

From: [REDACTED]
To: [REDACTED]
Subject: [REDACTED]
Date: Thursday, March 15, 2018 3:09:12 PM
Attachments: [carb_icingforERA18LA101case.jpg](#)

Here ya go... this is just using the METAR... but if you use the sounding lowest at 4.8 C temp... then dew point is -3.3 C... gives dew point depression of 8.1 C... so even closer to the "serious icing... any power" part...

P2

From: Rayner Brian
Sent: Thursday, March 15, 2018 2:59 PM
To: Suffern Paul [REDACTED]
Subject: [REDACTED]

Dood,

You are the man! So, how do you calculate the "dew point depression" and where do you come in on the chart, over?

b

From: Suffern Paul
Sent: Thursday, March 15, 2018 2:15 PM
To: Rayner Brian [REDACTED]
Subject: [REDACTED]

So based on the METAR from the 13th I come up with "serious icing in descent power"... Made an upper sounding from a weather model site for 1500 UTC/1100 EDT and it matches showing the possibility of carb below 2,000 ft. I included the text if you want data points between 0 and 200 feet msl. Here are the metars:

METAR KCPK 131555Z AUTO 31016G21KT 10SM CLR 06/M05 A2988 RMK AO2 T00631046=

METAR KCPK 131535Z AUTO 29015G21KT 10SM CLR 06/M04 A2988 RMK AO2 T00641040=

METAR KCPK 131515Z AUTO 29012G21KT 10SM CLR 06/M04 A2987 RMK AO2 T00561044=

On top of all that definitely some gusty winds as well... so that likely would compound any carb issues especially for training flight if not expecting it?

Let me know what else ya need!

Paul2

New Carburettor icing-probability chart

To use this chart:

- obtain the temperature and dew point
- calculate the difference between the two. This is the 'dew point depression'
- for example, if the temperature is 12° C **①** and the dew point is 2° the dew point depression will be 10° **②**
- for icing probability, refer to the shading legend appropriate to the intersection of the lines **③**
- for relative humidity, refer to the right hand scale **④**

To work out dew point depression:

$$\text{Temp} \text{ Minus } \text{Dew Pt.} = \text{Dew Pt. Depression}$$

