This document describes the best currently known speedrunning strats and routes for Woten. The first section talks about general game mechanics and movement tech. The second section goes through every room in the game and explains all the important strats and cycles (for all three endings, where those differ). The final section lists known bugs (which are more detrimental than helpful to speedrunning) and other quirks that aren't currently relevant to the routes.

General

Notes on movement

Woten only has two movement mechanics: a jump and a headbutt. That said, the headbutt is very versatile. Used neutrally or with a horizontal direction, it becomes a dash that can destroy walls, used upward it becomes a jump that can destroy walls above or get Woten stuck in the ceiling, and used in the air it becomes a stomp.

The horizontal headbutt consists of two phases. Until Woten hits the ground, he dashes forward at a higher speed than walking speed (and the player has no control over Woten's horizontal speed). Once he hits the ground, he turns into a rolling cannonball state and his speed is reduced to normal walking speed. In this state, he can still destroy walls. The bounce at the end of the first dash can also destroy breakable floors (but doesn't act as a stomp otherwise).

If you bonk into a wall during the first phase, Woten will bounce back a little and his horizontal speed gets reduced to zero. This can be prevent by inputting a stomp immediately after the bonk, in which case you can continue moving in the opposite direction with full dash speed. Unfortunately, there is currently no known use for this tech in the route.

If you hit a wall during the second phase, Woten will not actually bonk into it, but just fall down the wall in his cannonball state. This is very useful in several places in the run, because if there's a breakable section further down the wall, Woten can break it like this.

Since the first phase of the headbutt is faster than walking speed, you'd think that constantly headbutting would be faster than walking, but at the beginning of each headbutt, Woten stands still for a bit. The longer you press the headbutt button, the longer he stands there. If you manage to input the button only for a single frame, you will indeed save a tiny bit of time, but if you press it for too long you'll end up wasting time. So see if you can actually consistently save time with it, but otherwise just stick to walking.

That said, if you're able to headbutt down to a lower platform, you're extending the dash phase of the headbutt, i.e. you're travelling at the higher speed for longer. That always saves time, even if the lower platform is only one tile lower.

A note about the stomp: after the stomp you bounce up exactly one tile. If you're falling somewhere and you need to immediately jump one tile or less after landing (to grab a ledge or jump onto a higher platform), you can use a stomp to ensure that this jump happens immediately upon landing and that the jump is no higher than necessary. It's a tiny timesave, but an easy one to pull off.

Another interesting quirk of the stomp is that if you stomp while Woten moves up, the stomp will take him to his maximum jump height even if you only tapped the jump button. If you want to do a really short hop as a stomp, you'll need to input the stomp on the way down. The difference here is quite significant and save about 0.2 to 0.3 seconds per stomp.

Climbing

A few sections of the game require you to climb up a gap lined with alternating ledges. There are two ways to make those climbs: you can either headbutt straight up to grab the next ledge two tiles up, or you can jump from ledge to ledge in a zigzag pattern.

Which one of these is better depends on the width of the gap. For 1-tile gaps, it's a fair bit faster to use short zigzag hops from ledge to ledge. However, for 2-tile gaps, due to the longer jumps they take about the same time as the upward headbutt, but they also become really tight jumps, so it's better to just use the headbutt climb here.

Also of note: while hanging from a ledge you can perform an upward headbutt by holding the horizontal direction towards the ledge. This comes in handy when you want to headbutt upwards while moving onto the ledge (usually to break a ceiling in the process).

Blobs

Little black blobs appear throughout the game and are used either as trampolines or platforms. There isn't anything special to the platform ones, but the bouncy ones are somewhat nontrivial. You can either do a neutral bounce on them, or stomp on them for a higher jump. However, since it's possible to bounce of blobs in midair, there are ways to get a bounce of intermediate height, which can occasionally give you a minor time save.

For a regular small blob, if you stomp a bit too early while moving towards the blob, the stomp will make the blob itself bounce, but then your own bounce will make you hit the blob in the air, which gets you a few pixels higher than a stomp bounce.

For blobs that need to crawl into a spike (that you then flip around with a headbutt), if you manage to headbutt the blob into the spike, so that it hits the spike during its *second* bounce, it will complete another bounce with the spike pointing down (i.e. ready to be jumped on). If there's also a wall in the direction of the headbutt, the spiky blob can actually bounce back towards you. If you then jump at the right time, you can get a neutral midair bounce off the blob

which gets you about one tile higher than a regular neutral bounce (but less high than a stomp bounce, which can be useful to avoid getting stuck in a ceiling).

Individual room strats

A note on the different endings: the ending you get depends on the fruits you deliver to Aedling. To get the Bad Ending, you must not deliver any fruits at all. For the Good Ending, you'll need a certain amount of nutritional value at each of the three Aedling meetings that can lead up to Friday, Teer and Oasis. You'll also need to collect their heads and the three items they want you to trade for their Charms. The exact values and thresholds are a bit complicated but have been worked out by Voxelse, and a large number of fruits can actually be skipped while still getting the Good Ending (see below). If neither of those conditions are fulfilled, you'll get the Neutral Ending. That said, for the Neutral Ending we essentially only want to deliver a single fruit since feeding Aedling takes a lot of time.

The route for the Good Ending is based on the data gathered in <u>this spreadsheet</u> (and should be optimal unless new strats are found that change the detours significantly).

Chapter1

Starting plinth

Just headbutt off the plinth to make use of that sweet dash speed during the really long fall. You'll want to headbutt as soon as you get control of Woten. One way to do that is to mash the button while the game fades in and then stop mashing as soon as you see Woten crouch.

We *don't* collect the hidden pineapples on the left for the Good Ending.

Muninn's corridor 1

All of the Muninn rooms are virtually identical (and usually trivial). If you can consistently save time with flat-ground headbutts, you can get a good 6 or so headbutts in here, but otherwise just walk through.

First apples

Use a headbutt off the little platform at the bottom. For the first apple, jump over it for Bad and Neutral Ending, but headbutt through it (from the previous platform) for the Good Ending. You'll want to start that headbutt fairly late, so that the bonk off the wall gets you onto the top platform on the left without another jump. For either ending, you'll want to stand in the right half of that platform, so that you headbutt directly into the breakable wall from there.

Use a jumping climb for the gap on the left, and then the rest of the room is trivial.

First meeting with Aedling

Most of the Aedling rooms are also fairly trivial. Unfortunately, we've got to mash some buttons to get through the dialogue quickly. Imprecise button mashing can easily cost you a couple of seconds per cutscene, so figure out your most reliable button mashing technique and use it here. It's worth noting that there are multiple buttons mapped to jump, and mashing two of those can help a lot to get your speed up without getting cramps.

Another thing worth noting here: if you like to headbutt on flat ground, make sure not to headbutt into the cutscene trigger. The game will let you complete the headbutt, which delays the start of the cutscene.

First orange

For the Bad and Neutral Endings, jump over the first apple so that you don't collect either one. For the Good Ending, you can headbutt off the ledge to collect both of them. Make sure you headbutt fairly early, so that the cannonball phase completes before you reach the next platform.

Below the branch on the right, make sure to use as few hops as possible. Hang onto the ledge on the right, then directly jump to the left, hop onto the ledge and then directly jump onto the branch and up.

We collect neither the orange nor the pineapples for the Good Ending.

Leap off branch

Make sure you don't leap off the branch to early or you'll bonk against the corner of the platform (which loses a tiny amount of time). Now:

For the Bad Ending, just walk underneath the first apple and jump over the second one. You'll need to let go of the forward button very shortly after stepping off the ledge so that you don't pick up the apple while falling to the right.

For the Neutral Ending, you can headbutt through the first apple. You'll want to aim the headbutt so you land at the edge of the first apple's platform, so the cannonball bounce gets you over the second apple. If you headbutt too late and dash down both platforms, you'll also collect both apples, which costs a tiny amount of time during feeding, but also makes this section a tiny bit faster since you're extending the dash phase. (I don't actually know which of these effects is bigger, someone should time this...)

After this point, Neutral and Bad Ending will always be identical, so I'll only refer to the Neutral Ending.

For the Good Ending, headbutt as late as you safely can in order to dash down both platforms and collect both apples. We don't collect the pineapples.

Teer's head

For the Neutral and Bad Ending just walk off the ledge so you don't collect either apple.

For the Good Ending, you can headbutt off the ledge to collect both apples.

This room uses both types of climbs: use a jump climb for the first 1-tile gap and then a headbutt climb for the 2-tile gap at the top.

For the Good Ending, you'll also need collect the Teer head. At the end of the headbutt climb (while hanging from the top ledge), headbutt left to destroy the wall and pick up the head. When you jump to the left, use a stomp so that its bounce gets you up the 1-tile platform below. Then just do the climb again.

Chapter 2

Muninn's corridor 2

Nothing special here, but be ready to jump as soon as you enter the next room.

First blobs

This room differs quite a bit between Neutral and Good Endings.

For the Neutral Ending, jump onto the platform as soon as you enter the room and then jump over the first blob. Stomp on the second blob. Then walk underneath the first apple, jump over the gap and walk underneath the second apple. Stomp on the blob to clear the wall without touching anything. Then break the wall. If you've done everything right, the blob with the hat should be at the left edge of the platform. You can now do a fairly tight sequence of jump-stomp-jump-stomp to get the blob into the basin, jump off it and then jump off the left blob onto the branch.

For the Good Ending, you'll need to pick up the passion fruits and both apples. Walk off the first platform and immediately stomp to break the wall hiding the passion fruits. Move off the blob but stand just a little to the right of it so you can collect the passion fruits before they hit the ground. As soon as you have the fifth one, stomp the right blob, and then do a series of jumps to collect

the apples and clear the gap. Either stomp on the blob on the right, or just in front of it (for a midair bounce) to make it over the wall.

This time, when you break the wall and you did everything right, the blob should be near the middle of the platform. That's the ideal scenario: if you now stomp on it, it will fall into the basin really close to the right edge, which means if you just keep walking you will be able to bounce off it in midair the moment you walk off the edge. That saves a little bit of time because you don't get stuck on the left wall. You'll neutral bounce off the right blob and then you can stomp on the left blob.

Either way, fall down the final branch on the left and make sure you fall into the next room with a stomp.

CD

As said above, make sure you land with a stomp. Then on your way right, stomp again when the blob reaches the left wall so that the spike drops right on it. Flip the blob over with a headbutt and stomp bounce up. You *can* break the floor with a forward headbutt, but I don't think that's faster than a stomp unless you can also save time with headbutts during normal walking.

Make sure not to accidentally grab the ledge and then headbutt into the elevator blob as soon as you can.

For the Good Ending, you'll want to stand on the far left of the elevator and prepare a headbutt as soon as you're high enough to activate the second elevator. Nothing special after that.

Pineapples galore

For the Good Ending, we want to pick up some pineapples here, so make sure you land with a stomp when falling to the ground floor (where the blob is).

The casual route of pushing the blob all the way to the right is way too slow here. Instead, push it left once. The route then depends on the ending.

For Neutral Ending, stomp bounce and grab the left ledge. You can make the gap to the right with a regular jump and then just go up the stairs and walk to the right.

For Good Ending, we need to pick up 6 pineapples in total here, so we also take the ones in the middle. You can either stomp bounce or neutral bounce on the blob (in which case you need hop as soon as you grab the ledge... I don't know which one's faster) to get to the platform to the right, and then just make your way up to the top path.

First feeding

Nothing special here. Just mash those buttons and make sure you get clean ledge hops.

Chapter 3

Muninn's corridor 3

Make sure to begin a stomp at the end of this room. You'll need to land very soon after the screen transition for an ideal spike drop (i.e. before the blob starts moving too far). I don't know how big that window is exactly but probably not more than a handful of frames. That said, landing *before* the screen transition is much worse than landing slightly too late.

Friday's head

For Neutral Ending, I'm also not 100% convinced that it's optimal to have the spike drop right onto the blob. If it doesn't, it's possible to push the blob into the spike such that it bounces, which lets you get up the wall with a midair bounce, so you neither get stuck in the ceiling nor have to grab the ledge.

The only other important thing for Neutral Ending is that you headbutt out of the room. You'll want to stand quite far to the left of that last platform in order not to bonk into the corner of the ceiling.

For Good Ending, we want to pick up the passion fruits. The fun part is that this is actually not even a detour, because we need to wait on a cycle of the elevator blobs anyway, which we can still make even if we pick up the passion fruits. However, it becomes a very tight cycle, so movement through this first part needs to be near optimal. Flip over the blob, stomp bounce on it to break the ceiling, then wait on the floor until four fruits have dropped. Jump into the fifth fruit and stomp bounce on the blob to get up. A good indicator for whether you'll make the cycle is whether you hit the dormant elevator blob before the others reach the top of their cycle. Missing the cycle costs about 6 seconds.

Then make your way up the two elevator blobs and break the wall to the left. You should start the headbutt towards Friday's head quite late (i.e. with your front foot hanging a little over the edge) so that the bounce picks up the head without needing another jump. Likewise, on the way back you'll also want to start the headbutt quite late so that the bonk takes you directly up onto the platform (instead of grabbing the ledge).

We need to grab the lemon in the next room, so we go through the top exit. There's no need to wait for the elevator blob to get back up. Just headbutt into the wall and the bonk will let you grab the ledge.

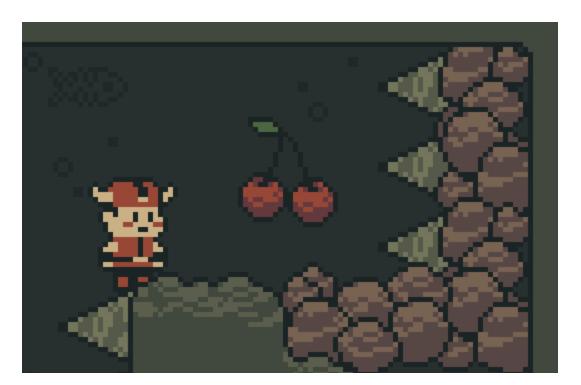
Autoscroller

For Good Ending, we start at the top. Break the two floors (while collecting the lemon) and then break the wall. For the top floor it helps to start the stomp while the corridor is still narrow so that you don't waste time jumping too high.

For Neutral Ending, you should be headbutting into the room which also breaks the wall.

Make your way up to the autoscroller. Make sure not to use too many jumps on the way up: every time you need to break a ceiling, there's no need to hop onto the floor below. Just headbutt upwards while grabbing the ledge, and make sure you hold right instead of up. The little bit of movement to the right is enough to hit the breakable ceiling instead of the solid one.

Now comes a really neat skip. There's no need to drop into the basin after the autoscroller, but the trick is a bit risky (especially for Good Ending, where failing the trick means a reset). By destroying the breakable floor with a headbutt instead of a stomp, we can use the cannonball phase of the headbutt to immediately break the right wall as well and make into that corridor. To get this right, you will want to stand quite far on the left of the platform with the breakable floor. This is the furthest to the right you can stand (use Woten's front foot as a visual cue):



There are four pixels to the left of this position where Woten still stands on the platform. Any further left will drop you into that spike which is probably a runkiller either way (you'll have to wait for another autoscroller cycle). Any further to the right and you'll headbutt into the spike.

For Neutral Ending that's not *that* bad. Just headbutt again immediately, and the skip is guaranteed to work. This then takes roughly the same time as going through the basin normally (it might still be a *little* bit faster). However, for Good Ending some of your fruits will fall down the gap to the left and you won't be able to recover them.

You can use the second cherry as an audio cue to determine when to drop off the autoscroller so you don't have to correct your position. It'll take some practice, but I tend to drop off just a tiny bit after hearing the sound effect (if you drop immediately, you'll hit the spikes though). If in doubt, take your time to align Woten correctly, it'll still be faster than going through the basin.

Nothing special for the rest of the room. Take care not to accidentally grab any ledges you don't want to grab.

Crystal maze

There's no need to use the intended route around the left part here since we can headbutt through a tiny gap in the spikes. Immediately make your way to the bottom right and teleport to the top centre part and stomp on the blob to activate it.

For Neutral Ending, this is the perfect opportunity to lose the cherries we had to pick up. While the blob is waking up, headbutt into the spike to the left. Make sure you don't stand too far to the left, or you'll drop down, losing lots of time (and not your cherries). Standing half on the blob and half still on the platform before the headbutt seems to work nicely.

As for headbutting into the gap, just stand on the blob and hold the headbutt button to get ready. Release the headbutt button when the blob is aligned with the spike below the gap. There seems to be quite a few pixels of leeway here, so it's easy enough to get this down consistently.

Blob cave

Make your way to the hanging blob. While headbutting upwards hold left so you don't end up back on the ledge. If you let go of the left button at just the right time you can fall directly through the gap with the blob, but the timing is fairly precise (you might end up grabbing the corner of the gap, but falling down from there is still a little bit faster).

Either way, you'll bounce of the blob. Move right a little to get off the blob. Then move back left and bounce the blob up. *Stomp* up the step so you can get a midair bounce off the blob onto the branch and don't have to do an additional hop.

Then make your way up, breaking the ceiling and stomp bouncing on the second blob.

For the Good Ending, we need to pick up the cherries hidden at the top, so headbutt left (this works either while either standing on the lower platform, or holding onto the upper ledge). Pick up the cherries and go back right.

Break the floor with a stomp. Sometimes, for some reason you don't actually bounce up but keep falling to the floor below the breakable part, but I haven't yet figured out how to do that consistently.

Floppy disk

For the Neutral Ending, you can jump into the spike which should knock you onto the top platform. Then quickly headbutt into the hanging blob while you still have i-frames. That gets the blob immediately where it needs to be.

For the Good Ending, we can't afford to lose our fruits, so we stomp in front of the first spike to make it drop. Then headbutt upwards to break the ceiling above the second spike. Jump down and kick the blob up the steps. Stomp in front of it for a midair bounce to the platform.

If you headbutt from the right half little 1-tile wall (into the breakable wall to make the block drop), you can get onto the block without having to grab the ledge, saving a little hop.

Fall down the gap with a stomp to make the next spike drop, then kick the blob left. Neutral bounce on it to get over the wall.

For the Good Ending, make sure to pick up the Floppy Disk. You can consistently make the jump up the disk by holding both up and right when starting the headbutt. A jump from the ledge straight up *doesn't* pick up the disk, but it's sufficient to move a single pixel to the right, which means you can actually move back left and fall down before hitting the floor beneath the disk. That said, if you miss the disk, you'll have to do all of those headbutts again which takes quite a lot of time.

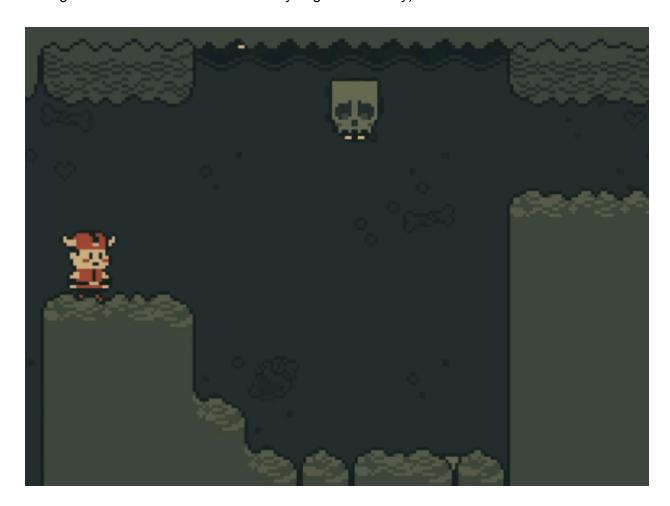
Neutral bounce on the big blob and then do two stomps in succession to make the final spike drop as soon as possible.

First skullevators

Don't bother activating the first skullevator, just drop down (down + jump). Break open the wall and then move a few pixels right before headbutting immediately (while the skullevators are still moving down). You should be able to bounce on one of them and break the wall. If you did it correctly you'll even make it into the space where the wall was without grabbing the ledge. There's a tiny chance you can headbutt exactly between two skullevators and land at the bottom, but it's rare enough to be worth the risk.

Make your way to the top to release the other skullevators. The safe strat now is to stop the first skullevator when it's roughly halfway between the lower and upper platforms and then do some fairly late and long jumps to get up (you should be able to make it up without having to grab the ledge, but it can happen if your jump falls just a bit short or you stopped the skullevator too late).

Pro strat: don't stop the skullevator at all. I did some tests and it's definitely possible to make the jump without stopping it, and even to make the jump without grabbing the ledge, but it's super tight. It's fairly doable with grabbing the ledge, but I doubt that that's faster than just stomping and making the jump to the top. Anyway, here's what it looks like when it does work out (that left and right skullevator wouldn't be there if you get this first try):



Friday's flight

Nothing special here for Neutral Ending. For Good Ending we'll go up to have a chat with Friday. After that dialogue, make sure to hope over the little gap, and also make sure not to fall off the right half of the branch because you'll end up in the gap at the bottom which costs you another jump.

Chapter 4

Muninn's corridor 4

Nothing really special here, but you can start a jump onto the first ledge in the next room just before the room transition. Don't jump too soon though.

Oasis's head

Bounce up the blobs and stomp bounce off the last one to make it onto the floating island.

For the Good Ending, we need to pick up the head. Just stomp bounce on the javelin and go through the portal. Make sure to headbutt off the head's ledge as late as possible, otherwise you'll grab the javelin which slows you down for a few pixels. Another option is to stomp immediately after the headbutt's bounce to avoid grabbing the javelin.

For the Neutral Ending, it's actually possible to headbutt off the floating island in such a way that you directly grab the next ledge, but it's only a two pixel window:



Unfortunately, I don't think the time save is enough to justify stopping to make sure your alignment is right, but if you can time it right during a walk it's a neat little timesave.. Otherwise, just walk over the floating island and hop up to the ledge.

Now our goal is to destroy the wall on the right in such a way that we grab the ledge of the falling block, so we can skip the big blob at the bottom. There's a three pixel window for this, courtesy of Voxelse (use Woten's left foot as a visual queue):



This saves enough time that it's worth realigning yourself if you don't land here after hopping onto the platform.

For the breakable ceiling, remember to do it with a headbutt from grabbing the ledge while holding right (like in the autoscroller room).

Then stomp bounce on the javelin that's already there to skip the second one.

Loop around

Fall down the gap, headbutt off the ledge into the crystal. You can reduce your speed during the cannonball phase so you don't overshoot the crystal by too much. Make your way to the left blob and kick it through the crystal. Neutral bounce on it to grab the first ledge.

Climb the gap with upward headbutts (switching to the other side with a regular jump after the first or second headbutt).

For the Good Ending, we need to pick up the passion fruits again. Hold onto the breakable ledge and destroy the ceiling while holding right (to get back onto the platform).

Destroy the breakable ledge, but keep holding left so you don't bounce back onto the platform but fall down with the spike. Kick the spike through the crystal and follow it.

For Good Ending, ideally the blob on the right is now at the right wall. If so and you kick it left it should bounce over the spike and pick it up on the way back, allowing you to do a midair bounce on it to make it into the exit without either grabbing the wall or getting stuck in the ceiling. (If this doesn't work out, you'll need to do a stomp bounce.) Don't start your headbutt for the blob before going through the crystal, or the bounce trajectory will be off.

For Neutral Ending, you should be able to do all of the above quickly enough that the spike lands directly on the blob as it's still walking right. If so, walk just a little bit to the left of the crystal and kick the blob right and then just stomp on it to get up. If you're a little too late for that, use the same strat as for Good Ending (kick the blob left over the spike and then midair bounce on it on the way back).

Javelin ladder

For the Good Ending, we need that lemon. However, there's a neat skip that doesn't require us to go all the way to the bottom and back up. Grab the ledge below the topmost head and *immediately* start a headbutt to the right. That will prevent the javelin from hitting you (but the javelin will travel right before you so you can grab it after you bonk on the wall on the right). Jump, stomp, pick up the lemon and make your way down (ignore the fact that I'm not picking up the lemon here, I was just testing the skip):



Unfortunately, this is too slow for Neutral Ending. Instead, just to drop down, destroy the wall, jump, stomp, and make your way through the newly created gap.

Destroy the wall and then do a headbutt off the ledge. If you do it far enough to the right, you can headbutt all the way down to the crystal (but the savings of making that last 1-tile step are probably negligible).

Go to the right and break the wall holding up the big blob. For Good Ending, you'll want to stomp at some point, and the landing after breaking this wall is a good time to do so. (This will release the spike at the top, so it's not in the way for a headbutt later). Now the path really diverges though.

For Neutral Ending, stomp on the bottom blob and then neutral bounce on the upper one but immediately hold right to make it onto the platform. Headbutt into the spikes. This loses you the cherries and gives you some i-frames so you can walk right and fall through the spikes and grab the ledge on the left. Then destroy the wall and leave the room.

For Good Ending, we can't afford to lose our fruits, so we need to do this the intended way. Again, stomp on the bottom blob and neutral bounce the upper one, but make your way left. Then headbutt over the gap and turn the cannonball phase into a stomp to break the floor and release the blob at the bottom. Make sure to move back right immediately so you don't fall down. Then kick the spike three times so it falls down the gap on the right.

Headbutt left again, and again. Hold left while falling down the gap. If you were quick enough since breaking that wall, you should be able to just bonk into the blob which will make it bounce a little bit to the right. Immediately headbutt twice to the right, which should kick the blob all the way into the spike. Then neutral bounce on the blob to grab the ledge on the left and break the wall to exit the room.

First bees

Immediately jump onto the ledge and up. You *can* jump a little bit before entering the room, but for Neutral Ending you risk missing out on the ideal bee setup if you go too fast. For Good Ending you should be fine though.

For Neutral Ending, run underneath the beehive where the bees should hit you. Use your i-frames to quickly grab the right edge of the beehive and headbutt right. Destroy the ceiling and make your way too the right (the bees will come quite close to you here, but you should be safe from them if you move as fast as you can). If you've done everything right, you can walk right underneath the first beehive without hitting a bee. However, you'll want to stop just a bit to the right of the beehive's centre so you don't trigger the second bee swarm. Let yourself get hit by the first one and then use your i-frames to jump onto the second beehive and onto the ledge to the right. Then just break the last ceiling and wall and exit the room. For some reason, the bees are more likely to notice you here if you've triggered them before getting hit, which can lose you lots of time.

For Good Ending, we need some of these honeycombs and we also can't afford to get hit by the bees. The main optimisation in this room is (a) turning around as soon as bees notice you and (b) starting to move again as early as possible so that they still see the flower before hitting you. Getting the timing right for that just requires practice, but it can easily account for a couple of seconds throughout the room.

Lure the first bees to the flower, then use an upward headbutt to get the honeycombs out of the beehive and pick them up (I pick up right before left, but I don't know if it makes a difference; it seems that picking up left before right might be good because it lets you break the wall while hanging from the right side of the honeycomb instead of having to jump up; but the honeycombs on the left side take longer to drop).

On the right, lure the first bees to the flower and then stomp on the beehive while making your way to the second bees. Lure them back to the flower as well, picking up the honeycombs on the way. You don't *really* need these bees to actually get all the way to the flower. If you've done everything right up to this point, they should be moving quite low while making their way towards you. That means you can actually just jump over them and make your way to the end of the room, but of course that ups the stakes significantly (if you make a more than minor mistake in the rest of the room, and they hit you, you'll likely have to reset unless you can pick up all the fruits again; which would still be a considerable time loss).

Teer's flight

Nothing special here.

Chapter 5

Muninn's corridor 5

Nothing special here.

Javelins and chains

Jump over the hump, fall down, destroy the wall on the right and then the one on the left. Grab the first ledge, headbutt up to the second ledge, then jump right to grab the gap and trigger the javelin. Immediately jump again to dodge the javelin and trigger a stomp so you can immediately bounce off the javelin to the upper ledge. Climb all the way up and make your way over the head to the right.

Break the wall and climb up. Fall down the gap with a stomp so you can grab the lower ledge as early as possible. Headbutt up and over onto the javelin.

Now jump over the head but jump as late as possible so you don't end up hanging from the ledge but standing on it. Jump up and activate the trigger. Headbutt left roughly from the centre of platform. If you do it right, you'll break the wall and immediately grab the ledge instead of falling down. I don't know the exact pixel window for this though.

Stomp on the head and then the javelin. Hop onto the platform and immediately jump again to trigger the javelin. Then grab it and make your way up, headbutt over and trigger the button. Fall down with a stomp on either the head or the javelin so you land on the platform before the slab of stone gets lifted (so the righthand head shoots as soon as possible).

Fall down the gap with a stomp. Make sure not to accidentally grab the opposite ledge.

Tape

The stomp activates the skullevator, so you can immediately walk over there and headbutt to break the wall.

Jump up towards the descending skullevators and trigger a stomp on the way up. You should be able to just make that jump.

Now casually you'd reverse the flow of these twice to make it to this section, but that's not necessary. Just ride a skullevator down with a charged headbutt and release it as soon as you clear the wall to destroy the next breakable wall. If you're quick enough you should be *just* able to jump onto the currently ascending skullevator in the last section to line up a headbutt for the last breakable wall. If you're not quite quick enough you can still make it onto the skullevator by grabbing the ledge and jumping up from there, but you won't be able to headbutt as early.

Headbutt through the crystals as normal and then down through the spikes. Make sure not to headbutt too late there or the cannonball phase will get you stuck in the gap for a short time. If you headbutt early enough you can either complete the cannonball before the gap and jump over, or right in the middle of the gap and jump out.

Climb up the steep steps, with a stomp when jumping up the final ledge to immediately break the floor. Kick the flower guy right to pacify the bees.

For the Good Ending, we need those honeycombs, so headbutt into the beehive but stop moving right so you bounce back and pick up the two honeycombs that fall to the left.

Jump onto the beehive (picking up the third honeycomb for Good Ending), a little to the right of the centre. Headbutt up to break the ceiling and make your way up. Catching a fast cycle of the skullevators seems to be a bit up to luck but if you feel like you won't make one, you can just wait a *little* bit on the next ledge before you reverse their direction.

Stomp onto the button to reverse the skullevators and open the gap. Try to reach the next skullevator up, either with a direct jump, or by grabbing the ledge and jumping from there. Then line up a headbutt.

For Neutral Ending, we only need to activate the button, so you can bounce back after hitting it and jump onto the next skullevator. You won't be able to make it through the gap immediately, so you can charge up a headbutt and then release it as soon as the gap is open wide enough and you're high enough not to bounce on the wall.

For Good Ending, we need to get the tape. It helps to start the headbutt as far left and up as possible so you immediately bounce onto the trigger and need only one jump to get the tape. Then go back right. It's *possible* to catch the same cycle as for Neutral Ending, but it's incredibly tight. If you don't get it, it means that waiting on the skullevator with a headbutt wastes a lot of time. Just jump up to grab the edge and then do the headbutt from the top of the wall.

First clouds

Walk down the first step, then headbutt into the wall from the second step and immediately stomp to activate the cloud below.

Go down and move right, but wait with stomp on the cloud until it's near the top of its vertical cycle, so you can jump directly onto the upper ledge.

For the Neutral Ending, just bounce on the second cloud to grab the ledge on the left and then headbutt through the breakable wall.

For the Good Ending, we need the passion fruits. Stomp onto the second cloud to break the ceiling. There are two ways to collect the passion fruits. Either bounce on the right edge of the cloud until you have all of them and the go left. This is a bit risky because the window where you don't fall of the cloud but also don't miss the passion fruits is *fairly* narrow. Or just drop back down to the upper ledge on the right and then jump back onto the cloud after collecting the fourth fruit (you'll pick up the fifth one on the way up). This is much safer, and it might actually be faster, but I haven't timed it.

Headbutt down the steps out of the room.

Clouds and bees

Stomp to break the floor. Then climb up. To break the ceiling use the "hold right while headbutting up from the ledge" trick again. Climb up and break the next wall, the next ceiling and the next floor (nothing special here).

Then trigger the bees and lure them back. You don't need to go back up to the flower, just hang from the edge of that platform. The bees will see the flower *just* before they hit you and you can drop back down and go right.

For the Good Ending, we need those honeycombs so stomp on the beehive while standing slightly left of the centre. Once you have both honeycombs move right and headbutt up to break the ceiling.

For the Neutral Ending, just hop onto the beehive move to the right half and destroy the ceiling.

Break the wall and jump onto the cloud and move right immediately to make it to the top platform without grabbing it. This needs a bit of practice because the timing for the jump (especially for the point of reversing the jump) is a bit tight.

Start a stomp just before leaving the room but make sure you don't accidentally complete it in this room.

Cloud leap

You should be entering this room with a stomp to activate the cloud. Stomp on it as soon as it comes out from underneath the floating island. Then headbutt over to the high wall. Make sure that you don't accidentally cannonball *over* the wall, because you'll lose a sweet sweet headbutt all the way down. I tend to just do the first headbutt a bit early so I bonk into the corner of the high wall, but you can probably also just slow down enough during the cannonball phase.

Headbutt off the wall which should pick up the second apple.

ABR (Annoying Bee Room)

Dread.

Stomp onto the first step. You want to time this so that the first raindrop immediately hits the flower guy, for which you might have to delay the stomp a fraction of a second, but you should be fine either way.

Jump onto the first beehive (the bees *should* notice the flower before you), break the wall, climb up and break the next wall.

For the Neutral Ending, we're not going to bother to lure these bees back down. Get hit instead. If you're lucky you will lose all of your fruits this way, but make sure you notice if that doesn't happen (for Bad Ending, you don't need to worry about losing your fruits because there won't be another feeding). Make use of your i-frames and very quickly jump up onto the beehive and break the wall with a neutral headbutt (so you land back on the beehive). You'll probably take

another hit from the bees now. I've managed a couple of times to kite them around so I didn't get hit, but I have no good idea how to do it consistently.

For the Good Ending, we can't afford to get hit, and we also need *all* of the honeycombs in this room. So after breaking the wall, we need to kite the bees back down. Use the fall to stomp on the lower beehive and pick up the honeycombs while the other bees follow you. If you manage to be faster than them, you can wait for them while hanging from the right edge of the beehive. Then climb back up as soon as they see the flower and stomp on the beehive at the top before breaking the wall with a neutral headbutt (again, so you end up back on the beehive). Really important note here: if you mess up anywhere and have to do another stomp, make sure to do an extra one somewhere along the way. You need to have made an even number of stomps at this point so that the centre cloud is raining.

Now with the wall broken, headbutt *from the beehive*. This causes you to bounce on the next platform, so that you fall down in cannonball state. That breaks the wall next to flower guy and sends him down. We don't need him for Neutral Ending, but it means we don't have to go down to the ground floor, and we do need him for Good Ending, which means we don't have to go through the left pair of crystals.

Do another headbutt from flower guy's platform, and stand quite far to the left (ideally with your rear foot hanging over the edge) so you can immediately break the next wall.

For Neutral Ending, you're going to take another hit, so trigger the bees before jumping over the gap and wait until they hit you. If you didn't lose all fruits at the top (it often happens that you keep exactly one), make sure you're facing left when they hit you so that the flower falls down to the ground floor. Then very quickly jump up the beehive onto the ledge and break the wall. The bees *will* be chasing you.

For Good Ending, we still need more honeycombs. Ideally, the top bee swarm will not be too close to the gap, so you can safely fall through the gap while triggering them. (Be careful not to get stuck on the corner, because they'll likely get you which means a reset.) The bees at the bottom should already be pacified by flower guy. Upward headbutt into the beehive and quickly pick up the honeycombs on the left before they fall down the step. Then walk past flower guy and break the wall to get back up. Upward headbutt into the last beehive and pick up the honeycombs before jumping up to the ledge and breaking the wall.

There's no need to release the final cloud. Just stomp onto the centre cloud when its near the top of its cycle and you should just be able to grab the ledge at the top. Make your way out of the room.

Oasis's flight

Headbutt over the large gap so you don't have to do the climb. Otherwise nothing special about this. Except that Bad Ending runners get to skip the cutscene here entirely.

Chapter 6

Munnin's corridor 6

Nothing special.

Tree of Life

For Good Ending you get a short cutscene. The best place to stomp to let the apples drop seems to be on the 3-tile wide step on the way up so that the bounce takes you another step up.

Headbutt off the top of the hill from just after the tree to maximise the fast flight time without hitting the floating island during the cannonball phase. Then climb up to leave the room.

Empty corridor

Start a jump just before leaving the room since there's a step one tile into the new room.

First storm clouds

Go through the crystal, then stomp up the step so the cloud on the left destroys the spikes at the bottom. Headbutt through the next crystal to break the wall behind it. Then drop down between the cloud and the wall. It takes a bit of practice to neither step onto cloud nor catch the ledge while reversing.

Headbutt through the next crystal to break another wall. Then stomp up the step to break the floor. You can now headbutt down all of those steps and still break the next wall, but the ideal window is a bit tight. You essentially need to stand on the last two pixels of the top step to make it. The good news is if you walk too far you can make it from almost anywhere on the next lower step (just don't stand all the way left because your headbutt will fall slightly short and you'll have to do another one).

For the last section, headbutt into the breakable ceiling from the left and keep holding right to move to the blob. Headbutt it left once then stomp on it, which should let you grab the ledge. Now headbutt up while holding left to skip the step with the spike on it. Then just make your way up.

Spiky blob

Move through the crystal. Then headbutt through the second crystal to break the wall/ledge and stomp on the way down to break some spikes on the left (only the leftmost two spikes should remain). Neutral bounce on the big blob, destroy the wall, neutral bounce on the first cloud, stomp on the second, stomp to break the floor.

Then you'll want to headbutt down the steps so that you bounce before the last two remaining spikes and cannonball over them. I tend to start from underneath the 1-tile wall, just a bit to the right from the centre.

Then, go through the crystal and stomp on the cloud and make your way over to the right.

Break the last wall and immediately stomp out of the bonk so that the cloud clears the way down. You can keep moving right all the way, the lightning bolt will go down just before you.

Start a stomp just before leaving the room.

Over the top

The stomp you start in the previous room should flip over the spiky blob. Grab the ledge and hop up with another stomp to break the wall. Now don't let go of the right button. Drop out of the gap (don't jump) and trigger a stomp on the way down. This should let you stomp on the blob and make it up to the next gap while also just avoiding the lightning bolt that got triggered when you broke the wall.

Break the next wall and then fall off the edge with a stomp and immediately reverse so you can make it through the gap. It doesn't matter whether you grab the left or right edge. Headbutt up (and right if necessary) to the next ledge, then left onto the stone slab and make your way over to the button.

Now move back quickly so you can jump onto the stone slab before it gets raised. You can walk across the top of the map there. You need to get a feel for how long Woten needs to cross those 8 tiles at the top. When here's near the end, start a headbutt. The idea is that it bounces on the breakable wall (destroying it) so that you cannonball down the gap and break the last wall without hitting the blob there. There's quite a bit of leeway in the timing for this, so you should be able to do it every time after a few attempts.

Input a stomp just as you walk over the edge so you immediately bounce off the blob and get stuck in the last stone slab (while the blob activates the button at the bottom). Then leave the room.

There are two strats for the next room. I think they take about the same time, but the safer one might be ever so slightly slower. To go for that one, leave the room with a stomp.

Clouds and crystals 1

If you've gone with the safe strat then move over to the crystal and stomp again as soon as the left cloud is close enough to the corresponding exit. Then just walk through both crystal pairs.

For the other strat, you also walk to the crystal but then wait with the stomp until the clouds reach the leftmost point of their cycle (you should stomp before that because they stop gradually, but you want to make sure they travel all the way to the left, or at least almost all the way).

Then walk over to the right and immediately after jumping the gap, do another low hop and stomp. This should trigger the second cloud just when it comes into reach of the inactive crystal but before it actually hits you.

Either way, you *need* to leave this room with a stomp or you'll lose a ton of time on a slow cycle.

Clouds and crystals 2

Move through the first pair of crystals and then all the way to the right to the inactive crystal. Stomp so that the cloud shoots lightning as soon as it passes over the edge and then *duck* (i.e. hold down). The lightning should hit the top of the crystal and just miss your hitbox.

Make your way out of the room, and once again leave the room with a stomp.

Clouds and crystals 3

Make your way down to the inactive crystal and then stomp shortly after, again so the crystal gets activated without you getting hit.

Hop up the steps and down the branch, then headbutt through the crystal to break the wall, and immediately stomp on the way down. If you did everything right, the left cloud will hit the spiky blob and send it into the crystal. Sometimes you can be a bit too early here, in which case you'll just have to stomp again.

Kick the blob up two steps and stomp on it to leave the room.

Pro strat: it's possible to make the jump after kicking the blob up only one step if you stomp off the very right end of the blob. It feels pixel-perfect (or close) though, so unless there's an easy setup for it, this will take a fair bit of practice to get down consistently.

First snakes

Stomp on the snake to immediately jump up both steps on the right. Climb all the way up and trigger the button. Don't be tempted to jump off immediately, you've got a lot of time here and there's a bug if you input a jump before landing that you'll hop off the button without actually triggering it.

Walk back down next to the small rock on the chain. After the top snake falls off the ledge, as soon as the bottom snake stands on top of the breakable rock, start doing repeated stomps in-place. That stunlocks the snake there so you don't have to wait for its cycle. As soon as the rock lifts, move right to break the wall and then immediately stop stomping.

Fall down and charge up a headbutt while the stone slab is being raised, then break the wall while holding right so you don't bounce too far back. Now you *can* try to break the next wall immediately, but there's a small risk that you'll hit it right the moment the snake is next to it, knocking it out for a substantial amount of time. It's a bit safer to wait just a little bit and let it do one more cycle. But if you can make that earlier cycle that's great (one cycle is about 1.05s).

Then hop back up to the left and wait for the spiky blob to drop. Stomp on it to grab the ledge on the left and climb up. Make your way to the right and then break the top wall (not holding left, so you bounce back and off the ledge), then the bottom wall and then the middle wall on the way back up. Once the snake hits the button make your way to the next room.

One note about the two snakes that are waiting behind stones on chains. Their cycles take 1.8 seconds, but stunning them with a bounce only takes 1.7 seconds. So unless they're going to make it through the gap *right* the moment it opens, you can save 0.1 seconds each by stunning them once so they make it through one cycle earlier.

The Gauntlet

Fall into the pit with a stomp to trigger the cloud and break the stones holding up the platform. Then walk underneath the cloud until it registers you and then keep walking right so it activates the crystal without hitting you.

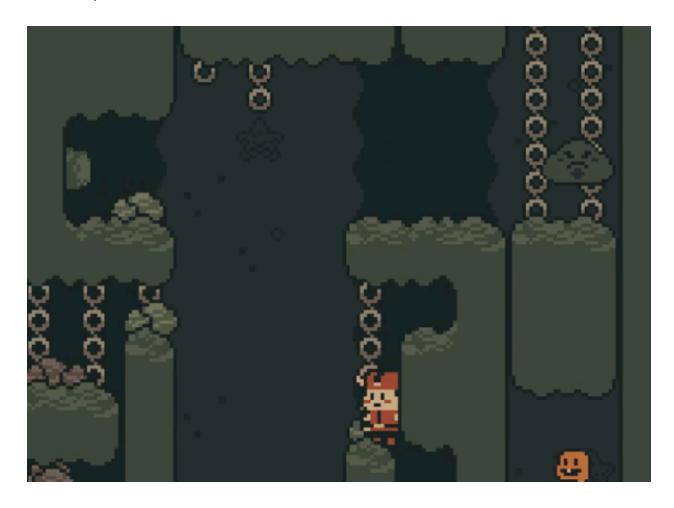
Stop with your foot hanging over the edge and headbutt upwards to free the snake. You can get *really* unlucky here and stun the snake if it happens to be right next to the stones when they break, which messes up several cycles in this room... so make sure that doesn't happen.

Make your way to the right of the spiky blob. If you've done everything right, the snake should drop down next to the crystal just when the cloud is also over the snake. Stomp once to trigger the cloud and knock the snake through the crystal, so you don't have to wait for it to move all the way left and back.

You'll now want to stand on the tile to the right of the spiky blob and charge up a headbutt. As soon as the snake recovers and drops down, headbutt into it to knock it into the gap. That saves having to wait for it to move right and back. This headbutt will likely knock you onto the blob, so don't panic as you ascend towards the spikes. A neutral bounce doesn't hit them.

Now stomp on the blob to jump into the nook on the right while the cloud gets released (if you're having trouble here and occasionally end up in the spikes: you've got enough time to walk off the blob again and make the jump from the ground, in which case you just need to hold right). Wait for it to reach the left column of spikes and stomp to destroy them. Immediately after the stop, jump to the ledge on the right and headbutt over and up to the button. The cloud should trigger again while you climb up, which is important for its cycle. If it doesn't, consider stomping as soon as you get to the top.

Pro strat: it's possible to trigger the cloud over the right column of spikes and jump into the lightning bolt to damage boost yourself up to the button (only an option for Neutral Ending). I don't know if this can be done consistently, or whether it messes up the cloud cycle too much, but if it works it should save a couple of seconds and it looks damn rad. Here's what it looks like (except that all of the spikes are still supposed to be there... I needed a couple attempts to record this):



Trigger the button, then fall down to the right (which triggers the cloud again). Stomp as you land in order to delay the cloud once more then hit the button.

Now the goal is to break the floor below the snake without actually hitting the snake (hitting the snake costs several seconds). If you got all the cycles right, there should be a moment where the snake turns around at the left wall, while the cloud is almost all the way at the right end of its cycle. That's when you want to stomp. If that doesn't work out for some reason, you can also try stomping a little bit after the cloud turns around when the snake is at the right wall.

You can already move over to the final stone slab. Once the snake releases the last cloud, wait for it to reach the right end of its cycle and then do two stomps in short succession (but not immediately after one another) to break both floors. Then wait for the last snake to trigger the last button.

Fall into the next room with a stomp.

Waking the bear

Stomping into this room immediately opens the gap to the left. Charge up a headbutt to break the wall behind it. Drop down the branch with a stomp to activate the crystal on the left. Then headbutt to release the cloud.

Stomp as soon as it starts moving but make sure you don't stun the snake with it (I don't think the cycle of the snake is too important, so if you're afraid you're going to stun it, you're better off waiting until after it touches the breakable wall).

When the snake reaches its button, stomp again to trigger it. The cycles should now match up so that when the cloud next reaches the right edge of its cycle, the flower guy is also standing in front of the crystal. Stomp twice in short succession (but not immediately after one another) to trigger two lightning bolts, one two activate the crystal and one to know the flower guy left.

If you've made the last three stomps early enough (i.e. the first one just when the snake reaches the button so that the cloud doesn't travel all the way left; and the other one as early as possible so that the cloud still reaches the rightmost position to hit the crystal), this sequence should knock the flower guy all the way to the bottom. This is the ideal situation and saves two seconds over the alternative. If it happens, make sure to stomp once more to send a third lightning bolt down into the pit to the flower guy (otherwise he takes too long to walk through the crystal).

If this doesn't work out, the flower guy will end up at the left edge of the top platform. Let the cloud move a few pixel (3-4 I think) and stomp again to kick the flower guy down the gap. In this case, he should be facing left so there's no need for another lightning bolt, but the reason this takes longer is that the flower guy triggers the javelin much later.

Wait on the slab with the broken chain until it gets raised up to grab the javelin and stomp on it to grab the branch. Hop up and then repeatedly headbutt the flower guy to the right so that the bees reach the bear as quickly as possible.

Bear chase

You've basically made it. Just walk over (or headbutt if that's what you do in corridors) and then drop down the branch.

Make sure to record enough of the final cutscene to make it clear which ending you got.

Bugs and other quirks

This lists a number of bugs and other quirks that have been found which aren't directly relevant to the current route, but which may either trip up a speedrunner or for which a use might still be found.

Headbutt glide

It's possible for a headbutt not to register properly right after a jump, in which case Woten won't stop in place but will glide forward in the charging stance, and releasing the button won't result in an actual headbutt. I believe this happens if you headbutt on the exact frame that you land. There is no known use for this, but it occasionally happens when going fast and ends up costing you time.



Yump

If you jump on the same frame that you land on a trigger, Woten will jump again without actually pushing the button. I'm not sure but it's possible that this even happens if you start hold the jump button a few frames before landing. This occasionally happens if you're going too fast at

the beginning of the *First snakes* room. There's no need to go fast there since you have to wait for the top snake's cycle anyway, so just fall on the button and jump out again a second later or so.



Dive roll

In the *Blob cave* room, at the top if you headbutt from the cherry ledge over to the right from just the right position, you can end up wedging yourself into the 1-tile gap in Woten's cannonball state, which makes him roll through the gap:



If you start from where I did in the GIF above, you need to manipulate Woten's horizontal speed during the short cannonball phase. You can also start the dive roll from one pixel further right, in which case it works if you just continue holding right, but then the roll is much slower. Note that normally the blob there would still have a spike on it. When you hit that you end up getting stuck inside the 1-tile gap with no way to get out.

This doesn't work on any other 1-tile gap because they are normally blocked off by invisible walls, but this one is missing.

Apparently, this cannonball roll was actually to be intended a game mechanic but was cut from the final game. This appears to be the only remnant that's left of it.

Cherry drift

If you leave a room with a bobbing cherry and re-enter it, the game doesn't correctly reset the cherry's position, which means you can slowly make the cherry drift up or down the screen by repeatedly leaving and re-entering the room when the cherry is at the top or bottom of its cycle. Unfortunately, this doesn't work with the heads and items where this might be potentially useful.

In the *Crystal maze* room it's possible to make a cherry drift into a crystal, which actually makes it teleport. It then drops to the ground and disappears as if you had lost it.

Storm cloud lock

Another bug related to leaving a room appears with storm clouds. If you stomp but leave the room before the cloud starts moving again, it will remain at rest when you re-enter the room. If you then stomp again, it will send out another lightning bolt and resume its patrol. However, if you leave the room even before it sends out its lightning bolt then it won't react to stomps any more, which leads to several possible soft locks in chapter 6. In this state, the cloud will still reactivate if you walk underneath it or stomp on it (a neutral bounce won't trigger them either).

Cloud clip

In ABR, if you headbutt into the cloud in the top right corner before it starts moving, you're magically teleported to the left where you can actually bounce upward:



Javelin OOB

If you stand on the javelin in the *Bear* room and headbutt into the wall, you'll end up somewhere out of bounds (Woten is just no longer visible), which locks the game.