



# Davis Meteoroloji Istasyonunun Otomasyonu

**Ilker Moral**

ODTU  
Fen Edebiyat Fakultesi  
Fizik Bolumu

**03.02.2015**



# Content

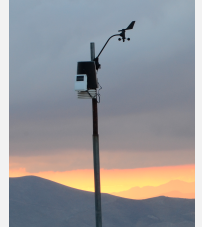
- \* Weather Monitoring
- \* Davis Meteoroloji Istasyonu
  - ▶ Sensorler
  - ▶ Suruculeri
  - ▶ Web arayuzleri
- \* Otomasyon
  - ▶ Genel surucu
  - ▶ Kullanici dostu arayuz
  - ▶ Faydalari
- \* Sonuc



# Meteoroloji Isyasyonlari

## Gozlemevleri Icin Onemi

- \* Kurulus sirasinda
- \* Kurulus sonrasi
- \* Olcumler
- \* Guvenlik
- \* Cihazlar



Weather Station of  
RTT 100



# Davis Meteoroloji İstasyonlari

## Eski ve Yeni Modeller



Davis Weather Monitor II



Davis Vantage II







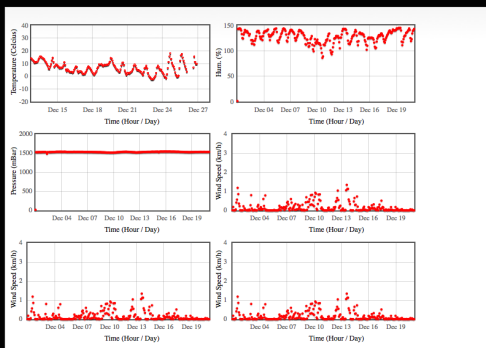
# Otomasyon

## Yeni Arayuz

### Meteo Monitor

( Located at Physics Department, METU, Ankara, Turkey )

	Current	Average
Temperature:	17.6917 °C	14.77 °C
Humidity :	88 %	74.3 %
Atm. Press. :	1008.87 mBar	1004.7 mBar
Wind Speed :	0.02 km/h	0.200 km/h



Candidate web interface



# Otomasyon

## En fazla kullanılan sistem



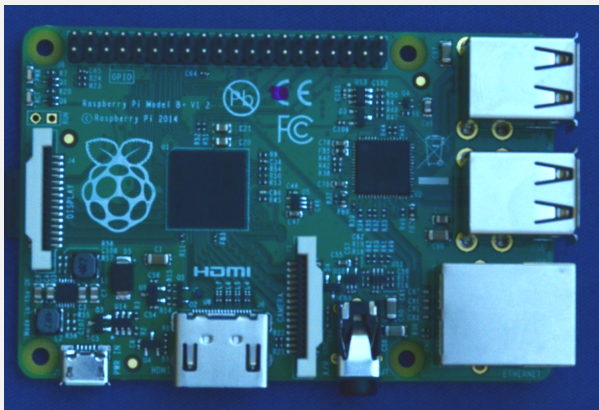
Current computer of  
weather monitor





# Otomasyon

## Gelecekte kullanılacak sistemler



Raspberry Pi







# Sonuc

## Ozet olarak

- \* Acik kaynak kodlu kullanisli suruculer
- \* Acik kaynak kodlu kullanıcı dostu web arayuzu
- \* Verilere hizli erisim





## References

-  Aslan, Z. and Aydin, C. and Tunca, Z. and Dimircan, O. and Derman, E. and Golbasi, O. and Marsoglu, A.. Site Testing for an Optical Observatory in Turkey. . p. 385 1989
-  Davis Instruments Corp. Davis Weather Monitor Owner's Manual. 2000
-  Davis Instruments Corp. Vantage Pro, Vantage Pro2 and Vantage Vue Serial Communication Reference Manual rev 2.6.1. 2013
-  Raspberry Pi (2014), Frequently Asked Questions, Retrieved from <http://www.raspberrypi.org/help/faqs>



## References

-  Ilker Moral (2014), TermiosSerialCom serial communication library for linux OS.,  
<https://github.com/irukeru/TermiosSerialCom>
-  Attractive JavaScript plotting for JQuery,  
<http://www.flotcharts.org/>



## Tesekkurler :)

