LA GRANDE BOUCLE - MOUNTAIN STAGES- RULEBOOK V 5.0

LA GRANDE BOUCLE - MOUNTAIN STAGES- RULEBOOK V 5.0

PROCEDURE FOR RUNNING MOUNTAIN STAGES.

Mountain stages gets their name from the profile of the route. This basicaly implies that the difficulties featuring on the day's offering are principally high mountain passes. For the benefit of the game, we only select the most significant climbs to be replayed.

The procedure for Mountain Stages should be adopted when indicated by the Stage Replay Data.

At a glance, we can assess that this stage has three selected climbs, two rated Category 2, and one Hors Category, the last one, which also is a Mountain Top Finish.

Stage 17:	**Gap - L'Alpe d'Huez**	23 July 1991	125.0 km	[Mountain Stage]
Distance Remaining	**Feature Location**	**Feature**		**Total Distance**
125.0 km to go:	**Gap**	Start		00.0 km
1st Climb	Col Bayard	KoM Cat. 2 (1210m)	7.5 km @ 6.8%	
1st section:	= 0 use d10 as decimal	Section 2 to top:	= use lowest d6 - 1, minimum value = 1	
2nd Climb	Col d'Ornon	KoM Cat.2 (1365m)	14.4km @ 3.9%	
1st section:	= use lowest d6	Section 2 to top:	= use highest d6-1	
3rd Climb	L'Alpe d'Huez	KoM Cat.HC (1860m)	13.8 km @ 7.9%	
All sections:	= 1 km as standard value + d10 as decimal			
00.0 km to go:	**L'Alpe d'Huez***	Finish line	[Mountain Top Finish]	125.0 km

* Mountain Top Finish

1) THINGS TO DO BEFORE THE START OF THE STAGE.

1. A) Replay data Check.

The first thing to do will be to consult the Stage Replay Data and gather the vital information for the day, such as number and severity of Climbs, and check if the finish of the stage is a Mountain Top Finish or a finish in the valley below.
All this info is displaid as above.

1. B) Non Starters, and questionable riders.

The next step is to check the identity of riders who will not start today as well as highlighting the riders who will start with reduced performance ratings due to a previous incident, illness or injury.

Questionable Riders

We are not talking about their integrity here, but about the level of fitness at the start of a stage. Some riders, after having been victim of incident will be questionable. This means that the likehood of them starting the next stage is subject to their recovery from the incident.

They can only start the stage of the day if pass the following test.

- Roll the d10. If the result is within 1-5, the rider starts the stage but with restricted ratings
  The reduction is ratings is stated on the Incident Chart.

  If the d10 result is between 6 and 10, the rider fails the test and does not start the stage.

2) A BRIEF OUTLINE OF THE CONCEPT BEHIND THE GAME MECHANICS FOR MOUNTAIN STAGES.

For the replay of Mountain stages, we will concentrate on following the action as it develops:

- On the selected climbs
- On the descent following the last climb of the day, if the stage ends in the valley.

We will also only follow riders who are selected as "CLIMBERS". Other riders will be treated abstractly as the peloton and will only be mentioned via the Incident procedure.
Depending on the year replayed, there are around 25 selected climbers.

Occasionally, a stage will be designated as a Mountain Stage but it may be run partly as a flat stage. When this occurs, the Stage Replay Data will outline the procedure to follow.

Otherwise, we will not replay any action before or between the selected climbs.

Action on climbs will be governed by the following principles:

- Riders can try to put pressure on the rest of the climbers group by attacking.
- When under pressure from an attack, riders must match the pace to avoid being dropped
- Riders can be put under pressure if they cannot match the pace of the group they belong to, even if no-one has attacked.
- Riders can push back their limitations by digging deep into their reserve of energy and stamina
- Riders can make up time on descents by taking risks

Before starting your replay of a Mountain stage, you should have in front of you:

- The selected climbers cards
- The Mountain Record Sheet
- The stage Replay Data for the Stage of the day
- The Team and Riders List
- A sheet of paper to record the action
- One set of small "post it notes"
- Two six-sided dice (one red, one white) and one ten-sided die (blue)

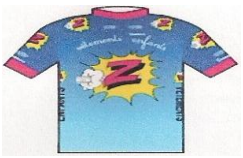
ACTION ON MAJOR CLIMBS.

In cycling, climbs are rated according to their severity, from Fourth Category (relatively easy) to First Category. The hardest climbs are considered "Hors Categorie" (Beyond Category). These are Monster climbs.
The ratings take into account the length of the climb, its gradient (steepness) and its position in the stage route.
Quality of the road surface is the last, but less important factor.
In our replay game, during Mountain stages, we have made the decision to consider climbs from 2nd Category, 1st Category or Beyond Category (HC) as worthy of inclusion into the replay data.
Category 3 and 4 climbs are generally disregarded on Mountain stages as they are of no or little consequence to the action, although, on rare occasions, we may include a 3rd Category climb if it is likely to have an impact on the stage outcome.

Let's get started

As explained, it wouldn't be practical nor interresting to follow in details the progress of each rider up the climb. Instead, we will focus our attention on a selected few, a mix of Key Riders and Specialists Climbers. These riders are identified with the Mountain icon on their individual card, as shown below.

Robert MILLAR (GB)
Z



8

Ratings:

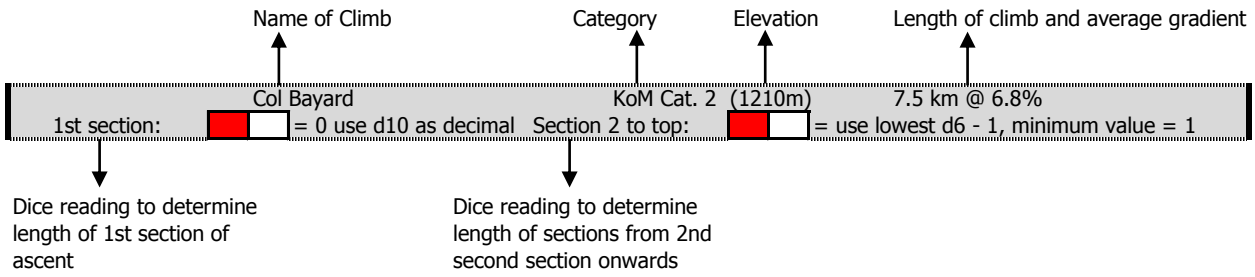
Prologue:	**0**	**Breakaway**
Time Trial 8:	**0**	**5**
Time Trial 21:	**0**	
Mountain:	**7**	
Descent::	**5**	
Sprint:	**0**	

Tour de France 1991

It is recommended at this point to assemble them in a pile before we continue further.

3) ASCENT OF SELECTED MAJOR CLIMBS.

3. A) Understanding the Major Climb Technical Data.



3. B) Outline of the procedure used on Major Climbs.

We have a pile of rider cards, all rated for Mountain. They will from now on be referred to as the *Climbers Group.*
These riders will be the only ones we will follow in detail from now on.
The procedure used on Major Climb always follow the same pattern.
We devide the climb into sections, asses the events occuring in the current section before moving to the next. We repeat the process until the top of the climb is reached.

Each section of a climb is subdivided into four distinct phases:

1) **Length of section**
2) **Incident**
3) **Action**
4) **Time management**

3. C) Length of section.

The length of each section is determined by a roll of all three dice.
The reading of the dice roll is influenced by the instructions from the Stage Replay Data.

For Instance,

Let's say that the dice roll result was **1 6 7**

Stage 17 Replay Data for Col Bayard instructs us that, on the first section of the climb, we discard the result of the 2d6 and only consider the d10 as a decimal value (see below).

Col Bayard	
1st section:	= 0 use d10 as decimal

Therefore the dice roll will be interpreted as: **0 0 7** or 0.7 km

Please note: In the eventuality of the d10 result being **0** when the Stage Replay Data instructs us to interpret the as = 0, the d10 would be read as **1.0 km**. No section can be less than 0.1 km.

The same dice roll on section 2 and after would be interpreted differently. The Replay Data instructs us to use the lowest of the 2d6 and reduce its value by 1. However, the minimum value of the modified d6 cannot be less than 1 (see below).

KoM Cat. 2 (1210m)	7.5 km @ 6.8%
Section 2 to top:	= use lowest d6 - 1, minimum value = 1

Thefore, from section 2 onwards, this dice roll would generate a section 1.7 km long.

Notes: **Length of section.**

It is important to record progress on the climb, notably:
- length of section
- total distance climbed
- distance remaing to the top

This information, will be used to calculate timing as well as to inform you if you wish to make a tactical decision.

3. D) Length of section exceeding the distance remaining on the climb.

If the reading of the dice roll produces a section exceeding the distance remaining to the top of the climb, it means that the leading riders have reached the top of the climb during this section.
As a result, there will be no Action Phase on a section reaching the top of a climb. Instead, we will first go through the Incident Phase (see paragraph **3.E**) and then go through the King of the Mountain Points procedure.

3. E) Incident Phase

The incident procedure on a climb is very similar to the incident procedure on Flat stage.
We must randomly identify a rider and determine if this rider is affected by an incident on the current section.

Roll all three dice again, to determine the victim of any incident occuring during the section of the stage that we are currently replaying. The Red and White d6 will correspond to the range of a particular team on the Riders List. d10 will be more specific and select a Rider inside the team.

- **Note that 0 result with the d10 will need to be re-rolled**, as we must generate a rider in this procedure.

Example:

Dice roll was **2 3 4**
23 = Lotto
4 = Johan Museeuw

Once the identity of the rider is known, we must roll the two d6 and consult the Incident Chart relevant to the stage.

Example:

Dice roll is **6 2** which we read **6** (+) **2** = 8

On the Incident Chart, 10 refers to the rider having a bad day, loosing time to the peloton and maybe not starting the next day.

Dice	Description of the Incident
10	Bad day. Rider is struggling and will loose 5 minutes + sum of 2d6 to the time of the peloton, today. ???

3. F) Action Phase

During the Action Phase, we will be determining the identity of a rider who will be the focus of the action on this particular section.

3. F. 1) Identifying the Action Rider.

First we will be identifying a team rather than a rider. To do so we will roll the 2d6 and consult the Climbers Sheet.

The Climbers Sheet lists the selected riders for Mountain stages. Riders are grouped within their team. Teams have been given a slice of the dice range between 11 and 66, representative of their level of involvement.

Roll the 2 d6, read the red first and the white second.
For Instance,

1	3

= **13**

Locate the team selected on the Climbers Sheet
For Instance,

1	3

= **Z** ⟶

Z	**11-13**	
No - Rider	1 LeMond	8 Millar
Mountain Rating	**6**	**7**

A team will have one or several riders listed. It will be the team manager's choice to select the rider from the team he wishes to use on the Action Phase. There are several factors to consider at the selection stage:

- Current Mountain Rating
- Position on the road
- Position on the General classification
- Timing (too early in the stage?)

Note: A rider identified in the incident phase of the section of a climb **cannot be selected** as the action rider for the same section.

For Instance,

we identified that Z has the initiative on this section of the climb. They have two riders listed. Greg LeMond and Robert Millar. LeMond is Rated 6 and Millar 7. LeMond is currently fourth overall Millar doesn't feature in the top 10. LeMond goal is the Yellow Jersey, Millar is targetting the King of the Mountain competition. We are on the first climb of the day, do we want LeMond to run out of steam later on Alpe d'Huez? Or should he build an early advantage? Should Millar get some early points in the King of the Mountain competition?

Your decision making will shape up the race and influence results.

3. F. 2) Attack or Pace Check?

When a rider is selected, we have two options to choose from as to what this rider is trying to do.
During the Action Phase, a rider can **Attack** or go through a **Pace Check**

Attack. An attack is used to increase the pace of a group or try to breakaway from a group.
A rider attacking will have to test his Mountain rating against the d10 result.
An attack, succesfull or not always reduce the Mountain Rating of the attacker by a minimum of 1 point.

Succesful attack. **If the Mountain Rating is higher than or equal to the d10, the attack is succesful.**
If an attack is succesful, the rider's card is move out of the group he was part of, and place to the left of that group, forming a new group. The rider is breaking away from the group.
If there are more than one rider in the group, the other riders will have to undergo a Pace check. Riders who pass the pace Check will join the attacker.
Riders who fail the Pace Check will remain in their original group.

Failed attack. **If the Mountain rating of the rider is lower than the dice roll, the rider cannot attack.**
However, a rider can if he wishes, dig into his reserves of energy and spend some of his remaining Mountain rating points to beat the d10 and attack succesfully.
Otherwise, he remains in the same group, but his Mountain Rating is reduced by 1
If the group is composed of more than one rider, the other rider(s) do not do anything.
The Action phase would be completed.

Pace Check. A Pace Check is to assess if the selected rider is able to follow the pace of the group he currently is part of or the match the pace of an attacker.
A rider undergoing a Pace Check will need to test his Mountain Rating against the d10

Pace Check do not cost rating points, unless a rider counter-attacks.

Succesful Pace Check. **If the Mountain Rating is higher than or equal to the d10, the Pace Check is succesful.**
If the Pace Check succeeded, the rider can stay in touch with the riders from his group. His Mountain Rating is unaffected.
If the Pace Check was the result of a succesful attack by another rider from the group, and the Pace Check was succesful, the rider can follow the attacker and form a new group.

Failed Pace Check. **If the Mountain rating of the rider is lower than the d10, the Pace Check failed.**
If the Pace Check fails, the rider cannot follow the group's pace and he is dropped.
If the Pace Check was as the result of a successful attack, the rider who failed the Pace Check will not be able to follow the attacker

Pace Checks do not alter the Mountain Rating

Counter-Attack. A counter-attack can be used when a rider has just failed a Pace Check.
Having failed the pace check, he can spend some of his remaining Mountain Rating Points

to equal the original d10 (that caused him to fail) and pass the Pace Check. As for the attack procedure, this will replicate the actions of a rider using his energy to stay in touch with a group of rider(s). In cycling terms, this is known as "going into the red".

Counter Attacks cost as many Mountain Rating Points as is necessary to succeed.

- A rider cannot Counter Attack if he hasn't got enough Mountain Rating points remaining to insure that the counter attack is succesful

For instance,

LeMond, **6**, is attacking. The d10 result is **7**, meaning that LeMond cannot attack. His Mountain Rating drops to **5**.
However, the american is determined to attack and uses **3** of his remaining 5 rating points to beat the original d10. LeMond dug into his energy reserves and made the attack stick. It is a gamble as his rating is now down to **2**.
Fignon, having failed the pace check, has been left behind by LeMond's attack. He decides to counter-attack. His Mountain Rating is currently **6**. The D10 result is **7**, meaning that Fignon is struggling to comeback with the group, initially. However, digging into his reserves of energy, he spends 1 of his remaining Mountain points to match the d10 and counter-attack.
After an effort, Fignon has rejoined the group that had left him behind a few seconds ago. His Mountain rating is down to **5**.

A rider cannot "spend" more points than his rating will allow him to.

Succesful counter-attack. If a counter-attack is succesful, the rider's card is moved back into the group he was part of before the attack.
The rider's Mountain Rating is adjusted to reflect the "cost" of the counter-attack.

For instance,

Rooks, also failed the pace check during LeMond's attack and was left behind with Fignon. He decides to counter-attack, too. His rating is **5**. The d10 result was **9**. He would need to spend 4 points to rejoin the lead group and this would leave very exposed with a rating of **1**. Instead, he lets the group disappear in the distance, hoping to find his "second wind" and make good use of his rating of **5**.
spend 4 points to rejoin the lead group and this would leave very exposed with a rating of **1**. Instead, he lets the group disappear in the distance, hoping to find his "second wind" and make good use of his rating of **5**.

Remember that a solo rider can form a group.

3. F. 3) Displaying the riders cards to reflect positions on the road.

During mountain stages, constant attacks and riders being dropped can create a confusing picture of the situation on the road. To help clarifying the situation, we use the climbers card as a visual aid to indicate the composition and position of the various groups.

At the foot of the first climb of the day, all climbers cards will be in front of us, in one neat pile.
As riders attack succesfully or are dropped, new groups will form.
personally, I like to place break away groups to the left of the group they just escaped from and dropped riders to the right. Riders not able to follow an attack stay where they were, unless they counter-attack succesfully.

Z have selected LeMond to Attack. A bold decision, this early in the stage. He is rated **6** and the d10 roll, results in a **3**
The attack is succesful. LeMond is injecting some pace into the climbers group. The rest of the group, will have to undergo a Pace Check to see if they can follow LeMond.
Before that, we must deduct 1 from LeMond's Mountain Rating.

Greg LEMOND (USA)

Z

1

Ratings:

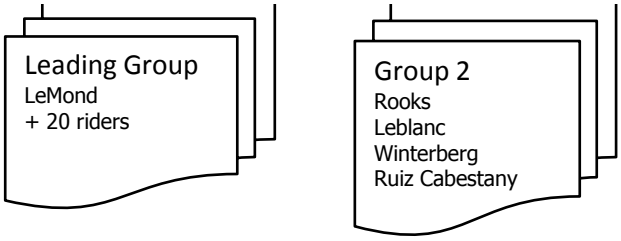
Prologue:	**19**	**Breakaway**
Time Trial 8:	**20**	**8**
Time Trial 21:	**18**	
Mountain:	**6**	
Descent:	**8**	
Sprint:	**6**	

Tour de France 1991

For instance,

Fignon, Ruiz Cabestany, Bourguignon, Rooks, Leblanc and Winterberg have failed the initial Pace Check but Fignon and Bourguignon counter attacked succesfully.
The rest of the climbers group (17 riders) did follow the pace of LeMond.

- We now have two piles of Climbers cards in front of us. Slightly to our left, the leading group with Greg LeMond and to the right of this pile, the group of four who failed the pace check and didn't counter attack succesfully.



3. F. 4) Recording the variation of Mountain Ratings.

it is strongly recommended to use the Climbers Record Sheet to record variation in rating. This document is also useful to determine the King of the Mountain rolls.

3. G) Time management Phase

On the first section of the first climb of the day, time gaps are relative to the Climbers group. Before the start of the first section, we assume that the Climbers group is having a total time of +00

3. G. 1) Time management concept

Riders breaking away from the group will receive bonus time (+) while riders dropped from this group would receive malus time (-)

For instance the riders who followed LeMond's attack will all receive (+) time. Riders in group 2 will remain as they were (+00)

If the failed Pace Check didn't come as the result of a succesful attack, the rider would have received a (-) time.

- (+ time added) if succesful attack
- (0 time added) if failed pace check as result of succesful attack
- (- time added ie, time deducted), if failed pace check not as result of succesful attack

3. G. 2) Time management calculation

(+) or (-) time gained or lost as the result of the Action Phase is calculated using the same formula:

Distance remaining on climb x Average gradient of the climb

For instance,

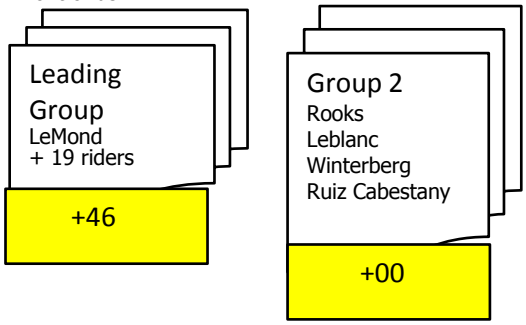
LeMond attacked with 6.8 km remaining to reach the top of Col Bayard. The average gradient is 6.8%

6.8 km x 6.8 % = + 46 seconds

We place a post it note with +46 on the top card of the lead group (LeMond)

What all this means, is that if both groups continue at this pace, there will be a 46 second gap when they reach the top of the Col Bayard.

Right now, this is what we have in front of us:



3. H) Recording the information

I would advise you to record the events from each segments. Personally, I use the format below.

Col Bayard. Cat. 2 (1210m) **7.5 km @ 6.8%** 1st section = d6 = 0 and use d10 as decimal
2nd section, + = use lowest d6 - 1 (1 minimum result)

(1) 16/7 0.7km 0.7 / 6.8 km from top
Incident = 23/4 = Museeuw (Lotto), Puncture (-30 sec)
Action = 13 = Z LeMond (6) attacks . 3 = ok (Fignon, Ruiz Cabestany, Bourguignon, Rooks, Leblanc & Winterberg) cannot follow but Fignon (-1) and Bourguignon (-1) counter attack succesfully.
Leblanc, Ruiz-Cabestany, Rooks & Winterberg are dropped.
Time = 6.8 x 6.8 = +46
Situation = Grp 1 Grp2
+46 +00

This end the first section of Col Bayard. The pattern is repeated until the top of the climb is reached.

3. I) Reaching the top of the climb

When we reach the top of the climb, we replace the Action Phase by the King of the Mountain Points Phase.
During this Phase, we will assess the order in which the riders passed at the top of the climb as well as distribute the points on offer for the King of the Mountain competition.

3. J) King of the Mountain Competition

The first riders at the top of each rated climbs earn points for the King of the Mountain Competition. The number of points and the number of riders receiving those points varies depending on the category of the climb.

For instance,

Col Bayard is a second category climb. It awards points to the first six riders at the top, respectively 10,9, 8,7,6 & 5
The lead group is composed of 12 riders. Six out of the twelve will be getting KoM points.

3. K) King of the Mountain Procedure

Roll all three dice.
Add the sum of the 2d6 to the rider's Modified Mountain Rating and use the d10 result as a decimal tie-breaker.
If two or several riders have an identical total, the second tie-breaker is the Mountain rating. The rider with the higher current Mountain Rating is ahead of the others. If this doesn't break the tie roll the D10 again

For instance,

LeMond	Z	6	**5**	**4**	**3**	= 12	**6**	12.6	12th	
Millar	Z	**7**		**3**	**5**	= 15	**9**	15.9	4th	7 pts
Chiapucci	Carrera	**8**		**5**	**5**	= 17	**8**	17.8	1st	10 pts
Breukink	PDM	6	**5**	**2**	**6**	= 13	**1**	13.1	11th	
Alcala	PDM	**7**		**4**	**3**	= 13	**4**	13.4	9th	
Indurain	Banesto	**8**		**3**	**6**	= 17	**3**	17.3	2nd	9 pts
Bernard	Banesto	8	**7**	**4**	**3**	= 14	**3**	14.1	6th	5 pts
Chozas	Once	**6**		**4**	**1**	= 11	**7**	11.7	13th	
Bugno	Gatorade	8	**5**	**1**	**4**	= 10	**6**	10.6	14th	
DeClercq	Lotto	6	**5**	**2**	**6**	= 13	**7**	13.7	7th	
Hampsten	Motorola	**6**		**6**	**4**	= 16	**0**	16.0	3rd	8 pts
Fignon	Castorama	6	**3**	**5**	**6**	= 14	**9**	14.9	5th	6 pts
Vichot	Castorama	**4**		**2**	**4**	= 10	**2**	10.2	15th	
Richard	Helvetia	**6**		**2**	**1**	= 9	**9**	9.9	16th	
Rue	Helvetia	**7**		**3**	**3**	=13	**5**	13.5	8th	
Mottet	RMO	~~7~~	**6**	**1**	**3**	= 9	**3**	9.3	17th	
Claveyrolat	RMO	**8**		**2**	**3**	= 13	**1**	13.1	10th	

Claudio Chiappucci was first at the top of Col Bayard and got maximum points. He was followed by Indurain, Hampsten, Millar, Fignon & Bernard.

If the lead group didn't have enough riders to attribute all the points on offer, riders from the second group would have followed the same procedure to fill the remaining vacant KoM points positions.

3. L) Peloton time management

During the climb, the peloton remained an abstract entity. We were aware that riders from the peloton were encountering problems via the incident phase but that was as far as it went.
Now that we have reached the top of the climb, we must assess the time lost by the peloton on the climb.

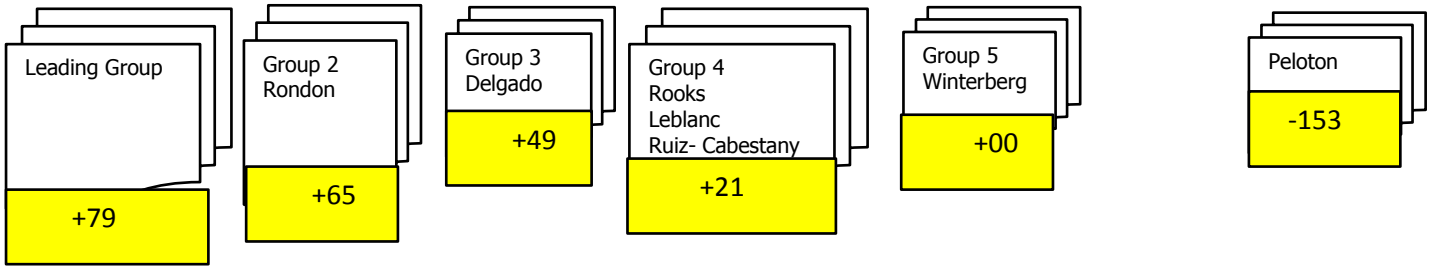
The time lost by the peloton varries depending on the category of the climb and is calculated using the formula below:

[length of climb x average gradient] **x -3 for 2nd category climbs**
x -4 for 1st category climbs
x -5 for out of category climbs

For instance,
on Col Bayard, the peloton will loose: 7.5 km x 6.8 % = 51 x -3 (cat 2 climb) = -153 seconds

- The time lost is in relation to the "+00" par given to the climbers group at the start of the first climb of the day
- The time lost is cumulative.
- The peloton is not eligible to catch up groups in front unless specified by the Stage Replay Data.

This how the riders cards are laid out at the top of Col Bayard



4. DESCENT AND TRANSITION BETWEEN CLIMBS

In this version of the game, we decided that the descent and transition between climb could be omitted. The reason behind this decision is that the action was most time of little consequence other than extending playing time.
So the action between climb is quite basic.

4. A) Incident Phase

First, we must determine riders who may be victim of an incident during the descent.

- Roll the 2 d6 and check the difference between their value. This determine the number of Incident Riders on the descent. If a "Double" is rolled, there are no Incident Riders.
  For Instance,
  4 **5** = **1**
- Use procedure as highlighted in paragraph:**3. E)** to determine the identity of the rider(s) invloved and the nature and consequences of the incident

4. B) Transition Phase

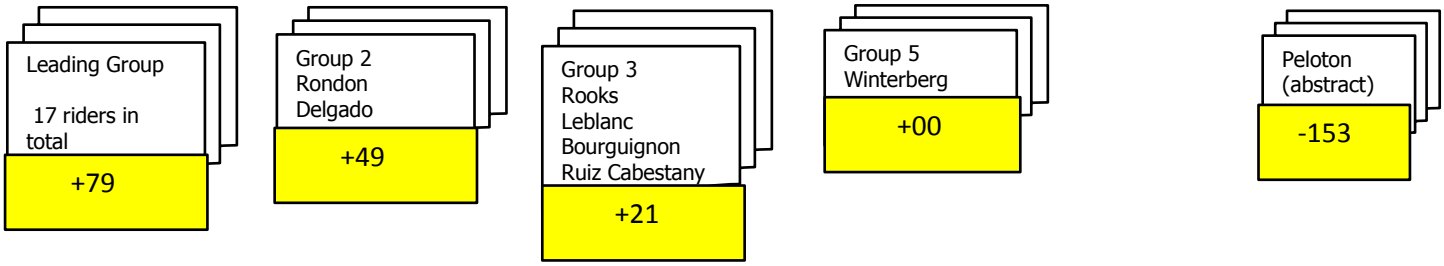
Asses the gap between each group of riders and if required re-arrange the groups.

- A group can only catch up the group in front if and only if the gap at the top of the climb is 10 seconds or less.
- Also, a team manager has the option of letting a rider from a group in front drop to the group immediately following as long as the gap between the two groups at the top of the climb was no more than 30 seconds

For instance,

No group is 10seconds or less apart from the one in front, so there will be no catch the one in front in the descent and transition to the second climb of the day.
However, Rondon (Banesto) in group 2 and Delgado (Banesto) in group 3 are separated by 14 seconds. The Banesto team manager could ask Rondon to wait and join forces with Delgado. Such a move would form a new group 2 which would be at +49 (Delgado's Group 3 time).

This represents the situation at the start of the second climb of the day.



5. OTHER CLIMB(S)

There is usually more than one mountain pass to climb during a Mountain Stage. The procedure for the other climbs on the same stage will be similar to the one we have highlighted in paragraph **3**.
However, there will be some situational variations thrown by the action phase which we must outline here.

5. A) Time management and catching up other groups

Starting with the second climb of the day, it is possible that the Action Phase allows a group to attack and regain more time than the gap separating it from the group(s) ahead.
Likewise, we could have a situation where riders are dropped from a group and potentially loose a chunk of time bigger than the time gap between them and the group behind (below?)

5. A. 1) Moving Up.

- A group moving up will move up as far as the group immediately ahead if the time allocation is sufficient.

For instance,

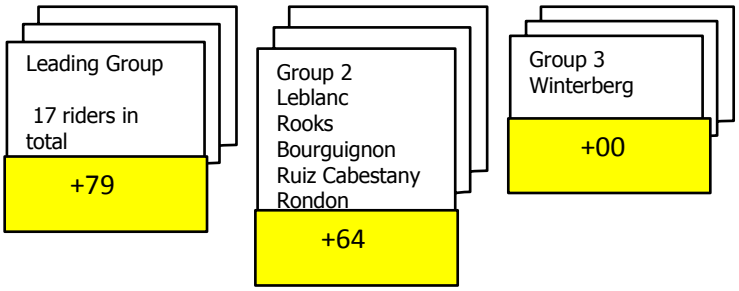
On the first section of Col d'Ornon, we have a succesful attack by Leblanc (Castorama). Rooks & Ruiz Cabestany follow him. Bourguignon also, but after a counter attack.. The 4 riders have a potential time allocation of + 43 seconds. Group 2 is only 28 seconds ahead of them. They catch up with group 2, having used 28 of their potential 43 seconds allocation.

- If time remains after catching up with the group ahead, it is possible for the newly created group to move forward and use the reminder of the time allocation.
  if:
  - The rider who attack spends another rating point, to lead the attacking group further up the climb.
  - Rider(s) from the group being caught up will have to undergo a Pace Check to see if they are tagging along or left behind.

For instance,

The group spurred by the attack of Leblanc still have a 15 seconds allowance. At the cost of 1 rating point to Leblanc, they could move forward by these 15 sec. The riders having been caught will also move that extra 15

seconds, only if they pass a Pace Check. Leblanc decides to spend the extra rating point and moves up 15 seconds, as do Rooks & Ruiz-Cabestany. Rondon and Delgado must go through a Pace Check. Both are succesful and tag along.
Following this example of play, the situation on the col d'Ornon would be.

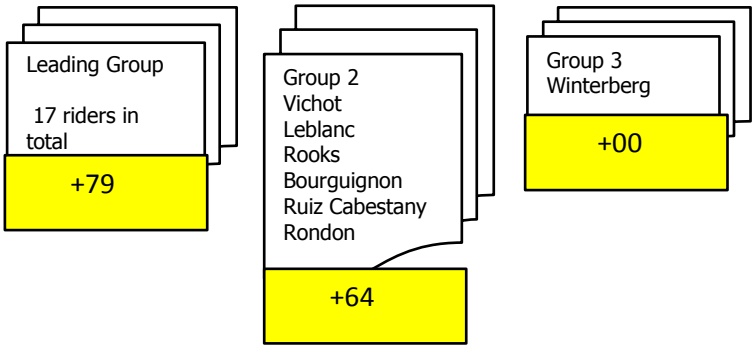


5. A. 2) Moving Down.

- A group moving down will move down as far as the group immediately behind (below?), unless the time allocation is not sufficient.

- If time remains after dropping back with the group behind, it is possible for the riders who just dropped back to move further back and use the reminder of the time allocation.
  if:
  - The rider(s) who just dropped back fail a Pace Check and cannot follow the pace of the group they have just joined.

For instance,
On the second section of Col d'Ornon, Castorama is the team with the initiative. It is decided to have Vichot **4**, (lead group), undergo a Pace Check. He fails. He doesn't want to lower his rating with a counter attack and can potentially drop back as much as 35 seconds. Group 2 is only 15 seconds down. Vichot moves level with group 2 and undergoes a pace check to see if he can follow the pace and settle in group 2. He succeeds and doesn't loose anymore time.
Following this example of play, the situation on the col d'Ornon would be.



6. LAST CLIMB OF THE DAY.

The last climb of the day is usually the most important in term of action and impact towards the result of the stage and the General Classification.
There are two distinct possibilities concerning the last climb of the day. **6. A)** the finish of the stage will be at the top of the climb or **7.)** the finish of the stage will be on the other side of the climb after a descent.

6. A) Mountain Top Finish
The procedure to replay a climb with a Mountain Top Finish is similar to other climb. The only variation in procedure concerns the King of the Mountain Phase which is also use to time the riders at the finish line.

King of the Mountain procedure see paragraph: 3. K)

For Instance,
using the procedure highlighted in paragraph 3. K), we established that the running order at the top of Alpe d'huez

Millar	Z	**6**	**2**	**3**	= 11	**7**	11.7	3rd	16 pts
Indurain	Banesto	**7**	**1**	**3**	= 11	**5**	11.5	4th	14 pts
Bernard	Banesto	**7**	**4**	**5**	= 16	**7**	16.7	1st	20 pts
Hampsten	Motorola	**5**	**4**	**5**	= 14	**3**	14.3	2nd	18 pts
Rue	Helvetia	**5**	**1**	**3**	= 8	**6**	8.6	6th	10 pts
Claveyrolat	RMO	**6**	**2**	**3**	= 11	**1**	11.1	5th	12 pts

for the lead group of 6 riders is: Bernard winning the stage, from Hampsten, Millar, Indurain, Claveyrolat and Rue.

Now, we must translate the figure obtained by riders in the King of the Mountain procedure into the basis for time gaps at the finish line.

6. B) Time Gaps at Mountain Top Finish
During the ascent of all climbs featured on the stage, we have kept tabs on the time advantage of each group of riders. For this, we used the Time Management Rules, recording time gained and lost on post it notes stuck to the appropriate group. This gives us the gaps between each groups. However, we must also determine the gaps between riders inside each

of the groups.
Returning to the example above, we are going to use the figure obtained by adding the 2 d6 to the current Mountain Rating and using the d10 as a decimal tie breaker

									Lead Group =		**+226**	
Millar	Z	**6**	**2**	**3**	= 11	**7**	11.7	**12**	+238	3rd	at 05s	
Indurain	Banesto	**7**	**1**	**3**	= 11	**5**	11.5	**12**	+238	4th	at 05s	
Bernard	Banesto	**7**	**4**	**5**	= 16	**7**	16.7	**17**	+243	1st	Stage winning time	
Hampsten	Motorola	**5**	**4**	**5**	= 14	**3**	14.3	**14**	+240	2nd	at 03s	
Rue	Helvetia	**5**	**1**	**3**	= 8	**6**	8.6	**9**	+235	6th	at 08s	
Claveyrolat	RMO	**6**	**2**	**3**	= 11	**1**	11.1	**11**	+237	5th	at 06s	

Procedure:

- Round the King of the Mountain Result to the nearest digit
- Add the rounded figure to the group own time total
- The difference between the numbers obtained is the gap (in seconds) between riders.

For instance,
The stage result for the first 6 places covered by the leading group would be:

1	Bernard	Banesto	3 hr 25 min 48 sec
2	Hampsten	Motorola	at 03 sec
3	Millar	Z	at 05 sec
4	Indurain	Banesto	same time
5	Claveyrolat	RMO	at 06 sec
6	Rue	Helvetia	at 08 sec

The process is repeated in the next group to arrive, even if the group is composed of a single rider.

For instance, the next group was the lone Richard (Helvetia). His time total was +183. The sum of his rating and the three dice combo is 9.1, bringing his time total to +192 which we deduct from Bernard's +243. This makes Richard, 7th, 51 sec down on the stage winner.
Next come Chiappucci, Bugno, Mottet and DeClercq the third group to come in. We repeat the process and places 8th to 11th, before moving to the next group and so forth.

peloton: We repeat the process highlighted in paragraph 3. L) and determine that the peloton deficit on a neutral climber would increase by
13.8 km x 7.9% = 109 x -5 = -545.
Adding this to the -321 already collected on the first two climbs of the day, we get a total time of -866
This means that non further delayed riders from the peloton will finish 866 + 243 = 1109 seconds from the stage winner. That's a deficit of 18 min 29 sec.

7. DESCENT AND VALLEY FINISH

Mountain stages can also finish in the valley after the last climb of the day, meaning that time may be lost or gained during the descent and short flat section that follows the last climb.

It is therefore necessary to account for the time lost or gained by using the following procedure.

7. A) Incident Phase

This phase is exactly identical to the Phase described in paragraph: **4. A)**

7. B) Descending rating

All selected climbers have also been rated for their ability to descend, and given a Descent Rating (no pun intended)
This is the rating that we are using during the Descent and valley Finish Phase.

Eric BREUKINK (Ned)
PDM - Concorde
21

Ratings:

Prologue:	**20**	**Breakaway**
Time Trial 8:	**18**	**8**
Time Trial 21:	**15**	
Mountain:	**6**	
Descent:	**9**	
Sprint:	**9**	

Tour de France 1991

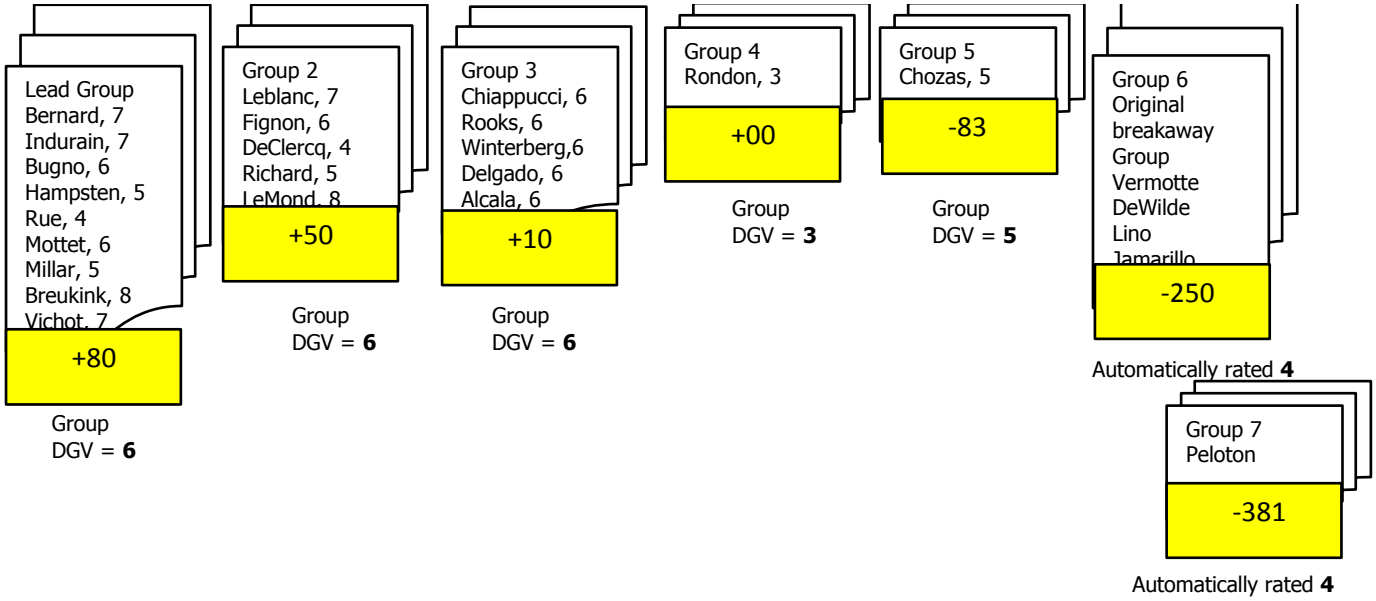
7. C) Determining the Descent Group Value (DGV)

The first step we must take during this phase is to calculate the Descent Group Value (DGV) of all the group of riders as the reach the top of the climb.

The DGV is calculated in similar way to the Flat Stage Group Value of Breakaway Group. We calculate the average of the Descent Ratings of the riders from the group and round the result to the nearest digit.

For instance,

The last climb of the day was Mont Revard, a 2nd category climb.
A descent towards the finish line in Aix Les Bains is all that remains.
The situation is as shown below, Descent ratings are indicated after the rider's name:



7. D) Strategy for the Descent

As for Flat stage breakaway, a rider's rating in relation to the DGV can determine if the rider can ride away from the group during the distance, stay with the group easily without taking risks or be left behind by the group unless risks are taken.

As for Flat Stage GV, we must assess each rider from the group.

Good	■ If the Descent Rating is 2 or more higher than the GDV, the rider will ride away from the group without taking risks
Average	■ If the Descent Rating is equal to the GDV or 1 higher or lower than the GDV, the rider will stay with the group without taking risks.
Poor	■ If the descent rating is 2 lower than the group rating, the rider will be unable to follow the group unless he takes risks.

For instance,

Let's check Group 1 **DGV = 6**

Breukink, 8	Bernard, 7 Indurain, 7 Bugno, 6 Hampsten, 5 Mottet, 6 Millar, 5 Vichot, 7	Rue, 4
2 above DGV **Good** Will gain time on the group but can increase time gained on group if decides to take risks	**+1 / -1 from DGV** **Average** will be the benchmark do not have the option to take risks	**2 below DGV** **Poor** Will loose time to group unless decides to take risks to match pace of group

Within Group 1, Breukink is the best descender, and the only one rated GOOD. He has two options.

<u>Take Risks:</u> This is to increase the time gained on the group to DGV +2. The drawback is that the rider taking risks must roll on the descent Incident Chart.

<u>Normal:</u> Descending at a safer pace of DGV +1, without having to roll on the Descent Incident Chart, unless the rider is designated during the Incident Phase.

Looking at Rue, rated POOR, he has the same range of options.

Taking Risks: Will allow him to stay with the group but involve a roll on the Descent Incident Chart.

Normal: Will see him descend at GDV -1 and loose time to the group but reduce the risk of incidents.

7. E) Time Management on Descent.

The time management procedure on the descent towards the finish line of a stage, involves two factors:

- The DGV of the group (modified by the strategy choice)
- The Time Factor of the descent

To calculate the Time Allocation generated by the Descent, we simply multiply the Group DGV x Time Factor of the Descent

Group DGV (modified by strategy) x Time Factor

For instance,

Breukink is rated **Good**. It is unmodified as he has chosen strategy Normal, descending at his own pace without attacking.
The Descent from the top of Mt Revard to Aix les Bains is rated **26**.

DGV **6 +1** (Breukink is rated Good) x 26 = +182 sec for Breukink.

Moving on to the group (that's all rider's within +1 / -1 of the DGV). The DGV is **6**. This generates a Time Allocation of 6 x 26 = +156 sec

Finishing with the lead group, we have Rue who isn't a fast descender and is rated **Poor**. Like Breukink, he has chosen the safer option of Strategy Normal. This generates a Time Allocation of (6-1) x 26 = +130 sec.

So the various decending abililities of the riders from group 1 caused the group to split.
Breukink gained 26 sec on the main body of riders, while Rue lost 26 sec on the same riders and 52 on Breukink.

we would repeat this process for the rest of the groups.

In group 2, the situation would be similar to group 1. The main body of the group (DGV 6) would get +156, LeMond **Good** would get +182 and DeClercq **Poor** would get +130

Group 3 is different . It has a DGV of **6** and has no rider rated + or - and therefore the group remains together and gets +156

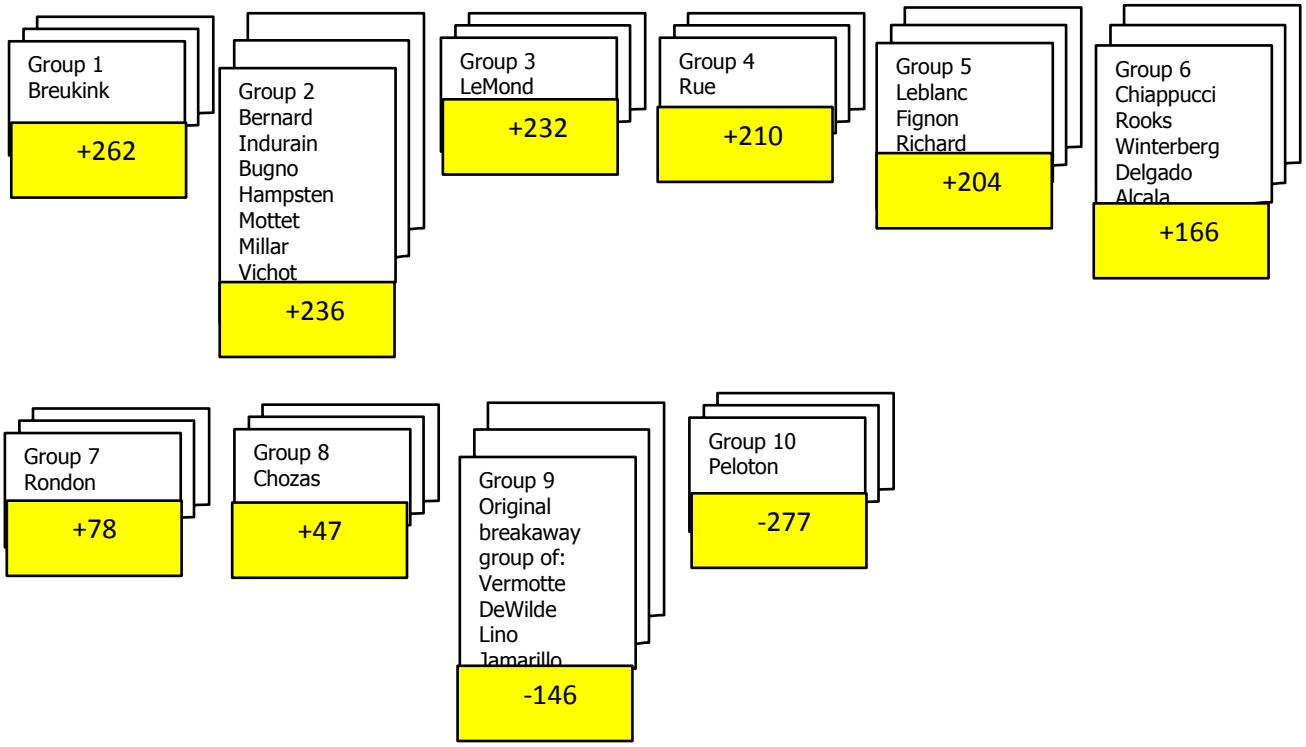
Group 4 is Rondon, alone, a particularly weak descender rated **3.** This gives him +78

Group 5 is Chozas, also alone, rated **5**. this gives him +130

- **The Time Allocation obtained on the descent by the various groups is then added to the Total Time that the riders had before starting the descent.**

- **Groups are then re-positioned according to the value of their Total Time modified by the descent.**

For Instance,
This is how the situation ended up after the descent phase.



7. F) Ranking the riders at the finish.
If a group crossing the finish line is composed of more than one rider, we must determine the order in which the riders crossed the line.
The order will be based on the following considerations:

- Riders rated for Sprint will be finishing before non-rated riders.

- Riders rated for sprint will be ranked in decreasing order according to their Sprint Rating
  For instance a rider rated 6 will be in front of a rider rated 5, etc…

- Riders with equal Sprint Ratings or riders non rated for Sprint will have to roll all three dice, adding the 2 d6 and using the d10 as a decimal tie breaker, to determine their finishing order.

For instance,

Breukink is crossing the finish line alone. No problem, he takes the stage win.
26 seconds later, group 2 arrives with: Bernard, Indurain Bugno, Hampsten, Mottet, Millar and Vichot.
Bugno (8) and Hampsten (6) are the only two riders rated for Sprint. Bugno takes second place on virtue of his rating being higher than Hampsten's who takes third on the stage. Bernard, Indurain, Mottet, Millar and Vichot much rely on a dice roll to determine their finishing order.

7. G) Time Management at the Stage finish.

Having determined the order in which the groups and riders finished, we must now determine the time gaps between Groups.

- **All the riders from the same group are allocated the same finishing time**
- The first group of rider(s) is given the stage par time.
- Other groups of rider(s) loose an amount of time equal to the difference between their Total Time and the winner's Total Time.

For instance,

Breulink wins the stage in 4 hrs 18min 28 sec, group 2 all finish 26 sec behind the PDM rider, filling up positions 2nd to 8th. LeMond is 9th, 30 sec down on Breukink, while Rue completes the top 10, 52 sec away from the stage winner.