North Patch – Revelle

percent of interpolated ½ day maximum SF_6

station	cast	max on cast[1]	surface niskin[2]	avg 10 UW[3]
8	1	52%	23%	13%
9	1	89%	89%	65%
10	1	82%	82%	79%
10	2	5%	5%	36%
10	3	74%	74%	74%

South Patch - Revelle

percent of interpolated ½ day maximum SF_6

station	cast	max on cast	surface niskin	avg 10 UW
20	2	116%	106%	54%
21	1	110%	110%	59%
21	2	104%	54%	63%
22	1	157%	157%	109%
24	1	76%	76%	66%
24	3	89%	89%	77%
25	2	49%	25%	52%
26	1	74%	74%	71%
26	3	80%	78%	70%
27	1	8%	8%	21%
28	1	58%	55%	70%
28	3	65%	64%	87%
29	1	65%	65%	98%

[1] percentage = 100 x maximum SF_6 on cast / interpolated maximum SF_6
[2] percentage = 100 x SF_6 in surface niskin / interpolated maximum SF_6
[3] percentage = 100 x average of 10 UW SF_6 values (time match) / inter'd max' SF_6

NOTE:
The above table was a preliminary attempt at a quantitative answer to the question of whether a cast on the Revelle was in or out of the patch. The ten largest underway analyses were averaged for each half day. A regression fit between the year-day (x) and the average half-day maximum (y) yielded an exponential equation. This equation was used to provide a maximum SF6 concentration within the patch when each cast was done. The percentage of that maximum SF6 concentration was calculated for three values associated with each cast: the SF6 in the surface bottle, the largest SF6 measured in any niskin, and the SF6 measured with the underway system (average of ten analyses) during the cast. The largest differences among these three values are seen within the first days of dispersal of the patch. The occurrence of percentages significantly larger than 100% also illustrates the spatial variability of the tracer gas and the difficulties in estimating the half-day maxima.