

Aviation Weather – Part 2

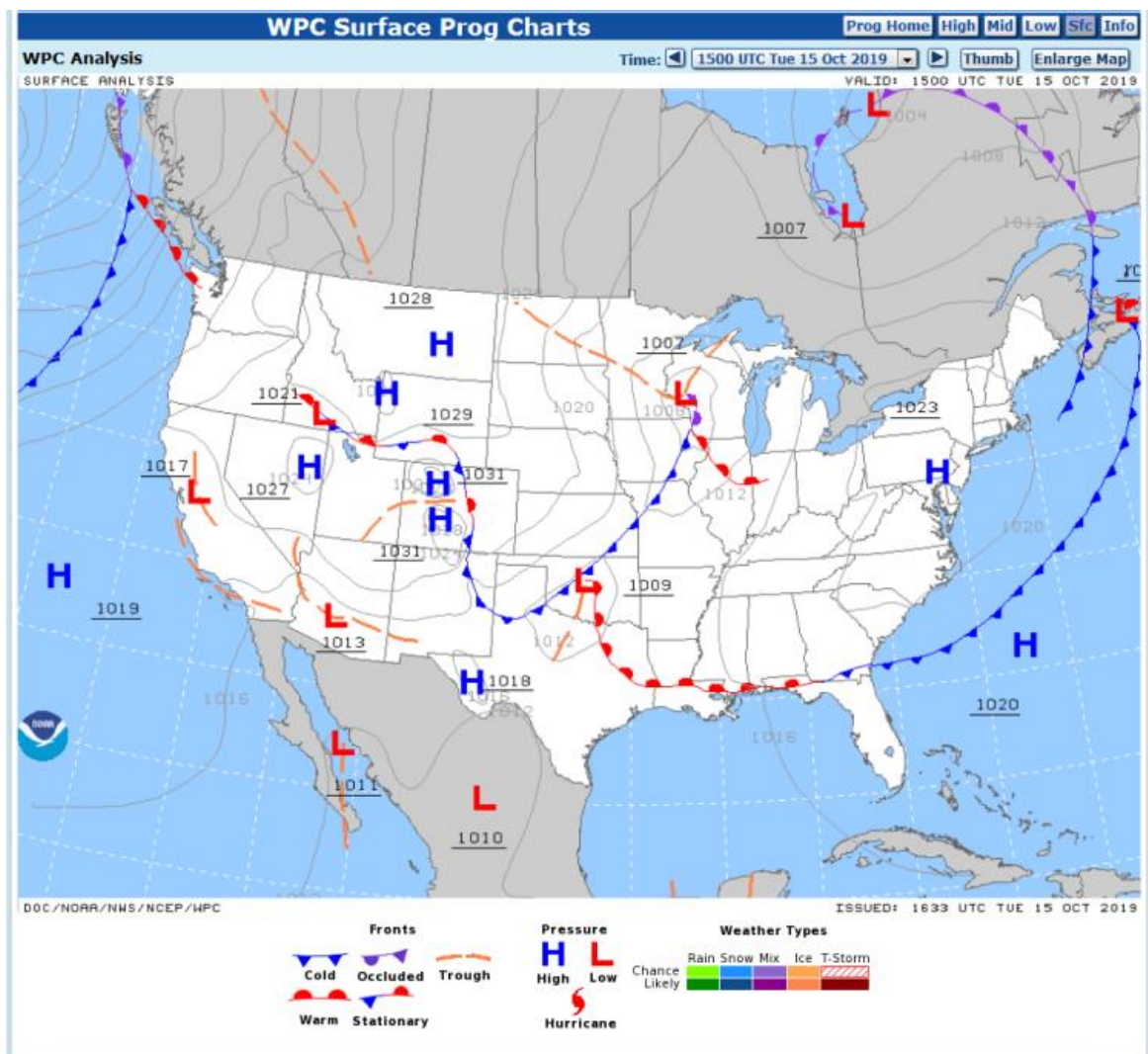
Charts

No questions here – just some information on the charts that are available at the [NOAA / NWS Aviation Weather Center](https://www.noaa.gov/aviation-weather-center). You will find several maps, some interactive, as well as METARs, TAFs, SIGMETs, PIREPs and graphical AIRMETs.

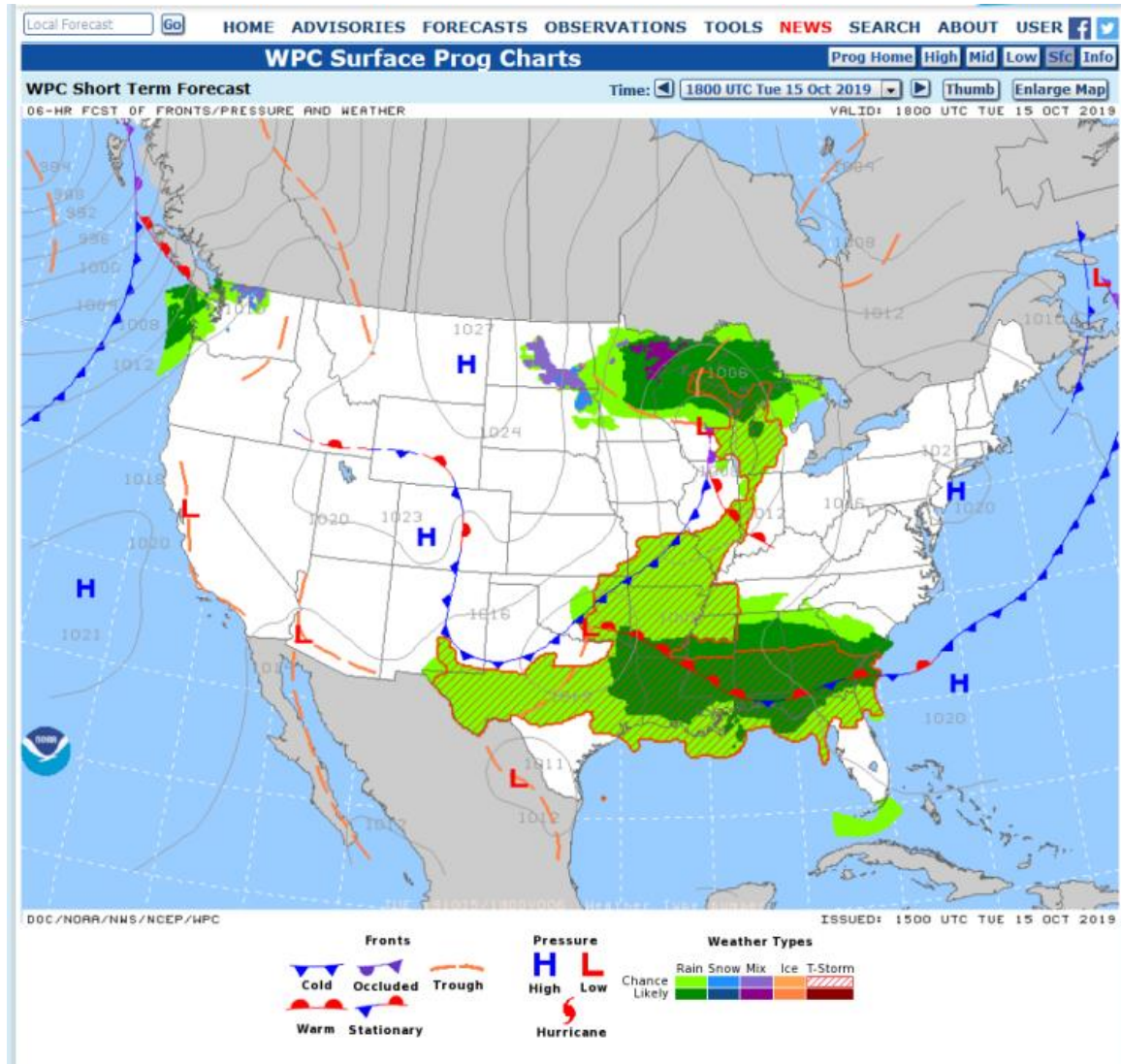
For long-range flight planning where it is helpful to have the “big picture” to guide your overall flight planning (vs. having to look at every METAR and TAF along the way – although this is not a substitute for consulting the appropriate reports and forecasts) the surface and low-level prognostic (‘Prog’) charts are of great value.

An example of the [Surface Prog Chart](#) –

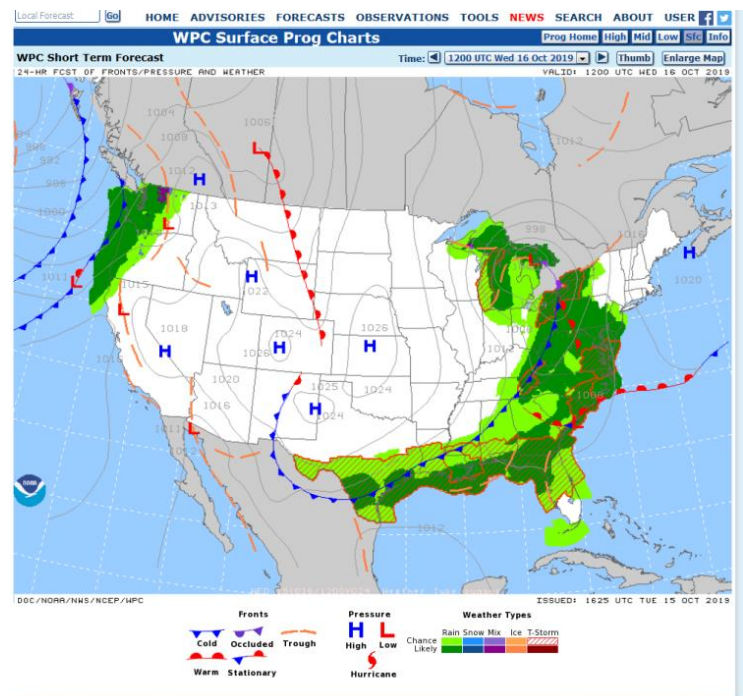
Note that at the current time things are pretty benign looking. High pressure is dominating much of the nation’s weather and the only precipitation as of the last issue time (Oct. 15, 2019 at 1633 Z) on the chart valid at 1500 Z is a tiny patch of snow and rain/snow mix in the far northern part of Arizona.



So, looks like you can do some flying pretty much anywhere, right? Well, just a minute there, Sky King. Moving JUST 3 hours forward ('Time' arrows above the map) to the Surface Prog Chart for 1800 Z –

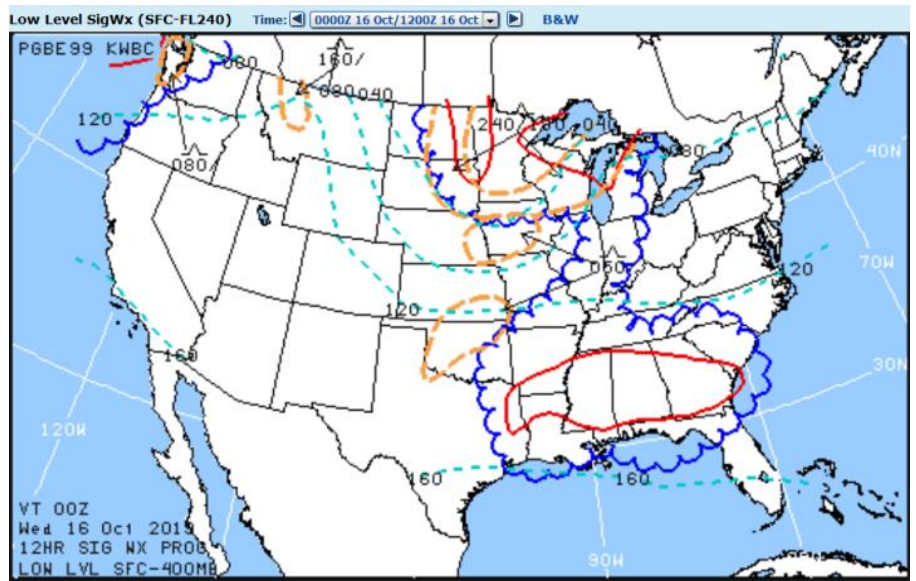


Seems those innocent looking lows in the south-central US and northeast Mexico are really huge moisture pumps that bring rain, the chance of rain and the chance of thunderstorms to a good part of the center of the country and across the south and north-central US. And yes – this is real; serendipity, but still real. And, as I move forward in three-hour increments the surface forecast gets a bit uglier looking – and you can see that the forecast for 1200 Z Oct. 16th is for all of this to move fairly quickly to the east.



Of course, this would have been no surprise to you because you would have also looked at the [Low Level Prog Chart](#) which gives broader time frames (12 and 24 hours vs. the three hour steps on the Surface Prog Chart) so the 12 hour Low Level Prog Chart would have already been showing a forecast of wide areas of IFR (the red solid line) and marginal VFR (the blue scalloped line) for a good part of the area that initially looked benign on the Surface Prog Chart but got ugly in a hurry.

See the [Low Level Prog Chart](#) web page for both maps (12 and 24 hr/) and full legend.



Repeating the links provided in the discussion above plus a few others (see the 'Observations' and 'Tools' menus at the top of the main page):

- Main aviation weather page: [NOAA / NWS Aviation Weather Center](#)
- Surface forecast map page: the [Surface Prog Chart](#)
- Low-level forecast map page (12 and 24 hr.): [Low Level Prog Chart](#)
- Surface and Winds Aloft forecast map page: [Winds and Temps Forecast](#)
- Current and forecast icing and freezing level maps page: [Icing and Freezing Level](#)
- Current turbulence SIGMETs and aircraft reports maps page: [Turbulence Reports](#)
- Current convective SIGMETs and Convective Outlook maps: [Convective Reports and Outlook](#)