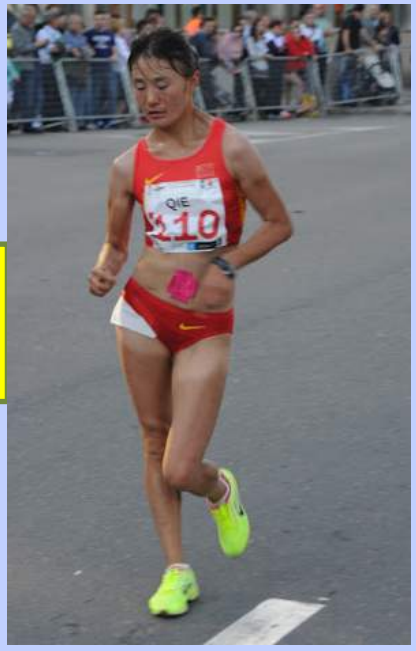
Season 2015


CHINA
Z. WANG
BEIJING 20


TOYOTA
World Championships
BEIJING 2015

TEAM SEASON 2015

Liu Hong



Qieyang Shenjie

Wang Zhen

Zhang Lin

Yu Wei

Cai Zelin

LIU HONG
SEASON 2015

RACES = 6
2 = km. 5
4 = km. 20

RESULTS				
1	Genova	Km. 5	21:39	2°
2	Beijing	Km. 20	1h27:39	2°
3	Rio Maior	Km. 20	1h27:22	1°
4	Torino	Km. 5	21:25	1°
5	La Corūna	Km. 20	1h24:38	1°
6	Beijing	Km. 20	1h27:45	1°

PERIODS AND PHASES OF THE YEAR 2015

PREPARATION PERIOD

October

GENERAL PREPARATION PHASE

November / December

SPECIFIC PREPARATION PHASE

January / February

COMPETITION PERIOD and RECOVERY

March

SPECIFIC PREPARATION PHASE

April / May

COMPETITION PERIOD and RECOVERY

½ June

SPECIAL PREPARATION PHASE

½ June / July / ½ August

COMPETITION PERIOD

August

TRANSITION PERIOD

3 week September

STAGE

PREPARATION PERIOD

Beijing

GENERAL PREPARATION PHASE

Lijiang / Saluzzo

SPECIFIC PREPARATION PHASE

Saluzzo / San Lorenzo

COMPETITION PERIOD and RECOVERY

Beijing / Home / Rio Maior

SPECIFIC PREPARATION PHASE

Monte Gordo / Saluzzo

COMPETITION PERIOD and RECOVERY

La Coruna / Saluzzo

SPECIAL PREPARATION PHASE

Livigno - Sestriere (altitude) / Saluzzo

COMPETITION PERIOD

Beijing (World Champhionships)

TRANSITION PERIOD

Home

Training Means

Aerobic Resistence 80% - 85% Speed Race	Specific Resistence 90% - 95% Speed Race	Special Resistence 95% - 100% Speed Race
Costant Walk: Long: (20 -35 km.) Medium: (10 – 15 km.)	Costant Walk: Medium (10 – 15 km.) Short: (5 – 8 km.)	Special Extensive Resistence: Total km. = (15 – 20 km.)
Costant Walk in progression Long: (20 – 25 km.) Medium: (10 – 15 km.)	Costant Walk in Progression Medium: (10 – 15 km.) Short: (5 – 8 km.)	Special Intensive Resistence: Total km. = (8- 12 km.)
Walk with change speed Long: (5 – 8 km.) Medium: (3 – 5 km.)	Walk with change speed Medium: (3 – 5 km.) Short: (1 – 2 km.)	Test: Long: (20 – 25 km.) Medium: (12 – 15 km.) Short: (5 – 10 km.)
Uphill: Long Costant (10 – 15 km.)	Repetitions: Short: (500 Mt – 2 km.) Medium: (3 – 5 km.) Long: (8 – 10 km.)	Special Block: Morning: (10 – 15 km.) Afternoon: (5 – 10 km.)
	Uphill: Long repetitions (1 – 3 km.)	Uphill: Short repetitions (200 – 500 Mt.)

Specific and Special Resistence

- **Over a longer period away from the race you must improve AEROBIC and**

  GENERAL RESISTENCE

- **In step closer to the race you must increase SPECIFIC and SPECIAL RESISTANCE.**

- **To improvement of the Special Resistance cover the period from 6 to 8 weeks before the competition.**

- **In last period take attention: Specific and Special Resistence extensive, if the athlete has a high anaerobic threshold (more quantity)**

- **Specific and Special Resistence intensive, if the athlete has a high level of resistance (less quantity – more intensity)**

Examples – Special Extensive Resistence

	Examples	Time	Time x km.	Total Time	Volume
1°	1.000 5.000 1.000 5.000	4.50 21:45 4.50 21:30	4.50 4.21 4.50 4.18	52:55 (average speed 4:25 x km.)	Km. 12
2°	1.000 3.000 1.000 3.000 1.000 3.000 1.000 3.000	4.50 13:00 4.50 13:00 4.50 13.00 4.50 13:00	4.50 4.20 4.50 4.20 4.50 4.20 4.50 4.20	1h11:20 (average speed 4:27 x km.)	Km. 16
3°	1.000 5.000 1.000 3.000 1.000 2.000 1.000 1.000	4.50 21:45 4.50 13:00 4.50 8.40 4.50 4:15	4.50 4.21 4.50 4.20 4.50 4.20 4.50 4.20	1h07:00 (average speed 4:28 x km.)	Km. 15

Examples – Special Intensive Resistence

	Examples	Time	Time x km.	Total Time	Volume
1°	8 x 1.000 Recovery: 500 mt.	4.15 – 4.20 2.20	===	52:55 (average speed 4:25 x km.)	Km. 12
2°	6 x 2.000 Recovery: 3’	12:45	4.15	===	Km. 12
3°	1.000 3.000 1.000 2.000 1.000 1.000	4.45 12:45 4.45 8:30 4.45 4.10	4.45 4.15 4.15 4.15 4.45 4.10	39:40 (average speed 4:24 x km.)	Km. 9
4°	4 x 1.000 Recovery: 2’ + 3 x 2.000 Recovery: 3’	4.10 8.30	4.10 4.15	==== ====	Km. 10

Examples – Special Block

Block Intensive – Extensive (Speed 98% – 100% Race Speed)				
Examples	Volume	Time	Time x km.	% race Speed
Morning	Km. 10	45:00 - 44:30	4.30 – 4.27	96% - 97%
Afternoon	8 x 1.000	4:15 – 4:10	Recovery = 3’	100% - 102%

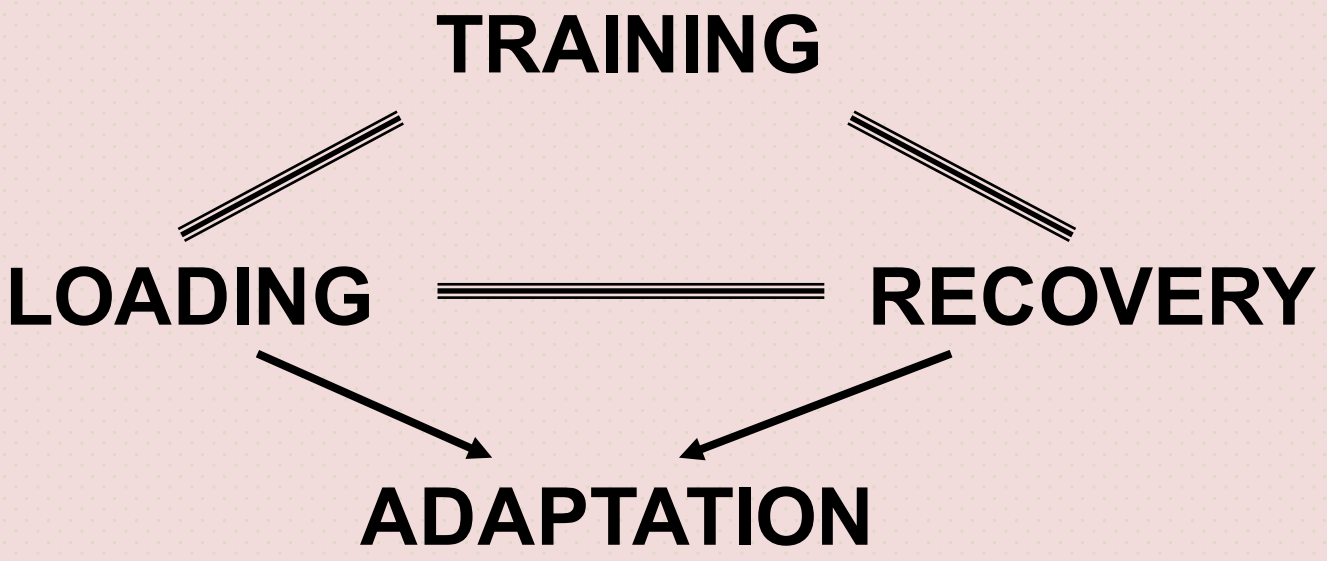
Block Extensive - Intensive (Speed 98% - 100% Race Speed)				
Examples	Volume	Time	Time x km.	% race Speed
Morning	Km. 10 in Progression	44:00 – 44.30	4.35 – 4.15	95% - 102%
Afternoon	Km. 15 change speed 3.000 / 2.000	3.000 = 13.30 2.000 = 8.40 Time = 1h06:30	4.30 4.20 4.26	96% 100% 98%

Block Extensive (Speed 95% - 97% Race Speed)				
Examples	Volume	Time	Time x km.	% race Speed
Morning	Km. 15	1h07:30 – 1h08:00	4:30 – 4.35	95% - 96%
Afternoon	Km. 15	1h07:30 – 1h08:00	4.30 – 4.35	95% - 96%

Training Treadmill with Elastic

- I believe that an important training tool is the work on the treadmill.
- The treadmill can be used:
  - as a technical work, for to improve the tecnicque (without elastic)
  - as a power and organic work (with elastic)
- The diversity of strength was measured through a small specific device
- To the organic working parameters are the measurement of lactate.

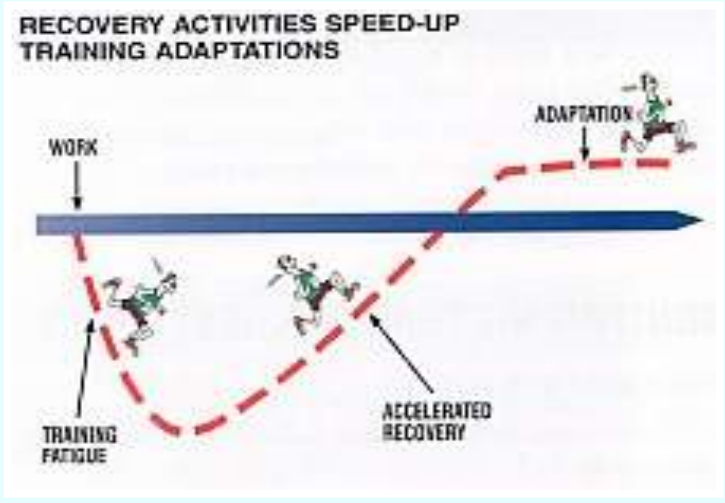
LOAD / RECOVERY BALANCE



Increased training loads require increased recovery to ensure appropriate adaptation

Failure to restore homeostasis results in **OVERTRAINING**

TRAINING ADAPTATIONS



Work Optimally

+

Recover Well

=

Best Adaptation

-The principle of recovery is about encouraging adaptive processes after the presentation of the training stimulus.

- If there is sufficient recovery before the next workload the underlying system or fuel store stressed during training can improve its capacity to cope with the next stressor.

- The human body tries to adapt to a new stimulus as best it can. However if the stimulus is presented often enough, the body becomes habituated or bored.

- To improve, it is important to vary the training stimulus from time to time.

- To encourage adaptation to training it is important to plan recovery activities which reduce residual fatigue from the workload.

- The sooner you recover from fatigue and the fresher you are when you do your training, the better your chances are to improve.

- Coaches often measure the efficiency of their training programs by monitoring the time needed by which athletes recover and bounce back from heavy training.

The method invented by the Italian physiologist dott.De Angelis

The main **problems of a coach**, apart from the technical ones, until now the most difficult to solve, are:

1. **Optimization of Supercompensation**
2. **Avoid Overtraining** that blocks the improvement or even determines a deterioration of performance, and also of the general health of the subject

3. The **early detection of altered health**

SuperOp is a service for athletes and coaches

- **Helps to easily select all the times the best training intensity for each subject**
- **Day by day**, SuperOp indicates, with colors, **which is the condition** of the athlete and **which is the best training intensity** that would give the best benefits
- Values on the day of **blood pressure, high and low, and heart rate**.
- Attributed the votes (on a scale from 0 to 5) to the **quantity** and to the **intensity** of the training in the previous day

The method invented by the Italian physiologist dott.De Angelis

With these parameters can be identified the condition of the day and, therefore, the type of ideal training.
SuperOp has 4 possible output:

- **GREEN**, an **optimal condition**: you can support **heavy training**
- **YELLOW**, **decent** condition: you take an **average workout**
- **ORANGE**, **sufficient** condition: you can only hold a **light training**
- **RED**, **insufficient** condition: you are **not** in a position to do a **profitable** workout

Table colors Beijing 2015

LIU HONG

	Day	Period
26/06/15	RED	ORANGE
27/06/15	YELLOW	ORANGE
28/06/15	YELLOW	ORANGE
29/06/15	GREEN	YELLOW
30/06/15	YELLOW	YELLOW
01/07/15	GREEN	GREEN
02/07/15	GREEN	GREEN
03/07/15	GREEN	GREEN
04/07/15	GREEN	GREEN
05/07/15	GREEN	GREEN
06/07/15	GREEN	GREEN
07/07/15	YELLOW	GREEN
08/07/15	GREEN	GREEN
09/07/15	GREEN	GREEN
10/07/15	GREEN	GREEN
11/07/15	YELLOW	GREEN
12/07/15	YELLOW	YELLOW
13/07/15	RED	ORANGE
14/07/15	GREEN	ORANGE
15/07/15	GREEN	YELLOW
16/07/15	YELLOW	YELLOW

	Day	Period
17/07/15	GREEN	GREEN
18/07/15	YELLOW	GREEN
19/07/15	YELLOW	GREEN
20/07/15	ORANGE	YELLOW
21/07/15	GREEN	YELLOW
22/07/15	YELLOW	YELLOW
23/07/15	GREEN	YELLOW
24/07/15	GREEN	YELLOW
25/07/15	GREEN	GREEN
26/07/15	GREEN	GREEN
27/07/15	YELLOW	GREEN
28/07/15	GREEN	GREEN
29/07/15	GREEN	GREEN
30/07/15	YELLOW	GREEN
31/07/15	GREEN	GREEN
01/08/15	GREEN	GREEN
02/08/15	YELLOW	GREEN
03/08/15	GREEN	GREEN
04/08/15	YELLOW	GREEN
05/08/15	GREEN	GREEN
06/08/15	GREEN	GREEN

	Day	Period
07/08/15	ORANGE	GREEN
08/08/15	YELLOW	GREEN
09/08/15	GREEN	GREEN
10/08/15		
11/08/15		
12/08/15	YELLOW	GREEN
13/08/15	GREEN	GREEN
14/08/15	GREEN	GREEN
15/08/15	GREEN	GREEN
16/08/15	GREEN	GREEN
17/08/15	YELLOW	GREEN
18/08/15	YELLOW	YELLOW
19/08/15	ORANGE	YELLOW
20/08/15	YELLOW	YELLOW
21/08/15	ORANGE	ORANGE
22/08/15	ORANGE	ORANGE
23/08/15	YELLOW	YELLOW
24/08/15	GREEN	GREEN
25/08/15	GREEN	GREEN
26/08/15	GREEN	GREEN
27/08/15	GREEN	GREEN

Summary Season 2015

Start Training	World Champion.	Total km.	Weeks	Days	Days Work	Days work x week
27/10/2014	28/08/205	4.873	44	308	252	5,7
Training sessions	**Training session x day**	**Average km. x months**	**Average km. x week**	**Average km. x day**	**Average km. x session**	
412	1,6	480	110,75	19,3	11,8	
Month with more km.	**Month with less km.**	**Week with more km.**	**Week with less km.**	**Month with more days of training**	**Month with less days of training**	
660 (May)	313 (Feb.)	182 (May)	0 (Dec. / Mar.)	30 (July)	17 (Feb.)	

Monthly training

OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
70	487 (557)	442 (999)	566 (1.565)	313 (1.878)	273 (2.151)
APRIL	**MAY**	**JUNE**	**JULY**	**AUGUST**	
543 (2.694)	660 (3.354)	502 (3.856)	607 (4.463)	410 (4.873)	

Summary Season 2015 for Training Speeed Race Pace = 4:20

Job	Km.	Numbers	% on total Km.	Average km. x session	Time X km.	Average time x km.
Long Job (> 20 km.)	**1.495**	**61**	**31%**	**24,5**	**4.58**	**88%**
> 4.50 (< 90% - < 20 km.)	**2.445**	**253**	**51%**	**9,6**	**+ 4.50**	**< 90%**
4.50 - 4.35 (90/95%)	**392**	**34**	**8%**	**11,5**	**4.44**	**92%**
4.35 - 4.20 (95/100%)	**154**	**16**	**3%**	**9,6**	**4.28**	**97%**
4.20 (> 105%)	**122**	**17**	**2%**	**7,1**	**4.10**	**104%**
Treadmill with elastic	**60**	**10**	**1%**	**6,6**	**===**	**===**
Mountain	**205**	**22**	**4%**	**9,1**	**===**	**===**

Means of training used in this season with Liu Hong

% SPEED COMPETITION	IDEAL % Annual km.	TYPOLOGIES TRAINING	QUANTITY TRAINING
< 75%	30%	Regeneration	*Slow Walk (5 – 10 km.)*
80% - 85%	10%	General Resistence	*Short, Medium, Long work (5 – 20 km.)*
85% - 90%	25%	Aerobic Resistence	*Long work (20 – 35 km.)*
90% - 95%	15%	Specific Resistence Power Aerobic	*Medium and Long Work (10 – 25 km.)*
95% - 100%	5%	Special Resistence (Competition speed)	*Short and Medium Work (5 – 15 km.)*
100 % - 105%	3%	Special Resistence Intensive	*Short Work (5 – 10 km.)*
> 105%	2%	Hyper Speed	*Short Work (3 – 8 km.)*
Mountain	5%	Power	*Mountain work (10 – 15 km.)*
Treadmill	5%	Power	*Treadmill with elastic work (5 – 8 km.)*

Season 2015

Race Speed = 4:20

Training Average Speed km. x km.

1	> 5.35	< 75%	904	18%
2	5.35 - 5.20	75% - 80%	220	4%
3	5.20 - 5.05	80% - 85%	517	11%
4	5.05 - 4.50	85% - 90%	1.652	34%
5	4.50 - 4.35	90% - 95%	819	17%
6	4.35 - 4.20	95% - 100%	313	7%
7	4.20 - 4.10	100 % - 105%	126	3%
8	< 4.10	> 105%	57	1%
	Work Treadmill&Elastic		60	1%
	Mountain		205	4%
	Gym	105h30		
		Total	4.873	100%

IDEAL

1	> 5.15	< 75%	20%	Slow regeneration
2	5.10 - 4.55	75% - 80%	10%	Aerobic Basic
3	4.55 - 4.40	80% - 85%	10%	General Resistence
4	4.40 - 4.25	85% - 90%	25%	Aerobic Resistence
5	4.25 - 4.10	90% - 95%	15%	Specific Resistence
6	4.10 - 3.55	95% - 100%	5%	Special Resistence (Competition Speed)
7	3.55 - 3.45	100 % - 105%	3%	Special Resistence Intensive
8	< 3.45	> 105%	2%	Hyper Speed
	Work Treadmill&Elastic		5%	Power
	Mountain		5%	Power
	Gym			
			100%	

LONG JOB

km. 1.495 (tot. km. = 4.873 - 31%)

Average Km. x Training = 24,9

Month	Numbers Trainings	Total km. Monthly	Average Time Monthly	Total Trainings	Annual Total km.	Average Annual Time
November	6	130	5.09 (84%)	5	130	5.09 (84%)
December	9	215	4.52 (89%)	15	345	5.01 (86%)
January	8	185	4.53 (89%)	23	530	4.58 (87%)
February	5	135	4.51 (89%)	28	665	4.56 (88%)
March	1	20	4.50 (90%)	29	685	4.54 (88%)
April	6	145	4.56 (88%)	35	830	4.55 (88%)
May	10	260	4.52 (89%)	45	1.090	4.54 (88%)
June	6	150	4.48 (90%)	51	1.240	4.53 (89%)
July	8	210	4.47 (90%)	59	1.450	4.53 (89%)
August	2	45	4.56 (88%)	61	1.495	4.54 (88%)

Distribution Works x Month

	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	*Total*
km. 20	4	4	4	1	1	2	5	2	2	1	*26*
km. 25	2	3	3	1		3	1	2	3	1	*19*
km. 30		2	1	3		1	1	2	2		*12*
km. 35							3		1		*4*
	6	*9*	*8*	*5*	*1*	*6*	*10*	*6*	*8*	*2*	*61*

LONG TRAININGS > 20 KM.

Trainings most important

Dec.	km. 20	1h33:08	4.39 (87%)	23:23 (4:41) + 23:26 (4:41) + 23:13 (4:39) + 23:05 (4:37)	171	3.8
Feb.	km. 30	2h20:16	4.40 (87%)	0 - 5 = 24:47 (4:58) 5 - 10 = 23:36 (4:43) = 48:23 10 - 15 = 24:13 (4:51) = 1h12:36 15 - 20 = 22:34 (4:31) = 1h35:10 20 - 25 = 23:22 (4:40) = 1h58:33 25 - 30 = 21:43 (4:21) = 2h20:16	155 165 162 169 162 171	 3.2
May	km. 35	2h45:14	4.43 (86%)	25:08 (5:02) + 24:47 (4:58) + 24:29 (4:54) + 24:21 (4:52) + 23:48 (4:46) + 22:03 (4:25) + 20:37 (4:07)	5.8	177
June	km. 25	1h58:30	4.45 (85%)	23:58 (4:48) + 23:50 (4:46) + 23:49 (4:46) + 23:36 (4:43) + 23:17 (4:39)		157
July	km. 30	2h17:44	4.35 (88%)	25:14 (5:03) + 23:50 (4:46) + 23:33 (4:43) + 22:34 (4:31) + 22:19 (4:28) + 20:13 (4:03)	6.3	166

Jobs (4.50 - 4.35) x km. (90% - 95%)

Training < 20 km.

Km. = 392 (tot. km. = 4.873 - 8%) - km. x training = 11,5

Month	Numbers Trainings	Total km. Monthly	Average Time Monthly	Total Trainings	Annual Total km.	Average Annual Time
November	0	0	0	0	0	0
December	4	35	4:44 (92%)	4	35	4.44 (92%)
January	2	30	4.45 (91%)	6	65	4.45 (91%)
February	0	0	0	6	65	4.45 (91%)
March	3	35	4:43 (92%)	9	100	4:44 (92%)
April	7	80	4:42 (92%)	16	180	4:43 (92%)
May	7	84	4:44 (92%)	23	264	4:44 (92%)
June	3	35	4:42 (92%)	26	299	4:43 (92%)
July	4	50	4.47 (91%)	30	349	4:44 (92%)
August	4	43	4:41 (93%)	34	392	4:44 (92%)

Distribution Works x Month

	Nov.	Dec.	January	Feb.	March	April	May	June	July	August	*Total*
km. 3										1	*1*
km. 5		1				2					*3*
km. 8							1				*1*
km. 10		3			2	1	1	2	2	1	*12*
km. 12							3				*3*
km. 15			2		1	4	2	1	2	2	*14*
		4	*2*		*3*	*7*	*7*	*3*	*4*	*4*	*34*

TRAININGS TO 90% - 95% OF THE SPEED RACE

Trainings most important

December	km. 10 2 x 5.000	23:45 23:07	4.42	23:45 (4.45) - (9.30 + 5.02 + 9.17) 23:07 (4.39) - (9.03 + 4.55 + 9.08)	171 169	
January	km. 15	1h09:03	4.40	km. 2 = 9.53 (4.57) + km. 4 = 18:16 (4.34) + km. 1 = 4.55 + km. 3 = 13.27 (4.29) + km. 1 = 4.59 + km. 2 = 8.44 (4.22) + km. 1 = 4.51 + km. 1 = 3.56		
March	km. 15	1h09:10	4.37	25:28 (4:54) + 22:52 (4:34) + 21:50 (4:22)		176
March	km. 10	46:52	4.41	23:22 (4:40) + 23:29 (4:42)		
April	km. 15	1h09:27	4.38	24:03 (4:49) + 23:13 (4:38) + 22:55 (4:35)		
May	km. 12	55:51	4.39	23:16 (4:39) + 23:17(4:39) + 09:17 (4:39)		167
May	km. 12	55:07	4.36	23:08 (4:38) + 22:53 (4:35) + 9:06 (4:33)		
June	km. 10	46:16	4.38	23:28 (4:42) + 22:48 (4:33)		
August	km. 15	1h10:28	4.42	20:25 (5:66) + 4:08 = 24:33 19:01 (4:45) + 4:05 = 23:06 = 47:39 18:29 (4:37) + 4:20 = 22:49 = 1h10:28		
August	km. 10	46:23	4.38	24:20 (4:52) + 22:02 (4:24)		

Jobs (4.35 - 4.20) x km. (95% - 100%)

Training < 20 km.

Km. = 174 (tot. km. = 4.873 - 4%) - km. x training = 10,2

Month	Numbers Trainings	Total km. Monthly	Average Time Monthly	Total Trainings	Annual Total km.	Average Annual Time
November	0	0	0	0	0	0
December	0	0	0	0	0	0
January	2	20	4.27 (97%)	2	20	4.27 (97%)
February	1	10	4.35 (95%)	3	30	4.31 (96%)
March	3	18	4.29 (97%)	6	48	4.30 (96%)
April	1	8	4.20 (100%)	7	56	4.28 (97%)
May	5	56	4.26 (98%)	12	112	4.27 (97%)
June	2	15	4.35 (96%)	14	127	4.29 (97%)
July	2	35	4.25 (98%)	16	162	4.29 (97%)
August	1	12	4.20 (100%)	17	174	4.28 (97%)

Distribution Works x Month

	Nov	Dec	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	*Total*
km. 5					2		1	1			*4*
km. 8					1	1					*2*
km. 10			2	1				1			*4*
km. 12							3			1	*4*
km. 15							1		1		*2*
km. 20									1		
			2	*1*	*3*	*1*	*5*	*2*	*2*	*1*	*17*

TRAININGS TO 95% - 100% OF THE SPEED RACE

Trainings most important

January	km. 10	2 x 5.000	4.24	22.03 (4.25) // 21.53 (4.23)	168	
March	km. 8	4 x 2.000 Lactat Test	4.24	9:24 (4:41) 9:02 (4:30) 8:40 (4:20) 8:07 (4:04)	162 171 176 181	3.8 5.8 8.3 13.5
April	km. 8	4 x 2.000 Lactat Test	4.20	9:11 (4.35) 8:59 (4.30) 8:36 (4.18) 7:56 (3.58)	167 171 176 184	2.3 4.5 5.8 14.9
May	km. 12	4 x 3.000	4.20	13:11 (4.24) 13:15 (4.25) 12:59 (4.20) 12:34 (4.11)	== 4.7 6.9 5.0	173 173 172 174
May	km. 12	53:34	4.27	22:32 (4:30) + 22:17 (4:28) + 8:45 (4:23)	3.8	
July	*km. 15*	*1h08:23*	*4.34* 4.29	*22:42 (4:32) + 22:54 (4:35) + 22:45 (4:33)*	*3.2*	*165*
August	km. 12	4 x 3.000	4.20	13:28 (4:29) 13:27 (4:29) 13:22 (4:27) 11:48 (3:56)	 9.1	

Jobs (< 4.20) x km. (> 100%)

Km. = 102 (tot. km. = 4.873 - 2%) - km. x training = 6,3

Month	Numbers Trainings	Total km. Monthly	Average Time Monthly	Total Trainings	Annual Total km.	Average Annual Time
November	0	0	0	0	0	0
December	0	0	0	0	0	0
January	2	17	4.15 (102%)	2	17	4.15 (102%)
February	3	22	4.12 (103%)	5	39	4.13 (103%)
March	1	5	4.18 (101%)	6	44	4.15 (102%)
April	2	2	3.58 (109%)	8	46	4.10 (104%)
May	2	23	4.18 (101%)	10	69	4.12 (103%)
June	0	0	0	10	69	4.12 (103%)
July	3	15	4.03 (107%)	13	84	4.10 (104%)
August	3	18	4.10 (104%)	16	102	4.10 (104%)

Distribution Works x Month

	Nov	Dec	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	*Total*
km. 1						2					*2*
km. 2										1	*1*
km. 5			1	2	1				3		*7*
km. 6										1	*1*
km. 8							1				*1*
km. 10										1	*1*
km. 12			1	1							*2*
km. 15							1				*1*
			2	*3*	*1*	*2*	*2*		*3*	*3*	*16*

TRAININGS MORE FAST SPEED RACE

Trainings most important

Febbruary	km. 12	500/1.000/500	4.14	500 = 2.10 - 2.09 - 2.07 - 2.08 - 2.07 - 2.08- 2.08 - 2.07 - 205 - 2.04 - 2.05 - 2.05 1.000 = 4.17 - 4.17 - 4.12 - 4.10 - 4.06 - 3.51	170 174	5.1 6.9 9.6
Febbruary	km. 5	20:53	4.11	==	178	8.2
May	km. 15	3 x 5.000	4.17	21.28 (4.18) 21:41 (4.20) 21:05 (4.13)	3.8 6.9 5.6	178 176 176
May	km. 8	34:31	4.19	21:55 (4:23) + 12:36 (4:12)	5.6	
August	km. 10	1000/2000	4.08	4:12 / 8:41 (4:20) 4:13 / 8:29 (4:15) 4:08 / 8:20 (4:10) 3:44	4.2 4.1 5.9 11.3	

TRAINING -TEST

An important part in this season program have had Training Test.
Trainings on various distances at near race pace or race pace or less than race pace. Some of these tests were prepared as were true races with a period of tappering (2/3 days) and with a recovery period of (2/3 days).
I think the Chinese athletes to participate in a few events during the year, especially in competitions in which the goal is not the great result but a verification of training and technical condition.

LIU HONG				
25 January	San Lorenzo	Km. 20	1h28:49 (4.26)	98%
18 February	Saluzzo	Km. 30	2h20:16 (4:40) – last 20 km. 1h30:20	96%
3 May	Saluzzo	Km. 12	55:44 (4.29) - Last 10 km. 44:17	97%
23 May	Saluzzo	Km. 35	2h45:14 (4.43) – last 20 km. 1h29:17 - last 10 km. = 42:40	97%
10 July Altitude	Livigno Mt. 1.900	Km. 20	1h28:54 (4:27)	97%
29 July	Saluzzo	Km. 30	2h17:44 (4:35) - last 20 km. = 1h28:35 - last 10 km. = 42:32	98%

For optimize Liu Hong training we will have to pay attention to all these details

- Appropriate Loads.
- Right balance between work and active rest.
- Fluid Electrolyte & Carbohydrate Replacement during the training.
- Regeneration and Rehydrate after training.
- Injureries & Prevention with physiotherapy (Tecar, Ultrasound, Magnetoterapy, Agopuntur)
- Massage Sport.
- Nutrition.
- Replace depleted energy reserves (supplements).
- Sleep and Rest
- Tapperring before races

Thank you for your attention!