**Ticosonde TC⁴ Goals**

- **Flight planning/met support**
- **Aura validation: MLS, TES, HIRDLS plus AIRS**
- **Research applications:**
  - Tropopause and UT/LS levels and variability of $H_2O$, $O_3$
  - TTL dynamics - equatorial wave effects on $T_{trop}$
  - Inertio-gravity waves in tropics - inertial freq ~ 3 days
  - Diurnal variability forced by convection
  - Synoptic scale waves and disturbances in region
  - Characterize precip regimes - veranillo, temporales
  - Boundary layer profiles
**Ticosonde TC^4 Radiosonde Program**

**Location:** IMN launch site at Juan Santamaria Int. AP, Alajuela

**Dates:** 00 UT (6 PM) 1 July — 18 UT 12 August

**Frequency:**
- 4 times/day: July 1 — 12 August
- 2 times/day: June 16 — June 30

**Data:** 2-sec data ~ 10 meters, to ~28 km

**Measurements:** Temperature, RH, winds

**Radiosonde:** Vaisala RS92-SGP

**Personnel:** IMN radiosondistas, UCR students
Ticosonde/Aura-TCSP: 16 Jun – 13 Aug 2005
radiosondes at Juan Santamaria

Winds: U V

coldpoints

NASA TC4 Science Team meeting, Lanham-Seabrook, MD, April 2007
Real- and near real-time products for TC4 flight planning and science

- ASCII exchange files of 2-sec data - ESPO archives
- Thermodynamic plots - web servers at Ames and UCR
- Time-height cross-sections - web servers

T anomalies Jun 16 - Aug 13, 2005

19 July 18 UT
Galapagos TC\textsuperscript{4} soundings

Goals:
- Clear sky reference for TC4 observations
- TTL water vapor and ozone away from convection
- TTL dynamics: equatorial waves
- Radiosonde comparison

Program:

Location: INAMHI launch site at San Cristobal, Galapagos 89.6°W, 0.9°S

Dates: 1 July — 12 August

Frequency: Radiosonde: 2 times/day: 0:00 UT and 12:00 UT
CFH/ECC: 10 soundings total

Data: 2-sec data ~ 10 meters, to ~28 km

Measurements: Temperature, RH, winds

Radiosonde: Vaisala RS92-SGP

Personnel: INAMHI radiosondistas