

# Matching Validation and kinematics of Z and extra-jets

MadReport

March 6, 2008

# Contents

<b>1</b>	<b>Production 1 details</b>	<b>3</b>
<b>2</b>	<b>Differential Jet Rate</b>	<b>4</b>
2.1	Production 1 . . . . .	4
<b>3</b>	<b>X kinematics</b>	<b>5</b>
3.1	Production 1 . . . . .	5
<b>4</b>	<b>Jet <math>P_T</math></b>	<b>6</b>
4.1	Production 1 . . . . .	6
<b>5</b>	<b>Jet rapidity</b>	<b>7</b>
5.1	Jet Rapidity: Production 1, jets with minimal $P_T$ of 20 Gev . . . . .	7
5.2	Jet Rapidity: Production 1, jets with minimal $P_T$ of 50 Gev . . . . .	8
5.3	Jet Rapidity: Production 1, jets with minimal $P_T$ of 100 Gev . . . . .	9
<b>6</b>	<b>Ht calculation</b>	<b>10</b>
6.1	Ht calculation: Production 1, done with minimal $P_T$ of 20 Gev . . . . .	10
6.2	Ht calculation: Production 1, done with minimal $P_T$ of 50 Gev . . . . .	11
6.3	Ht calculation: Production 1, done with minimal $P_T$ of 100 Gev . . . . .	12
<b>7</b>	<b>Missing ET</b>	<b>13</b>
7.1	Production 1 . . . . .	13

# 1 Production 1 details

No banner for this production

## 2 Differential Jet Rate

### 2.1 Production 1

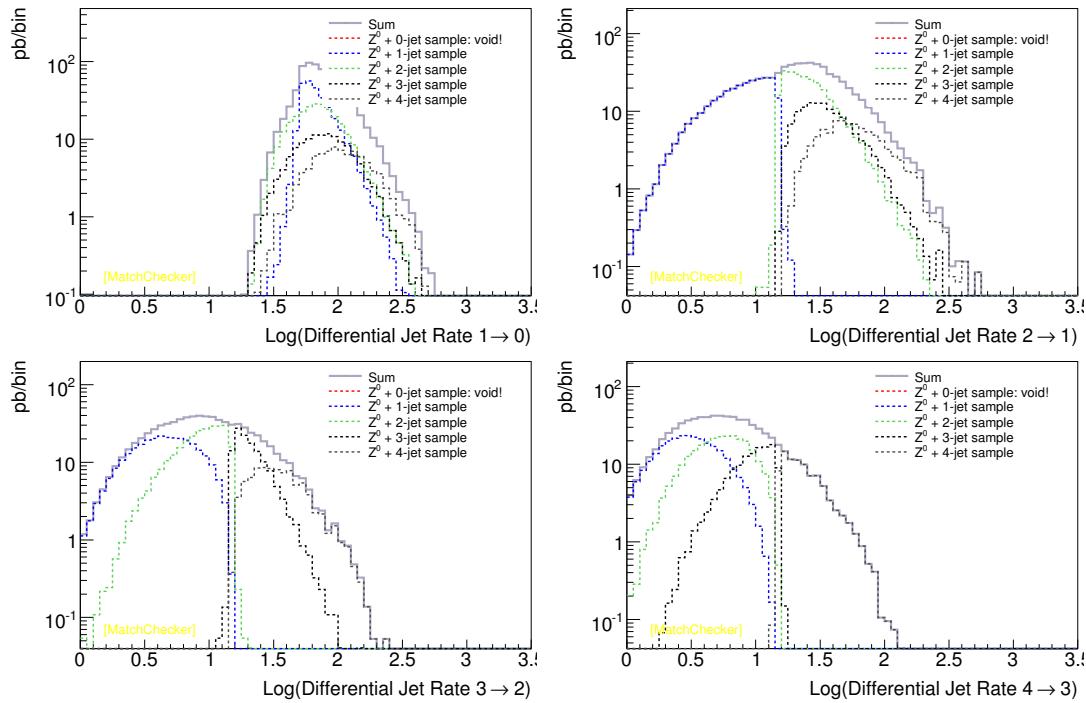


Figure 1: Differential jet rate with  $Q_{cut} = 15$  GeV.

# 3 X kinematics

## 3.1 Production 1

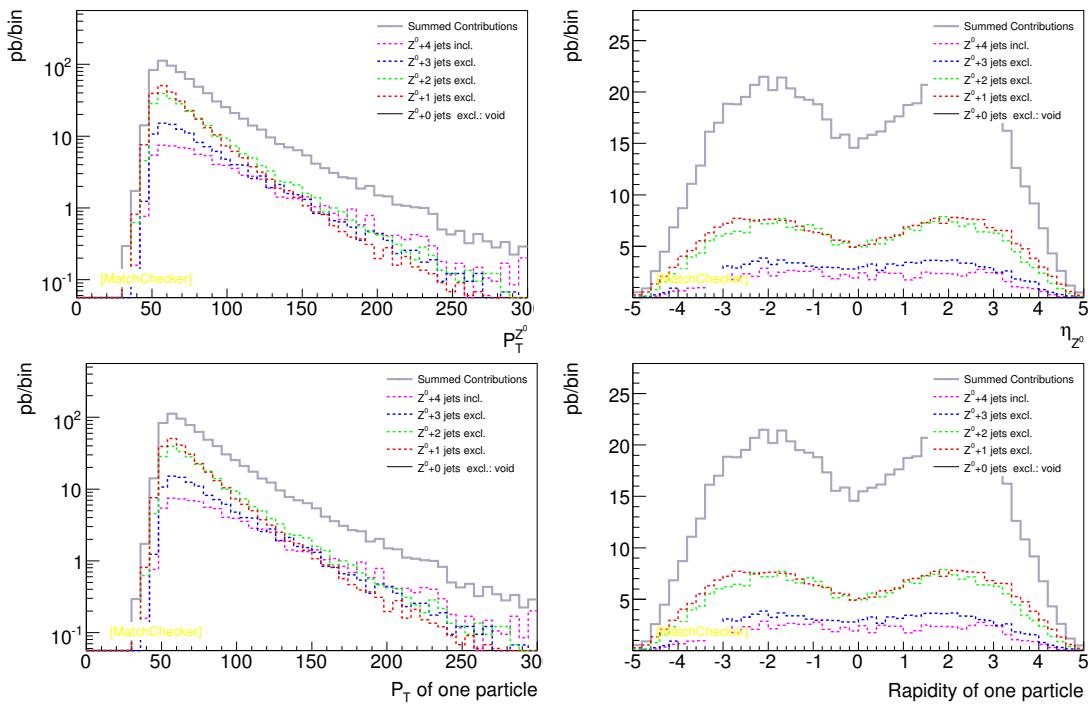


Figure 2: Kinematics variables for  $Z^0$  with a multiplicity up to 4 using mg, .

# 4 Jet $P_T$

## 4.1 Production 1

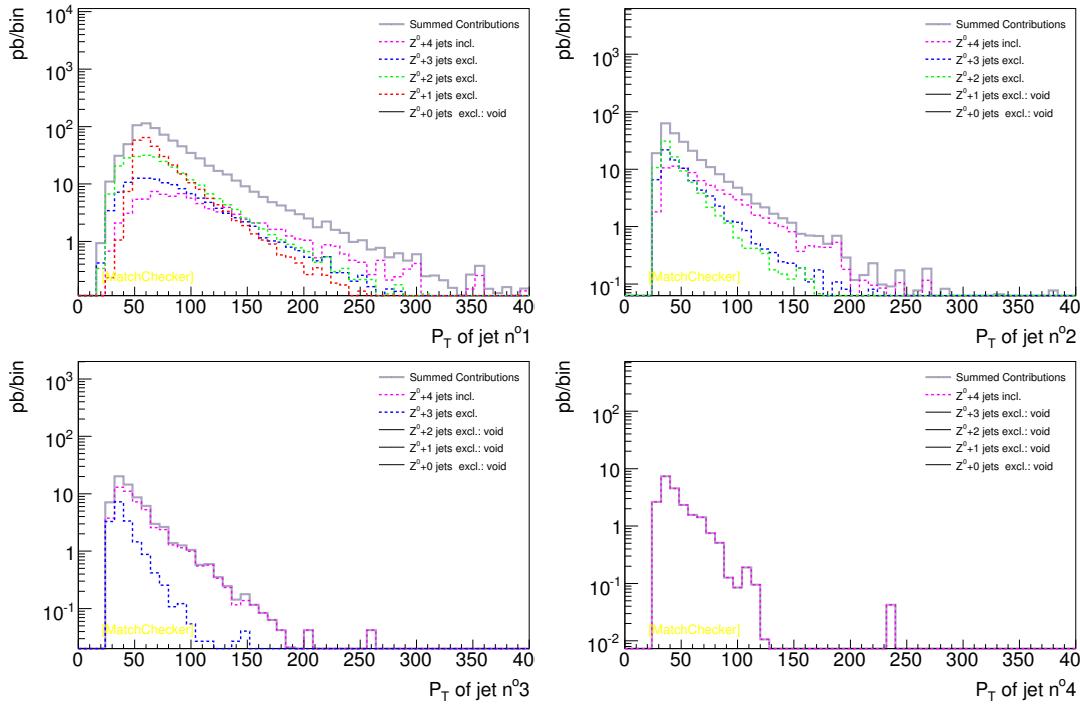


Figure 3:  $P_T$  of the four first extra-jets in  $P_T$  for  $Z^0$  using mg,. .

# 5 Jet rapidity

## 5.1 Jet Rapidity: Production 1, jets with minimal $P_T$ of 20 Gev

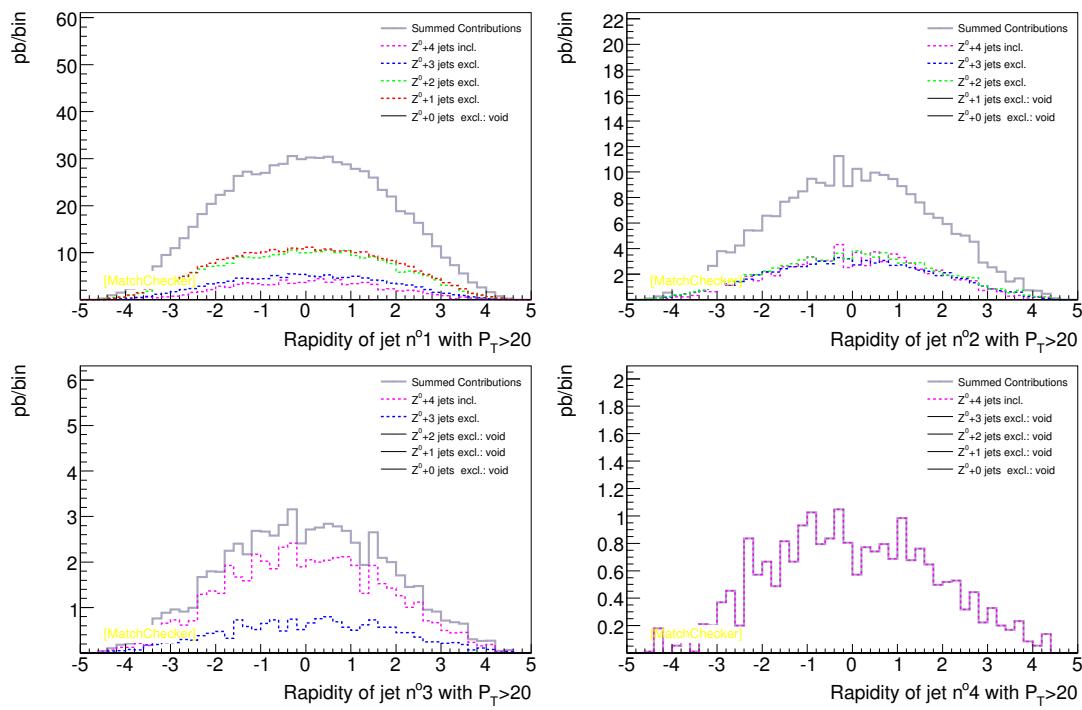


Figure 4:  $P_T$  of the four first extra-jets in  $P_T$  for  $Z^0$  using mg, .

## 5.2 Jet Rapidity: Production 1, jets with minimal $P_T$ of 50 GeV

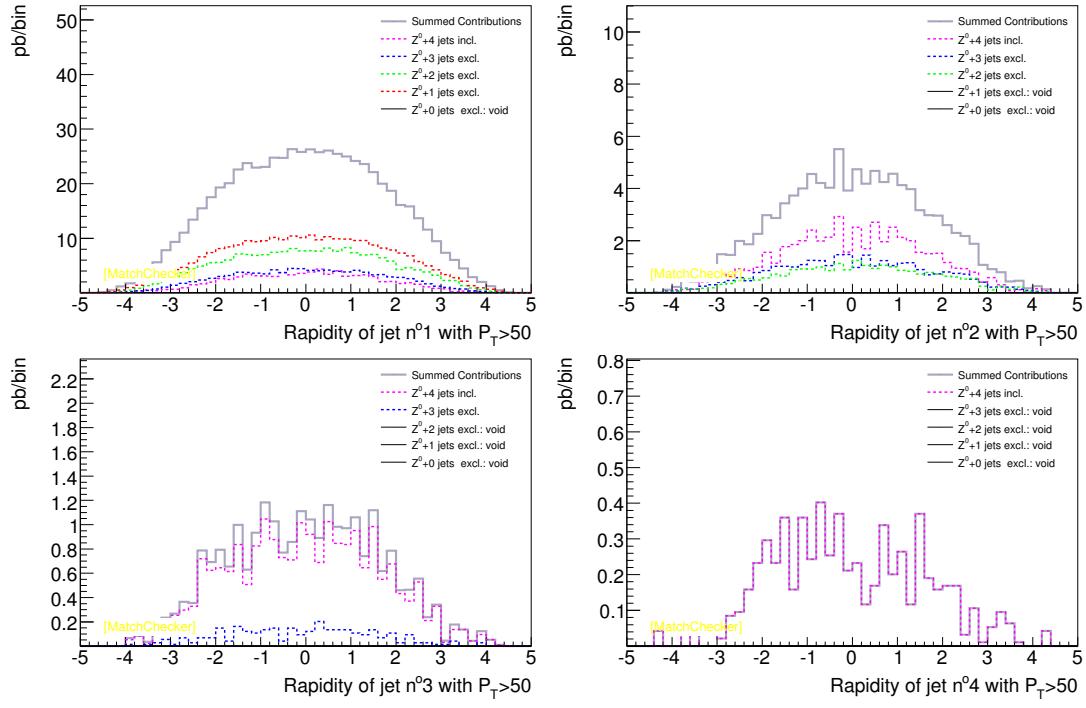


Figure 5:  $P_T$  of the four first extra-jets in  $P_T$  for  $Z^0$  using mg, .

### 5.3 Jet Rapidity: Production 1, jets with minimal $P_T$ of 100 Gev

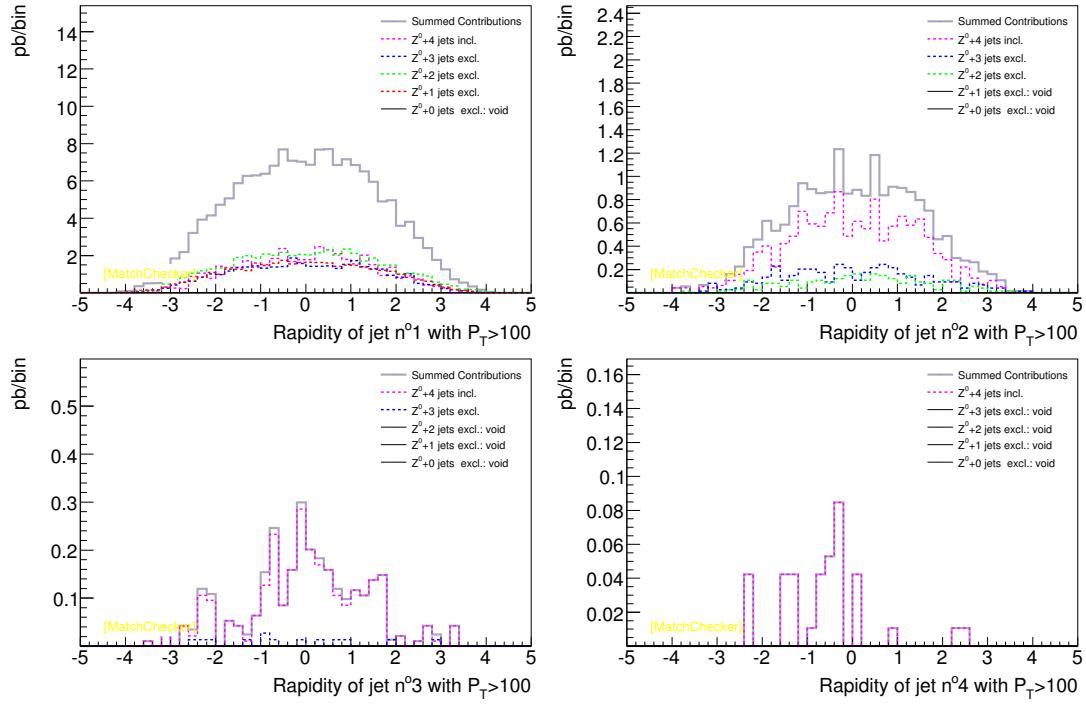


Figure 6: Pt of the four first extra-jets in Pt for  $Z^0$  using mg, .

# 6 Ht calculation

## 6.1 Ht calculation: Production 1, done with minimal $P_T$ of 20 Gev

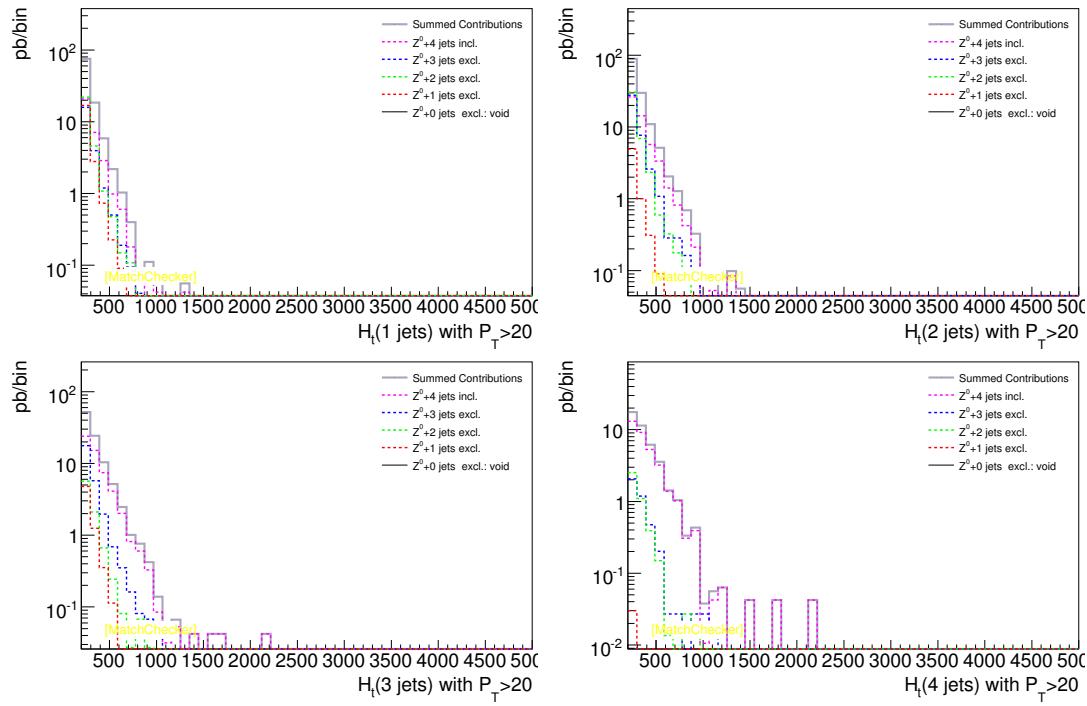


Figure 7:  $H_t(0 \text{ to } 4)$  for  $Z^0$  using mg.

## 6.2 Ht calculation: Production 1, done with minimal $P_T$ of 50 GeV

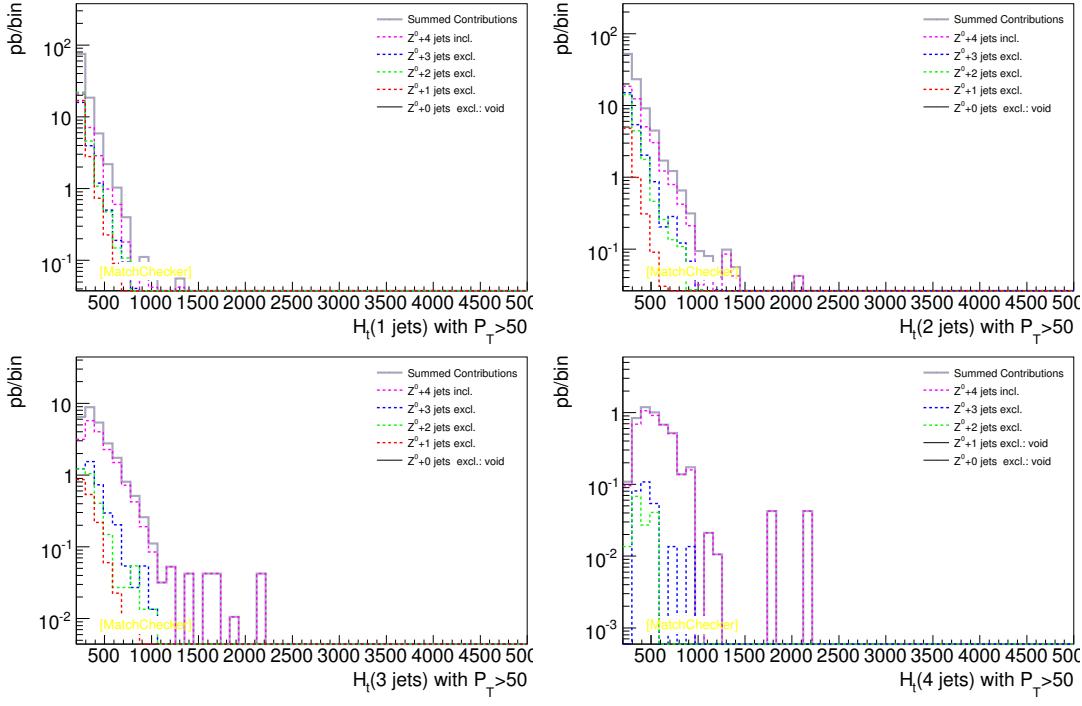


Figure 8:  $H_t(0 \text{ to } 4)$  for  $Z^0$  using mg.

### 6.3 Ht calculation: Production 1, done with minimal $P_T$ of 100 GeV

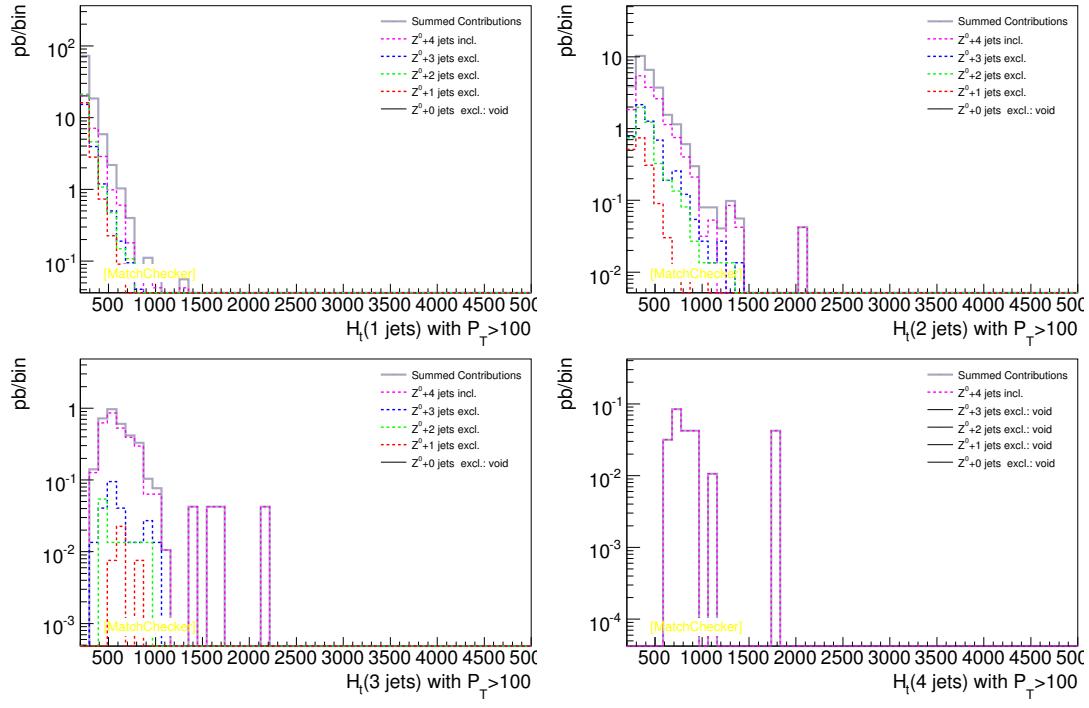


Figure 9:  $H_t(0 \text{ to } 4)$  for  $Z^0$  using mg.

# 7 Missing ET

## 7.1 Production 1

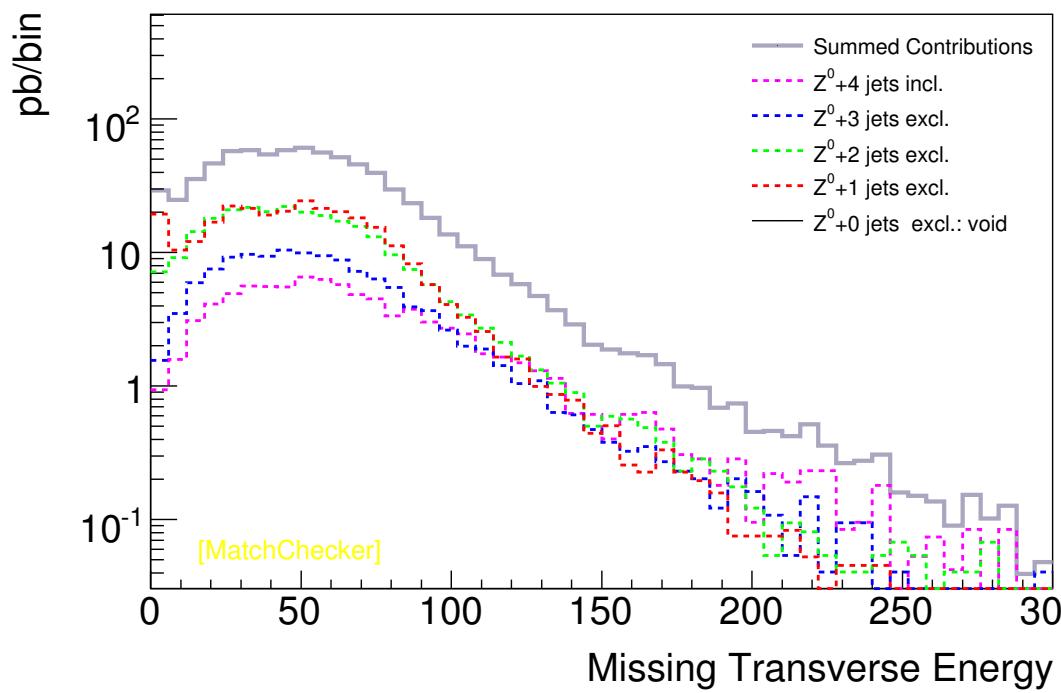


Figure 10: Kinematics variables for  $Z^0$  with a multiplicity up to 4 using mg, .