Tomorrow may be a very promising day for Oceanside, Moolack, Sea Lion Caves or Petersen's if we can find some no rain windows.

**General advice**: Look at the wider regional perspective using observations and actual weather reports and determine the complexity of the situation. The simpler the system (less competing factors) or more dominant the system (large coherent wind fields) the easier it should be to predict. Determine if a definite trend will occur past your flying time. Look at a forecast, if it is promising; corroborate that with real time observations as the flying day approaches.

# **Site Requirements**

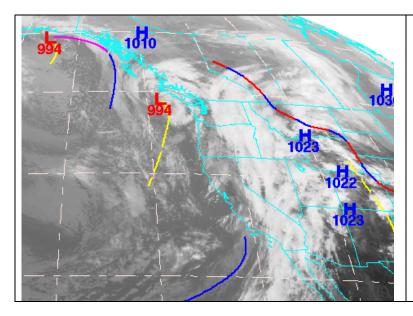
Oceanside: smoother W or SW winds at 10-20 mph and rain free window. Marine buoys should be at 12-15 kts.

Sea Lion Caves requires WSW to WNW 8 -15 mph surface winds, rain free window and tides out.

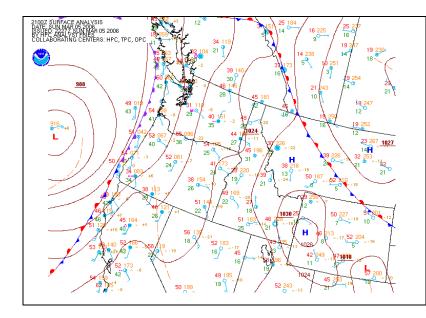
Newberg: SW 5-11 surface winds, rain free window and a .02 pressure differential between Corvallis and Portland.

Petersen's requires 8-11 mph surface winds, rain free window and .03 pressure differential between Salem and Eugene.

Current Conditions Regional Perspective: 12 noon 00 UTC

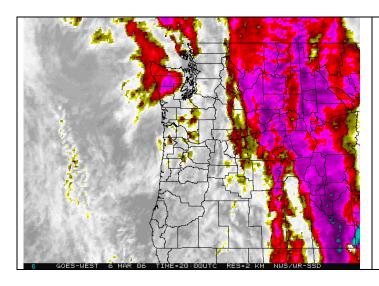


The Low and accompanying front is off of the Washington coastline. It is moving south. There is lighter cloud cover associated with outskirts of the low near Oregon.



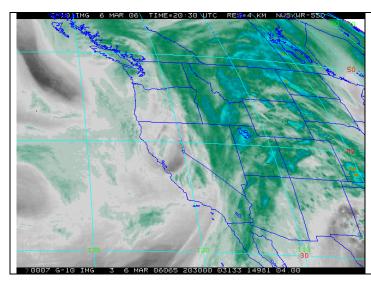
## 12:00 noon

In fact, the Low has moved down the coast some since the last satellite image was taken and is now creating some high winds and some persistent cloud cover and rain showers in the Willamette Valley (I'm looking out my window)



## 12:00 noon

The infrared image shows some of those high-top clouds and showers around Corvallis and coming onto Portland. But looking out to see shows low-top clouds



The water vapor images shows how much open blue sky there really is. The light green off the coast shows thin widespread clouds. However, see that tongue of black headed our way? That's clear weather! The water vapor loop- this image done in sequence animation - shows its moving toward us.

#### 1200 PM PST MON MAR 06 2006

NOTE: "FAIR" INDICATES FEW OR NO CLOUDS BELOW 12,000 FEET WITH NO SIGNIFICANT WEATHER AND/OR OBSTRUCTIONS TO VISIBILITY.

ORZ001>013-062100-NORTHWEST OREGON

| ~          |              | ~    | /     |        |     |      |         |        |         |
|------------|--------------|------|-------|--------|-----|------|---------|--------|---------|
| CITY       |              | SKY  | / WX  | TMP    | DP  | RH   | WIND    | PRES   | REMARKS |
| ASTORIA    |              | CLOU | JDY   | 49     | 42  | 77   | SW17G26 | 29.74R |         |
| NEWPORT    |              | CLO  | JDY   | 46     | 43  | 87   | SW20    | 29.85S | FOG     |
| PORTLAND   |              | LGT  | RAIN  | 50     | 41  | 71   | S21     | 29.80R |         |
| VANCOUVER  | WA           | LGT  | RAIN  | 50     | 40  | 68   | S12G24  | 29.81R |         |
| SCAPPOOSE  |              | LGT  | RAIN  | 48     | 41  | 76   | SW12G18 | 29.80R |         |
| HILLSBORO  |              | LGT  | RAIN  | 47     | 41  | 80   | S15     | 29.81R |         |
| AURORA     |              | LGT  | RAIN  | 50     | 41  | 71   | S15G28  | 29.84R |         |
| MCMINNVILI | ĿΕ           | LGT  | RAIN  | 49     | 43  | 80   | S23     | 29.83R |         |
| SALEM      |              | LGT  | RAIN  | 45     | 40  | 82   | S16G24  | 29.84R |         |
| CORVALLIS  |              | PTSU | JNNY  | 50     | 41  | 71   | SW10    | 29.84S |         |
| EUGENE     | <b>PTSUN</b> | INY  | 52 40 | 63 S24 | G31 | 29.8 | 36R     |        |         |

Note the rising pressure in Astoria and all across Western Oregon. Rising pressure almost always mean fairer weather and more sunshine. You can see it coming in the satellite images above, right?

Now, let's look at some FORECASTS

901 AM PST MON MAR 06 2006

SPOT TEMPERATURES AND PROBABILITIES OF MEASURABLE PRECIPITATION ARE FOR TODAY...TONIGHT...TUESDAY...TUESDAY NIGHT...AND WEDNESDAY.

ORZ001-WAZ021-062300-

NORTH OREGON COAST-SOUTH WASHINGTON COAST-INCLUDING THE CITIES OF...ASTORIA...CANNON BEACH...TILLAMOOK... PACIFIC CITY...NORTH COVE...RAYMOND...LONG BEACH...NASELLE 901 AM PST MON MAR 06 2006

.TODAY...SHOWERS AND A SLIGHT CHANCE OF THUNDERSTORMS. WINDY. HIGHS AROUND 50. SOUTH WIND 20 TO 30 MPH WITH GUSTS TO 45 MPH AT HEADLANDS AND BEACHES...SHIFTING TO THE SOUTHWEST 15 TO 20 MPH IN THE AFTERNOON.

.TONIGHT...SHOWERS. LOWS AROUND 40. SOUTHWEST WIND 10 TO 15 MPH. .TUESDAY...SHOWERS LIKELY. HIGHS 45 TO 50. SOUTHWEST WIND 10 TO 15 MPH.

.TUESDAY NIGHT...RAIN...BREEZY. LOWS AROUND 40. SOUTHWEST WIND 10 TO 15 MPH INCREASING TO 10 TO 25 MPH AFTER MIDNIGHT.

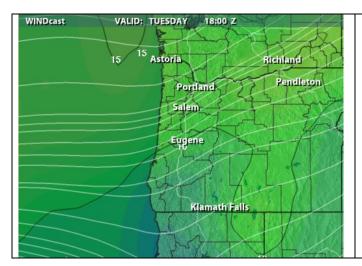
ORZ008-062300-

SOUTH WILLAMETTE VALLEY-

INCLUDING THE CITIES OF...CORVALLIS...ALBANY...EUGENE...SPRINGFIELD 901 AM PST MON MAR 06 2006

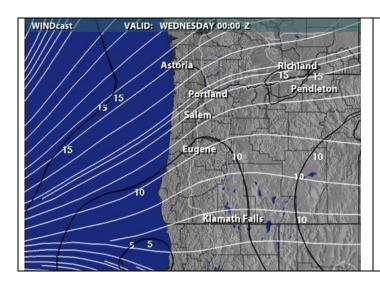
.TODAY...SHOWERS. HIGHS AROUND 50. SOUTH WIND 10 TO 20 MPH. .TONIGHT...SHOWERS. LOWS AROUND 35. SOUTH WIND 5 TO 15 MPH.

.TUESDAY...SHOWERS LIKELY. HIGHS AROUND 50. SOUTH WIND 5 TO 10 MPH. TUESDAY NIGHT...RAIN LIKELY. LOWS AROUND 40. SOUTHWEST WIND 5 TO 15 MPH.



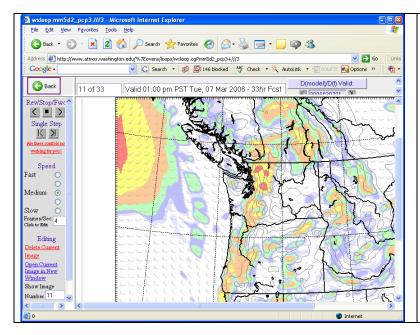
## Forecast for 10 am Tuesday

Wow, this Graphical wind forecast for 10 am Tuesday shows west wind at 10-15 on the coast and WSW in the valley. Note how the wind lines cross the isobars. The isobars are widely spaced. The greenish hue means greater 10 mph winds



# Forecast for 4:00 pm Tuesday

Note that the isobars have changed directions slightly so now the wind lines are no longer crossing them in the center of the image. They have also changed directions from west to southwest and have necessarily weakened. Note that image has changed to blue – or less than 10 mph.



The MM5 computer model forecast shows Northwest wind at 1:00 pm Tuesday and eventually turning WSW in the evening. This is a surprise! But lets confirm this with observations later.



Here is Intellicast forecast for rain at 10:00 am Tuesday. Green means insignificant rain, blue means no rain. That matches what we see in water vapor satellite images and the MM5

It may be real good flying in the morning at Petersen's, Oceanside, Newberg or Sea Lion Caves or even Sollie-Kilches. Let's look at the webcams, radar, and marine buoys and Airport AWOS winds tomorrow morning.

Good Morning! Yep, it's early and I'm still making a last minute decision. Here are the 6:00 am Airport Observations.

OREGON REGIONAL WEATHER ROUNDUP NATIONAL WEATHER SERVICE PORTLAND OR 600 AM PST TUE MAR 07 2006

NOTE: "FAIR" INDICATES FEW OR NO CLOUDS BELOW 12,000 FEET WITH NO SIGNIFICANT WEATHER AND/OR OBSTRUCTIONS TO VISIBILITY.

ORZ001>013-071500-NORTHWEST OREGON

| CITY         | SKY/WX | TMP | DP | RH | WIND | PRES   | REMARKS |
|--------------|--------|-----|----|----|------|--------|---------|
| ASTORIA      | CLOUDY | 42  | 41 | 96 | SE3  | 29.98R |         |
| NEWPORT      | MOCLDY | 45  | 41 | 87 | W7   | 30.06R |         |
| PORTLAND     | CLOUDY | 44  | 39 | 82 | S7   | 30.02R |         |
| VANCOUVER WA | CLOUDY | 44  | 39 | 82 | CALM | 30.01R |         |
| SCAPPOOSE    | CLOUDY | 41  | 38 | 89 | S3   | 30.01R |         |
| HILLSBORO    | MOCLDY | 39  | 36 | 89 | CALM | 30.01R |         |
| AURORA       | CLOUDY | 43  | 40 | 89 | S9   | 30.03R |         |
| MCMINNVILLE  | CLOUDY | 41  | 39 | 93 | SW6  | 30.03R |         |
| SALEM        | CLOUDY | 41  | 38 | 89 | S9   | 30.02R |         |
| CORVALLIS    | MOCLDY | 43  | 37 | 81 | S6   | 30.03R |         |
| EUGENE       | CLOUDY | 40  | 38 | 93 | S6   | 30.05R |         |
| \$\$         |        |     |    |    |      |        |         |

Rising Pressure mean fairer weather coming.

#### Conditions at Buoy 46029 as of (5:50 am PST) 1350 GMT on 03/07/2006: Wind Direction (WDIR): W (270 deg true) Wind Speed (WSPD): 11.7 kts Wind Gust (GST): 13.6 kts Wave Height (WVHT): 9.5 ft Dominant Wave Period 10 sec (DPD): Average Period (APD): 7.1 sec Mean Wave Direction W (262 deg (MWDIR): true) **Atmospheric Pressure** 29.95 in (PRES): Pressure Tendency +0.06 in (

Rising)

46.9 °F

44.1 °F

41.2 °F

(PTDY):

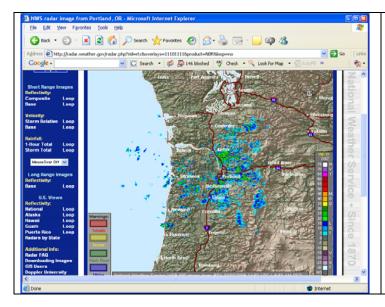
(WTMP):

Air Temperature (ATMP):

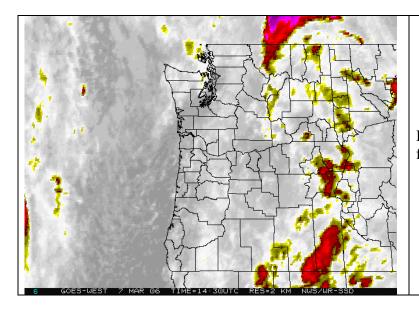
Water Temperature

Wind Chill (CHILL):

The wind speed looks good. 11 knts translates to 14 mph on the surface. Remember, Oceanside is at 400 feet where winds are higher. Also, note wave direction. That means that a west wind has been persistent enough to create west waves.

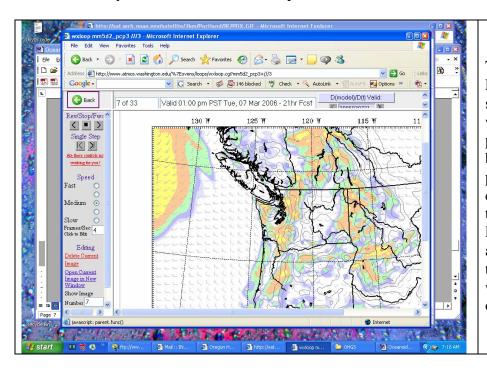


The Radar shows no significant rain on the coast. Oh, here is where the NW wind is too. If you hit loop function to see the movement of the clouds the are from the NW. There are quite a few squalls being created and dissipating though.



However, the next major front is one day away

Out of curiosity lets check the MM5 computer model to see if it has corrected itself



The MM5
Forecast still shows Northwest winds at 1:00 pm. It appears to be ridge of high pressure off the coast Canada on the heels of the low that has already passed through. The wind is flowing off the sides

Here is the text based forecast. NOAA thinks the MM5 is wrong. Note the rain and wind will increase later....so if we fly the coast....we better leave now.

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403 AM PST TUE MAR 7 2006
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SPOT TEMPERATURES AND PROBABILITIES OF MEASURABLE PRECIPITATION ARE FOR TODAY...TONIGHT...WEDNESDAY...WEDNESDAY NIGHT...AND THURSDAY.

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ORZ001-WAZ021-071900-
NORTH OREGON COAST-SOUTH WASHINGTON COAST-
INCLUDING THE CITIES OF...ASTORIA...CANNON BEACH...TILLAMOOK...
PACIFIC CITY...NORTH COVE...RAYMOND...LONG BEACH...NASELLE
403 AM PST TUE MAR 7 2006
```

.TODAY...SHOWERS LIKELY IN THE MORNING...THEN A CHANCE OF SHOWERS IN THE AFTERNOON. HIGHS 45 TO 50. SOUTHWEST WIND 10 TO 15 MPH.

### .TONIGHT...RAIN. LOWS AROUND 40. SOUTH WIND 10 TO 20 MPH.

Here is Marine Buoy Observation for Cape Lookout.....

Conditions at 46089 as of (6:50 am PST) 1450 GMT on 03/07/2006:

Wind Direction (WDIR): NW (320 deg true)

Wind Speed (WSPD): 15.5 kts

Wind Gust (GST): 19.4 kts

Yep, it's a Cape Lookout Day too.....How are tides?

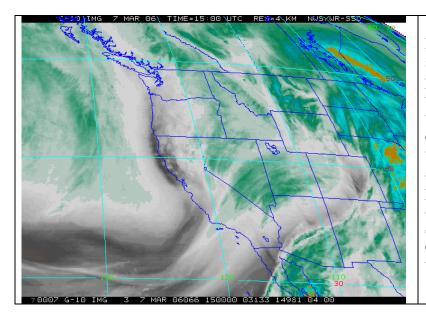
03/07/2006 Tue 06:06AM LST 7.7 H 01:43PM LST 0.5 L 09:07PM LST 5.6 H

Low tide is at 1:43 pm. Oh well, I can't go there because its abit too much for my students.

Here is what it actually looks like at Oceanside



The picture looks pretty squally. Though it will probably improve because of rising pressures, it's a little chancy to assume we won't have to deal with them.



Here is reason why the sky doesn't look as promising. Remember that tongue of clear weather we saw yesterday bearing down on us? It missed us went to southern Oregon and California! At this point, we know its flyable at Oceanside and most low SW sites. So, now the question, which will give us the better experience.

Lets look check the weather channel's hourly Petersen's forecast. Its look real good actually. The danger of getting rained on or dealing with squalls is much less in the valley than on the coast.

| 8am  | Few Showers<br>42°F | 37°F           | 30%   | 38°F | 86% | From SSW 8<br>mph  |
|------|---------------------|----------------|-------|------|-----|--------------------|
| 9am  | Few Showers<br>43°F | 38°F           | 30%   | 39°F | 86% | From SSW 9<br>mph  |
| 10am | Few Showers<br>44°F | 39°F           | 30%   | 39°F | 83% | From SSW<br>10 mph |
| 11am | Few Showers<br>45°F | 40°F           | 30%   | 39°F | 79% | From SSW<br>10 mph |
| 12pm | Few Showers<br>45°F | 40°F           | 30%   | 39°F | 79% | From SW 10<br>mph  |
| 1pm  | Few Showers<br>46°F | 41°F           | 30%   | 38°F | 74% | From SW 10<br>mph  |
| 2pm  | Few Showers<br>47°F | 43°F           | 30%   | 37°F | 68% | From SW 9<br>mph   |
| 3pm  | Few Showers<br>48°F | 44°F           | 30%   | 37°F | 66% | From WSW 9<br>mph  |
| 4pm  | Few Shower 48°F     | rs <b>44</b> ° | F 30% | 37°F | 66% | From WSW<br>9 m    |

OREGON REGIONAL WEATHER ROUNDUP NATIONAL WEATHER SERVICE PORTLAND OR 800 AM PST TUE MAR 07 2006

NOTE: "FAIR" INDICATES FEW OR NO CLOUDS BELOW 12,000 FEET WITH NO SIGNIFICANT WEATHER AND/OR OBSTRUCTIONS TO VISIBILITY.

ORZ001>013-071700-NORTHWEST OREGON

| CITY         | SKY/WX   | TMP | DP | RH  | WIND | PRES   | REMARKS |
|--------------|----------|-----|----|-----|------|--------|---------|
| ASTORIA      | PTSUNNY  | 42  | 42 | 100 | CALM | 30.03R |         |
| NEWPORT      | PTSUNNY  | 43  | 39 | 87  | CALM | 30.10R |         |
| PORTLAND     | LGT RAIN | 44  | 39 | 82  | SW6  | 30.06R |         |
| VANCOUVER WA | CLOUDY   | 44  | 39 | 82  | S3   | 30.05R |         |

| SCAPPOOSE   | CLOUDY   | 42 | 38 | 85 | SW5  | 30.05R |
|-------------|----------|----|----|----|------|--------|
| HILLSBORO   | LGT RAIN | 40 | 38 | 93 | CALM | 30.06R |
| AURORA      | LGT RAIN | 42 | 40 | 92 | s7   | 30.07R |
| MCMINNVILLE | CLOUDY   | 42 | 39 | 89 | SW6  | 30.08R |
| SALEM       | PTSUNNY  | 42 | 39 | 89 | S8   | 30.07R |
| CORVALLIS   | MOSUNNY  | 45 | 37 | 76 | S7   | 30.07R |
| EUGENE      | CLOUDY   | 41 | 38 | 89 | S9   | 30.10R |
| \$\$        |          |    |    |    |      |        |

Note the .03 pressure differential between Corvallis and Salem. The pressure is rising too.

Lets check the coast weather one more time...



Still no blue sky.....

Let's go to Petersens!

Be there as soon as you can! Bring a long rope to tie down your glider, your boots and a lunch.

### **Petersens site report:**

Upon arrival we are met with SW winds at 15 gusting to 19. Sun and light thermals create a gust factor of 4 seconds. Two pilots have no problem benching up to the main butte. Good soaring for 3 hours. One reports using thermals for assistance in getting higher. At 3:00 pm, a major squall moves in and showers on the butte. The wind lightens up considerably and turns west. At 4:00 pm even some light northwest occurs, but mostly it stays west. The day is much to west for novices trying to soar Petersen's . The terrain is much too close for nothing but excellent control technique skills in this kind of bouncy and sinky air.

#### Andersen's site report:

Two valley pilots commit to the 2 hour drive to Cape Lookout. They arrive in the early morning to find very light conditions in a slight NW wind. Cloud movement is northwest and the tide is going out. Good timing for a landing zone but the wind won't cooperate. The tide is forecasted to be 01:43PM LST 0.5 L 09:07PM LST 5.6 H. They have determination and patience to wait till 3:00 pm, when a perfectly soarable NW starts to blow. One pilot report's flying with greatest number of eagles ever. There is still adequate beach to land on by 6:30 pm. Current sand levels allow a 4.0 foot high tide and there still will be land-able beach. This can change anytime though based on much beach is built or destroyed by waves.

### Conclusion

It is frequently soarable at Petersen's and Oceanside when there is high pressure (in this case it appears to be a ridge) off the coast Canada and we have high lapse rates and it is lighter wind in the valley. West-northwest wind on the northern Oregon coast steers west when crossing the coast range and valley. Local thermal updrafts up the south side of petersen's add to the southerly component at launch at Petersen's. These conditions at Petersen's are great for intermediate pilots wishing to improve and advanced pilots. The lighter but soarable conditions at Cape Lookout might have been ideal for those wishing a first flight there.

## Days wind and pressure

**KEUG** 072354Z 25011KT 10SM FEW030 BKN041 OVC050 09/04 A3017 AO2 CIG 030 RNW 34 SLP220 60001 T00940039 10111 20072 51007

**KCVO** 072355Z AUTO 28012G20KT 10SM CLR 11/04 A3017 AO1 60004 10130 20090 401300060 52007

**KSLE** 072356Z 28010KT 10SM FEW023 BKN035 OVC043 09/05 A3015 AO2 RAE14 SLP211 P0002 60014 T00890050 10100 20067 53004

**KEUG** 072254Z 20009KT 10SM FEW050 BKN070 10/05 A3017 AO2 RAE38 SLP219 P0000 T01000050 **KCVO** 072255Z AUTO 30005KT 10SM BKN029 10/05 A3015 AO1 P0004 **KSLE** 072256Z 25006KT 8SM -RA BKN023 OVC033 07/05 A3015 AO2 SLP210 P0010 T00720050

**KCVO** 072235Z AUTO 29010G19KT 9SM FEW001 BKN030 OVC040 09/04 A3016 AO1 P0003

KSLE 072224Z 00000KT 5SM +RA BKN025 OVC033 07/04 A3014 AO2 P0006

**KEUG** 072154Z 21009KT 10SM -RA FEW029 BKN035 OVC044 09/04 A3016 AO2 RAB42 SLP214 P0000 T00890039

**KCVO** 072215Z AUTO 28008KT 10SM SCT030 12/04 A3015 AO1 **KSLE** 072216Z 26009G16KT 2 1/2SM +RA BKN025 BKN032 OVC039 07/04 A3015 AO2 P0003

KCVO 072155Z AUTO 24008KT 9SM FEW045 12/04 A3015 AO1

KCVO 072135Z AUTO 24009KT 10SM FEW029 SCT041 BKN048 12/04 A3014 AO1

KCVO 072015Z AUTO 26008KT 9SM FEW033 SCT040 12/04 A3014 AO1

KCVO 071935Z AUTO 23009KT 10SM FEW055 FEW070 11/03 A3014 AO1

KCVO 071915Z AUTO 22008KT 10SM CLR 11/04 A3014 AO1

KCVO 071835Z AUTO 19007KT 10SM FEW025 SCT035 11/04 A3013 AO1

KCVO 071815Z AUTO 20007KT 10SM FEW021 SCT035 SCT060 11/04 A3013 AO1

**KEUG** 071754Z 17007KT 10SM SCT018 BKN075 07/04 A3015 AO2 SLP211 60001 T00720044 10072 20039 51025

**KCVO** 071755Z AUTO 21008KT 10SM FEW019 SCT035 BKN041 10/04 A3013 AO1 10100 20060 52027

**KSLE** 071756Z 19012KT 10SM SCT040 08/04 A3011 AO2 SLP198 60000 T00780044 10078 20050 51022

KCVO 071735Z AUTO 22004KT 10SM SCT041 09/04 A3012 AO1 KCVO 071715Z AUTO 00000KT 10SM CLR 09/04 A3011 AO1 **KCVO** 071655Z AUTO 19004KT 10SM CLR 08/04 A3011 AO1 **KSLE** 071656Z 19007KT 10SM SCT037 BKN095 07/04 A3010 AO2 SLP194 T00670039

KEUG 071654Z 18008KT 10SM FEW020 SCT035 BKN055 06/04 A3013 AO2 SLP204 T00610039 KCVO 071635Z AUTO 18007KT 10SM CLR 08/04 A3010 AO1 KCVO 071615Z AUTO 18007KT 10SM CLR 07/03 A3009 AO1

**KEUG** 071554Z 16008KT 10SM SCT030 BKN055 OVC085 05/03 A3010 AO2 SLP193 T00500033 **KCVO** 071555Z AUTO 18006KT 10SM FEW037 07/03 A3007 AO1 **KSLE** 071556Z 18007KT 10SM BKN065 06/04 A3007 AO2 RAB1458E39 SLP184 P0000 T00560039