

### GCPEX Citation Mission Summary

Date	Sortie Number	TO (UTC)	L (UTC)	Notes
1/19/2012	GCPEX-1	14:58	18:02	2 spiral up/down cycles, 5 descending dog bone steps
1/27/2012	GCPEX-2	02:13	05:30	Sampled precipitating layer with spiral down, step up/down, and spiral up. Melting level around 6000 feet MSL
1/28/2012	GCPEX-3	16:01	19:26	Spirals down/up/down/up at triple point, then spiral down/up at Huronia
1/30/2012	GCPEX-4	22:59	02:09	Flew spiral down, racetrack, and dog bone patterns
2/12/2012	GCPEX-5	03:16	06:41	Flew Spirals at north and south points primarily in area C2. Dog bone steps between 3200' and 6200', with the last pass being at 8000'
2/12/2012	GCPEX-6	23:56	02:11	Flew lines and spirals in box C3. Supercooled liquid water was up to about 0.5 g/m <sup>3</sup> .
2/14/2012	GCPEX-7	16:43	20:09	Sampled in the C2 box doing dog-bones. Couple spirals, one near CARE site. Sampled between 15,000 and 3,200 ft. Up to 0.3 g/m <sup>3</sup> of LWC in some places.
2/16/2012	GCPEX-8	14:29	17:23	Flight was mostly in the C2 box with a leg out over Georgian Bay. Cloud bases between 3,500 and 4,500', tops between 11,500 and 12,000'.
2/18/2012	GCPEX-9	09:51	12:59	Many spirals near CARE site. Large crystals sampled during second half of flight. Cloud tops to 16,000'. Layer of liquid water between ~4,800' and 7,000', up to 1 g/m <sup>3</sup> measured by the CDP
2/18/2012	GCPEX-10	15:49	19:00	Spirals near CARE site. High crystal counts and large crystals during first half of flight. Up to 0.2 g/m <sup>3</sup> liquid water in clouds between 4,000' and 7,000'.
2/24/2012	GCPEX-11	11:48	15:06	Spirals near CARE site, then dog bones over Georgian Bay. Some layers of LWC
2/24/2012	GCPEX-12	16:52	20:14	Conducted spirals within C2 box. Sampled in some 35 dbz echo. High ice concentration with some LWC.