



In recent years, video game graphic technologies are showing amazing improvements. The visual effect I want to talk about is the dirt on gameplay scene (or on your camera). Battlefield series and Metro Last Light have applied this kind of visual effect successfully. When I was playing these games, I feel the dirt effect is so real. If there is a sound of wind or other events, the dirt will pass your view naturally and cause the environmental light effect to change corresponding to the dirt. It should be a computational object, not an effect of camera filter. This dirt effect provides more detail to gameplay and makes the player feel the game world tangible. This kind of visual effect is usually created by a particle system near a light source spawn particle with very high reflection/specular light values. It could be objects if the dirt reflects the light and have vague shadows. Sometimes it could be textured without object if there is no light reflecting off the object and shadows. Another way, it is fake. This kind of dirt doesn't need much complex computation and affects your camera view like advance texture.