

The CADRE Report



Event: 2021 IC37 North Americans
 Forecast Location: Newport, RI
 Forecast Date/Time: 0700 EDT, Sat Oct 02, 2021

- Summary:**
- **Bottom Line: SW Gradient wind backing/increasing thru midday, + thermals from land**
 - Big picture: High pressure has shifted to south of us, bringing SW gradient winds
 - a frontal system will pass across northern new England this PM, just pushing a few clouds into the area
 - Currently this morning, winds are 4-9 kts from the west
 - Winds will gradually back (shift left) this morning, and increase, until early afternoon
 - Expecting overall gradual persistent left shift until reaching max left by around 2-3pm or winds inside Bay of near 200
 - PM heating from land will aid this process of backing/increasing
 - careful with slow persistent shifts, as it may not make any large difference in 1 short race
 - Nature of the wind will feel a little less gusty than yesterday; little/no mixing of cooler air
 - however it will still be 'unstable' as it passes across heated land bringing thermal plumes (puffs)
 - there is still a little right wind shear today, but it won't have much impact on puff direction
 - The further left (SSW) the wind becomes, the more land will have shoreline effects (conv/div)
 - Offshore course will once again be quite different today, with SW breeze up to 15-20 kts
 - Some mid/high clouds will arrive from the north later today making it a little hazy but with little effect on winds.
 - Southerly swells from Hurricane Sam will begin to reach the south facing coast this PM
 - long period swells reaching up to 4-6 ft by tonight, some may filter up the Bay.

Sat Oct 2

General Weather

Sky Mostly sunny, a few clouds
Waves Increasing S swells up to 4-6 ft by tonight for south-facing coast
Temps Aftn High: 72 **Tides:** Low 10:48 AM
 Water Temp 67 High 5:22 PM

INSHORE COURSES

Time (EDT)	1000	1100	1200	1300	1400	1500	1600	1700
Wind Direction (mag)	240-260	230-250	220-240	210-230	210-230	200-220	210-230	210-230
Wind Speed (knots)	6-10	8-13	9-14	10-14	11-15	11-15	11-15	8-13
Gust (knots)								
Comments				backing increasing	peak winds	peak winds		

OFFSHORE COURSE

Time (EDT)	1000	1100	1200	1300	1400	1500	1600	1700
Wind Direction (mag)	250-270	240-260	220-240	210-230	210-230	210-230	210-230	210-230
Wind Speed (knots)	9-14	11-15	14-18	14-18	15-19	15-19	13-17	13-18
Gust (knots)					22	22		
Comments					peak winds	peak winds		

Forecast Confidence

- Confidence is high in the forecast today with good agreement among models
- Expecting wind speeds at least to mid teens, esp offshore, but there is a chance for high teens even inside the Bay, esp later afternoon
- Max left today is 180-190, max right is early in the day at 260-270

**Outlook
Sun Oct 3**

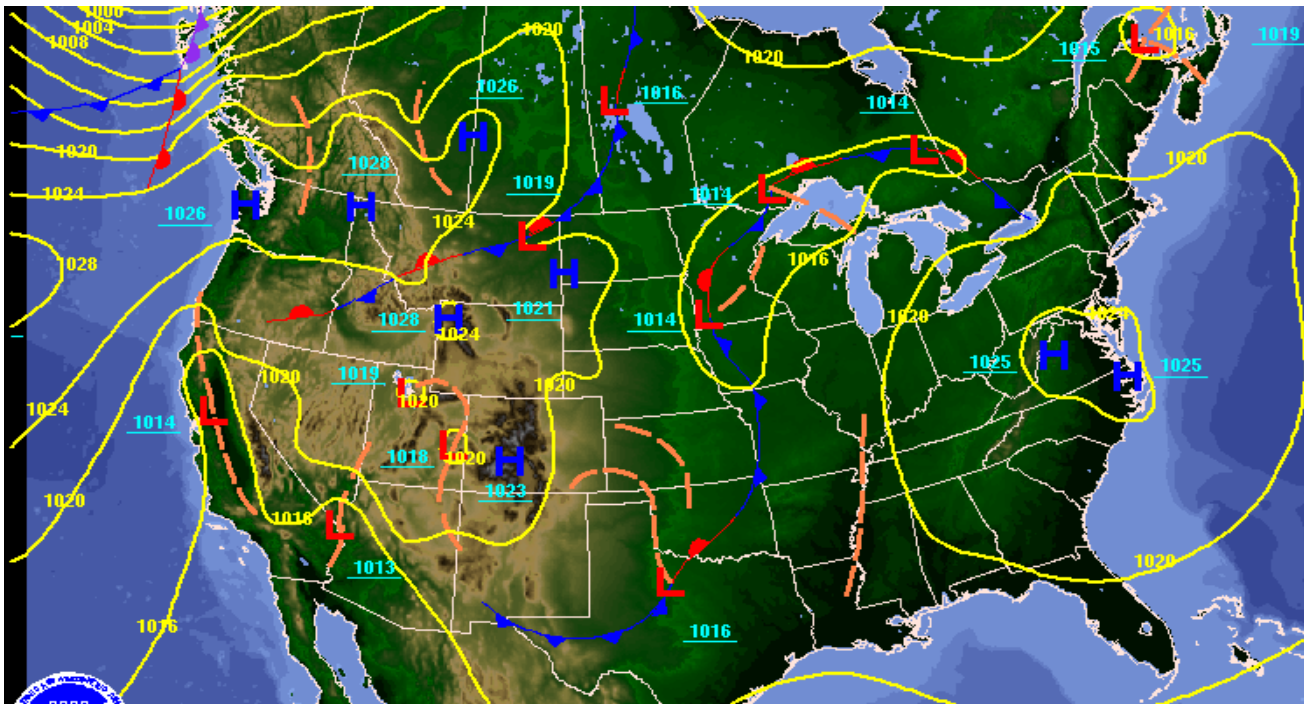
Moist SW-SSW flow continues into southern New England, while a backdoor cold front pushes down frm the N. The front should remain north of us until the evening time. Cloud cover will be on an increasing trend, with moderate S to SSW breeze.

Time (EDT)	0800	1000	1200	1400	1600
Wind Direction (mag)	220-240	210-230	190-210	190-210	190-210
Wind Speed (knots)	4-8	3-7	7-10	7-11	7-11
Gust (knots)					

Weather

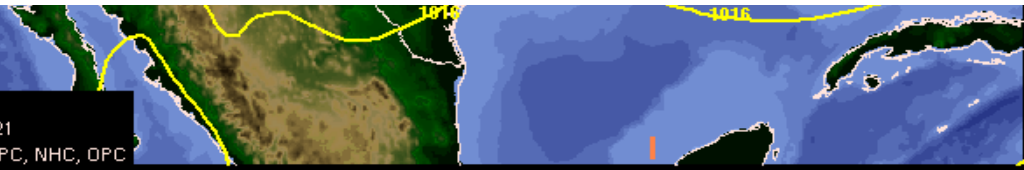
Sky Mostly sunny early, turning cloudy PM.
Temps High 74

Today's Weather Map





0600Z SURFACE ANALYSIS
DATE: SAT OCT 02 2021
ISSUED: 0727Z SAT OCT 02 2021
BY WPC ANALYST ZAVADOFF
COLLABORATING CENTERS: WPC, NHC, OPC



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