## Contents

## 1 s4.0

$\operatorname{Order}$	Standard wl	observed wl	$\operatorname{shift}$	m velocity(m/s)	m velocity(km/s)
5	8865	8798	67	2267343.5	2267.3435
5	9018	8956	62	2062541.6	2062.5416
5	9230	9162	68	2210184.2	2210.1842
5	9550	9492	58	1821989.5	1821.9895
5	10050	9985	65	1940298.5	1940.2985
6	10940	10872	68	1864716.6	1864.7166
6	12820	12756	64	1497659.9	1497.6599
7	12820	12740	80	1872074.9	1872.0749
8	16115	16005	110	2047781.6	2047.7816
8	16810	16700	110	1963117.2	1963.1172
8	17377	17275	102	1760948.4	1760.9484
9	21660	21530	130	1800554.0	1800.554

## 2 s0.5

Order	Standard wl	observed wl	shift	velocity(m/s)	$\overline{ m velocity(km/s)}$
2	6565	6520	45	2056359.5	2056.3595
6	10940	10870	70	1919561.2	1919.5612
7	12822	12735	87	2035563.9	2035.5639
8	16114	16000	114	2122378.1	2122.3781
8	16412	16295	117	2138679.0	2138.679
9	21660	21535	125	1731301.9	1731.3019

 $3 \quad s0.5_{\rm bys4.0}$ 

Order	Standard wl	observed wl	shift	velocity(m/s)	m velocity(km/s)
2	6565	6519	46	2102056.4	2102.0564
5	10052	9992	60	1790688.4	1790.6884
6	10052	9977	75	2238360.5	2238.3605
6	10941	10868	73	2001645.2	2001.6452
7	12822	12736	86	2012166.6	2012.1666
8	16113	16000	113	2103891.3	2103.8913
8	16810	16695	115	2052349.8	2052.3498
9	21661	21533	128	1772771.3	1772.7713