Subject: Re: JPEG Images do not get rotated correctly
Posted by Tom1 on Sun, 21 Oct 2018 14:20:14 GMT
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Hi Mirek,

Could you possibly add two lines of code in jpgupp.cpp in order to support Exif "DateTime" -tag:

```cpp
int JPGRaster::Data::ExifDir(const char *begin, int offset, IFD_TYPE type)
{
 const char *e = begin + offset;
 int nitems = Exif16(e);
// puts(NFormat("directory %08x: %d items", dir, nitems));
 e += 2;
 for(int i = 0; i < nitems; i++, e += 12) {
  int tag = Exif16(e);
  int fmt = Exif16(e + 2);
  int count = Exif32(e + 4);
  static const int fmtlen[] = {
   1, 1, 2, 4, 8, 1, 1, 2, 4, 8, 4, 8
  };
  int len = 0;
  if(fmt > 0 && fmt <= __countof(fmtlen))
   len = fmtlen[fmt - 1] * count;
  const char *data = e + 8;
  if(len > 4)
   data = begin + Exif32(data);
//  puts(NFormat("[%d]: tag %04x fmt %d, count %d, data %s",
//   i, tag, fmt, count, BinHexEncode(data, data + len)));
  if(type == BASE_IFD) {
   if(tag == 0x112)
    metadata.Add("orientation", Exif16(data));
   if(tag == 0x132)
    metadata.Add("DateTime", String(data, 20));
   if(tag == 0x8825) {
    int offset = Exif32(data);
 //   puts(NFormat("GPS IFD at %08x", offset));
    ExifDir(begin, offset, GPS_IFD);
   }
  }
  else if(type == GPS_IFD) {
   if((tag == 2 || tag == 4) && fmt == EXIF_RATIONAL && count == 3) {
    metadata.Add(tag == 2 ? "GPSLatitude" : "GPSLongitude",
     ExifF5(data + 0) + ExifF5(data + 8) / 60 + ExifF5(data + 16) / 3600);
//   puts(NFormat("GPSLatitude: %n %n %n", n1, n2, n3));
   }
   else if(tag == 6 && fmt == EXIF_RATIONAL && count == 1)
    metadata.Add("GPSAltitude", ExifF5(data));
   else if(tag == 16 && fmt == EXIF_ASCII && count == 2 && *data)
```

```
      metadata.Add("GPSImgDirectionRef", String(*data, 1));
    else if(tag == 17 && fmt == EXIF_RATIONAL && count == 1)
      metadata.Add("GPSImgDirection", ExifF5(data + 0));
  }
 }
 int nextoff = Exif32(e);
// puts(NFormat("next offset = %08x", nextoff));
 return nextoff;
}
```

More specifically those reading:
```
   if(tag == 0x132)
     metadata.Add("DateTime", String(data, 20));
```

This would be great help!

Best regards,

Tom