunday the 6th, one boater drowned in the Stick Marsh (northwest Indian River county) and a would be rescuer apparently suffered a heart attack and died.

The 7th also had a wind related incident. There were two near drownings in the ocean at Daytona Beach from what appears to be a rather strong [longshore current](#).

On the 10th, there was a drowning on a lake in Seminole county due to a capsized canoe.

On the 11th, a boater drowned on Blue Cypress Lake (northwest Indian River county).

April 6

The wind forecast for the 6th was southeast at 10 mph. At first glance, the [10Z XMR sounding](#) seems to support this. However, there were hints of a stronger gradient. The [12z TBW sounding](#) showed 20 knot winds at 500 feet and 25 knots at 1500 feet. The [12z 6 April surface analysis](#) shows that the pressure gradient was indeed tighter to our west. The [00z 7Apr surface analysis](#) showed rather strong high pressure over the northeast U.S. and developing low pressure in the western Gulf of Mexico, with tightened gradient extending across all of Florida.

The winds at MLB and VRB showed winds were closer to 15 mph (and likely much more gusty as there are currently some limitations on the ability of ASOS to depict gusts).

METAR KMLB 061553Z 12013KT 10SM SCT030 28/22 A3010 RMK AO2 SLP190
T02780222 \$

METAR KMLB 061653Z 13011KT 10SM SCT030 28/22 A3009 RMK AO2 SLP188
T02780217 \$

METAR KMLB 061753Z 12016KT 10SM CLR 27/22 A3008 RMK AO2 SLP184 T02720222
10283 20211 58004 \$

SPECI KMLB 061813Z 12014KT 10SM VCTS FEW075 27/22 A3008 RMK AO2 TSB07 \$

SPECI KMLB 061828Z 12014KT 10SM BKN075 27/22 A3008 RMK AO2 TSB07E22 \$

METAR KMLB 061853Z 11014KT 10SM SCT030 27/22 A3007 RMK AO2 TSB07E22
SLP183 VCSH T02720222 \$

SPECI KMLB 061902Z AUTO 11013KT 10SM VCTS SCT080 27/23 A3008 RMK AO2 LTG
DSNT SW TSB1856 \$

SPECI KMLB 061932Z AUTO 11013KT 10SM SCT080 27/23 A3006 RMK AO2 LTG DSNT SW TSB1856E26 \$

METAR KMLB 061953Z AUTO 11013KT 10SM FEW080 27/23 A3006 RMK AO2 TSB1856E26 SLP177 T02720228 \$

METAR KMLB 062053Z 10015KT 10SM CLR 27/23 A3004 RMK AO2 SLP172 T02720228 58012 \$

METAR KVRB 061553Z 14013G18KT 10SM FEW018 28/23 A3009 RMK AO2 SLP189 T02830228

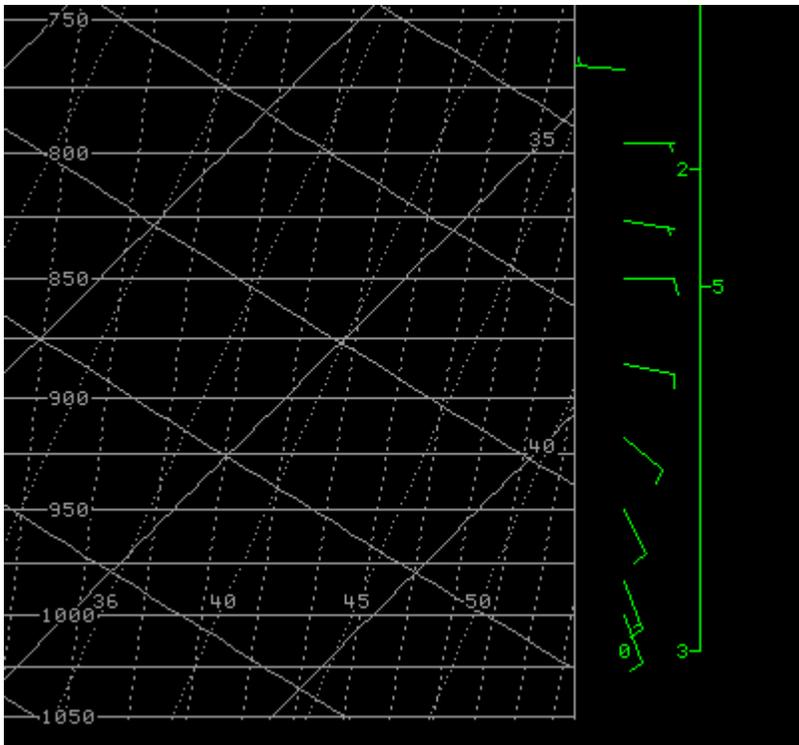
METAR KVRB 061653Z 12013KT 10SM SCT020 28/23 A3009 RMK AO2 SLP187 T02780228

METAR KVRB 061753Z 14015G19KT 10SM SCT020 28/23 A3007 RMK AO2 SLP180 T02830228 10289 20189 58005

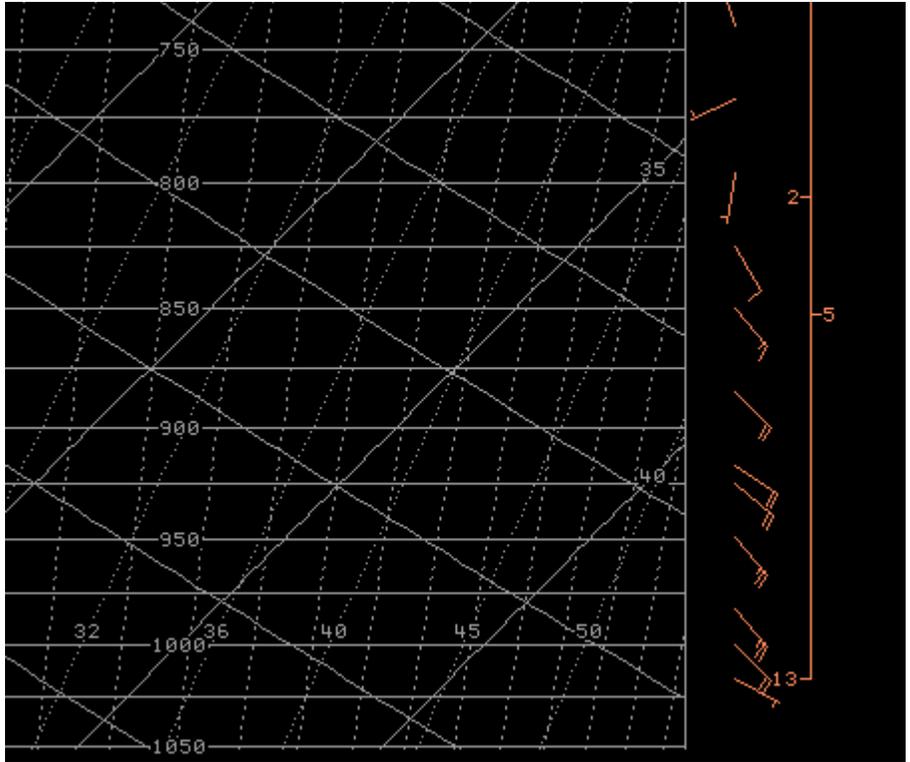
METAR KVRB 061853Z 12012KT 10SM FEW019 28/23 A3006 RMK AO2 SLP179 T02830228

METAR KVRB 061953Z 12013KT 10SM CLR 28/23 A3005 RMK AO2 SLP174 T02830233

METAR KVRB 062053Z 12016KT 10SM CLR 27/23 A3003 RMK AO2 SLP168 T02720233 58013

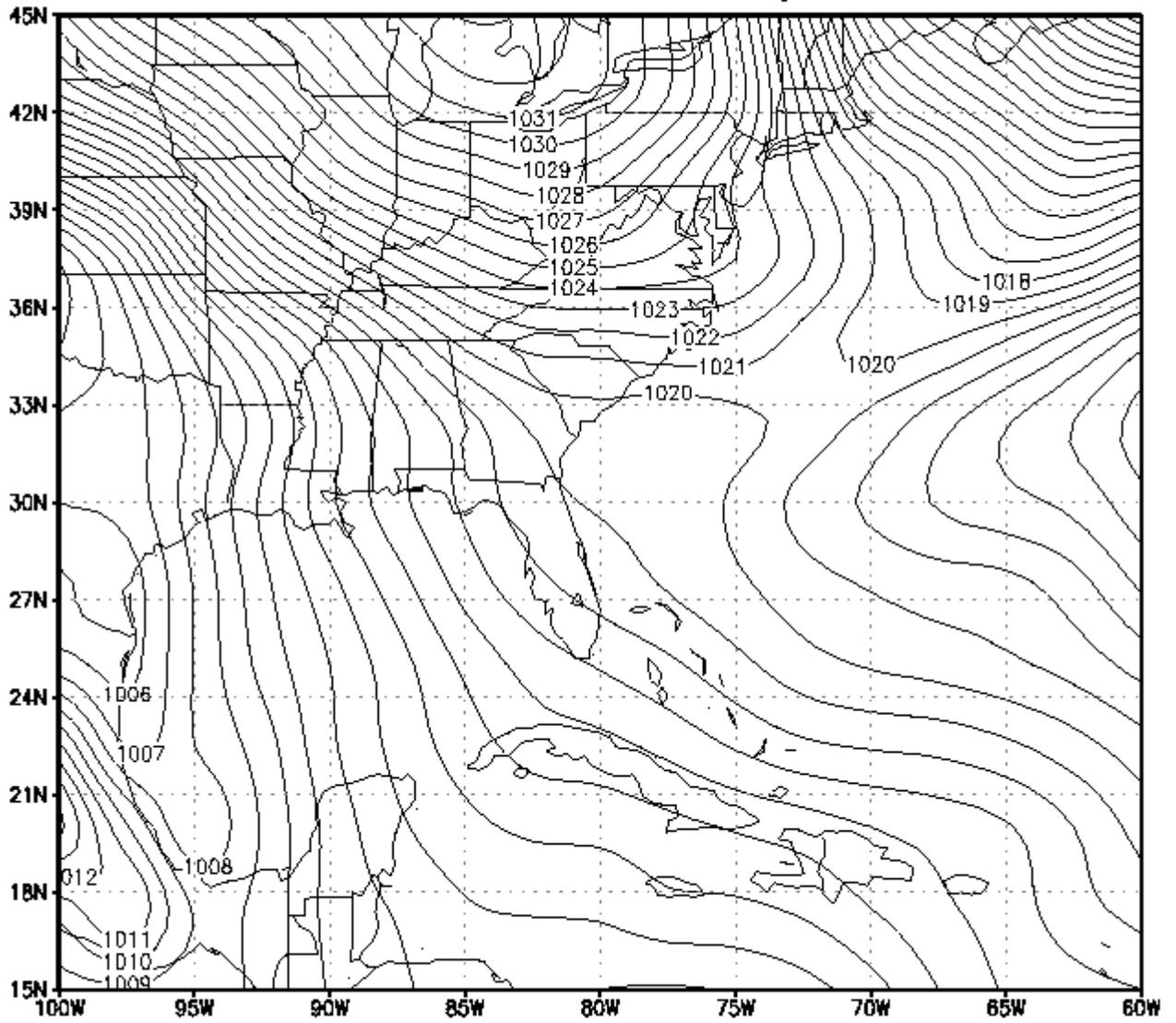


10Z XMR sounding 6 Apr 2003 (above)

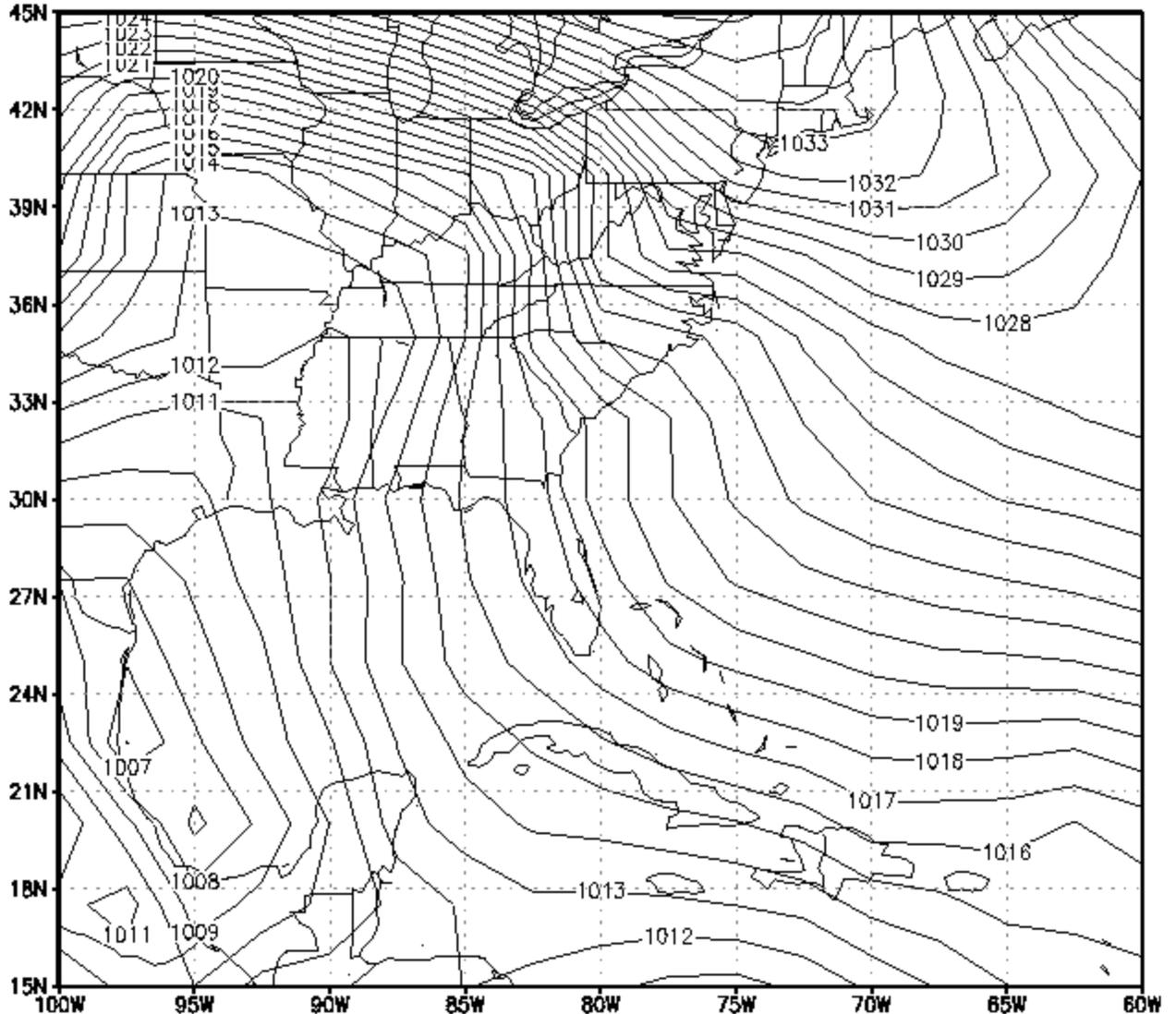


12z TBW sounding 6 Apr 2003 (above)

PRMSLmsl 12Z Sun 6apr2003



PRMSL 00Z Mon 7apr2003



April 7

The wind forecast for the 7th was 15 mph in the zones and 15 knots for the coastal waters. The [12z TBW sounding](#) showed winds at 500 feet around 20 knots while those at 1500 feet were over 30 knots. The [10z XMR sounding](#) showed similar winds speeds in the low levels. The [12z 7 April surface analysis](#) showed that the southeast gradient wind across the area would equate to the gradient between JAX-MIA which supports around 20 knots (~5 mb). The [00Z 8 Apr surface analysis](#) showed that the gradient had weakened some. However since the early morning surface gradient was tight and low level winds were strong, it was still a quite windy day along the coast, as evidenced by the MLB and TTS observations:

METAR KMLB 071653Z 13016G24KT 10SM SCT025 28/22 A3008 RMK AO2 SLP185
T02830217

METAR KMLB 071753Z 13017G22KT 10SM SCT040 28/22 A3007 RMK AO2 SLP182
T02830217 10283 20239 56013

METAR KMLB 071853Z 13017G22KT 10SM CLR 29/22 A3005 RMK AO2 SLP176
T02890217

METAR KMLB 071953Z 13017G23KT 10SM SCT040 28/22 A3003 RMK AO2 SLP167
T02830222

METAR KMLB 072053Z 14016G22KT 10SM CLR 28/21 A3002 RMK AO2 SLP165
T02780211 56017

METAR KMLB 072153Z 13012G18KT 10SM FEW040 27/21 A3002 RMK AO2 SLP166
T02720211

METAR KTTS 071355Z 15015G20KT 10SM SCT020 26/21 A3012 RMK [PK WND 15027/52](#)
C 4CU /4/ SLP200 8/100 9/400

METAR KTTS 071455Z 16015G21KT 10SM SCT020 26/22 A3014 RMK 4CU /4/ SLP206
8/100 9/400 52017

METAR KTTS 071555Z 15018G25KT 10SM SCT021 27/23 A3012 RMK [PK WND 15026/39](#)
N SCT021 V BKN 4CU /4/ SLP200 8/100 9/400

METAR KTTS 071655Z 15018G24KT 10SM FEW022 SCT090 28/22 A3011 RMK [PK WND 15027/10](#)
N 1CU /1/ 2AC /3/ SLP196 8/170 9/120

METAR KTTS 071755Z 14013G24KT 10SM FEW022 FEW090 28/21 A3009 RMK [PK WND 16025/13](#)
N 1CU /1/ 1AC /2/ SLP190 8/170 9/110 57017

METAR KTTS 071855Z 16017G24KT 10SM FEW022 FEW250 29/23 A3007 RMK [PK WND 15025/36](#)
S 15025/21 C MDT CU S-W-NW 1CU /0/ 2CS /0/ SLP183

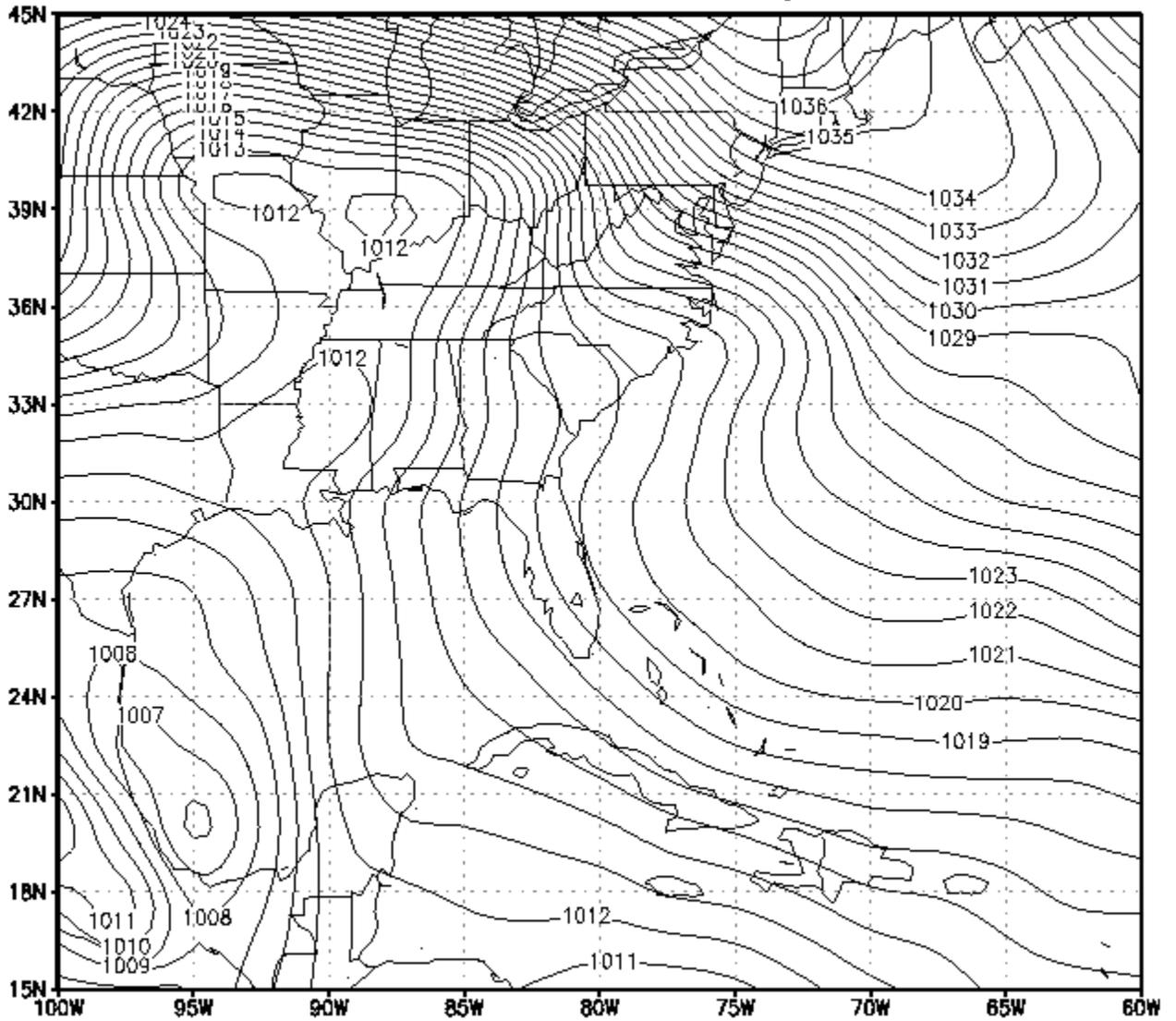
METAR KTTS 071955Z 14016G23KT 10SM FEW022 FEW160 28/21 A3005 RMK [PK WND 15025/42](#)
N MDT CU NW 1CU /0/ 1AC /0/ SLP176 8/270 9/110

METAR KTTS 072055Z 14013G21KT 10SM FEW022 FEW160 FEW250 28/20 A3003 RMK
MDT CU SW-W 1CU /0/ 1AC 1CS /0/ SLP171 8/278 9/111 56019

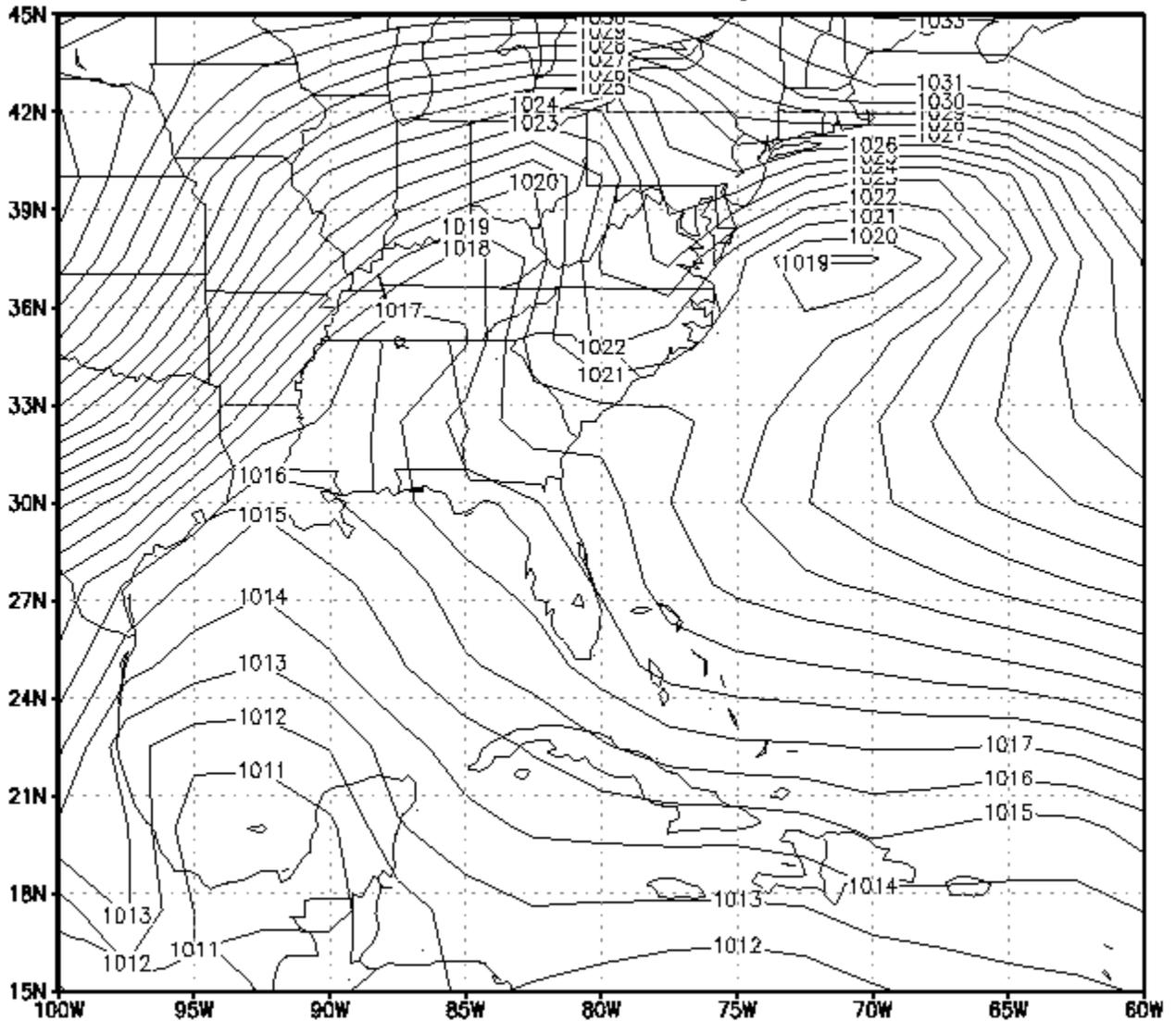
METAR KTTS 072155Z 15016G24KT 10SM FEW022 FEW160 27/21 A3003 RMK [PK WND 15025/08](#)
C 15025/10 N 1CU /0/ 1AC /0/ SLP169 8/170 9/110

10Z XMR sounding 7 April 2003 (above)

PRMSLmsl 12Z Mon 7apr2003



PRMSL 00Z Tue 8apr2003



April 10

The [18z surface analysis](#) showed a deepening surface low in the vicinity of the Carolina coast producing a strong west northwest gradient wind. The windy conditions were advertised for [several days](#), and a "caution on area lakes" was included in the zone forecast for the day on which the drowning occurred.

METAR KSFB 101353Z 29018G24KT 10SM BKN038 OVC048 16/07 A2986 RMK AO2 [PK WND 28026/1331 SLP111 T01560072](#)

METAR KSFB 101453Z 27016G23KT 10SM BKN055 16/07 A2987 RMK AO2 [PK WND](#)

28026/1425 SLP116 T01610072 53012

METAR KSFB 101553Z 28018G23KT 10SM FEW044 BKN055 17/07 A2987 RMK AO2 PK WND 28030/1511 SLP114 T01720067

METAR KSFB 101653Z 26017G26KT 10SM SCT055 18/05 A2985 RMK AO2 PK WND 27026/1650 SLP107 T01830050

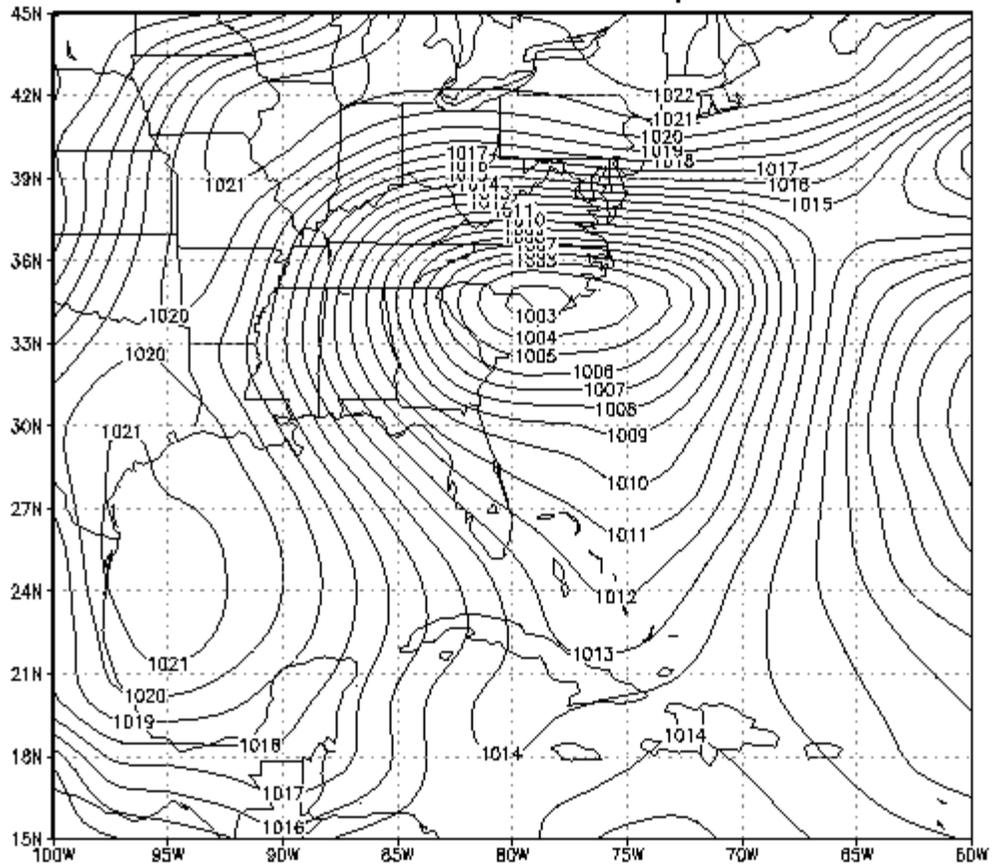
METAR KSFB 101753Z 27016G22KT 10SM SCT055 19/05 A2984 RMK AO2 PK WND 27029/1657 SLP103 T01890050 10194 20139 58013

METAR KSFB 101953Z 27016G24KT 10SM SCT055 19/05 A2981 RMK AO2 PK WND 25028/1918 SLP094 T01890050

METAR KSFB 102053Z 24016KT 10SM BKN060 OVC080 18/06 A2979 RMK AO2 SLP086 T01780056 58017

METAR KSFB 102153Z 24013G24KT 10SM -RA OVC047 16/08 A2979 RMK AO2 PK WND 26026/2131 RAB45 SLP087 P0000 T01560078

PRMSLmsl 18Z Thu 10apr2003



April 11

Windy conditions continued as a result of the slowly departing surface low. Again, a "caution on area lakes" was contained in the zone forecast.

HWOMLB

AMZ550-555-570-575-FLZ041-044>047-053-054-058-059-064-141-144-147-090300-

EAST CENTRAL FLORIDA HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE MELBOURNE FL
437 PM EDT TUE APR 8 2003

.DAY ONE...TONIGHT AND WEDNESDAY:

...STRONG TO SEVERE STORMS POSSIBLE THIS EVENING THROUGH EARLY WEDNESDAY MAINLY ORLANDO NORTHWARD...

A DEVELOPING LOW PRESSURE CENTER OVER THE SOUTHEAST UNITED STATES WILL SWING A STRONG COLD FRONT INTO THE EASTERN GULF OF MEXICO TONIGHT. WARM AND MOIST AIR AHEAD OF THE FRONT SHOULD FUEL A LINE OF STORMS...WHICH IS EXPECTED TO MOVE ACROSS THE NORTHERN HALF OF THE PENINSULA LATE TONIGHT AND EARLY WEDNESDAY.

IN ADDITION...A COLLISION OF THE EAST AND WEST COAST SEA BREEZE BOUNDARIES THIS EVENING SHOULD LEAD TO SCATTERED STORMS DEVELOPING...
SOME STRONG...MAINLY NEAR THE INTERSTATE 4 CORRIDOR.

INCREASING WIND FIELDS WITH THIS DEVELOPING WEATHER SYSTEM MAY CAUSE STORMS TONIGHT AND EARLY WEDNESDAY TO BECOME STRONG TO SEVERE WITH FREQUENT LIGHTNING...LARGE HAIL AND DAMAGING WINDS.

HEAVY RAINFALL IS ALSO POSSIBLE WITH 1 TO 2 INCH AMOUNTS COMMON AND LOCALLY HIGHER TOTALS POSSIBLE...ESPECIALLY ACROSS NORTHERN AREAS... GENERALLY FROM LAKE COUNTY ACROSS METRO ORLANDO INTO VOLUSIA COUNTY.

.DAYS TWO THROUGH SEVEN...WEDNESDAY NIGHT THROUGH TUESDAY:

THE COLD FRONT WILL SHIFT EAST OF THE AREA LATE WEDNESDAY. STRONG AND GUSTY WEST WINDS...**UP TO 30 MPH AT TIMES**...WILL OCCUR BEHIND THE COLD FRONT THROUGH THURSDAY...AND GRADUALLY SUBSIDE FRIDAY.

.SPOTTER CALL TO ACTION STATEMENT...

SPOTTERS ARE ADVISED TO SELF ACTIVATE IF WEATHER WATCHES OR WARNINGS ARE ISSUED. ALSO...PLEASE REPORT ANY RAINFALL TOTALS OF 2 INCHES OR MORE.

\$\$

RL

Longshore Current Fact Sheet

1. A longshore current, sometimes called a cross current, lateral current or Littoral current, flows parallel to the coastline.
 2. Everyone who has been in the water at the beach has experienced one. Let's say you go to the beach, put your blanket/chair at point "x" and enter the water there. Most always within 5 minutes you will be either north or south of point "x". This was caused by the longshore movement of water.
 3. A longshore current is simply caused by swells or wind waves that are not coming directly onshore. It is unusual not to have at least a slight longshore current.
 4. Though a longshore current is not as strong as a rip current, it can be very dangerous. A person standing on a sandbar can be pushed into deeper water. If you are not a good swimmer, you could drown as a result. Drownings have occurred due to the longshore current.
 5. Another danger of the longshore current is that you could be pushed along the coast and right into a rip current! This can occur when swells are impacting the area but local winds are moving water laterally along the beach.
 6. Check with the Beach Patrol about ocean hazards when arriving at the beach.
 7. Always swim near a lifeguard.
 8. Never try to swim directly against currents that occur at the beaches.
 9. If you find yourself moving northward or southward along the coast into deep water, remain calm and do not swim directly back against the current. Signal for help and try to swim at an angle to the current and back to shore.
 10. Avoid swimming near piers and jetties where seaward flowing rip currents could be strong.
-

Randy Lascody, 4/2003