## 1 Nominal correlations.

Meas	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A183	$15.57 \pm 0.68$	25.58	-0.58	-0.36	-0.42	-0.40	-0.50	-0.47	-0.40	0.62	0	0.09	0.09	0.26
D183	$15.86 \pm 0.74$	22.26	0.04	0.29	0.16	0.09	0.09	0.19	0.06	0.69	0	0.09	0.07	0.23
L183	$16.53 \pm 0.72$	23.49	0.30	0.50	0.46	0.56	0.67	0.60	0.57	0.67	0	0.08	0.14	0.20
O183	$15.43 \pm 0.66$	28.68	0.25	-0.42	-0.20	-0.25	-0.27	-0.31	-0.24	0.61	0	0.14	0	0.22
BLUE 183	$15.79 \pm 0.36$	100.00	0	0	0	0	0	0	0	0.32	0	0.10	0.04	0.11

Meast	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A189	$15.71 \pm 0.38$	-0.86	26.72	1.11	0.98	0.95	0.80	0.80	0.94	0.34	0	0.05	0.09	0.15
D189	$15.83 \pm 0.43$	-1.39	21.33	-0.65	-0.93	-1.07	-1.18	-0.79	-1.06	0.38	0	0.07	0.05	0.18
L189	$16.24 \pm 0.43$	0.16	22.12	-0.69	-0.80	-0.43	-0.18	-0.30	-0.36	0.37	0	0.04	0.08	0.20
O189	$16.30 \pm 0.38$	2.09	29.83	0.23	0.76	0.55	0.56	0.30	0.48	0.34	0	0.07	0	0.17
BLUE 189	$16.00 \pm 0.21$	0	100.00	0	0	0	0	0	0	0.18	0	0.05	0.03	0.08

Meast	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A192	$17.23 \pm 0.91$	0.47	0.45	27.07	0.77	0.75	0.75	0.73	0.74	0.89	0	0.05	0.09	0.15
D192	$16.90 \pm 1.02$	0.18	0.12	21.25	0.26	0.22	0.22	0.27	0.22	1.00	0	0.07	0.06	0.20
L192	$16.39 \pm 0.93$	0.14	-0.01	25.85	0.09	0.17	0.21	0.21	0.19	0.90	0	0.08	0.08	0.21
O192	$16.60 \pm 0.97$	-0.79	-0.56	25.83	-1.11	-1.14	-1.18	-1.21	-1.14	0.88	0	0.12	0	0.40
BLUE 192	$16.72 \pm 0.48$	0	0	100.00	0	0	0	0	0	0.46	0	0.07	0.04	0.10

Meast	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A196	$17.00 \pm 0.57$	1.17	1.15	2.03	29.30	1.87	1.86	1.80	1.83	0.54	0	0.05	0.09	0.15
D196	$17.86 \pm 0.63$	0.43	0.28	0.80	23.94	0.52	0.52	0.65	0.51	0.59	0	0.07	0.06	0.20
L196	$16.67 \pm 0.60$	0.29	-0.10	0.22	26.61	0.31	0.42	0.40	0.37	0.55	0	0.08	0.08	0.21
O196	$18.59 \pm 0.74$	-1.89	-1.33	-3.06	20.15	-2.70	-2.79	-2.86	-2.71	0.60	0	0.12	0	0.41
BLUE 196	$17.43 \pm 0.32$	0	0	0	100.00	0	0	0	0	0.29	0	0.07	0.04	0.10

Meas	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A200	$16.98 \pm 0.56$	0.98	1.03	1.92	1.79	28.27	1.74	1.70	1.73	0.53	0	0.05	0.09	0.15
D200	$17.35 \pm 0.60$	0.26	0.17	0.72	0.51	24.56	0.41	0.57	0.41	0.56	0	0.07	0.06	0.20
L200	$16.94 \pm 0.62$	0.07	-0.23	0.04	-0.06	23.20	0.23	0.23	0.19	0.57	0	0.08	0.08	0.21
O200	$16.32 \pm 0.66$	-1.32	-0.98	-2.67	-2.23	23.96	-2.38	-2.49	-2.34	0.54	0	0.10	0	0.37
BLUE 200	$16.84 \pm 0.31$	0	0	0	0	100.00	0	0	0	0.28	0	0.07	0.04	0.10

Measu	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A202	$16.16 \pm 0.76$	0.67	0.63	1.12	1.05	1.04	30.03	1.00	1.02	0.74	0	0.05	0.09	0.15
D202	$17.67 \pm 0.84$	0.06	0.04	0.29	0.19	0.15	24.54	0.23	0.15	0.81	0	0.08	0.07	0.21
L202	$16.95 \pm 0.88$	0.15	-0.03	0.11	0.07	0.15	22.28	0.20	0.18	0.85	0	0.08	0.08	0.21
O202	$18.48 \pm 0.91$	-0.88	-0.64	-1.53	-1.31	-1.34	23.16	-1.43	-1.35	0.81	0	0.12	0	0.40
BLUE 202	$17.23 \pm 0.42$	0	0	0	0	0	100.00	0	0	0.40	0	0.07	0.04	0.10



Meast	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A205	$16.57 \pm 0.55$	0.93	1.01	1.94	1.80	1.77	1.76	29.66	1.75	0.52	0	0.05	0.09	0.15
D205	$17.44 \pm 0.64$	0.35	0.19	0.72	0.52	0.44	0.44	22.00	0.43	0.60	0	0.06	0.05	0.20
L205	$17.35 \pm 0.64$	~ 0	-0.26	~ 0	-0.10	0.08	0.17	22.07	0.15	0.59	0	0.08	0.08	0.21
O205	$15.97 \pm 0.64$	-1.28	-0.95	-2.67	-2.22	-2.30	-2.37	26.27	-2.33	0.52	0	0.10	0	0.36
BLUE 205	$16.71 \pm 0.31$	0	0	0	0	0	0	100.00	0	0.28	0	0.06	0.03	0.10

Meası	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A207	$17.32 \pm 0.45$	1.35	1.54	2.95	2.73	2.70	2.66	2.61	29.14	0.41	0	0.05	0.09	0.15
D207	$16.50 \pm 0.48$	0.86	0.54	1.54	1.19	1.03	1.04	1.28	25.87	0.43	0	0.06	0.05	0.20
L207	$17.96 \pm 0.51$	-0.11	-0.49	-0.11	-0.27	0.05	0.20	0.21	22.40	0.45	0	0.08	0.08	0.21
O207	$17.77 \pm 0.57$	-2.10	-1.59	-4.38	-3.65	-3.78	-3.90	-4.10	22.58	0.42	0	0.09	0	0.37
BLUE 207	$17.33 \pm 0.25$	0	0	0	0	0	0	0	100.00	0.22	0	0.06	0.03	0.10

Table 1: BLUE's of the combination ( $\chi^2/\text{ndof} = 27.42/24$ ). Values /1k are displayed. For each input measurement i, the central value weight CVW or  $\lambda_i^{\alpha}$  with which that measurement contributes to the BLUE for observable  $\alpha$  is listed.

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 \begin{pmatrix} & | 183 | 189 | 192 | 196 | 200 | 202 | 205 | 207 \\ \hline 183 | 1.00 | 0.20 | 0.11 | 0.17 | 0.17 | 0.13 | 0.17 | 0.20 \\ \hline 189 | 0.20 | 1.00 | 0.13 | 0.20 | 0.20 | 0.15 | 0.20 | 0.24 \\ \hline 192 | 0.11 | 0.13 | 1.00 | 0.12 | 0.12 | 0.09 | 0.12 | 0.14 \\ \hline 196 | 0.17 | 0.20 | 0.12 | 1.00 | 0.18 | 0.13 | 0.17 | 0.21 \\ \hline 200 | 0.17 | 0.20 | 0.12 | 0.18 | 1.00 | 0.13 | 0.17 | 0.21 \\ \hline 202 | 0.13 | 0.15 | 0.09 | 0.13 | 0.13 | 1.00 | 0.13 | 0.16 \\ \hline 205 | 0.17 | 0.20 | 0.12 | 0.17 | 0.17 | 0.13 | 1.00 | 0.21 \\ \hline 207 | 0.20 | 0.24 | 0.14 | 0.21 | 0.21 | 0.16 | 0.21 | 1.00 \\ \end{pmatrix}
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Table 2: Correlations between the BLUE's.

/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207 \
A183	0.47	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
A189	0.04	0.15	0.02	0.02	0.02	0.02	0.02	0.02	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
A192	0.04	0.02	0.82	0.02	0.02	0.02	0.02	0.02	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
A196	0.04	0.02	0.02	0.32	0.02	0.02	0.02	0.02	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
A200	0.04	0.02	0.02	0.02	0.31	0.02	0.02	0.02	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
A202	0.04	0.02	0.02	0.02	0.02	0.58	0.02	0.02	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
A205	0.04	0.02	0.02	0.02	0.02	0.02	0.30	0.02	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
A207	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.20	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$															
D183	0.01	$\sim 0$	0.54	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
D189	0.01	$\sim 0$	0.05	0.18	0.04	0.04	0.04	0.04	0.04	0.04	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D192	0.01	$\sim 0$	0.05	0.04	1.05	0.04	0.04	0.05	0.05	0.04	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D196	0.01	$\sim 0$	0.05	0.04	0.04	0.40	0.04	0.05	0.05	0.04	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D200	0.01	$\sim 0$	0.05	0.04	0.04	0.04	0.36	0.05	0.05	0.04	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D202	0.01	$\sim 0$	0.06	0.04	0.05	0.05	0.05	0.71	0.05	0.04	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
D205	0.01	$\sim 0$	0.05	0.04	0.05	0.05	0.05	0.05	0.41	0.04	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01													
D207	0.01	$\sim 0$	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.23	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01													
L183	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.52	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L189	~0	$\sim 0$	0.04	0.19	0.05	0.05	0.05	0.05	0.05	0.05	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$														
L192	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.05	0.05	0.87	0.05	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L196	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.05	0.05	0.05	0.36	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L200	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.05	0.05	0.05	0.05				0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L202	0.01	~0	~0	~0	~0	~0	~0	~0	0.01	0.01	0.01	0.01	0.01	0.01	~0	~0	0.05	0.05	0.05	0.05				0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
L205	0.01	~0	~0	~0	~0	~0	~0	~0	0.01	0.01	0.01	0.01	0.01	0.01	~0	~0		0.05			0.05				0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
L207	0.01	~0	~0	~0	~0	~0	~0	~0	0.01	0.01	0.01	0.01	0.01	0.01	~0	~0		0.05			0.05				0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
O183	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.01		0.01	0.01	0.01	0.44	0.05	0.10	0.11	0.09	0.10	0.09	0.09
O189	0.01	~0	~0	~0	~0	~0	~0	~0	0.01	~0	~0	~0	~0	0.01	~0	~0	0.01	~0	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.15	0.08	0.08	0.07	0.08	0.07	0.07
O192		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01				0.01	0.10	0.08	0.95	0.18	0.16	0.18	0.16	0.16
O196		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		_	0.01				0.01		0.11	0.08	0.18			0.18		0.16
O200	0.01	~0	~0	~0	~0	~0	~0	~0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	~0		0.01			0.01		0.09	0.07	0.16	0.16		0.16	0.14	0.14
1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.01	0.01	0.01		0.01	0.10	0.08	0.18	0.18	0.16		0.16	0.16
O205	0.01	~0	~0	~0	~0	~0	~0	~0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	~0	0.01	0.01				0.01	0.09	0.07	0.16	0.16	0.14	0.16	0.41	0.14
\ O207	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.09	0.07	0.16	0.16	0.14	0.16	0.14	0.32 /						

Table 3: Full input covariance between measurements (summed over error sources). Values /1M are displayed.

A183	0.38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0.79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0.29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0.28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0.55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0.27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0.17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0.48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	0.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	0.31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0.66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.81	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.30	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.32	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.72	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.37	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.12	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.77	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.29	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.66	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.27	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18

Table 4: Partial input covariance between measurements. Error source #0: Stat. Values /1M are displayed.

A183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O200	0	0	0	0	0	0	0	0	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0202	0	0	0	0	0	0	0	0	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O207	U	0	0	U	0	U	0	0	U	0	0	0	U	0	0	U	0	0	U	U	0	0	0	U	U	0	U	U	U	0	0	0

Table 5: Partial input covariance between measurements. Error source #1: LCEU. Values /1M are displayed.

/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207 \
A183	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
A189	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
A192	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
A196	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
A200	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
A202	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
A205	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
A207	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
D183	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
D189	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$	$\sim 0$	$\sim 0$	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D192	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$	$\sim 0$	$\sim 0$	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D196	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$	$\sim 0$	$\sim 0$	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D200	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$	$\sim 0$	$\sim 0$	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
D202	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
D205	0.01	$\sim 0$	0.01	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01																				
D207	0.01	$\sim 0$	0.01	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01																				
L183	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L189	$\sim 0$	0.01	$\sim 0$	0.01	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$																							
L192	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L196	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L200	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L202	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L205	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
L207	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
O183	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.02	0.01	0.01
O189	0.01	$\sim 0$	0.01	$\sim 0$	$\sim 0$	$\sim 0$	$\sim 0$	0.01	$\sim 0$	$\sim 0$	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01						
O192	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
O200	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
O202	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01						
\ O207	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	$\sim 0$	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01 /						

Table 6: Partial input covariance between measurements. Error source #2: LCEC. Values /1M are displayed.

	0.01	0	0	0	0	A202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 7: Partial input covariance between measurements. Error source #3: LUEU. Values /1M are displayed.

/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207
A183	0.07	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0.06	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05	0.04	0.09	0.09	0.08	0.09	0.08	0.08
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0.03	0.07	0.07	0.06	0.07	0.06	0.06
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09	0.07	0.16	0.17	0.15	0.16	0.14	0.15
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09	0.07	0.17	0.17	0.15	0.17	0.15	0.15
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0.06	0.15	0.15	0.13	0.15	0.13	0.14
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09	0.07	0.16	0.17	0.15	0.16	0.14	0.15
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0.06	0.14	0.15	0.13	0.14	0.13	0.13
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0.06	0.15	0.15	0.14	0.15	0.13	0.14

Table 8: Partial input covariance between measurements. Error source #4: LUEC. Values /1M are displayed.

 $\underline{\textit{LEP Combination for the Summer 2001 Conferences (http://lepewwg.web.cern.ch/LEPEWWG/lepww/4f/Summer01)}. \ \ The \ output \ results \ may \ differ \ because \ of \ rounding \ errors.}$ 

## 2 Modified correlations.

## 2.1 Zero correlations.

Measi	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A183	$15.57 \pm 0.68$	26.14	0	0	0	0	0	0	0	0.62	0	0.09	0.09	0.26
D183	$15.86 \pm 0.74$	22.48	0	0	0	0	0	0	0	0.69	0	0.09	0.07	0.23
L183	$16.53 \pm 0.72$	23.63	0	0	0	0	0	0	0	0.67	0	0.08	0.14	0.20
O183	$15.43 \pm 0.66$	27.75	0	0	0	0	0	0	0	0.61	0	0.14	0	0.22
BLUE 183	$15.82 \pm 0.35$	100.00	0	0	0	0	0	0	0	0.32	0	0.05	0.04	0.12

Meas	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A189	$15.71 \pm 0.38$	0	27.79	0	0	0	0	0	0	0.34	0	0.05	0.09	0.15
D189	$15.83 \pm 0.43$	0	22.27	0	0	0	0	0	0	0.38	0	0.07	0.05	0.18
L189	$16.24 \pm 0.43$	0	22.17	0	0	0	0	0	0	0.37	0	0.04	0.08	0.20
O189	$16.30 \pm 0.38$	0	27.77	0	0	0	0	0	0	0.34	0	0.07	0	0.17
BLUE 189	$16.02 \pm 0.20$	0	100.00	0	0	0	0	0	0	0.18	0	0.03	0.03	0.09

Meast	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A192	$17.23 \pm 0.91$	0	0	27.75	0	0	0	0	0	0.89	0	0.05	0.09	0.15
D192	$16.90 \pm 1.02$	0	0	21.82	0	0	0	0	0	1.00	0	0.07	0.06	0.20
L192	$16.39 \pm 0.93$	0	0	26.37	0	0	0	0	0	0.90	0	0.08	0.08	0.21
O192	$16.60 \pm 0.97$	0	0	24.07	0	0	0	0	0	0.88	0	0.12	0	0.40
BLUE 192	$16.78 \pm 0.48$	0	0	100.00	0	0	0	0	0	0.46	0	0.04	0.04	0.13

Meast	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A196	$17.00 \pm 0.57$	0	0	0	30.20	0	0	0	0	0.54	0	0.05	0.09	0.15
D196	$17.86 \pm 0.63$	0	0	0	24.67	0	0	0	0	0.59	0	0.07	0.06	0.20
L196	$16.67 \pm 0.60$	0	0	0	27.17	0	0	0	0	0.55	0	0.08	0.08	0.21
O196	$18.59 \pm 0.74$	0	0	0	17.95	0	0	0	0	0.60	0	0.12	0	0.41
BLUE 196	$17.41 \pm 0.31$	0	0	0	100.00	0	0	0	0	0.29	0	0.04	0.04	0.11

Meası	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A200	$16.98 \pm 0.56$	0	0	0	0	29.39	0	0	0	0.53	0	0.05	0.09	0.15
D200	$17.35 \pm 0.60$	0	0	0	0	25.42	0	0	0	0.56	0	0.07	0.06	0.20
L200	$16.94 \pm 0.62$	0	0	0	0	24.07	0	0	0	0.57	0	0.08	0.08	0.21
O200	$16.32 \pm 0.66$	0	0	0	0	21.11	0	0	0	0.54	0	0.10	0	0.37
BLUE 200	$16.93 \pm 0.30$	0	0	0	0	100.00	0	0	0	0.28	0	0.04	0.04	0.11

Measi	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A202	$16.16 \pm 0.76$	0	0	0	0	0	30.70	0	0	0.74	0	0.05	0.09	0.15
D202	$17.67 \pm 0.84$	0	0	0	0	0	25.10	0	0	0.81	0	0.08	0.07	0.21
L202	$16.95 \pm 0.88$	0	0	0	0	0	22.82	0	0	0.85	0	0.08	0.08	0.21
O202	$18.48 \pm 0.91$	0	0	0	0	0	21.38	0	0	0.81	0	0.12	0	0.40
BLUE 202	$17.22 \pm 0.42$	0	0	0	0	0	100.00	0	0	0.40	0	0.04	0.04	0.12



Meası	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A205	$16.57 \pm 0.55$	0	0	0	0	0	0	30.95	0	0.52	0	0.05	0.09	0.15
D205	$17.44 \pm 0.64$	0	0	0	0	0	0	22.93	0	0.60	0	0.06	0.05	0.20
L205	$17.35 \pm 0.64$	0	0	0	0	0	0	23.10	0	0.59	0	0.08	0.08	0.21
O205	$15.97 \pm 0.64$	0	0	0	0	0	0	23.02	0	0.52	0	0.10	0	0.36
BLUE 205	$16.81 \pm 0.31$	0	0	0	0	0	0	100.00	0	0.28	0	0.04	0.04	0.12

Meası	urements	CVW183/%	CVW189/%	CVW192/%	CVW196/%	CVW200/%	CVW202/%	CVW205/%	CVW207/%	Stat	LCEU	LCEC	LUEU	LUEC
A207	$17.32 \pm 0.45$	0	0	0	0	0	0	0	30.58	0.41	0	0.05	0.09	0.15
D207	$16.50 \pm 0.48$	0	0	0	0	0	0	0	26.76	0.43	0	0.06	0.05	0.20
L207	$17.96 \pm 0.51$	0	0	0	0	0	0	0	23.57	0.45	0	0.08	0.08	0.21
O207	$17.77 \pm 0.57$	0	0	0	0	0	0	0	19.09	0.42	0	0.09	0	0.37
BLUE 207	$17.34 \pm 0.25$	0	0	0	0	0	0	0	100.00	0.22	0	0.03	0.04	0.11

Table 9: BLUE's of the combination ( $\chi^2/\text{ndof}=22.98/24$ ). Values /1k are displayed. For each input measurement i, the central value weight CVW or  $\lambda_i^{\alpha}$  with which that measurement contributes to the BLUE for observable  $\alpha$  is listed.

,	/	183	189	192	196	200	202	205	207
1	183	1.00	0	0	0	0	0	0	0
١	189	0	1.00	0	0	0	0	0	0
١	192	0	0	1.00	0	0	0	0	0
١	196	0	0	0	1.00	0	0	0	0
١	200	0	0	0	0	1.00	0	0	0
١	202	0	0	0	0	0	1.00	0	0
l	205	0	0	0	0	0	0	1.00	0
١	207	0	0	0	0	0	0	0	1.00 /

Table 10: Correlations between the BLUE's.

/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207
A183	0.47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0.82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0.32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0.31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0.58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	0.18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	1.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0.71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.87	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.38	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.78	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.41	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.44	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.15	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.95	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.54	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.44	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.83	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.41	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.32

Table 11: Full input covariance between measurements (summed over error sources). Values /1M are displayed.



	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207
A183	0.38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0.79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0.29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0.28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0.55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0.27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0.17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0.48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	0.35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	0.31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0.66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.81	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.30	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.32	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.72	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.37	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.12	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.77	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.29	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.66	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.27	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18

Table 12: Partial input covariance between measurements. Error source #0: Stat. Values /1M are displayed.



/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207
A183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
\ O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 /

Table 13: Partial input covariance between measurements. Error source #1: LCEU. Values /1M are displayed.

/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207
A183	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01

Table 14: Partial input covariance between measurements. Error source #2: LCEC. Values /1M are displayed.



/	A183	A189	A192	A196	A200	A202	A205	A207	D183	D189	D192	D196	D200	D202	D205	D207	L183	L189	L192	L196	L200	L202	L205	L207	O183	O189	O192	O196	O200	O202	O205	O207 `
A183	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\sim 0$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ,

Table 15: Partial input covariance between measurements. Error source #3: LUEU. Values /1M are displayed.



A183	0.07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A189	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A192	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A196	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A200	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A202	0	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A205	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A207	0	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D183	0	0	0	0	0	0	0	0	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D189	0	0	0	0	0	0	0	0	0	0.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D192	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D196	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D200	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D202	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0
L196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0
L200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0
L202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0
L205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0
L207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0
O183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05	0	0	0	0	0	0	0
O189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0	0	0	0	0	0
O192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.16	0	0	0	0	0
O196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17	0	0	0	0
O200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.13	0	0	0
O202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.16	0	0
O205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.13	0
O207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14

Table 16: Partial input covariance between measurements. Error source #4: LUEC. Values /1M are displayed.

## Appendix A1. Input data.

```
# The file is expected to have the following format.
   # Blank lines and lines with only empty spaces are ignored.
   # Lines starting by '#' are reserved for comments and are ignored.
   # Data lines are composed of fields separated by one or more empty spaces.
   # Fields cannot contain empty spaces, with the exception of the title line.
   # The next line must have 2 fields: 'TITLE' and the title of the
12 # BlueFin combination, which must be enclosed within double quotes
   # and may contain only alphanumeric characters or spaces or hyphens.
   TITLE "LEP2 WW cross sections"
   # The next line must have 2 fields: 'NOBS' and the number of observables.
   NOBS 8
18
19
   # The next line must have 2 fields: 'NMEA' and the number of measurements.
   NMEA 32
20
21
   # The next line must have 2 fields: 'NERR' and the number of error sources.
23
   NERR 5
24
25
   # The next NERR+3 lines must have NMEA+1 fields in this format:
   # - in the 1st line: 'MEANAME' followed by NMEA distinct measurement names
       (measurement names may contain only alphanumeric characters or spaces);
   # - in the 2nd line: 'OBSNAME' followed by the NMEA names (with NOBS distinct
29
       values) of the observables measured by the corresponding measurements
       (observable names may contain only alphanumeric characters or spaces
       and should preferably be at most 3 characters long);
32 | # - in the 3rd line: 'MEAVAL' followed by the NMEA measured central values;
33 | # - in each of the last NERR lines: the error source name followed by the
       NMEA partial errors for each measurement due to the given error source
      (error source names may contain only alphanumeric characters or spaces).
   # === From echo 'cat sww.in | egrep '\+(A|D|L|0)' | awk '{print substr(1,2,1)$2}' | sed 's| | |g'
   MEANAME A183 A189 A192 A196 A200 A202 A205 A207 D183 D189 D192 D196 D200 D202 D205 D207 L183 L189
                                                                                                                 L192
                                                                                                                      L196
                                                                                                                                  L202
                                                                                                                            1.200
                                                                                                                                        1.205
                                                                                                                                             1.207
       0192 0196 0200 0202 0205 0207
   # === From echo 'cat sww.in | egrep '\+(A|D|L|0)' | awk '{print "C"$2}' ' | sed 's |
                                         202
                                              205
                                                    207
                                                         183
           183 189
                        192
                             196
                                   200
                                                               189
                                                                                            205
                                                                                                 207
                                                                                                       183
                                                                                                                  192
                                                                                                                        196
                                                                                                                                   202
                                                                                                                                         205
                                                                                                                                               207
                                                                                                                                                    183
                                                                                                                                                          189
         192 196
                  200
                         202
                              205
                                   207
   # === From echo 'cat sww.in | egrep '\+(A|D|L|0)' | awk '{print $3}''
   MEAVAL 15570 15710 17230 17000 16980 16160 16570 17320 15860 15830 16900 17860 17350 17670 17440 16500 16530 16240 16390 16670 16940 16950 17350 17957 15430 16300
       16600 18590 16320 18480 15970 17770
   # === From echo 'cat sww.in | egrep '\+(A|D|L|0)' | awk '{print $4}'' |
                                   530
                                       740
                                              520
                                                    410
                                                          690
                                                               380
                                                                                560
                                                                                      810
                                                                                                 430
                                                                                                                                    850
                                                                                                                                               450
                                                                                                                                                    610
                                                                                                                                                          340
              600
                                     420
                          810
                               520
   # === From echo 'cat sww.in | egrep '\+(A|D|L|0)' |
                                                    awk
                                                        '{print $7}
45
   LCEU
                                 0
                  'cat sww.in | egrep '\+(A|D|L|0)' | awk
47
   LCEC
                               50
                                          50
                                                                                                                                                           65
              120
                     99 115
                                96
  # === From echo 'cat sww.in | egrep '\+(A|D|L|0)' | awk '{print $9}' | sed 's | |
```



```
49
    LUEU
                93
                                         89
                                                                                                                    138
                                                                                                                            76
                                                                                                                                  84
                                                                                                                                        84
                                                                                                                                                                               0
             0
                         0
                                      0
                                            0
    # === From echo
                     'cat sww.in
                                  | egrep
                                          '\+(A|D|L|0)' |
                                                           awk
                                                               '{print $10}''
                                                                                      's|
                                                                                              lg;
                                                                 235
51
    LUEC
               256
                     148
                           148
                                  148
                                        148
                                              148
                                                    148
                                                           148
                                                                        181
                                                                              200
                                                                                     200
                                                                                           200
                                                                                                 206
                                                                                                        205
                                                                                                              195
                                                                                                                    205
                                                                                                                           202
                                                                                                                                 210
                                                                                                                                       210
                                                                                                                                              210
                                                                                                                                                    210
                                                                                                                                                          210
                                                                                                                                                                210
                                                                                                                                                                       219
                                                                                                                                                                             168
                 413
                       367
                             404
                                    357
                                          369
52
53
    # The next NMEA*(NMEA-1)/2+1 rows must have NERR+2 fields in this format:
    # - in the 1st line: 'CMEA1' 'CMEA2' (correlations between 2 measurements)
        followed by the NERR error source names in the same order used above;
    # - in each of the NMEA*(NMEA-1)/2 last lines: the names of two distinct
57
        measurements followed by the NERR correlations between the partial
58
         errors on the two measurements due to corresponding error source.
    #
59
        Measurements must appear in the same order listed above.
    # === From: adlo="A D L O"; ecms="183 189 192 196 200 202 205 207"; for a1 in $adlo; do for e1 in $ecms; do for a2 in $adlo; do for e2 in $ecms; do m1=$a1$e1; m2=
        $a2$e2; lueu=0; lcec=1; if [ "$e1" == "$e2" ]; then lceu=1; else lceu=0; fi; if [ "$a1" == "$a2" ]; then luec=1; else luec=0; fi; if [[ $m2 > $m1 ]]; then echo
                                                        $luec"; fi; done; done; done;
                                     $1cec
                                               $lueu
    CMEA1 CMEA2 Stat LCEU
                           LCEC LUEU LUEC
62
    A183
           A189
                    0
63
    A183
            A192
64
    A183
            A196
    A183
            A200
    A183
            A202
67
    A183
            A205
68
    A183
            A207
    A183
            D183
70
    A183
            D189
71
    A183
            D192
72
    A183
            D196
73
    A183
            D200
74
            D202
    A183
75
            D205
    A183
76
    A183
            D207
77
    A183
            L183
    A183
           L189
    A183
            L192
    A183
           L196
81
    A183
            L200
    A183
            L202
83
    A183
            L205
84
    A183
            L207
    A183
            0183
86
    A183
            0189
87
    A183
           0192
    A183
            0196
89
    A183
            0200
                    0
90
    A183
            0202
    A183
            0205
    A183
            0207
93
    A189
            A192
94
    A189
            A196
    A189
            A200
    A189
            A202
97
    A189
            A205
    A189
            A207
99
    A189
            D183
                    0
                                         0
100
    A189
            D189
                                         0
                    0
                         1
                                    0
   A189
            D192
```



102	A189	D196	0	0	1	0	0
103	A189	D200	0	0	1	0	0
104	A189	D202	0	0	1	0	0
105	A189	D205	0	0	1	0	0
106	A189	D207	0	0	1	0	0
107	A189	L183	0	0	1	0	0
108	A189	L189	0	1	1	0	0
109	A189	L192	0	0	1	0	0
110	A189	L196	0	0	1	0	0
111	A189	L200	0	0	1	0	0
112	A189	L202	0	0	1	0	0
113	A189	L205	0	0	1	0	0
114	A189	L207	0	0	1	0	0
115	A189	0183	0	0	1	0	0
116	A189	0189	0	1	1	0	0
117	A189	0192	0	0	1	0	0
118	A189	0196	0	0	1	0	0
119	A189	0200	0	0	1	0	0
120	A189	0202	0	0	1	0	0
121	A189	0205	0	0	1	0	0
122	A189	0207	0	0	1	0	0
123	A192	A196	0	0	1	0	1
124	A192	A200	0	0	1	0	1
125	A192	A202	0	0	1	0	1
126	A192	A205	0	0	1	0	1
127	A192	A207	0	0	1	0	1
128	A192	D183	0	0	1	0	0
129	A192	D189	0	0	1	0	0
130	A192	D192	0	1	1	0	0
131	A192	D196	0	0	1	0	0
132	A192	D200	0	0	1	0	0
133	A192	D202	0	0	1	0	0
134	A192	D205	0	0	1	0	0
135	A192	D207	0	0	1	0	0
136	A192	L183	0	0	1	0	0
137	A192	L189	0	0	1	0	0
138	A192	L192	0	1	1	0	0
139	A192	L196	0	0	1	0	0
140	A192	L200	0	0	1	0	0
141	A192	L202	0	0	1	0	0
142	A192	L205	0	0	1	0	0
$143 \\ 144$	A192	L207	0	0	1	0	0
$144 \\ 145$	A192	0183	0	0 0	1 1	0	0
146	A192	0189 0192	0	1	1	0	
$140 \\ 147$	A192 A192	0192	0 0	0	1	0 0	0
148	1		^	_		_	
149	A192 A192	0200 0202	0	0	1 1	0	0
150	A192	0202	0	0	1	0	0
151	A192	0207	0	0	1	0	0
$151 \\ 152$	A192	A200	0	0	1	0	1
153	A196	A202	0	0	1	0	1
154	A196	A202 A205	0	0	1	0	1
155	A196	A207	0	0	1	0	1
156	A196	D183	0	0	1	0	0
157	A196	D189	0	0	1	0	0
158	A196	D192	0	0	1	0	0
	1 5 5		-	-	-	-	·



159	A196	D196	0	1	1	0	0
160	A196	D200	0	0	1	0	0
161	A196	D202	0	0	1	0	0
162	A196	D205	0	0	1	0	0
163	A196	D207	0	0	1	0	0
164	A196	L183	0	0	1	0	0
165	A196	L189	0	0	1	0	0
166	A196	L192	0	0	1	0	0
167	A196	L196	0	1	1	0	0
168	A196	L200	0	0	1	0	0
169	A196	L202	0	0	1	0	0
170	A196	L205	0	0	1	0	0
171	A196	L207	0	0	1	0	0
172	A196	0183	0	0	1	0	0
173	A196	0189	0	0	1 1	0	0
174	A196 A196	0192	0		1	0	0
175 176	A196	0196 0200	0 0	1 0	1	0 0	0
170 177	A196	0200	0	0	1	0	0
178	A196	0202	0	0	1	0	0
179	A196	0207	0	0	1	0	0
180	A200	A202	0	0	1	0	1
181	A200	A205	0	0	1	0	1
182	A200	A207	0	Ö	1	Ö	1
183	A200	D183	0	0	1	0	0
184	A200	D189	0	0	1	Ö	0
185	A200	D192	0	0	1	0	0
186	A200	D196	0	0	1	0	0
187	A200	D200	0	1	1	0	0
188	A200	D202	0	0	1	0	0
189	A200	D205	0	0	1	0	0
190	A200	D207	0	0	1	0	0
191	A200	L183	0	0	1	0	0
192	A200	L189	0	0	1	0	0
193	A200	L192	0	0	1	0	0
194	A200	L196	0	0	1	0	0
195	A200	L200	0	1	1	0	0
196	A200	L202	0	0	1	0	0
197	A200	L205	0	0	1	0	0
198	A200	L207	0	0	1	0	0
199	A200	0183	0	0	1	0	0
200	A200	0189	0	0	1	0	0
201	A200	0192	0	0	1	0	0
202	A200	0196	0	0	1	0	0
203	A200	0200 0202	0	1 0	1	0	0
$204 \\ 205$	A200 A200	0202	0	0	1 1	0 0	0
206	A200	0207	0	0	1	0	0
207	A202	A205	0	0	1	0	1
208	A202	A207	0	0	1	0	1
209	A202	D183	0	0	1	0	0
210	A202	D189	0	0	1	0	0
211	A202	D192	0	0	1	0	0
212	A202	D196	0	Ö	1	0	0
213	A202	D200	Ö	Ö	1	Ö	0
214	A202	D202	0	1	1	0	0
215	A202	D205	0	0	1	0	0
	1						



216	A202	D207	0	0	1	0	0
217	A202	L183	0	0	1	0	0
218	A202	L189	0	0	1	0	0
219	A202	L192	0	0	1	0	0
220	A202	L196	0	0	1	0	0
221	A202	L200	0	0	1	0	0
222	A202	L202	0	1	1	0	0
223	A202	L205	0	0	1	0	0
224	A202	L207	0	0	1	0	0
225	A202	0183	0	0	1	0	0
226	A202	0189	0	0	1	0	0
227	A202	0192	0	0	1	0	0
228	A202	0196	0	0	1	0	0
229	A202	0200	0	0	1	0	0
230	A202	0202	0	1	1	0	0
231	A202	0205	0	0	1	0	0
232	A202	0207	0	0	1	0	0
233	A205	A207	0	0	1	0	1
234	A205	D183	0	0	1	0	0
235	A205	D189	0	0	1	0	0
236	A205	D192	0	0	1	0	0
237	A205	D196	0	0	1	0	0
238	A205	D200	0	0	1	0	0
239	A205	D202	0	0	1	0	0
240	A205	D205	0	1	1	0	0
241	A205	D207	0	0	1	0	0
242	A205	L183	0	0	1	0	0
243	A205	L189	0	0	1	0	0
244	A205	L192	0	0	1	0	0
245	A205	L196	0	0	1	0	0
246	A205	L200	0	0	1	0	0
247	A205	L202	0	0	1	0	0
248	A205	L205	0	1	1	0	0
249	A205	L207	0	0	1	0	0
250	A205	0183	0	0	1	0	0
251	A205	0189	0	0	1	0	0
252	A205	0192	0	0	1	0	0
253	A205	0196	0	0	1	0	0
254	A205	0200	0	0	1	0	0
255	A205	0202	0	0	1	0	0
256	A205	0205	0	1	1	0	0
257	A205	0207	0	0	1	0	0
258	A207	D183	0	0	1	0	0
259	A207	D189	0	0	1	0	0
260	A207	D192	0	0	1	0	0
261	A207	D196	0	0	1	0	0
262	A207	D200	0	0	1	0	0
263	A207	D202	0	0	1	0	0
264	A207	D205	0	0	1	0	0
265	A207	D207	0	1	1	0	0
266	A207	L183	0	0	1	0	0
267	A207	L189	0	0	1	0	0
268	A207	L192	0	0	1	0	0
269	A207	L196	0	0	1	0	0
270	A207	L200	0	0	1	0	0
271	A207	L202	0	0	1	0	0
272	A207	L205	0	0	1	0	0
	-						



273	A207	L207	0	1	1	0	0
274	A207	0183	0	0	1	0	0
275	A207	0189	0	0	1	0	0
276	A207	0192	0	0	1	0	0
277	A207	0196	0	0	1	0	0
278	A207	0200	0	0	1	0	0
279	A207	0202	0	0	1	0	0
280	A207	0205	0	0	1	0	0
281	A207	0207	0	1	1	0	0
282	D183	D189	0	0	1	0	1
283	D183	D192	0	0	1	0	1
284	D183	D196	0	0	1	0	1
285	D183	D200	0	0	1	0	1
286	D183	D202	0	0	1	0	1
287	D183	D205	0	0	1	0	1
288	D183	D207	0	0	1	0	1
289	D183	L183	0	1	1	0	0
290 291	D183 D183	L189	0	0	1 1	0	0
291 292	D183	L192 L196	0	0	1	0 0	0
292 293	D183	L190 L200	0	0	1	0	0
293 294	D183	L200	0	0	1	0	0
295	D183	L202	0	0	1	0	0
296	D183	L207	0	0	1	0	0
297	D183	0183	0	1	1	0	0
298	D183	0189	0	0	1	Ö	0
299	D183	0192	0	0	1	0	0
300	D183	0196	0	0	1	0	0
301	D183	0200	0	0	1	0	0
302	D183	0202	0	0	1	0	0
303	D183	0205	0	0	1	0	0
304	D183	0207	0	0	1	0	0
305	D189	D192	0	0	1	0	1
306	D189	D196	0	0	1	0	1
307	D189	D200	0	0	1	0	1
308	D189	D202	0	0	1	0	1
309	D189	D205	0	0	1	0	1
310	D189	D207	0	0	1	0	1
311	D189	L183	0	0	1	0	0
312	D189	L189	0	1	1	0	0
313	D189	L192	0	0	1	0	0
314	D189	L196	0	0	1	0	0
315	D189	L200	0	0	1	0	0
316	D189	L202	0	0	1	0	0
317	D189	L205	0	0	1	0	0
318	D189	L207	0	0	1	0	0
319	D189	0183	0	0	1	0	0
320	D189	0189	0	1	1	0	0
321	D189	0192	0	0	1	0	0
322	D189	0196	0	0	1	0	0
$323 \\ 324$	D189	0200	0 0	0 0	1	0 0	0
324 325	D189 D189	0202 0205	0	0	1 1	0	0
326 326	D189	0203	0	0	1	0	0
320 327	D103	D196	0	0	1	0	1
328	D192	D190 D200	0	0	1	0	1
329	D192	D200	0	0	1	0	1
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330	D192	D205	0	0	1	0	1
331	D192	D207	0	0	1	0	1
332	D192	L183	0	0	1	0	0
333	D192	L189	0	0	1	0	0
334	D192	L192	0	1	1	0	0
335	D192	L196	0	0	1	0	0
336	D192	L200	0	0	1	0	0
337	D192	L202	0	0	1	0	0
338	D192	L205	0	0	1	0	0
339	D192	L207	0	0	1	0	0
340	D192	0183	0	0	1	0	0
341	D192	0189	0	0	1	0	0
342	D192	0192	0	1	1	0	0
343	D192	0196	0	0	1	0	0
344	D192	0200	0	0	1 1	0	0
345	D192	0202	0	0	1	0	0
$\frac{346}{347}$	D192 D192	0205 0207	0 0	0 0	1	0	0
348	D192	D207	0	0	1	0	1
349	D196	D200	0	0	1	0	1
350	D196	D202	0	0	1	0	1
351	D196	D203	0	0	1	0	1
352	D196	L183	0	0	1	0	0
353	D196	L189	0	Ö	1	Ö	0
354	D196	L192	0	0	1	0	0
355	D196	L196	Ö	1	1	Ō	0
356	D196	L200	0	0	1	0	0
357	D196	L202	0	0	1	0	0
358	D196	L205	0	0	1	0	0
359	D196	L207	0	0	1	0	0
360	D196	0183	0	0	1	0	0
361	D196	0189	0	0	1	0	0
362	D196	0192	0	0	1	0	0
363	D196	0196	0	1	1	0	0
364	D196	0200	0	0	1	0	0
365	D196	0202	0	0	1	0	0
366	D196	0205	0	0	1	0	0
367	D196	0207	0	0	1	0	0
368	D200	D202	0	0	1	0	1
369	D200	D205	0	0	1	0	1
370	D200	D207	0	0	1	0	1
371	D200	L183	0	0	1	0	0
372	D200	L189	0	0	1	0	0
373	D200	L192	0	0	1	0	0
374	D200	L196	0	0	1	0	0
375	D200	L200	0	1	1	0	0
376 377	D200	L202	0	0	1	0	0
378	D200 D200	L205 L207	0 0	0	1 1	0 0	0
379	D200	0183	0	0	1	0	0
380	D200	0189	0	0	1	0	0
381	D200	0103	0	0	1	0	0
382	D200	0196	0	0	1	0	0
383	D200	0200	0	1	1	0	0
384	D200	0202	0	0	1	0	0
385	D200	0205	Ö	Ö	1	Ö	0
386	D200	0207	0	0	1	0	0
	1		-	-	=	-	-



387	D202	D205	0	0	1	0	1
388	D202	D207	0	0	1	0	1
389	D202	L183	0	0	1	0	0
390	D202	L189	0	0	1	0	0
391	D202	L192	0	0	1	0	0
392	D202	L196	0	0	1	0	0
393	D202	L200	0	0	1	0	0
394	D202	L202	0	1	1	0	0
395	D202	L205	0	0	1	0	0
396	D202	L207	0	0	1	0	0
397	D202	0183	0	0	1	0	0
398	D202	0189	0	0	1	0	0
399	D202	0192	0	0	1	0	0
100	D202	0196	0	0	1	0	0
101	D202	0200	0	0	1	0	0
102	D202	0202	0	1	1	0	0
103	D202	0205	0	0	1	0	0
104	D202	0207	0	0	1	0	0
105	D205	D207	0	0	1	0	1
106	D205	L183	0	0	1	0	0
107	D205	L189	0	0	1	0	0
108	D205	L192	0	0	1	0	0
109	D205	L196	Ö	0	1	0	0
110	D205	L200	Ö	0	1	0	0
411	D205	L202	0	0	1	0	0
412	D205	L205	0	1	1	0	0
413	D205	L207	0	0	1	0	0
114	D205	0183	0	0	1	0	0
415	D205	0189	0	0	1	0	0
416	D205	0103	0	0	1	0	0
417	D205	0192	0	0	1	0	0
118	D205	0200	0	0	1	0	0
419	D205	0200	0	0	1	0	0
120	D205	0202	0	1	1	0	0
120 121	1				1		
$\frac{121}{122}$	D205 D207	0207	0	0	1	0	0
	1	L183		0		0	0
123	D207	L189	0	0	1	0	0
124	D207	L192	0	0	1	0	0
125	D207	L196	0	0	1	0	0
126	D207	L200	0	0	1	0	0
127	D207	L202	0	0	1	0	0
128	D207	L205	0	0	1	0	0
429 430	D207	L207	0	1	1	0	0
	D207	0183	0	0	1	0	0
131	D207	0189	0	0	1	0	0
132	D207	0192	0	0	1	0	0
133	D207	0196	0	0	1	0	0
134	D207	0200	0	0	1	0	0
435	D207	0202	0	0	1	0	0
136	D207	0205	0	0	1	0	0
137	D207	0207	0	1	1	0	0
138	L183	L189	0	0	1	0	1
139	L183	L192	0	0	1	0	1
140	L183	L196	0	0	1	0	1
141	L183	L200	0	0	1	0	1
142	L183	L202	0	0	1	0	1
443	L183	L205	0	0	1	0	1
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144	L183	L207	0	0	1	0	1
445	L183	0183	0	1	1	0	0
446	L183	0189	0	0	1	0	0
447	L183	0192	0	0	1	0	0
448	L183	0196	0	0	1	0	0
449	L183	0200	0	0	1	0	0
450	L183	0202	0	0	1	0	0
451	L183	0205	0	0	1	0	0
452	L183	0207	0	0	1	0	0
453	L189	L192	0	0	1	0	1
454	L189	L196	0	0	1	0	1
455	L189	L200	0	0	1	0	1
456	L189	L202	0	0	1	0	1
457	L189	L205	0	0	1	0	1
458	L189	L207	0	0	1	0	1
459	L189	0183	0	0	1	0	0
460	L189	0189	0	1	1	0	0
461	L189	0192	0	0	1	0	0
462	L189	0196	0	0	1	0	0
463	L189	0200	0	0	1	0	0
464	L189	0202	0	0	1	0	0
465	L189	0205	0	0	1	0	0
466	L189	0207	0	0	1	0	0
467	L192	L196	0	0	1	0	1
168	L192	L200	0	0	1	0	1
469	L192	L202	0	0	1	0	1
470	L192	L205	0	0	1	0	1
471	L192	L207	0	0	1	0	1
472	L192	0183	0	0	1	0	0
473	L192	0189	0	0	1	0	0
474	L192	0192	0	1	1	0	0
475	L192	0196	0	0	1	0	0
$476 \\ 477$	L192	0200	0	0	1	0	0
477 478	L192	0202	0	0	1 1	0 0	0
479	L192 L192	0205 0207	0	0	1	0	0
480	L192	L200	0	0	1	0	1
481	L196	L200	0	0	1	0	1
482	L196	L202	0	0	1	0	1
483	L196	L207	0	0	1	0	1
184	L196	0183	0	0	1	Ö	0
485	L196	0189	0	Ö	1	Ö	0
486	L196	0192	Ö	0	1	0	0
187	L196	0196	Ö	1	1	0	0
488	L196	0200	0	0	1	0	0
189	L196	0202	Ö	0	1	0	0
490	L196	0205	0	0	1	0	0
491	L196	0207	0	0	1	0	0
492	L200	L202	0	0	1	0	1
493	L200	L205	0	0	1	0	1
194	L200	L207	0	0	1	0	1
495	L200	0183	0	0	1	0	0
496	L200	0189	0	0	1	0	0
497	L200	0192	0	0	1	0	0
498	L200	0196	0	0	1	0	0
499	L200	0200	0	1	1	0	0
500	L200	0202	0	0	1	0	0
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501	L200	0205	0	0	1	0	0
502	L200	0207	0	0	1	0	0
503	L202	L205	0	0	1	0	1
504	L202	L207	0	0	1	0	1
505	L202	0183	0	0	1	0	0
506	L202	0189	0	0	1	0	0
507	L202	0192	0	0	1	0	0
508	L202	0196	0	0	1	0	0
509	L202	0200	0	0	1	0	0
510	L202	0202	0	1	1	0	0
511	L202	0205	0	0	1	0	0
512	L202	0207	0	0	1	0	0
513	L205	L207	0	0	1	0	1
514	L205	0183	0	0	1	0	0
515	L205	0189	0	0	1	0	0
516	L205	0192	0	0	1	0	0
517	L205	0196	0	0	1	0	0
518	L205	0200	0	0	1	0	0
519	L205	0202	0	0	1	0	0
520	L205	0205	0	1	1	0	0
521	L205	0207	0	0	1	0	0
522	L207	0183	0	0	1	0	0
523	L207	0189	0	0	1	0	0
524	L207	0192	0	0	1	0	0
525	L207	0196	0	0	1	0	0
526	L207	0200	0	0	1	0	0
527	L207	0202	0	0	1	0	0
528	L207	0205	0	0	1	0	0
529	L207	0207	0	1	1	0	0
530	0183	0189	0	0	1	0	1
531	0183	0192	0	0	1	0	1
532	0183	0196	0	0	1	0	1
533	0183	0200	0	0	1	0	1
534	0183	0202	0	0	1	0	1
535	0183	0205	0	0	1	0	1
536	0183	0207	0	0	1	0	1
537	0189	0192	0	0	1	0	1
538	0189	0196	0	0	1	0	1
539	0189	0200	0	0	1	0	1
540	0189	0202	0	0	1	0	1
541	0189	0205	0	0	1	0	1
542	0189	0207	0	0	1	0	1
543	0192	0196	0	0	1	0	1
544	0192	0200	0	0	1	0	1
545	0192	0202	0	0	1	0	1
546	0192	0205	0	0	1	0	1
547	0192	0207	0	0	1	0	1
548	0196	0200	0	0	1	0	1
549	0196	0202	0	0	1	0	1
550	0196	0205	0	0	1	0	1
551	0196	0207	0	0	1	0	1
552	0200	0202	0	0	1	0	1
553	0200	0205	0	0	1	0	1
554	0200	0207	0	0	1	0	1
555	0202	0205	0	0	1	0	1
556	0202	0207	0	0	1	0	1
557	0205	0207	0	0	1	0	1
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Input data file: sww.bfin.