

Flight notes 20 August 1999
Crew: Hoshor, Kelly, Gill

1416 Start engines

Corvallis weather: broken clouds at all levels from fog to cirrus (BL cu, alto cu, ci uncinus, . . .).

1424 takeoff

1456 starting descent into restricted area, which is overcast st along the eastern boundary, with some breaks visible further west. Some isolated higher st cloud tops are visible, resembling weak cu trying to push up into an inversion.

On first descent sounding, note cloud tops at 2900 ft with winds from 330 and cloud bases about 1800 ft with winds from 343. Will use flight tracks at 320/140 mag headings.

xxxx one pass at 300 ft, followed by spiral-up sounding to 5000 ft. Note same cloud base and top heights.

1529 start level pass at 2500 ft, 320 mag heading, radar side-looking. See low fssp concentrations but "heavy" drizzle at this level, in patches. There is a lot of horizontal variability in the cloud.

1538 second pass at 2500 ft, after 180 degree, 45 degree bank turn.

xxxx spiral up/down sounding to 5000 ft then 300 ft. Above cloud top, to about 3500 ft, we observed high dew-point temperatures, then rapid drying in just a few 100 ft. The corresponding temperature inversion was weak. This sounding location is at the north end of our passes, and is relatively clear (echo and drizzle).

xxxx longer level run at 300 ft.

1601 level run at 2000 ft on 320 mag heading. fssp concentrations are low, but also see high concentrations of large drops. Many drops large enough to show up on the 2DC. These locations are patchy. The st is far from uniform.

1607 second level run at 2000 ft on 140 mag heading.

1613 spiral up/down sounding to 5000 ft then 300 ft. The st look amazingly uniform from above, given the amount of variability in cloud.

xxxx level run at 300 ft.

1631 level run at 2500 ft and 140 mag heading

1638 level run at 2000 ft and 320 mag heading

1644 spiral up/down sounding to 5000 ft then 300 ft. Until now it has been nearly clear above the st tops

in the area we're flying. Now see a few ci-level clouds overhead.

1651 level 300 ft on 140 mag heading, headed right for what resembles a shower.

xxxx spiral climb to 5000 ft then continue climb to 10000 ft on heading for Corvallis. Winds noted on this

climb:	level	wdir/wspd (m/s)
	300	020/3
	1000	008/3
	2000	340/5
	2700	345/5
	4000	275/4
	5000	230/3

1713-1725 Rodi maneuvers at 14 kft.

1756 land

Problems:

--High rate PVM recording on laptop must have stopped not long after takeoff.

--had trouble ejecting tape from radar computer (mantis)