

# Slide Processing

## Introduction

While not being essential, processing your own slides does have enormous benefits for budding astro photographers. The main advantage is being able to take, perhaps, only 3 or 4 images and process them the next day.

The method is to put the complete camera and developing tank into a daylight changing bag; open the camera back and cut the film, loading the exposed end into the tank. This is much more economical than waiting weeks to use a roll of 36 exposure film only to find it didn't work as well as you expected.



There are several makes of slide processing kit available from high street photographic stores. I use Photocolor E6 kits and have found them quite reliable over several years of processing. Besides the kit you will also need the following items:

Washing up bowl (to act as a water bath), developing tank, 3 x 300 ml flat style "medicine" bottles, 500ml and 100ml measuring cylinders, thermometer to read between 30 and 50 degrees C, cloth changing bag (to load the film in daylight), scissors, slide mounts, two clothes pegs and a small weight to use for hanging the film up to dry, a film squeegee and a digital stop watch (many wrist watches will suffice)

The actual processing is well covered by the instructions in the kit. It's a three bath process and consists of a first developer, second developer, combined bleach fix, washing and drying. There are a few tips I've discovered to make the rather critical temperature control easier:

1. if possible, turn your centrally heated water system down to 50 degrees C the day before. This gives you wash water at roughly 40 degrees for washing the film, if you use cold water it can ruin the film and makes temperature control impossible.
2. gently warm the filled bottles in a microwave oven (loosen the tops first) this makes it easy to warm them to 38 degrees.
3. have a kettle of boiled water to hand for keeping the water bath at a reasonable temperature.

## Film types

One of the problems with using colour slides for astro photography is they are intended for normal exposures of between 1/1000 and 1 second in daylight, certainly not 5 to 30 minutes by starlight! This effects the red, green and blue layers in the film in different ways and gives strange looking colour casts to slides exposed beyond a few seconds, the only "official" way of correcting this is to use a colour correction filter, but even then it isn't possible to correct it 100%. Try experimenting with different film types and perhaps a magenta filter if your results are too green!

One of the more successful night time films is Kodak Ektachrome 200. It generally produces better results than Ektachrome Elite 400 asa and doesn't give the horrible muddy brown and green backgrounds that it's 400 asa cousin tends towards.